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Title of the Research Papers

- A Quantitative Exploration into the Gender Wage Gaps in Rural Wage Markets
- Devising A Balanced Scorecard to Evaluate Banks' Performance: An Empirical Study of Selected Indian Banks
- Is Indian Stock Market Efficient? An Empirical Test of Market Efficiency Using CAPM
- Does Environmental Performance Improve Financial Performance? An Empirical Study On Selected NSE Listed Companies
- Performance of Indian Iron and Steel Industry after Post Reform Period
- Consumer Protection: New Age Challenges
- Innovation in Social Media Marketing Using Data Analytics: A Critical Review on Social Commerce
- An Analytical Study on Assessment, Measurement and Evaluation (AME) of Service Quality in Private Banks of South Odisha
- TECHNICAL SESSION – Abstracts

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EDITORIAL

“Education must provide life-building, man-making, character-making assimilation of ideas.”

- Swami Vivekananda (C.W., Vol. III, p 309)

The Indian management education is undergoing a paradigm shift in its scope and essence. India houses a massive pool of talent, some of the best educational institutions. Most of the B-schools have started paying attention to up-gradation, rationalisation and restructuring of course curriculum to make them practically viable for aspirants. Creative and Innovative pedagogical tools, practical learning methodologies should become the substratum of Indian management education. Presently, Academicians have a dialogue with management practitioners and understand the requirements as well as business challenges. One of the key challenges most premier B-Schools face the faculty competency development. Thus, B-Schools are initiating faculty exchange programs, investing in capacity building programme and inducing fresh blood. Indian B-Schools are increasingly advocating the best of domestic and international associations and tie-ups, etc.

Business education in India is poised at a very promising growth chart and in the next decade, Indian professional education will become globally competitive and sought after with students and faculty from across the world opting for courses in India. Industry should take part in designing the syllabus. Business Analytics as a new specialization which equips business professionals with the tools necessary to manage data ethically for business success. The expert data analysts who can explore patterns, reveal trends, uncover relationships, and transform data into a catalyst for business growth.

(Managing Editor)

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A QUANTITATIVE EXPLORATION INTO THE GENDER WAGE GAPS IN RURAL WAGE MARKETS

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ABSTRACT

It is incontrovertible that globally, a gender gap exists along axes of economic, social and political outcomes. Studies have offered varying results and various insights on such gaps to be increasing or decreasing, changing by varying degrees, varying by magnitude depending on the period of study and region of analysis [including rural-urban distinction]. It is widely acknowledged that such gaps are, however, either on account of inputs or characteristics that are different across members of different genders (the explained gap) or on account of differential rates of return on possession of comparable characteristics across genders (the unexplained gap). Decomposition of such gaps into their explained and unexplained fractions is crucial for the purpose of measuring the precise extent of gender discrimination. This contribution fills a void in the existing literature by analysing such gaps in the rural wages sector across select states of India and thereby deriving key insights regarding gender gaps in terms of earned wages in rural wage market. It uses the technique of Blinder-Oaxaca decomposition for the purpose of study, which has not been applied so far in studying inter-state characterization of rural gender wage gaps. Thereafter the paper compares the results obtained for rural wage market of India with results for urban wage market, for the pooled wage market of India and for rural wage markets of different groups of states at extreme ends of the per capita GDP range.

Key Words : *gender, wage gap, decomposition, Blinder-Oaxaca*

JEL classification: J16, J31, J71, C21

INTRODUCTION

World Economic Forum's Global Gender Gap Report quantifies the magnitude of gender disparities and tracks their progress over time, with a specific focus on the relative gaps between men and women across four key areas, namely health and survival, educational attainment, economic participation and opportunity and political empowerment. The 2016

report (WEF 2016) shows tardy progress on closing the gender gaps along multiple axes. There is wide disparity in progress in closing the gender gap across the globe, with a lot of success stories and also with no dearth of underperformers. The report states that even as the global gender gap has narrowed since 2006, it has done so by just four per cent; were that glacial pace to continue it would take another 118 years for the world's women to be on an even footing with men.

India is ranked 87 out of 144, improving from its 108 position in 2015. It has closed its gender gap by 2per cent in a year: its gap now stands at 68per cent across the four pillars of economy, education, health and political representation. The major improvement, however, has been in education, where it has managed to close its gap entirely in primary and secondary education. In the economic sphere, much work remains to be done. Overall, it ranks 136 in this pillar out of 144 countries, coming in at 135th for labour force participation and 137 for estimated earned income. India ranks 103 in terms of wage equality between men and women. Clearly, therefore, albeit India has improved its gender gap by 8per cent, much work remains to be done in terms of bridging the economic gap between men and women - particularly, in terms of the wage gap between the two genders.

The International Labour Organisation's report - *Women at Work: Trend 2016* (ILO 2016) - finds that gender equality in work place remains elusive. Inequality between women and men can be observed in global labour markets, with respect to opportunities, treatment and outcomes. Since the Fourth World Conference on Women in Beijing in 1995, the improvements have been at best marginal, leaving large gaps to be covered in the implementation of the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015. Over the last two decades there has been significant progress in educational achievements of women, but these have not translated into a comparable improvement in their position at work. In many regions in the world, in comparison to men, women are more likely to become and remain unemployed, have fewer chances to participate in the labour force and - when they do - often have to accept lower quality jobs. Worldwide, the chances for women to participate in the labour market remain almost 27per cent lower. Millions of women worldwide are not getting the same kind of quality, well-paying jobs as men. New data from 178 countries present a gloomy picture of the current state of working women. The report shows the gender gap in employment, wages and social protection has changed little in 20 years and that women are less likely to participate in the labour market than men. As stated by Deputy Director of ILO Lawrence Johnson, "At the global level, the employment gender gap has closed only by 0.6 percent between 1995 and 2015. This means progress getting women into more jobs is either insufficient or has flat-lined."

Throughout their working lives, women continue to face significant obstacles in gaining access to decent jobs. Progress in surmounting these obstacles has been slow and is limited to a few regions across the world. Even in many of those countries where gaps in labour force

participation and employment have narrowed and where women are shifting away from contributing family work and moving to the services sector, the quality of women's jobs remains a matter of concern. Globally, the gender wage gap is estimated to be 23 per cent; in other words, women earn 77 per cent of what men earn and these gaps cannot be explained by differences in labour market inputs like education, training or experience. Though some progress has been made in bridging these gender wage gaps, but the improvements are small. It has been estimated that at the prevailing trends, it will take more than 70 years to close the gender wage gaps. Another significant finding of the report has been that the gender wage gaps are unrelated to a country's level of economic development- some countries with high per capita income levels exhibit high gender wage gaps.

The 2012 World Bank Report unequivocally pronounced that gender equality is "Smart Economics", as it enhances economic productivity, improves development outcomes for the next generation, and makes institutions and policies more representative and so the laws do more for all the different groups of society, especially the marginalised. Hence closing the gender gaps is a desirable objective for economies at all levels of development.

This paper intends to use the widely used Oaxaca-Blinder decomposition technique to investigate the level of gender gap in rural wage earnings across India, using the NSS 66th round data findings. Thereafter, this gender gap in rural wages will be compared with the gaps in reference groups of states, to get a holistic understanding of the rural wage gap across axis of gender across states of India.

METHODOLOGY

An often used methodology to study labor market outcomes by groups (sex, race, and so on) is to decompose mean differences in log wages based on regression models in a counterfactual manner. The procedure is known in the literature as the Blinder-Oaxaca decomposition (Blinder 1973; Oaxaca 1973) and divides the wage differential between two groups into a part that is "explained" by group differences in productivity characteristics such as education or work experience and a residual part that cannot be accounted for by such differences in wage determinants. This "unexplained" part is often used as a measure for discrimination, but it also subsumes the effects of group differences in unobserved predictors. Most applications of the technique can be found in the labor market and discrimination literature. A brief explanation of the technique is in order, before it is applied for the purposes of analysis. This section draws on the exposition in Jann (2008).

Given are two groups A and B, an outcome variable Y, and a set of predictors. In our case, males and females, suppose (log) wages be the outcome variable, and human capital indicators such as education and work experience be predictors. The question now is how much of the mean outcome difference

$$R = E(Y_A) - E(Y_B) \quad - 1$$

where $E(Y)$ denotes the expected value of the outcome variable, is accounted for by group differences in the predictors.

Based on the linear model

$$Y_w = X'_w \beta_w + \epsilon_w, E(\epsilon) = 0, W \in \{A, B\} \quad - 2$$

where X is a vector containing the predictors and a constant, β contains the slope parameters and the intercept, and ϵ is the error, the mean outcome difference can be expressed as the difference in the linear prediction at the group-specific means of the regressors. That is

$$R = E(Y_A) - E(Y_B) = E(X'_A) \beta_A - E(X'_B) \beta_B \quad - 3$$

since $E(Y_w) = E(X'_w \beta_w + \epsilon_w) = E(X'_w \beta_w) + E(\epsilon_w) = E(X'_w) \beta_w$ with $E(\beta_w) = \beta_w$ and $E(\epsilon_w) = 0$ by assumption.

In the above formulation, the slope coefficients - sometimes referred to alternatively as 'rates of return' to a predictor - vary as per the group being considered. This difference in the slope coefficients presupposes discrimination between the groups, that is, a gap in the outcome that is not attributable to gap in inputs (or, predictors). This does not bias the statistical exercise or taint it with the investigator's preconception of existence of bias - the results of the decomposition of the wage gap, as we shall see shortly, allows for the slope coefficients to be the same for the two groups.

One decomposition that is prominent in the discrimination literature results from the concept that there is some nondiscriminatory coefficients vector that should be used to determine the contribution of the differences in the predictors. Let β^* be such a nondiscriminatory coefficients vector. The outcome difference can then be written as

$$R = [E(X'_A) - E(X'_B)] \beta^* + [E(X'_A) (\beta_A - \beta^*) + E(X'_B) (\beta^* - \beta_B)] \quad - 4$$

This way, we have a two-fold decomposition where the first component is the part of the outcome differential that is "explained" by group differences in the predictors (the "quantity effect") and the second summand is the "unexplained" part. The latter is usually attributed to discrimination¹. It may be noted here, that in case of absence of significant discrimination - which is indeed the ideal scenario - the latter part may be approximated to be insignificant. In such a case, $\beta^* = \beta_A$ and $\beta^* = \beta_B$; thus $\beta_A = \beta_B$ i.e. slope coefficients are same for the two groups.

The determination of the components of the two-fold decomposition is made complex by the requirement of an estimate for the unknown non-discriminatory coefficient β^* . Several suggestions have been made in the literature. For example, there may be reason to assume

¹ But it is important recognize that it also captures all potential effects of differences in unobserved variables.

that discrimination is directed towards one of the groups only, so that $\beta^* = \beta_A$ or $\beta^* = \beta_B$. Often, however, there is no specific reason to assume that the coefficients of one or the other group are non-discriminating. Moreover, economists have argued that the undervaluation of one group comes along with an overvaluation of the other. Faced with this dilemma, Cotton 1988 suggests weighting the coefficients by the group sizes. Others have suggested to use β^* to represent the slope coefficients obtained by pooling all observations across the two groups - the so called 'pooled coefficients'. This paper will proceed to use pooled coefficients.

LITERATURE REVIEW

Blinder (1973) and Oaxaca (1973) introduced the use of decomposition of outcomes to study the relative roles played by differences in inputs and differences in coefficients in influencing differences in outcomes. The methodology was further refined by Cotton (1988) and Banerjee and Knight (1983). Further, this method has been widely employed to statistically characterize group-wise gaps in wages (see for example Kim (2010) and Bhaumik and Chakrabarty (2009)) and other outcomes (more recently in Haddad et al (2012)).

Studies on India-centric research themes include Borooah (2005), which analyses poverty and inequality in the caste discrimination framework. Using the similar technique of decomposition of economic outcomes in India over data collected for 28922 households, it showed that at least one-third of the average outcome differences between upper caste households and SC/ST households was due to unequal treatment - the so called 'unexplained differences' - of the latter. Similarly, Poel and Speybroeck (2009) decomposes malnutrition inequalities between SC/ST and the remaining Indian population using Blinder-Oaxaca decomposition of the 1998-99 Indian Demographic Health Survey data; it reveals no significant unexplained differences between SC/ST and the remaining population, most of the differences being accounted for by differences in inputs.

Among the important papers on gender wage gap in India are the following: Reilly and Dutta (1996) find that the mean wage gap between men and women to be relatively stable in 1980s and 1990s. Madheswaran and Khasnobis (2007), while focusing on decomposition of gender wage gaps, discover that gross wage gap between males and females declined over time. They also find that decline in endowment difference contributed to decline in wage gap over time while a worsening of endowment differences in casual labour market led to the opposite trend in outcomes. Khanna (2012) goes a step forward and investigates the gender wage gap in India using NSS 66th Round data at various quintiles of the wage distribution, discovering a phenomenon of 'sticky floor' with wage gaps being wider at lower ends of the wage distribution. This paper employs the Machado-Mata-Melly decomposition which is a finer extension of the Blinder Oaxaca decomposition methodology, as outlined above. The Blinder-Oaxaca decomposition technique for analysing gender wage gaps for Odisha was first

executed in Chinara and Kamila (2017). Other quantitative assessments in the Indian context include Duraisamy and Duraisamy (1996) and Kingdon and Unni (1997).

So far as the researcher's knowledge is concerned, no paper so far has analysed the gender wage gap for rural wage market, nor has there been any comparison of such gaps in an inter-state framework. This work intends to make a contribution in this direction, by investigating the decomposition of gender wage gap in rural wage market for India and comparing the results thereby obtained with the decomposition outcomes for groups of state(s).

DATA AND RESULTS

As mentioned earlier, this paper relies on the NSS 66th Round, which is a comprehensive data set with coverage of all relevant indicators for the current investigation. Choice of variables to be used as predictors is guided by insights offered by previous studies on the subject.

The data figuring in NSS 66th Round dataset corresponds to the relevant data items captured in NSS Questionnaire used for the survey. A brief discussion of the variables used is given here, to facilitate better understanding of the analysis and its results.

Wages are recorded on a weekly basis, as "wage and salary earnings (received or receivable) for the work done during the week". For the econometric exercise in this paper, daily wage has been computed (with adjustment for number of weeks worked and the wages received thereby) and then the log form of the same has been taken. This measure is then decomposed into explained and unexplained parts using regressors such as age, levels of education (general and technical), duration of training and number of workers in the economic enterprise.

Age is accepted as a standard measure of experience in the labour market, and hence is expected to significantly influence wages. Educational level, apart from experience, is also accepted as an important determinant of wages. The utility of educational level is not only important in white collar jobs, but throughout the labour market - this is corroborated by most studies on labour market outcomes. Duration of training contributes directly to level of skills embodied in a worker, and hence impacts wages. Number of workers in the economic enterprise is a measure of the size of the business organisation, and hence likely to contribute to wage determination.

Table 1 shows a simple OLS regression carried out in order to ascertain the significance or otherwise of the variables listed above. First noteworthy fact is that controlling for all relevant regressors, gender (the variable 'sper') has a significant coefficient. This implies that the gender wage gap in rural wage market is existent and is statistically significant. Before moving on to analyse the characteristics of this gender wage gap, we can draw some inferences about the importance of regressors and make decisions regarding including them (or otherwise) in further econometric exercises. Apart from gender, duration of vocational

training in weeks (the variable 'durtrain'), age of the individual in the wage labour market (the variable 'age') and certain categories (Refer to Notes for details) of levels of general education (the variable 'genedu') are significant determinants of wages - therefore it is imperative that we include them in further econometric expositions. However, coefficients for levels of technical education (the variable 'techedu') are all insignificant, and on the understanding that technical education as recorded in the NSS Schedule (Refer to Notes for details) are of limited utility in the rural wage market, we decide to drop this variable from our econometric exercises hereinafter.

We now proceed to dissect the gender wage gap in rural areas into explained and unexplained parts, using pooled coefficients as the benchmark (as explained in the Methodology section); further we will compare and contrast our results with comparable findings for a holistic understanding. Table 2 shows the Blinder-Oaxaca decomposition for the gender wage gap in the rural wage market. It clearly shows that the gap in log wage between males and females is statistically significant and the unexplained portion of the gap exceeds the explained portion of the gap by nearly a factor of 3, i.e. while the explained gap is 25per cent of total gap in log of wages, the unexplained gap is 75per cent of total gap. For purposes of comparison, we study using the same econometric specification the gender wage gap in urban wage market. Table 3 shows the results, which are broadly in line with those obtained for the rural wage market. The gap in log wage between males and females is statistically significant and the unexplained portion of the gap exceeds the explained portion of the gap by a factor of 4, i.e. while the explained gap is 20per cent of the total gap in log of wages, the unexplained gap is 80per cent of total. Further, we dissect the gender wage gap for urban and rural wage markets taken as a whole - using the same econometric specification as before. Table 4 exhibits the results: the gap in log wage between males and females is statistically significant and the unexplained portion of the gap exceeds the explained portion of the gap by a factor of 4, i.e. while the explained gap is 20per cent of the total gap in log of wages, the unexplained gap is 80per cent of total.

Further comparison with states at the diametrically opposite end of the income scale yields interesting insights. Analysing gender wage gap in the rural wage market of high per capita income states like Haryana, Maharashtra, Tamil Nadu and Gujarat (Refer to Notes for selection of states) - results shown in Table 5 - we see that albeit the gender gap is statistically significant, it is largely an explained gap. That is, in the richest states of India by per capita GDP, the gender wage gap in rural wage market is explained by difference in important labour market characteristics by 52per cent and the unexplained gap is statistically insignificant. By contradistinction, for states at the lower end of per capita GDP scale like Bihar, Uttar Pradesh, Jharkhand, Madhya Pradesh and Odisha - the results for which are given in Table 6 - the gender wage gap is statistically insignificant, thereby eliminating any justification of further dissection and analysis.

Some caveats, however, ought to be kept in mind while interpreting the aforementioned results:

1. The numbers of observations available for state-wide analyses, albeit qualifying for the large sample treatment, may be judged by some scholars as not being large enough to draw wage gap comparisons. While appreciating this view point, it may be pointed out that NSS Data is inarguably the most comprehensive data available for undertaking analyses of the above nature and hence in absence of a better alternative, the given dataset must be treated as acceptable.
2. The unexplained part of the wage gaps, as mentioned elsewhere, also captures all potential effects of differences in unobserved variables. Therefore, labelling all of the unexplained fractions of the wage gaps as discrimination is technically unsound. However, the very fact that a significant gap in wages along the axis of gender is not explained in terms of differences in characteristics/inputs raises doubts about the gender-based equality of value of labour.
3. Even as we 'explain' parts of the gender wage gap in terms of differences in characteristics or inputs, such decomposition exercises fail to capture discrimination faced in access to or acquisition of such characteristics or inputs. This is often called 'premarket discrimination' (see for example Juhn et al 1993) - that is, the discrimination that members of a group(s) experience while trying to acquire the characteristics or credentials that receive a premium in the wage market. In our instant case, discrimination faced by women (or men) faced in accessing levels of general education, levels of technical education, vocational training, gaining employment in enterprises employing varying levels of workers, etc. is not captured by our Blinder-Oaxaca decomposition. This is as much a strength as a demerit. While the full spectrum of discrimination fails to get captured, this exercise illustrates that 'equality in access to inputs' does not lead inexorably to 'equality in outcomes' for groups. The policy implication of this is that efforts to mitigate discrimination in the labour/wage market must be pursued as vigorously as efforts to end the discrimination in the access to valuable inputs such as education, health, skilling, etc.

CONCLUSION

The basic conclusion one may draw from the foregoing analysis is that viewed at an aggregate level, the gender gap in rural wages is not just significant, but three-fourths of it cannot be explained on the basis of observable and relevant labour market characteristics; and by implication, three-quarters of this gap is attributed to discrimination in the rural wage market against females vis-à-vis males. Juxtaposition this with the results for urban wage market of India and the pooled wage market of India and we see that results are largely similar. Furthermore it is seen that data suggests an absence of discrimination (despite presence of a statistically significant gap) in rural wage markets of high per capita GDP states such as Haryana, Maharashtra, Gujarat and Tamil Nadu; and an absence of any significant gap in

corresponding markets of low per capita GDP states like Odisha, Jharkhand, Bihar, Uttar Pradesh and Madhya Pradesh. Albeit recent data or more detailed studies with wider coverage than NSS Rounds may also afford opportunities to revisit the findings of this research, evidence is overwhelming that there is need for concrete steps to eliminate the discrimination observed against females in the wage market if we want to become a "Smart Economy" in coming days. The increasing participation levels of women in the paid labour market activities is viewed as a positive outcome for improving women's status by bridging the hiatus in this crucial sphere of economic involvement. However, mere increases in participation remain inadequate in altering the gender inequalities unless these are supported by the nature of work they undertake being decent, lucrative, equally remunerative and secure. If illiterate women are crowding into unskilled, manual labour requiring jobs, that are low paying and hazardous to their health and safety, such a situation can barely be lauded or appreciated. Equally despicable is co-qualified and co-capable women earning less than their comparable male counterparts. Therefore, in addition to the policy focus and implementation of programs those aim at magnifying female labour force participation, nuanced safeguards and supporting institutions must also be put in place to ensure the principle of gender equality in wage markets in India.

Notes:

1. The codes used for levels of general education (represented in the tables as 'genedu') in the NSS Questionnaire Schedule 10: Employment and Unemployment are - not literate -01, literate without formal schooling: EGS/ NFEC/ AEC -02, TLC -03, others -04; literate: below primary -05, primary -06, middle -07, secondary -08, higher secondary -10, diploma/certificate course -11, graduate -12, postgraduate and above -13.
2. The codes used for levels of technical education (represented in the tables as 'techedu') in the NSS Questionnaire Schedule 10: Employment and Unemployment are - no technical education -01, technical degree in agriculture/ engineering/ technology/ medicine, etc. -02, diploma or certificate (below graduate level) in: agriculture -03, engineering/technology -04, medicine -05, crafts -06, other subjects -07; diploma or certificate (graduate and above level) in: agriculture -08, engineering/ technology -09, medicine -10, crafts -11, other subjects -12.
3. The codes used for number of workers in the enterprise (represented in the tables as 'noworker') in the NSS Questionnaire Schedule 10: Employment and Unemployment are - less than 6 -1, 6 & above but less than 10 -2, 10 & above but less than 20 -3, 20 & above -4, not known -9.
4. The codes used for sex of the individual (represented in the tables as 'sper') in the NSS Questionnaire Schedule 10: Male - 1, Female - 2.
5. The selection of states on the basis of per capita GDP has been done on the basis of data released by Ministry of Statistics and Program Implementation, and accessed on 13 March 2017 at <http://statisticstimes.com/economy/gdp-capita-of-indian-states.php>.

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Tables :

Table 1 : OLS regression for lnwage in rural wage market in India

Source	SS	df	MS		No. of obs	958
Model	247.375575	28	8.83484198		F(29, 929)	19.16
Residual	428.264631	929	.460995297		Prob> F	0.0000
Total	675.640207	957	.705998126		R-squared	0.3661
					Adj. R2	0.3470
					Root MSE	0.67897
Inwage	Coeff.	Std. Error	t	p > t	[90per cent Confidence Interval]	
age	.0333054	.0023396	14.24	0.000	.0294532	.0371575
genedu						
5	-.9758061	.5478403	-1.78	0.075	-1.877823	-.0737896
6	-.6748104	.4975525	-1.36	0.175	-1.494028	.1444076
7	-.5130086	.4887138	-1.05	0.294	-1.317674	.2916564
8	-.6201506	.4867346	-1.27	0.203	-1.421557	.1812557
10	-.388451	.4861054	-0.80	0.424	-1.188821	.4119194
11	-.231179	.4878494	-0.47	0.636	-1.034421	.5720628
12	-.2441489	.4858661	-0.50	0.615	-1.044125	.5558274
13	-.1681638	.4887307	-0.34	0.731	-.9728566	.6365291
techedu						
1	.4216398	.4847617	0.87	0.385	-.3765182	1.219798
2	.4909758	.5121913	0.96	0.338	-.352345	1.334297
3	.7236828	.5377179	1.35	0.179	-.1616672	1.609033
4	.1429594	.4908774	0.29	0.771	-.6652681	.9511869
5	.5955424	.5035605	1.18	0.237	-.2335676	1.424652
6	.2916608	.5337913	0.55	0.585	-.5872241	1.170546
7	.2455139	.492631	0.50	0.618	-.5656008	1.056629
8	.5726584	.8364409	0.68	0.494	-.8045377	1.949855
9	.5479917	.511503	1.07	0.284	-.2941958	1.390179
10	.599204	.5366103	1.12	0.264	-.2843225	1.48273
11	.8064875	.8385505	0.96	0.336	-.5741821	2.187157
12	.4654041	.4974972	0.94	0.350	-.3537228	1.284531
noworker						
1	.1026926	.1059842	0.97	0.333	-.0718099	.277195
2	.2951673	.112618	2.62	0.009	.1097422	.4805924
3	.4151155	.1169925	3.55	0.000	.2224879	.6077432
4	.4859522	.106973	4.54	0.000	.3098217	.6620827
9	.494929	.1189031	4.16	0.000	.2991556	.6907024
durtrain	.0026082	.0005198	5.02	0.000	.0017523	.003464
sper [female dummy]	-.2892942	.0554472	-5.22	0.000	-.3805877	-.1980006
_cons	4.13291	.7048778	5.86	0.000	2.972332	5.293488

Source: Author's calculation based on NSS Data

Table 2 : B-O decomposition of lnwage gap in the rural wage market in India along gender axis

Blinder-Oaxaca decomposition				Number of observations	
				Model	Linear
Group 1: sper = 1[Males]				N of obs 1	743
Group 2: sper = 2[Females]				N of obs 2	215
Inwage	Coeff.	Robust standard error	z	p > z	[90per cent confidence interval]
group_1	5.482501	.0294407	186.22	0.000	5.434075 5.530926
group_2	5.147828	.0623056	82.62	0.000	5.045344 5.250312
difference	.3346726	.0689111	4.86	0.000	.2213239 .4480212
explained	.083771	.0355009	2.36	0.018	.0253773 .1421647
unexplained	.2509015	.0584201	4.29	0.000	.1548091 .346994

Source: Author's calculation based on NSS Data

Table 3 : B-O decomposition of lnwage gap in the urban wage market in India along gender axis

Blinder-Oaxaca decomposition				Number of observations	
				Model	Linear
Group 1: sper = 1[Males]				N of obs 1	1376
Group 2: sper = 2[Females]				N of obs 2	466
Inwage	Coeff.	Robust standard error	z	p > z	[90per cent confidence interval]
group_1	5.813132	.0220161	264.04	0.000	5.776919 5.849345
group_2	5.463987	.0438657	124.56	0.000	5.391834 5.536139
difference	.3491456	.0490806	7.11	0.000	.2684152 .429876
explained	.0680459	.0275858	2.47	0.014	.0226714 .1134305
unexplained	.2810997	.0397965	7.06	0.000	.2156402 .3465592

Source: Author's calculation based on NSS Data

Table 4 : B-O decomposition of lnwage gap in the pooled wage market in India along gender axis

Blinder-Oaxaca decomposition				Number of observations	
				Model	Linear
Group 1: sper = 1[Males]				N of obs 1	2119
Group 2: sper = 2[Females]				N of obs 2	681
Inwage	Coeff.	Robust standard error	Z	p > z	[90per cent confidence interval]
group_1	5.6972	.0179605	317.21	0.000	5.667658 5.726743
group_2	5.364171	.0363142	147.72	0.000	5.30444 5.423903
difference	.333029	.040513	8.22	0.000	.2663911 .3996669
explained	.0650216	.0224363	2.90	0.004	.0281172 .101926
unexplained	.2680074	.0329376	8.14	0.000	.21383 .3221849

Source: Author's calculation based on NSS Data

Table 5 : B-O decomposition of lnwage gap in the rural wage market of high GSDP per capita states in India along gender axis

Blinder-Oaxaca decomposition				Number of observations	
				Model	Linear
Group 1: sper = 1[Males]				N of obs 1	219
Group 2: sper = 2[Females]				N of obs 2	58
Inwage	Coeff.	Robust standard error	z	p > z	[90per cent confidence interval]
group_1	5.384383	.0549807	97.83	0.000	5.293948 5.474818
group_2	5.088172	.1256081	40.51	0.000	4.881565 5.294779
difference	.2962105	.1371141	2.16	0.031	.0706778 .5217431
explained	.1550566	.0713792	2.17	0.030	.0376483 .272465
unexplained	.1411538	.1176196	1.20	0.230	-.0523131 .3346208

Source: Author's calculation based on NSS Data

Table 6 : B-O decomposition of lnwage gap in the rural wage market of low GSDP per capita states in India along gender axis

Blinder-Oaxaca decomposition				Number of observations	
				Model	Linear
Group 1: sper = 1[Males]				N of obs 1	67
Group 2: sper = 2[Females]				N of obs 2	13
Inwage	Coeff.	Robust standard error	z	p > z	[90per cent confidence interval]
group_1	5.344194	.1162857	45.96	0.000	5.152921 5.535467
group_2	4.888471	.2807627	17.41	0.000	4.426657 5.350284
difference	.4557229	.3038916	1.50	0.134	-.0441343 .9555801
explained	.4218457	.2507132	1.68	0.092	.0094592 0.8342323
unexplained	.0338771	.2308989	0.15	0.883	-.3459177 .413672

Source: Author's calculation based on NSS Data

DEVISING A BALANCED SCORECARD TO EVALUATE BANKS' PERFORMANCE: AN EMPIRICAL STUDY OF SELECTED INDIAN BANKS

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ABSTRACT

Banking Sector, being a principal player of Money and Capital market in India, plays a very vital role in the economic progress of the nation. Presently, banks are entrusted with a wide range of exercises and offering a variety of financial products and services to an enormous number of clients. At the same time banks are working in an environment encompassed by various challenges and threats from different edges. Structuring innovative products, adopting new technologies, building infrastructures, improving client relations, meeting employees' expectations and most importantly keeping investors' interest are the primary strategic objectives that banks should concentrate to survive in the intense competition. At this critical juncture, a performance evaluation system is absolutely essential to measure the strategic achievement of commercial banks. Sole dependence on financial or accounting based performance measures is inadequate in the complex environment. The increased significance of non-financial performance measures has induced multiple innovations in the area of performance evaluation system. One of the popular and effective innovations is called Balanced Scorecard (BSC) which has been developed by Kaplan and Norton in 1992. The BSC supplements the conventional financial measures with non-financial measures focused on at least three other perspectives - customers, internal business processes, and learning and growth. This paper endeavors to study the application of Balanced Scorecard (BSC) as a performance management tool in Indian Banking Sectors. The study analyses and makes a comparative study of four new generation banks namely ICICI, HDFC, Axis and SBI banks based on the BSC model.

Key Words : *Balanced Scorecard (BSC), financial measures, Indian Banking Sector, non-financial measures, performance evaluation system and strategic objectives.*

INTRODUCTION

The banking sector in India is a vital linkage between small investors and corporate giants and structures the foundation of an economy. The performance of banking sector is the indicator of performance of an economy. A sound, solid and vibrant banking sector guarantees a sound, dynamic, developing, and lively economy. The banking sector in India has experienced revolutionary changes in the previous decade with the rapid globalisation and liberalization, expanded wholesale and retail banking, extended business openings over the globe, the increasing intensity of the corporates and the upward trend of living standards of the middle class Indian. Banking sector reforms paved the way for the entry of new private sector and foreign banks in India. Emergence of new players has intensified the competition in the Indian Banking industry which resulted in product innovation, increased customers' services and innovative banking practices.

Against this backdrop, there is an emerging requirement to focus on the performance measurement tools. Banks have to rethink and redesign their performance measurement systems in order to counter the challenges of rapidly changing and complex environment. Banks have to realise that for competing in rapidly changing environment, it is essential to monitor and measure the performances on a continuous basis. Performance measurement has been considered as a crucial factor and the focus of performance measurement has been shifted from financial perspectives to non-financial perspectives. Traditional measurement systems put focus only on past performances and no futuristic view of the performances. One of the revolutionary changes that have been taken place in performance measurement system is Balanced Scorecard (BSC). According to the 2015 Bain & Company Management Tools Study, Balanced Scorecard has made the list of the top 10 most popular strategic management tools. Robert Kaplan and David Norton developed the Balanced Scorecard (BSC) as a strategy management framework that "balances" four critical perspectives within an organisation. A balanced scorecard is a performance metric used to identify, improve, and control a business's various functions and resulting outcomes. It involves measuring four main perspectives of a business i.e. finance, customers, business processes, learning and growth.

The article seeks to adopt Balanced Scorecard Model in the four selected banks in the Indian Banking Industry using a panel data structure.

LITERATURE REVIEW:

Kaplan and Norton (1992) concluded that there is no single measure that can give a concentrated consideration on basic zones of the business with a clear performance target. Corporate managers need to address both financial and non-financial measures.

Kaplan and Norton (1996) uncovered that the balanced scorecard furnishes managers with a far-reaching system that can change an organisation's vision and strategy into a coherent and linked set of performance measures. These performance measures ought to incorporate both result measures and performance drivers.

Mishra (2011) concluded that there has been a progressive enhancement of competition in the Indian Banking system after the financial sector reforms and competition in banking is important, primarily for productivity, efficiency, consumers' welfare and overall economic growth of a country.

Datta (2005) supported that the competitive environment of Indian banking sector has improved during the regime of ongoing liberalization and competition has become more severe in the latter two years.

Kumar (2016) advocated that to overcome the challenges of an increasingly complex and dynamic competitive environment, organizations have to rethink their performance measurement systems.

Al-Najjar (2012) viewed that Performance Measurement Systems assume a key role in assessing the strategic performance of an organisation, yet numerous managers concur that their performance measurement frameworks don't enough satisfy this function. Therefore a move towards the Balanced Scorecard (BSC) has risen as a managerial approach to evaluate the strategic performance of the organisation.

Hughes and Mester (2013) recommended that banks' comparative advantage in dealing financial products and services to educationally obscure clients, their capacity to broaden credit and liquidity hazard and how they are managed, including the need to get a contract to work and unequivocal and verifiable government assurances of bank liabilities to lessen the likelihood of bank runs.

Khatik and Nag (2015) analysed the performance of the banking sector in India by analyzing the performance of Private and Foreign banks with the help of CAMEL MODEL Approach. The Camel Model approach incorporates important parameters like Capital Adequacy, Assets Quality, Management Efficiency, Earnings Quality, and Liquidity.

Selvakumar et al. (2019) analysed the performance of new generation private sector banks in India.

Gupta et al. (2018) evaluated the performance of HDFC Bank using Balanced Scorecard Model.

RESEARCH GAP: The above literature review demonstrated that fewer researches have been conducted utilising a balanced scorecard as a Performance Measurement Tool in the banking sector in India and the present work is an unobtrusive endeavor towards this path.

OBJECTIVES OF THE STUDY

1. To apply Balanced Scorecard as a Performance Measurement Tool in the selected banks undertaken for the study.
2. To evaluate and analyse the difference between the performance of the selected banks.

HYPOTHESES

In accordance with the above objectives, the following hypotheses have been formulated and examined for the study:

H₀ - There is no significant difference between the performance of Axis, HDFC, ICICI and SBI banks evaluated on the basis of BSC model.

H₁ - There is significant difference between the performance of Axis, HDFC, ICICI and SBI banks evaluated on the basis of BSC model.

RESEARCH METHODOLOGY

Data Collection: Data is collected from various secondary sources such as books, newspapers, magazines, journals, online portals etc. for the present study.

Sources of data: Data has been collected from the annual reports of Axis, HDFC, ICICI and SBI banks and various statistical tables published by RBI database for the period 2008-09 to 2017-18.

Period of study: The period selected for evaluation of performance of selected banks for ten years i.e 2008-09 to 2017-18.

Sampling Design: Indian banking sector is the universe for the study. Three new generation private banks i.e Axis, HDFC, ICICI bank and one public sector bank SBI have been selected on the basis of convenient sampling. So sample size is four and these four banks are the sample units for the study.

Scope of the study: The study is based on the performance evaluation of selected four banks in India during the period 2008-09 to 2017-18. A BSC model of performance measurement is applied to evaluate and analyse the performance.

Statistical Tools: Different statistical tools like Mean, Standard Deviation and ANOVA test have been used for the present study. IBM SPSS Statistics 20.0 has been deployed to simplify the statistical analysis.

Methodology: The relative performances of banks are studied applying Mean and Standard Deviation. Variance in the performance is measured through Analysis of Variance (ANOVA). It is used to analyze the significant differences among group means in a sample. Here One-

Way ANOVA is used to compare the means of two or more independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different.

VARIABLES SELECTED FOR THE STUDY

On the basis of literature review and discussion with the banking professionals various Key Performance Indicators under different perspectives of Balanced Scorecard have been selected for the study. The following variables are considered for the four perspectives of the BSC model:

Perspectives in BSC framework	KPIs selected for Performance Measurement	Description
1. Financial	1. Credit - Deposit Ratio (CDR)	It is the ratio of a bank's lending and deposits it has mobilised. A higher ratio replicates greater dependence on deposits for lending and vice-versa.
	2. Net Interest Margin) (NIM)	Ratio of net interest income to total assets
	3. Return on Assets (ROA)	It is an indicator of how well a company utilises its assets.
	4. Return on investments (ROI)	It is a performance measure used to evaluate the efficiency of an investment
	5. Capital adequacy ratio (CAR)	It is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures.
	6. Ratio of net NPA To net advances (NPANA)	Higher ratio reflects rising bad quality of loans.
2. Customer	1. Ratio of deposits to total liabilities (DTL)	If the ratio is high, it means the bank have enough liquidity to cover any unforeseen fund requirements.
	2. Ratio of demand & savings bank deposits to total deposits (DSBDTP)	Higher ratio indicates that the bank has more demand deposits than time deposits
	3. Ratio of priority sector advances to total advances (PSATA)	Shows the advances given to various priority sectors as prescribed
	4. Ratio of term loans to total advances (TLTA)	Term loans provided in relation to total advances

3. Internal Business	1. Cost of deposits (COD)	The cost of deposit is the interest rate paid by the banks divided by the deposit amount
	2. Cost of borrowings (COB)	It is the total amount a bankr pays to secure a loan and use funds, including financing costs, account maintenance, loan origination, and other loan-related expenses.
	3. Return on advances (RA)	Income earned by way of giving advances
	4. Log Natural of Business per employee (NLBPE)	Revenue earned by a bank per employee
	5. Profit per employee (NPPE)	Profit earned by a bank per employee
4. Learning & Growth	1. Log Natural of Number of ATMs (NATM)	Total nos of on-site and off-site ATMs
	2. Log Natural of No of outstanding Credit Cards (LNNCC)	No of outstanding Credit Cards at the end of the financial year
	3. Log Natural of No of outstanding Debit Cards (LNNDC)	No of outstanding debit Cards at the end of the financial year
	4. Log Natural of No of Skilled Employees (LNNSE)	No of Skilled Employees by a bank
	5. Log Natural of No of Functioning Branches (LNNFB)	No of Functioning Branches by a bank
	6. Ratio of wage bills to total income (RWBTI)	Payment to and provisions for employees / Total income

LIMITATIONS OF THE STUDY:

1. The study is confined to a period of 10 years.
2. Selection of variables is based on the data availability.
3. The study is based on the secondary data may influenced by the inherent limitations of secondary data.
4. The study is restricted to only four banks in Indian Banking Industry. So generalization of findings may be judged carefully.

DATA ANALYSIS AND INTERPRETATION:**Financial Perspective:****Table 1 (a): KPIs under Financial Perspective**

Year	Credit - Deposit Ratio (CDR)				Ratio of net interest income to total assets (Net Interest Margin) (NIM)				Return on Assets (ROA)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	69.48	69.24	99.98	73.11	2.87	4.69	2.15	2.48	1.44	1.28	0.98	1.04
2010	73.84	75.17	89.70	78.58	3.05	4.13	2.19	2.35	1.67	1.53	1.13	0.88
2011	75.25	76.70	95.91	81.03	3.10	4.22	2.34	2.86	1.68	1.58	1.35	0.71
2012	77.13	79.21	99.31	83.13	3.04	4.19	2.40	3.38	1.68	1.77	1.50	0.88
2013	77.97	80.92	99.19	86.94	3.09	4.28	2.70	3.06	1.70	1.90	1.70	0.97
2014	81.89	82.49	102.05	86.76	3.30	4.14	2.91	2.93	1.78	2.00	1.78	0.65
2015	87.17	81.08	107.18	82.45	3.37	4.14	3.07	2.86	1.83	2.02	1.86	0.68
2016	94.64	85.02	103.28	84.57	3.36	4.15	3.11	2.60	1.72	1.89	1.49	0.46
2017	90.03	86.16	94.73	76.83	3.17	4.13	2.91	2.44	0.65	1.88	1.35	0.41
2018	96.92	83.46	91.34	71.49	2.88	4.16	2.79	2.43	0.04	1.93	0.87	-0.19
Mean	82.43	79.94	98.27	80.49	3.12	4.22	2.66	2.74	1.42	1.78	1.40	0.65
Std. Dev.	9.31	5.10	5.41	5.39	0.18	0.17	0.36	0.33	0.59	0.24	0.33	0.36
df	3,36				3,36				3,36			
ANOVA F-Value	17.80				68.55				13.89			
F Critical Value	2.87				2.87				2.87			
p Value	0.00				0.00				0.00			
Null Hypothesis	Rejected				Rejected				Rejected			

Source: Compiled from the Annual reports and statistical tables of banks during 2009-18 and analysed by the researcher

Under Financial Perspectives six KPIs of four banks has been analysed and interpreted. The Credit-Deposit Ratio (CDR) of a bank shows the ratio of a bank's lending and deposits it has mobilized. A higher ratio exhibits greater reliance on deposits for lending purposes and vice-versa. A higher growth in the credit deposit ratio suggests credit growth is rising quickly, which could lead to excessive risks and leveraging on the borrower's side. This ratio serves as a useful measure to understand the systemic risks in the economy.

Table 1 (b): KPIs under Financial Perspective

Year	Return on investments (ROI)				Capital adequacy ratio (CAR)				Ratio of net NPA To net advances (NPANA)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	7.63	7.41	6.90	6.69	13.69	15.69	15.53	14.25	0.40	0.63	2.09	1.79
2010	6.70	6.78	5.77	6.20	15.80	17.44	19.41	13.39	0.40	0.31	2.12	1.72
2011	6.94	7.22	6.19	6.71	12.65	16.22	19.54	11.98	0.29	0.19	1.11	1.63
2012	7.74	7.72	6.58	7.88	13.66	16.52	18.52	13.86	0.27	0.18	0.73	1.82
2013	7.49	7.48	6.65	8.20	17.00	16.80	18.74	12.92	0.36	0.20	0.77	2.10
2014	7.34	7.77	6.63	8.52	16.07	16.07	17.70	12.44	0.44	0.27	0.97	2.57
2015	7.31	7.23	6.32	8.03	15.09	16.79	17.02	12.00	0.46	0.25	1.61	2.12
2016	7.53	8.13	6.67	8.00	15.29	15.53	16.64	13.12	0.74	0.28	2.98	3.81

2017	7.39	7.77	7.07	7.19	14.95	14.55	17.39	13.11	2.27	0.33	5.43	3.71
2018	7.06	7.10	6.35	7.70	16.57	14.82	18.42	12.60	3.64	0.40	5.43	5.73
Mean	7.31	7.46	6.51	7.51	15.08	16.04	17.89	12.97	0.93	0.30	2.32	2.70
Std. Dev.	0.32	0.40	0.37	0.77	1.39	0.91	1.27	0.74	1.12	0.13	1.78	1.33
df	3,36			3,36			3,36					
ANOVA F-Value	8.75			34.09			7.31					
F Critical Value	2.87			2.87			2.87					
p Value	0.00017			0.00			0.00072					
Null Hypothesis	Rejected			Rejected			Rejected					

Source: Compiled from the Annual reports and statistical tables of banks during 2009-18 and analysed by the researcher

As per table 1(a) the mean score of CDR is highest for ICICI bank (98.27) with a standard deviation of (5.41) and lowest for HDFC bank (79.94) with a standard deviation of (5.10) among the four banks under study. As a Public sector bank with more regulations expected SBI has a mean score of (80.49) with a standard deviation of (5.39). ANOVA clearly exhibits that there is a significant difference between the mean scores of CDR of four banks as p-value is less than 0.05. NIM is the ratio of Net Interest Income to Total Assets. Net interest margin (NIM) indicates the amount of money that a bank is earning in interest on loans compared to the amount it is paying in interest on deposits. NIM is one of the major indicators of a bank's profitability and growth. Higher NIM shows higher profitability and vice-versa. HDFC bank shows higher profitability (4.22) with a standard deviation of (0.17) as compared to other banks and ICICI bank shows lower profitability (2.66) with a standard deviation of (0.36). ANOVA analysis clearly shows that there is a significant difference between the mean scores of NIM of four banks as p-value is less than 0.05. Return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. Among four banks HDFC bank exhibits higher ROA (1.78) with a standard deviation of (0.24) and SBI reflects lowest ROA (0.65) with a standard deviation of (0.36). ANOVA analysis clearly replicates that there is a significant difference between the mean scores of ROA of four banks as p-value is less than 0.05. Return on Investment (ROI) measures how well an investment is performing. As per table 1(b) the mean score of ROI of SBI bank (7.51) is highest with a standard deviation of (0.77) and ICICI bank (6.51) is lowest with a standard deviation of (0.37). It is clearly evident that SBI bank is efficiently managing its investment. ANOVA analysis clearly replicates that there is a significant difference between the mean scores of ROI of four banks as p-value is less than 0.05. The Capital Adequacy Ratio is otherwise known as Capital to Risk-weighted Assets Ratio, indicates a bank's financial strength by using its capital and assets. It is used to protect depositors and promote the stability and efficiency of banks. A higher CAR shows the financial safety of the bank to protect depositors and vice-versa. The mean score for CAR is highest for ICICI bank (17.89) with a standard deviation of (1.27) and lowest for SBI (12.97) with a standard deviation (0.74). ANOVA analysis clearly replicates that there is a significant difference between the mean scores of CAR of four banks as p-value is less than 0.05. NPANA is the Ratio of net NPA to net

advances which shows the measure of the overall quality of the bank's loan book. The higher ratio is the indicator of inefficient management of net advances of banks. The mean score of SBI (2.70) is the highest among all four with a standard deviation (1.33) showing the inefficient management of net advances and the lowest mean score for HDFC bank (0.30) with a standard deviation (0.13). ANOVA clearly exhibits that there is a significant difference between the mean scores of NPANA of four banks as p-value is less than 0.05.

ANOVA reveals that the p-value in all six variables in the financial perspective is less than 0.05. Therefore, null hypothesis is rejected and alternate hypothesis is accepted. It can be concluded that there is significant difference between the performances of four selected banks on the basis of financial perspective of Balanced Scorecard.

Customer Perspective:

Table 2: KPIs under Customer Perspective

Year	Ratio of deposits to total liabilities (DTL)				Ratio of demand & savings bank deposits to total deposits (DSBDTP)				Ratio of priority sector advances to total advances (PSATA)				Ratio of term loans to total advances (TLTA)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	79.46	77.92	57.57	76.94	43.15	44.37	28.70	41.64	28.14	30.12	28.42	26.48	70.78	73.25	82.38	50.07
2010	78.22	75.25	55.59	76.33	46.73	52.03	41.69	47.26	28.69	35.09	29.79	26.99	71.76	75.88	83.44	49.69
2011	77.97	75.21	55.54	76.32	41.10	52.69	45.06	49.42	28.99	34.24	24.68	30.61	72.99	60.46	83.33	48.26
2012	77.06	73.01	52.24	78.15	41.54	48.40	43.45	44.81	28.56	32.68	23.37	28.84	70.09	58.63	84.88	47.98
2013	74.18	74.00	54.51	76.79	44.38	47.43	41.89	44.82	24.62	32.01	20.60	25.28	69.41	55.40	82.34	47.01
2014	73.31	74.72	55.82	77.78	45.01	44.81	42.90	42.91	27.28	29.58	19.06	23.21	68.68	54.48	81.23	50.36
2015	69.80	76.34	55.96	76.99	44.78	44.03	45.46	41.34	24.82	29.03	19.67	22.23	69.54	67.97	79.28	51.22
2016	66.31	73.76	58.47	73.41	47.34	43.25	45.82	42.62	24.09	30.52	21.24	22.45	70.11	69.27	77.69	53.28
2017	68.89	74.51	63.49	75.56	51.41	48.03	50.37	44.57	25.16	29.31	22.95	21.72	70.25	70.73	73.48	56.78
2018	65.62	74.14	63.81	78.34	53.76	43.50	51.68	44.49	22.43	26.26	18.14	23.17	65.67	71.17	69.06	57.94
Mean	73.08	74.89	57.30	76.66	45.92	46.85	43.70	44.39	26.28	30.88	22.79	25.10	69.93	65.72	79.71	51.26
Std. Dev.	5.14	1.41	3.73	1.43	4.07	3.46	6.24	2.50	2.32	2.65	3.90	3.05	1.94	7.77	5.02	3.68
df	3,36				3,36				3,36				3,36			
ANOVA F-Value	71.49				1.11				12.54				54.37			
F Critical Value	2.87				2.87				2.87				2.87			
p Value	0.00				0.36				0.00				0.00			
Null Hypothesis	Rejected				Accepted				Rejected				Rejected			

Source: Compiled from the Annual reports and statistical tables of banks during 2009-18 and analysed by the researcher

Under Customer Perspectives four KPIs of four selected banks has been analysed and interpreted. Lower Ratio of deposits to total liabilities (DTL) shows higher profitability for the banks and vice-versa. On the contrary the lower ratio replicates lower customer centric and vice-versa. As per the table 2 the mean score of DTL of SBI bank (76.66) is highest among all the banks with a standard deviation (1.43) and lowest for ICICI bank (57.30) with a standard deviation 3.73. ANOVA shows a significant difference between the mean scores of DTL of four banks as p-value is less than 0.05. DSBBDTP shows the ratio of demand & savings banks deposits to total deposits. ANOVA clearly reveals that there is no significant between the mean scores of NPANA of four banks as p-value is more than 0.05. Ratio of priority sector advances to total advances (PSATA) shows the proportion of lending to various

priority sectors. The mean score of HDFC (30.88) is the highest among all with a standard deviation (2.65) and the mean score of ICICI (22.79) is the lowest with standard deviation (3.90). ANOVA shows a significant difference between the mean scores of PSATA of four banks as p-value is less than 0.05. TLTA shows the Ratio of term loans to total advances of four banks. The mean score of ICICI bank (79.71) is highest among all with standard deviation (5.02) while lowest for SBI (51.26) with standard deviation (3.68).

ANOVA reveals that the p-value in three variables i.e. DTL, PSATA and TLTA in the customer perspective is less than 0.05 and p-value in DSBBDTP in the customer perspective is more than 0.05. Therefore, null hypothesis is rejected and alternate hypothesis is accepted for the three variables. Null hypothesis is accepted only for the variable DSBBDTP in the customer perspective. It can be concluded that there is significant difference between the performances of four selected banks on the basis of Customer Perspective of Balanced Scorecard.

Internal Business Perspective:

Table 3: KPIs under Internal Business Perspective

Year	Cost of deposits (COD)				Cost of borrowings (COB)				Return on advances (RA)				Natural Log Business per employee (NLBPE)				Profit per employee (NPPE)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	6.06	6.58	6.82	5.93	8.89	13.02	8.74	7.33	10.57	14.96	10.06	9.67	6.97	6.10	7.05	6.32	10.00	4.18	11.00	4.74
2010	4.42	4.51	5.48	5.61	5.62	7.14	6.49	4.26	8.59	10.77	8.70	8.62	7.01	6.38	6.64	6.46	12.00	5.98	9.00	4.46
2011	4.54	4.27	4.71	4.98	5.03	9.94	6.76	5.06	8.43	10.56	8.26	8.64	7.22	6.48	6.60	6.56	14.00	7.37	10.00	3.85
2012	5.95	5.57	5.95	5.63	5.94	12.03	6.81	6.15	9.85	11.89	9.42	9.98	7.15	6.48	6.56	6.68	14.00	8.00	11.00	5.31
2013	6.35	6.01	6.16	6.01	6.41	10.32	6.53	5.31	10.45	12.33	10.05	9.46	7.10	6.62	6.60	6.85	15.00	10.00	14.00	6.45
2014	5.79	5.74	5.72	6.02	6.86	9.95	6.55	5.08	10.28	11.68	9.99	9.09	7.11	6.79	6.62	6.97	15.00	12.00	14.00	4.85
2015	5.68	5.75	5.85	6.00	6.33	6.05	5.96	4.24	10.12	11.12	9.81	8.95	7.22	6.92	6.72	7.12	17.00	10.00	16.00	6.02
2016	5.45	5.85	5.50	5.98	5.96	5.30	5.74	3.00	9.69	10.80	9.47	8.37	7.30	7.04	6.85	7.25	18.00	15.00	14.00	4.70
2017	5.09	5.27	5.02	5.59	6.38	6.08	5.92	2.51	9.31	10.22	8.81	7.88	7.24	7.12	6.90	7.39	6.68	16.00	12.00	5.11
2018	4.42	4.58	4.46	5.71	6.31	7.48	5.15	2.92	8.40	10.33	8.37	8.06	7.30	7.32	6.98	7.42	0.47	20.00	8.00	-2.43
Mean	5.37	5.41	5.57	5.74	6.37	8.73	6.47	4.59	9.57	11.46	9.29	8.87	7.16	6.73	6.75	6.90	12.22	10.85	11.90	4.31
Std. Dev.	0.72	0.75	0.70	0.32	1.02	2.68	0.95	1.52	0.84	1.41	0.71	0.69	0.12	0.38	0.18	0.39	5.29	4.93	2.56	2.48
df	3,36				3,36				3,36				3,36				3,36			
ANOVA F-Value	0.68				10.07				14.32				4.72				8.52			
F Critical Value	2.87				2.87				2.87				2.87				2.87			
p Value	0.571				0.0001				0.00				0.007				0.0002			
Null Hypothesis	Accepted				Rejected				Rejected				Rejected				Rejected			

Source: Compiled from the Annual reports and statistical tables of banks during 2009-18 and analysed by the researcher

Under Internal Business Perspectives five KPIs of four selected banks has been analysed and interpreted. As per the table 3 it is found that there is no significant difference between the mean scores of Cost of Deposits (COD) of selected banks as ANOVA produces a p-

value of 0.571 which is more than 0.05. The higher Cost of Borrowing (COB) shows a threat to profitability and vice-versa. HDFC bank (8.73) shows the highest COB with standard deviation (2.68) and SBI (4.59) has the lowest COB with standard deviation (4.59). Return on advances (RA) exhibits how effectively bank's advances have been deployed. The mean score of HDFC bank (11.46) is highest with standard deviation (1.41) and SBI (8.87) is the lowest with standard deviation (0.69) among the selected banks. The mean score of Natural Log Business Per Employee (NLBPE) is highest for Axis Bank (7.16) with standard deviation (0.12) and lowest for HDFC (6.73) with standard deviation (0.38). The mean score of Profit Per Employee (PPE) is highest for Axis Bank (12.22) with standard deviation (5.29) and lowest for SBI (4.31) with standard deviation (2.48).

ANOVA reveals that the p-value in four variables i.e. COB, RA, NLBPE and PPE in the internal business perspective is less than 0.05 and p-value for COD in the internal business perspective is more than 0.05. Therefore, null hypothesis is rejected and alternate hypothesis is accepted for the four variables. Null hypothesis is accepted only for the variable COD. It can be concluded that there is significant difference between the performances of four selected banks on the basis of Internal Business Perspective of Balanced Scorecard.

LEARNING AND GROWTH PERSPECTIVE

Table 4 (a): KPIs under Learning and Growth Perspective

Year	Log Natural of Number of ATMs (NATM)				Log Natural of No of outstanding Credit Cards (LNNCC)				Log Natural of No of outstanding Debit Cards (LNNDC)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	8.75	8.63	8.73	9.92	13.36	15.44	15.03	14.55	16.13	16.40	16.59	18.11
2010	8.93	8.78	8.84	9.98	13.43	15.50	14.92	14.56	16.21	16.46	16.60	18.22
2011	9.20	9.10	9.11	10.01	13.57	15.54	14.86	14.62	16.34	16.48	16.61	18.33
2012	9.33	9.28	9.26	10.21	13.91	15.70	14.87	14.76	16.48	16.57	16.74	18.52
2013	9.47	9.33	9.33	10.68	14.14	15.45	14.97	14.87	16.40	16.67	16.92	18.62
2014	9.42	9.37	9.43	10.73	14.37	15.60	15.02	14.97	16.48	16.89	17.13	18.89
2015	9.45	9.39	9.53	10.81	14.70	15.80	15.11	15.10	16.56	16.95	17.30	19.06
2016	9.56	9.41	9.54	10.82	15.02	15.96	15.26	15.33	16.82	16.98	17.42	19.20
2017	9.53	9.44	9.57	10.99	15.32	16.18	15.42	15.65	16.92	17.01	17.54	19.44
2018	9.38	9.48	9.61	10.98	15.60	16.34	15.71	15.93	17.01	17.11	17.62	19.57
Mean	9.30	9.22	9.30	10.51	14.34	15.75	15.12	15.03	16.54	16.75	17.05	18.80
Std. Dev.	0.27	0.29	0.31	0.43	0.80	0.32	0.27	0.47	0.30	0.26	0.41	0.52
df	3,36				3,36				3,36			
ANOVA F-Value	34.85				12.85				72.08			
F Critical Value	2.87				2.87				2.87			
p Value	0.00				0.00				0.00			
Null Hypothesis	Rejected				Rejected				Rejected			

Source: Compiled from the Annual reports and statistical tables of banks during 2009-18 and analysed by the researcher

Table 4 (b): KPIs under Learning and Growth Perspective

Year	Log Natural of No of Skilled Employees (LNNSE)				Log Natural of No of Functioning Branches (LNNFB)				Ratio of wage bills to total income (RWBTI)			
	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI	Axis	HDFC	ICICI	SBI
2009	9.93	10.87	10.45	12.24	6.72	7.21	7.21	9.40	7.27	11.41	5.10	12.75
2010	9.98	10.86	10.47	12.21	6.94	7.41	7.40	9.50	8.06	11.36	5.80	14.84
2011	10.18	10.93	10.20	12.31	7.30	7.53	7.79	9.58	8.16	11.69	8.64	15.65
2012	10.37	11.10	10.97	12.28	7.44	7.80	7.86	9.62	7.59	10.10	8.56	14.04
2013	10.64	11.15	11.04	12.34	7.62	7.99	8.00	9.68	7.05	9.46	8.04	13.55
2014	10.66	11.13	11.19	12.31	7.82	8.10	8.20	9.73	6.84	8.52	7.73	14.53
2015	10.65	11.24	11.13	12.27	7.89	8.25	8.26	9.76	13.45	7.10	8.27	7.75
2016	10.82	11.38	11.21	12.26	8.00	8.37	8.35	9.79	6.70	8.03	7.35	13.09
2017	10.94	11.34	11.32	12.25	8.12	8.42	8.45	9.81	6.92	7.95	7.78	12.56
2018	11.01	11.39	11.32	12.48	8.23	8.43	8.46	10.08	7.60	7.13	8.17	12.52
Mean	10.52	11.14	10.93	12.30	7.61	7.95	8.00	9.69	7.96	9.27	7.54	13.13
Std. Dev.	0.38	0.20	0.41	0.08	0.50	0.45	0.43	0.19	1.99	1.78	1.18	2.16
df	3,36				3,36				3,36			
ANOVA F-Value	64.60				52.01				19.57			
F Critical Value	2.87				2.87				2.87			
p Value	0.00				0.00				0.00			
Null Hypothesis	Rejected				Rejected				Rejected			

Source: Compiled from the Annual reports and statistical tables of banks and analysed by the researcher

Under Learning and Growth Perspectives six KPIs of four selected banks has been analysed and interpreted. As per the table 4 (a) & 4 (b) the mean score of Log Natural of Number of ATMs (NATM) of SBI (10.51) is the highest with standard deviation (0.43) and HDFC (9.22) is the lowest with standard deviation (0.29). The mean score of Log Natural of Outstanding Credit Cards (LNNCC) of HDFC (15.75) is the highest with standard deviation (0.32) and Axis (14.34) is the lowest with standard deviation (0.80) among all the banks under study. The mean score of Log Natural of Outstanding Debit Cards (LNNDC) of SBI (18.80) is the highest with standard deviation (0.52) and Axis (16.54) is the lowest with standard deviation (0.30). The mean score of Log Natural of No of Skilled Employees (LNNSE) of SBI (12.30) is the highest with standard deviation (0.08) and Axis (10.52) is the lowest with standard deviation (0.38). The mean score of Log Natural of No of Functioning Branches (LNNFB) of SBI (9.69) is the highest with standard deviation (0.19) and Axis (7.61) is the lowest with standard deviation (0.50). The mean score of Ratio of Wage bills to Total income (RWBTI) of SBI (13.13) is the highest with standard deviation (2.16) and ICICI (7.54) is the lowest with standard deviation (1.18) among all the banks under study.

ANOVA reveals that the p-value in all the six variables i.e. NATM, LNNCC, LNNDC, LNNSE, LNNFB and RWBTI in the Learning & Growth Perspective is less than 0.05. Therefore, null hypothesis is rejected and alternate hypothesis is accepted for all the six

variables. It can be concluded that there is significant difference between the performances of four selected banks on the basis of Learning & Growth Perspective of Balanced Scorecard. The performances of selected banks under different perspectives are highlighted below:

Summary of performances of selected banks under study			
Perspectives in BSC framework	KPIs selected for Performance Measurement	Higher Performer	Lower Performer
1. Financial	1. Credit - Deposit Ratio (CDR)	HDFC	ICICI
	2. Net Interest Margin (NIM)	HDFC	ICICI
	3. Return on Assets (ROA)	HDFC	SBI
	4. Return on investments (ROI)	SBI	ICICI
	5. Capital adequacy ratio (CAR)	ICICI	SBI
	6. Ratio of net NPA To net advances (NPANA)	HDFC	SBI
2. Customer	1. Ratio of deposits to total liabilities (DTL)	SBI	ICICI
	2. Ratio of demand & savings bank deposits to total deposits (DSBDTP)	No significant differences	
	3. Ratio of priority sector advances to total advances (PSATA)	HDFC	ICICI
	4. Ratio of term loans to total advances (TLTA)	ICICI	SBI
3. Internal Business	1. Cost of deposits (COD)	No significant differences	
	2. Cost of borrowings (COB)	SBI	HDFC
	3. Return on advances (RA)	HDFC	SBI
	4. Log Natural of Business per employee (NLBPE)	AXIS	HDFC
	5. Profit per employee (NPPE)	AXIS	SBI
4. Learning & Growth	1. Log Natural of Number of ATMs (NATM)	SBI	HDFC
	2. Log Natural of No of outstanding Credit Cards (LNNCC)	HDFC	AXIS
	3. Log Natural of No of outstanding Debit Cards (LNNDC)	SBI	AXIS
	4. Log Natural of No of Skilled Employees (LNNSE)	SBI	AXIS
	5. Log Natural of No of Functioning Branches (LNNFB)	SBI	AXIS
	6. Ratio of wage bills to total income (RWBTI)	SBI	ICICI

Source: Analysed and compiled by the researcher

CONCLUSION

It can't be concluded that banks that are performing great financially are the best's banks when other intangible measures are contemplated. So to recognize the best performing banks in the industry and to disclose comprehensive information with respect to performances to all stakeholders, it is fundamental for the banks to receive BSC as a complete, precise, dependable strategic performance measurement instrument. Important basic measures for banks under BSC are required to be recognized to guarantee consistency among all banks for performance evaluation. The banks has to excel in all the four perspectives i.e. Financial, Customer, internal business Processes and Learning & Growth in order to reach level of heights. This study paves the way of further research on the performances evaluation of other banks in Indian Banking Industries.

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IS INDIAN STOCK MARKET EFFICIENT? AN EMPIRICAL TEST OF MARKET EFFICIENCY USING CAPM

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ABSTRACT

Market Efficiency, an important concept of traditional finance emphasizes that security prices always incorporate all available information. Risk and return are two major factors which are considered by investors before taking any investment decision. In an efficient market scenario, no investor can have abnormal gain or loss. This means, the return expected by investors considering the risk factor will always be same with actual return earned. CAPM (Capital Assets Pricing Model) is one of the accepted tools for calculating expected return. This study aims to test the market efficiency of Indian stock market by applying CAPM and considering sensex 30 companies as the sample. Monthly data has been taken for the study and the period is confined to 10 years i.e. 2009-2018. Further analysis is made to understand the impact of systematic risk on Indian market efficiency. The results of the study reveal that Indian market is not efficient in reflecting all possible available information and systematic risk has a significant impact on market efficiency.

Key Words : *Market Efficiency, Bombay Stock Exchange, Capital Asset Pricing Model, Risk, Beta*

INTRODUCTION

Return is the ultimate goal of every investment decision. A rational investor will always emphasize on getting maximum return with minimum risk. So, everything that affects return, matters to investors. Market efficiency is one such major factor, which plays and should play an important role in investment decision making. The market is called efficient, if all available information is reflected in share prices. So, there exists no opportunity for abnormal gain or no contingency for abnormal loss. Actual return always equals with expected return in case of efficient market condition.

Market efficiency should be considered as a key factor before going for any investment decision. Such market efficiency could be tested by various means like serial correlation, run test, event study etc. However, this study has made a rare attempt to measure the efficiency by using CAPM. Though CAPM is not able explain the form of efficiency but it will able to identify whether the market is efficient or not. Most of the earlier studies has used only traditional technique however a very few studies has tested the market efficiency by applying CAPM.. This paper attempts to analyze the efficiency of Indian stock market and also focuses on risk factor, to understand impact of risk on market efficiency. Thus the present paper will enrich the existing literature by adding updated findings.

IMPORTANCE OF THE STUDY

It is very important to analyze the market efficiency before taking any investment decision. Another factor which is also essential for the investor is risk. The unsystematic risk can be minimized through diversification while systematic risk cannot be. But if an investor has prior information about the degree of systematic risk, it will also help the investor to take necessary actions to hedge the investment risk.

In this digital era, information is easily & abundantly available to all the investor. But out of such information, certain information is highly essential for taking investment decision. As per efficient market hypothesis share price reflect all the information available in the market. When all information is available to all investors, expected return will be equal to actual return. Any deviation indicates market inefficiency. This study is an attempt to measure the Indian market efficiency using CAPM.

REVIEW OF LITERATURE

Capital market has always been attracted the attention of the researcher throughout the globe. Out of different dimensions of capital market, information asymmetry; efficient market hypothesis and market risk are always been a debatable topic among the researchers. Number of studies has been conducted on efficiency of the market in different economies but the results are quite contradictory in nature. Early studies of Working (1960), Fama (1965), Samuelson (1965), Affleck-Graves and Money (1975), Gilbertson and Roux (1977) Shiller (1989) have evidenced that market is efficient and it follows random walk theory. While the studies made by Niederhoffer & Osborne (1966), Jammine and Hawkins (1974), Hadassin (1976), Du Toit (1986) Poterba & Summers (1988) and Lo & MacKinlay (1988) have given contradictory evidence. They highlights that market is inefficient and violates the random walk theory. Claessens (1995) has made a compressive study of nineteen emerging markets has also found the result against the EMH and highlights that market has information asymmetry. Though the studies relating to market efficiency in the foreign context is exhaustive but Indian context only a few number studies has been undertaken. Mahapatra (1995),

Poshakwale (1996), Acharaya (2017) have evidenced that market is inefficient in Indian context. However Mahapatra (1995) also found that Indian market efficient and having no abnormal gain in the long run. Thus by observing such complex findings the study motivates to undertake an extensive study which will enrich the literature as well as helps in giving a clear and updated picture of the Indian stock market.

RESEARCH GAP AND STATEMENT OF THE PROBLEM

Literature in the context of Indian market efficiency is limited and needs further research in the same area. Though CAPM is a well accepted tool but not many studies have used this for measuring market efficiency. Our study attempts to add some more evidences to Indian market efficiency literature.

OBJECTIVES OF THE STUDY:

- To measure efficiency of the Indian market.
- To identify the influence of systematic risk on market efficiency.

RESEARCH METHODOLOGY:

Data Collection:

BSE website and RBI are two major sources of data. Market data is collected from BSE website and 364 T-bill rate is taken as risk free rate, which is available on RBI website.

Sample Selection:

Sensex 30 companies are taken as the sample but as per availability of data, total 28 companies could be considered as final sample for the study.

Time period:

The study period includes 10 years i.e. 2009 to 2018.

Tools and Techniques:

The study uses the classical CAPM model for evaluating expected return and also uses statistical methods like regression analysis for identifying the impact of risk factor on market efficiency.

- **Expected return as per CAPM:**

$$R_{EXP} = R_f + \text{Beta} (R_m - R_f)$$

R_{EXP} = Expected return, R_f = Risk free rate, Beta = Systematic Risk

R_m = Market return

- **Testing of Market Efficiency** = $R_{EXP} - R_{ACT}$

Where - R_{ACT} = Actual return

Paired Sample T test is used to test whether there is a significant difference between actual return and expected return for sample companies.

- **Impact of Risk Factor on Market Inefficiency**

The impact of systematic risk on such deviation is analyzed using the following OLS (Ordinary Least Square) regression model

$$\Delta R = \alpha + \beta_0 (\text{Systematic risk}) + \beta_1 (\text{Total Risk}) + e$$

Where,

ΔR = Difference between expected return & actual return.

α = Intercept

β_0 = Co-efficient of systematic risk.

β_1 = Co-efficient of volatility.

e = error terms

Table No 1: Variables Used in the Study

Sl. No	Variable name	Measurement
1	Risk free rate	364 treasury bill
2	Beta	Co-variance of market & stock return/variance of stock return
3	Stock return	$= (P_{S1} - P_{S0}) / P_{S0}$ Where, P_{S1} = stock price of current yr. P_{S0} = stock price of previous yr.
4	Market return	$= (P_{M1} - P_{M0}) / P_{M0}$ Where, P_{M1} = current yr. market index P_{M0} = previous yr. market index
5	Total Risk	Standard deviation of return

PROCEDURE OF ANALYSIS

In order to achieve the objective of the study the following process has been followed for the purpose of analysis.

- First expected return is calculated using CAPM.
- Actual return for the sample companies is calculated.

- Market efficiency is tested by comparing expected return with actual return.
- OLS model is used to analyze the impact of systematic risk on market inefficiency (deviation between expected and actual return).

EMPIRICAL RESULTS AND DISCUSSION

Table-2 Expected Return Vs Actual Return

Company	Average Expected Return	Average Actual Return
RELIACE	7.280984	0.018165
Tcs	7.116694	0.046019
Hul	7.28417	0.020597
Infosys	7.324551	0.02421
SBI	7.299552	0.01917
ICICI BANK	7.294777	0.00512
L&T	7.082597	0.018571
BAJAJ FIN	8.037665	0.26391
WIPRO	7.356678	0.035377
IOC	7.388729	0.06213
HCL TECH	7.241974	0.029132
ASIAN PAINT	7.217457	0.032915
B.AIRTEL	7.339856	0.001134
NTPC	7.381381	0.001694
BAJAJ FNSV	6.809734	0.028219
HIDUTANZIK	7.352906	0.022812
ULTRACEM	6.758973	0.018084
INDUSINDBK	7.189763	0.033331
NESTLE IND	5.73134	0.020351
TITAN	7.270009	0.034018
GAIL LTD	7.300318	0.009778
TECH MND	7.236746	0.023026
BII	7.045712	0.029576
ABUR	7.332658	0.022081
JSW STEEL	7.351131	0.029055
GCP LTD	7.297523	0.025798
TATA STEEL	7.216319	0.011475
YES BANK	7.350766	0.106965

(Source-Self Compiled)

From the table it is found that there is difference between expected return and actual return. But in order to check whether this is significant or not, Paired sample t test is applied.

Hypothesis Testing:

Table No 3- Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	ACT	.048659	28	.1414513	.0267318
	EXP	7.296350	28	.8808024	.1664560

(Source-Self Compiled using SPSS)

Table No-4 Paired Samples Test

		Paired Differences					t	Df	Sig. (2-tailed) P value
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ACT - EXP	-7.2476906	.8647711	.1634264	-7.5830138	-6.9123674	-44.348	27	.000

(Source-Self Compiled)

The result of t test reveals that the P value is 0.00 which is less than 0.05; hence the null hypothesis is rejected i.e there is no significant difference between expected return and actual return. Thus the study indicates that the Indian stock market is inefficient market. This result further motivates to investigate how market inefficiency is influenced by systematic risk measured through Beta. The regression result is discussed in table 6.

Table No- 5 Summary Statistics

Variable	Mean	Median	S.D.	Min	Max
Actual Return	0.0355	0.0213	0.134	-0.0710	2.05
Expected Return	7.21	6.98	1.13	2.71	17.5
Difference in Return	-7.17	-6.98	1.07	-15.4	-2.67
Systematic Risk	0.0261	0.0130	0.0984	-1.19	0.583
Total Risk	0.108	0.0804	0.254	-0.00103	3.99

Source: Author's Own Calculation

The table highlights that mean of expected return is comparatively higher than mean of actual return while their difference (Actual- expected) mean is negative which implies that Actual return found to be less and the investors are getting less than their expectation.

REGRESSION ANALYSIS:**Table No-6 Regression Results**

	coefficient	P-value	VIF
Const	-7.388935595	2.19E-237***	
Systematic Risk	7.561789255	9.90E-25***	1.895
Total Risk	0.155434804	0.548270308	1.895
Mean dependent var	-7.174937485	S.D. dependent var	1.069347
Sum squared resid	175.5230275	S.E. of regression	0.796026
R-squared	0.449835582	Adjusted R-squared	0.445863
F(2, 277)	113.2429254	P-value(F)	1.14E-36
Log-likelihood	-331.9200792	Akaike criterion	669.8402
Schwarz criterion	680.7445271	Hannan-Quinn	674.2139

Source: Authors own Calculation

Note: ***, ** and * indicate significant level at 1%, 5% and 10% respectively.

The above table shows that, Co-efficient correlation of systematic risk is 7.561789255 and its p value is less than 0.05 so, the null hypothesis is rejected. Thus, the above analysis indicates that systematic risk factor significantly affect the market inefficiency.

FINDINGS:

From the study it is found that Indian market is not efficient in capturing all information. Systematic risk has a positive significant impact on market inefficiency. When systematic risk increases (stock becomes more risky than market), deviation between expected and actual return also increases. Investors must be careful while selecting high beta stocks as this may lead to higher deviation between expected and actual return.

CONCLUSION

Return is the main factor which motivates investors to invest money in stock market. Market efficiency, affects this return significantly. More research should be done in this direction as India is a developing nation and needs more and more investment. This study is an attempt in this direction, which indicated that Indian stock market is not efficient in reflecting all possible information available. The deviation between expected and actual return is positively affected by beta or systematic risk. This study can be taken as a guide to investors in the sense that more caution should be taken while selecting high beta stocks. Investors can develop alternative strategies like portfolio investment to hedge against high beta stocks. More policies

can be designed by regulators to improve the efficiency of Indian stock market, which will motivate investors to invest more.

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DOES ENVIRONMENTAL PERFORMANCE IMPROVE FINANCIAL PERFORMANCE? AN EMPIRICAL STUDY ON SELECTED NSE LISTED COMPANIES

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ABSTRACT

The study reviewed the environmental and financial performance of 32 randomly chosen NSE listed companies to examine if there is any relationship between the two. The environmental performance of the companies was measured by developing a check list of environmental performance initiatives undertaken and reported by the companies while the earning per share (EPS) was taken as proxy for financial performance of the companies. The study found no significant relation between the environmental and financial performance of the companies while the confounding variables R&D intensity and debt equity ratio were found to have a significant influence on the financial performance of the companies.

Key Words : *Environmental performance, Financial performance, EPS and Environmental performance check list, NSE*

INTRODUCTION

One of the most formidable challenges the economies across the globe face in this century is to proactively deal with the environment and climate change issues. Challenges posited by climate change include rising sea levels, adverse impact of extreme weather on the food production, intense heat waves, deteriorating levels of air quality and others. India ranks at 141 out of 180 countries on environmental performance indicators as per 2016 Environmental Performance Index created by Yale University. This shows that India fairs badly on environmental performance indicators. There is an urgent need to adapt our economies to the climate change issues and step up the mitigation efforts. There is a need for the companies to collaborate with the government on the issue and factor in the community vulnerabilities of their performance by incorporating it into their strategies and decision making process. For environmental issues of energy and water conservation, emissions, raw material sustainability and industrial waste affect business and create additional costs in terms of regulatory requirements and higher standards of environmental performance. At the same time environment and climate change issues create opportunities for business in terms of creating a competitive advantage for companies which are investing in energy efficient and

environmental technologies and show resilience by enhancing focus on renewable energy sources, water and energy conservation and resource optimisation. Hence we can say that environment and climate change issues create both cost as well as profits. It thus gives an opportunity to empirically test if the benefits from improved environmental performance outweigh its costs or not.

LITERATURE REVIEW

Vasanth et al. (2015) probed the association between environmental performance and the profitability of the Indian companies. They used environmental intensity as a proxy for environmental performance which was calculated as the ratio of power and fuel expenses to sales and return on assets, return on equity, return on capital employed and return on sales as proxy for financial performance. They found significant positive association between ROA, ROE, ROS and EI and a significant negative relationship between EI and ROCE. They also identified bidirectional causal relationship among the environmental performance variable and financial performance variables.

Rajput, Arora and Khanna (2013) conducted an empirical study to examine environmental and financial performance relationship of the firms in the banking sector using panel data regression method. The study found a significant relationship between the profitability and net income of the firm but no significant relationship between implementation of green banking and profitability.

Aggarwal Priyanka, (2013) analysed the environmental and financial performance relationship of firms through a review of the existing literature. The objective of the study was to examine if environmental performance has any influence on the profitability of the company or not. The study revealed that the results of the studies on environmental and financial performance were mixed, inconsistent and contradictory.

Earnhart and Lizal (2010) made an empirical assessment to determine if environmental performance has any influence on the profits of the company or not and in which direction. To analyse the effect of environmental performance on profits they disintegrated profits into revenues and costs. They found that better environmental performance improves profitability by driving down costs more than it drives down revenues.

King and Linx (2001) studied 652 U.S. manufacturing firms over a period of 1987 to 1996 to examine if stronger environmental performance leads to better financial performance and also investigate if the observed relationship is the result of some other underlying firm characteristic. The study found relation between lower pollution and higher financial valuation and that the firms fixed characteristics and strategic position might be the cause of this association.

OBJECTIVE OF THE STUDY

To examine the nature of relationship that exists between the financial performance and the environmental performance of the Indian companies.

RESEARCH METHODOLOGY

Data and Sample Selection

Data on the environmental performance of the companies was collected from annual reports, business responsibility reports, sustainability reports and company website while the data on the financial performance of the companies was collected from the annual reports of the companies for the year 2017-18.

Sample for the study included 32 companies randomly chosen from the companies listed on the National Stock Exchange in the year 2017-18.

Research Variables:

Independent Variable: The review of existing studies on environment and financial performance relationship has revealed that researchers have used different measures to quantify the environmental performance of companies. Vasantha et al. (2015) used environment intensity as proxy for environmental performance by taking a ratio of power and fuel expenses to sales. Rajput, Arora and Khanna (2013) used adoption of green banking guidelines as a measure of environmental performance of banks. Lenox and King (2001) on the other hand have employed total emissions, relative emissions and industry emissions as a measure of financial performance.

In present study the environmental performance of the companies was measured by constructing a check list of items disclosed by the firms in their annual reports, sustainability reports, and business responsibility reports on the company website. The environmental performance index consisting of fortytwo items is based on Dow Jones Sustainability Index performance measurement indicators (2014) and business responsibility report framework given by SEBI. The index not only takes the quantitative measurement of the environmental performance of companies but qualitative aspect of the reporting is also considered by quantifying the way the companies have reported their performance. For qualitative performance measurement, a score of one was assigned when only absolute data (in absolute units of measurement e.g. tonnes, cubic metres, gigajoules, etc) was reported, score two for trend data and score three was assigned for normalised data (data disclosed by relating two absolute figures to each other e.g. Water consumption per employee, Co2 emissions per unit of output). To determine the environmental performance score of a company for one was assigned for the disclosure of check list item by the company in its reports or on the website and 1 for absolute data, 2 for trend data and three for normalised data giving a maximum

possible environmental performance score of 57. Then this score was converted into a percentage score for each company by applying the following formula:

$$= \frac{\text{Total environmental performance score of the company}}{\text{Maximum possible score}} \times 100$$

The check list constructed to measure the social performance is given in the appendix

Dependent variable: Different measures have been employed by the researchers to measure the financial performance of the firms; Price to Earnings Ratio (P/E Ratio), Market to Book Ratio (M/B Ratio), Return on Invested Capital (ROIC), Return on Assets (ROA), Return on Equity, Profit Margin, Operating Margin, and Beta [refer Watson, Polito and Guerts (2004), Vasantha, et al. (2015), Gonzalez Benito, J. and Gonzalez Benito, O. (2005)] To measure the financial performance of the companies for the study, earnings per share (EPS) was employed.

Control Variables: Taking cue from the social performance and financial performance studies the present study employed control variables to control for size, leverage and management preference. Natural log of total assets was used as proxy for size as size has been found to be a significant variable influencing performance of the companies. Debt equity ratio as proxy for leverage and ratio of research and development to total assets as proxy for management preference were used in the study.

Estimation Technique

To assess the environmental and financial performance relationship the study used multivariate regression analysis technique. Ordinary least square model was employed to ascertain if environmental performance is determinant of corporate financial performance of company or not.

$$EPS_i = \beta_0 + \beta_1 ENV_i + \beta_2 R \& DI_i + \beta_3 DER_i + \beta_4 \text{Log}TA_i + u_i$$

Where, EPS= Earnings per share of a firm

β_0 is the intercept coefficient

ENV = Environmental Performance score measured by environmental performance check list

R&DI = Research and development intensity

LogTA = Log of total assets

$\beta_1, \beta_2, \beta_3$ & β_4 are the coefficients of the independent variables

Descriptive Statistics and Correlation Matrix

Table 1: Descriptive statistics of the study variables

	EPS	ENV	R&DI	DER	LogTA
Mean	38.82156	61.19188	1.249938	1.022813	10.73996
Median	28.49000	65.79000	0.255000	0.725000	10.84734
Maximum	119.4700	84.21000	7.430000	3.150000	12.89367
Minimum	-14.87000	31.58000	0.000000	0.110000	9.261195
Std. Dev.	36.80686	14.87376	2.244793	0.818725	0.949655
Skewness	0.632642	-0.716655	1.941636	1.161255	0.165099
Kurtosis	2.295759	2.417646	5.264854	3.286999	2.344484
Jarque-Bera	2.795863	3.191354	26.94582	7.301893	0.718309
Probability	0.247108	0.202771	0.000001	0.025967	0.698266
Sum	1242.290	1958.140	39.99800	32.73000	343.6789
Sum Sq. Dev.	41997.09	6858.095	156.2120	20.77965	27.95716
Observations	32	32	32	32	32

The mean score of environmental performance was 61.19 and the maximum and the minimum values of the environmental performance score indicated that the lowest performance was 31.58 and the highest performance was 84.21. The p value of Jarque-Bera statistics for most of the variables is greater than 0.05 indicating that these variables are normally distributed.

Correlation Matrix

Table 2: Results of Correlation analysis of the variables

	EPS	ES	RDI	DER	LTA
EPS	1.000				
ES	-0.151	1.000			
RDI	0.451*	0.049	1.000		
DER	-0.422*	-0.054	-0.150	1.000	
LTA	-0.208	0.218	-0.456*	0.214	1.000

* significance at 0.05 level

The Pearson's correlation results indicate that the correlation between earning per share and research and development intensity is positive and significant. On the other hand the correlation between DER and EPS is significant implying that these two variables have influence on the environmental performance of the companies and hence justifies the incorporation of these variables into the regression model to control for their effect on Environmental performance. Further size and R&D intensity are negatively correlated and show a significant association

Results and Findings of the study

Regression results given in Table: 3 indicate that the explanatory variables jointly can explain 29.05% of the variation in the dependent variable EPS and the model is significant with the p value of the F statistics significant at p value ≤ 0.01 . The coefficient of environmental performance is not significant indicating that change in environmental performance of the company has no influence on its financial performance which is consistent with the results of Benito and Benito (2005). The coefficient of research and development intensity is positive and significant indicating that an increase in R&D intensity causes an improvement in EPS of the company keeping other factors as constant. Conversely, the coefficient of debt equity ratio is negative and significant implying an inverse relationship with the EPS of the company while size was not found to be significantly contributing to the variability of EPS.

Table: 3 Results of Multivariate Regression Analysis

Ordinary Least Squares Model				
Dependent variable: EPS				
	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>
const	23.9919	72.8357	0.3294	0.7444
ES	-0.559026	0.391235	-1.4289	0.1645
RDI	7.64153	2.83246	2.6978	0.0119*
DER	-17.7208	7.00834	-2.5285	0.0176*
I_TA	5.36419	6.96754	0.7699	0.4481
R-squared	0.382132			
Adjusted R-squared	0.290596			
F(4, 27)	4.174669			
P-value(F)	0.00925**			
Observations	32			

* significance at 0.05 level ** significance at 0.01 level

Regression Equation: $EPS = 23.991 - 0.559*ENV + 7.641*RDI - 17.720*DER + 5.364*LTA$

To determine that the results of the analysis are robust, White's test for heteroskedasticity was conducted, the null hypothesis of which is heteroskedasticity not present implying that the error term of the model has a constant variance. The p value of the F statistics is greater than 0.05 percent level indicating that the null hypothesis cannot be rejected and hence it can be concluded that the variance of the error term is homoscedastic.

White's test for heteroskedasticity -

Null hypothesis: heteroskedasticity not present

F-statistic	0.506526	Prob. F(14,17)	0.8978
Obs*R-squared	9.419290	Prob. Chi-Square(14)	0.8033

Further another condition necessary for OLS estimates to be consistent and efficient is the normality of the residuals. The null hypothesis of the test is that the error is normally distributed and since the p value of the Chi-square statistics is greater than 0.05 percent the null hypothesis cannot be rejected.

Test for normality of residual -

Null hypothesis: error is normally distributed

Chi-square(2)	2.85554	p value	0.239843
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Another classical assumption that must hold is that no explanatory variable is a perfect linear function of any other explanatory variable. To test this assumption Variance Inflation Factors test was employed which indicate multicollinearity when the value of the statistic exceeds 10. As the values of the VIF are less than 10 for all the explanatory variables, there is no multicollinearity in the data.

Variance Inflation Factors

Minimum possible value = 1.0

Values > 10.0 may indicate a collinearity problem

Independent Variables	Statistics
Environment	1.092
R&D Intensity	1.304
Debt Equity Ratio	1.062
Log of Total Assets	1.412

Limitations of the Study

Though efforts have been made to ensure that the results of the study are robust but generalisation cannot be drawn from the results as the study is based on a very small sample of companies randomly chosen from the population. Further the quantification of environmental performance is based on what is reported by the companies in their publication and not their actual performance. Besides the present study examined the data for only one year but to draw meaningful inference on such relationship it is necessary that the environmental and financial performance of the companies is studied over a period of time.

Conclusion and recommendations for future research:

The study examined the environmental and financial performance relationship of Indian companies using a check list of environmental performance disclosures to measure the environmental performance of the companies while earning per share was used to measure the financial performance of the companies, the study found no significant association between financial and environmental performance of the companies but as these findings are based on a very small sampled of the companies it is possible that contrary results are achieved by extending the sample size or studying the performance of the companies for a longer period of times i.e. taking a longitudinal data in the study. Furthermore, the researchers can also incorporate moderating variables and developing more robust and efficient metrics for measuring the environmental performance.

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APPENDIX**Check list of Environmental performance disclosures**

Sr. No.	Issues	Yes/No
1	Environmental policy	
2	Disclosure of the policy on the website	
3	Environmental impact assessment	
4	Documentation of impact assessment results	
	Emissions:	
5	Continuous Emission Monitoring System	
6	Total emissions reported	
7	Direct emissions reported	
8	Indirect emissions reported	
9	Emission profile	
10	Emission Reduction Reported	
11	Absolute Data/Trend Data/Normalised data	
	Raw material:	
12	Raw material consumed	
13	Resource conservation efforts reported	
14	Use of Recycled material	
15	Proportion of recycled material of total consumption	
16	Proportion of recycled material of total consumption	
17	Absolute Data/Trend Data/Normalised data	
	Water consumption:	
18	Water consumption disclosure	
19	Water conservation efforts reported	
20	Rain water harvesting undertaken	
21	Water consumption reduction reported	
22	Water positive	
23	Absolute Data/Trend Data/Normalised data	
	Energy Consumption:	
24	Energy consumption disclosure	
25	Energy consumption profile	
26	Energy conservation efforts reported	
27	Use of renewable energy reported	
28	Absolute Data/Trend Data/Normalised data	
	Waste Management:	
29	Environmentally sound waste management system	
30	Waste minimisation efforts reported	

31	Waste recycling	
32	Absolute Data/Trend Data/Normalised data	
	Other Disclosures	
33	Employee awareness on sustainability	
34	Initiative to protect biodiversity reported	
35	tree plantation undertaken	
36	ISO 14000 certification	
37	WBCSD/TERI affiliation	
38	Clean Mechanism Development/Carbon Disclosure Project	
39	Green buildings and facilities	
40	Environmental performance targets set and reported	
41	No notices/fines/non monetary sanctions	
42	Award/Recognition for excellence in environmental performance	

*For reporting Absolute data assign 1, for Trend data 2 and Normalised data 3 and 1 for every 'yes' and 0 for 'No'



PERFORMANCE OF INDIAN IRON AND STEEL INDUSTRY AFTER POST REFORM PERIOD

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ABSTRACT

Indian Steel industry often considered as the backbone of the economy, depicting the development and performance of the economy. The post-liberalisation periods in terms of primary indicators such as production, consumption and import and export. More specifically, the post-liberalisation period has witnessed qualitative and quantitative expansion of the Indian steel industry which is almost at par with global standards. At present India is second largest producer of steel in the world and has been able to improve efficiency and world-off competition. Thus, modernisation and up gradation of technology, cost reduction and value-orientation of product portfolio is the key to success for the Indian steel industry in the coming years. On the basis of economical, financial and non-financial aspects of the steel industry is mostly dominated by Tata Steel Ltd., even though SAIL has a better market and proves to be superior with respect to non-financial indicators. The objective of this paper is performance of steel industry and economic development in India. The data has been collected from secondary sources and different statistical tools used for analysis and interpretation.

Key Words : *Indian Steel industry, Post - Liberalisation, Performance of Indian Steel industry*

INTRODUCTION

Indian steel industry is the backbone of the economic development of the country. It is a core industry. For many industries, such as engineering, machine tools, electrical and many more, iron and steel industry is a basis industry. These industries increased consumption of iron and steel. In a sense it may be said that the iron and steel industry is the mother industry. There is a close relation between the level of economic growth of GDP of a country and the quantum of steel consumption. It means that the direct economy and the growth of steel industry. Therefore, rapid growth of industrialisation and economic development of a country depends on a very great extent of the development of iron and steel industry.

After post - reform period Indian steel industry is very modern with state-of-the-art steel mills. It has always strived for continuous modernization and up-gradation of older plant and newly situated develop technology of steel plant which produce higher efficiency level. Indian

steel industry produces various types of product which is more demanded in the world market. The products are mostly used in housing and construction, railway track, ship building and also used in other sector in India.

Indian Steel Industry after Post-reform Period

After post-reform period the steel industry was able to find a strong foothold in the country. The public sector steel industry and private sector steel industries are very fast growing. That also possible by the reform of the steel industry policy and liberalisation by the government. The finished steel production in India has grown from a mere 1.1 million tonnes in 1951 to 23,372 million tonnes in 1997-98. During the first two decades of planned economic development, i.e. 1950-60 and 1960-70 the average annual growth rate of steel production exceeded 8%. However, this growth rate could not be maintained in the decades to follow. During 1970-80, the growth rate in steel production came down to 5.7% per annum and picked up marginally to 6.4% per annum during 1980-90. Due to deflation of the government of India reforms the steel industry policy. In the period 1990-91 reform the industrial policy by the Government of India and liberalised to steel industry sector as well as other sector. Thereafter, exports again fell rapidly to meet the rising domestic demand. Only after liberalisation of the steel sector has the exports of iron and steel have once again started increasing. Though the country's production iron and steel is sufficient to meet the domestic demand, however, some quantity of steel is always needed to be imported especially those grades and qualities which are required in small quantities, and therefore do not justify setting up of production capacity. In the year 2010 crude steel produced 68.3 million tonnes and it grows to 106.5 million tonnes in 2018-19.

Steel Industry in the Global Scenario

The present global steel industry is in its best position in comparing to last decades. The price has been rising continuously. The demand expectations for steel products are rapidly growing for coming years. The shares of steel industries are also in a high pace. The steel industry is enjoying its 9th consecutive years of growth in supply and demand. And there is many more merger and acquisitions which showed some good results. It is noticed that in 2018 world steel produced 1808.4 MT. However, steel production and consumption will be supported by continuous economic growth.

LITERATURE REVIEW

Rahel Falk (2005)¹ studied the sickness in the Indian Manufacturing industry and tested the theoretical model which has addressed the political economy of industrial sickness in India. According to this study Financial Restructuring and its impact on corporate performance

¹ Falk R. (2005), "Industrial Sickness in Indian Manufacturing Industry".

in India; politicians benefit from, and accordingly pay for sickness. He has concluded that sickness law certainly provides several ways for the firm/stake holders to find advantages in sickness and thereby to get rid of their financial responsibility.

Suresh Vadde and G. Srinivas (2012)² that the Indian steel industry is among the upcoming industries of the world. The rate of production of steel in India has been going up at a steady rate in the last few years. India is also supposed to have the best growth potential in the context of steel and is preceded only by china, which is a prominent steel producing and consuming country of the world. It is expected to become the second largest producer of crude steel in the world by 2018-19.

S. Pramila, K. Kumar and K. Anupam (2016)³ has gave his view, the liberalisation of industrial policy and other initiatives taken by the Government have given a definite impetus for entry, participation and growth of the private sector in the steel industry. In the last few years, the rapid and stable growth of the demand side has also prompted domestic entrepreneurs to set up fresh Greenfield projects in different states of the country.

Objective of the study

1. To study the trend in production of steel in SAIL and TATA steel.
2. To highlights the performance of Indian steel industry
3. To present the global scenario of steel industry as well as the production and growth of steel industry in India.

Sources of the Data

The present study is based on the secondary sources which are gathered from the Annual reports of SAIL and TATA Steel and different steel industries, published materials in the form of books, journals, websites and reports are relevant to the study.

RESEARCH METHODOLOGY

The main objective of the study is to understand the performance of Indian iron and steel industry after post reform period. Thus it is intended to analyse the growth of Indian steel industry and its resultant impact on various parameters such as production, sales and operating incomes, profit before tax, profit after tax, total assets, etc. The data have taken from Tata Steel and SAIL. For the data analysis used different statistical tools.

² Suresh Vadde and G. Srinivas (2012), The Indian Steel Sector: Development and Potential, International Journal of Multidisciplinary Research, Vol. 2 Issue 1,

³ S. Pramila, K. Kumar and K. Anupam, A study on steel Industries in India, International Journal of Research in Humanities, Arts and Literature, Vol. 4, Issue 6, January, 2016.

DATA ANALYSIS

Table - 1 : Top 10 Countries Crude Steel Production in 2018-19

Rank	Countries	Production (million tonnes)
1	China	928.3
2	India	106.5
3	Japan	104.3
4	United States	86.6
5	South Korea	72.5
6	Russia	71.7
7	Germany	42.4
8	Turkey	37.3
9	Brazil	34.9
10	Italy	24.5

Source: World Steel Association Annual Reports 2016-17

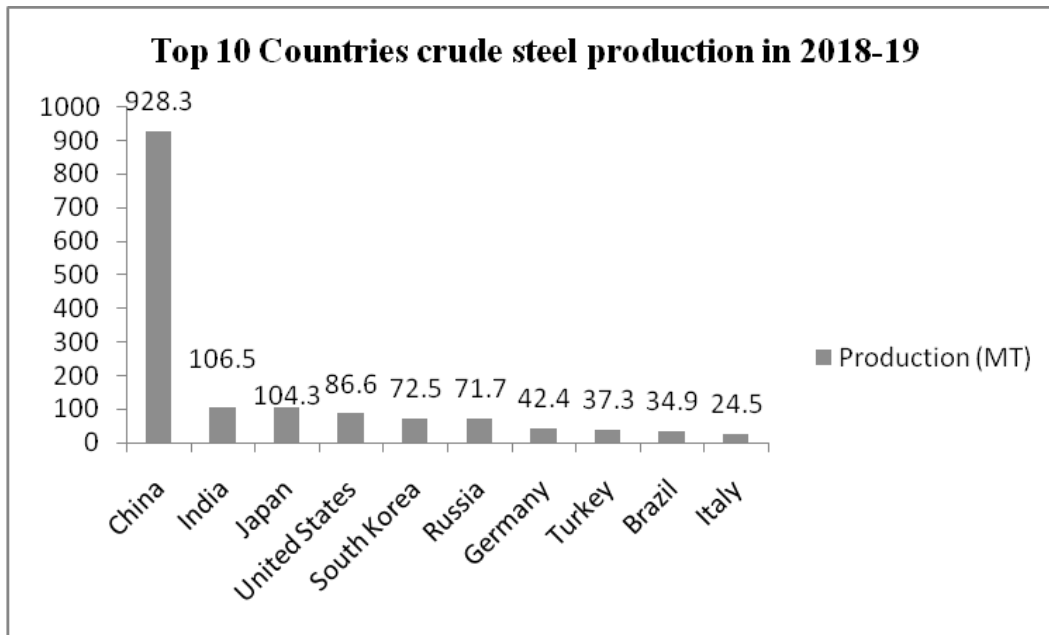


Figure 1

The above table 1 highlights the top 10 countries of highest steel produce in the world. China produced highest crude steel i.e. 928.3 million tonnes in 2018-19 which is 51.33% of the global total production. India is the second position in the world which produced 106.5 million

tonnes i.e. 5.88% of the total production. Then third position is Japan in the world which produced 95.6 million tonnes. India also emerged as the largest sponge iron producing country in the world in 2016, a rank it has held on since 2002. If proposed expansions plans are implemented as per schedule.

Table - 2 : Crude Steel Production of World, China and India from 2010 to 2018

Year	World	China	India
2010	1414	626.7	68.3
2011	1518	702	73.5
2012	1559	716.5	77.6
2013	1649	822	81.3
2014	1665	822.7	86.5
2015	1620	803.8	89.4
2016	1630	808.4	95.6
2017	1730	870.9	101.5
2018	1808	928.3	106.5

Source: World Steel Association Annual Reports 2018-19

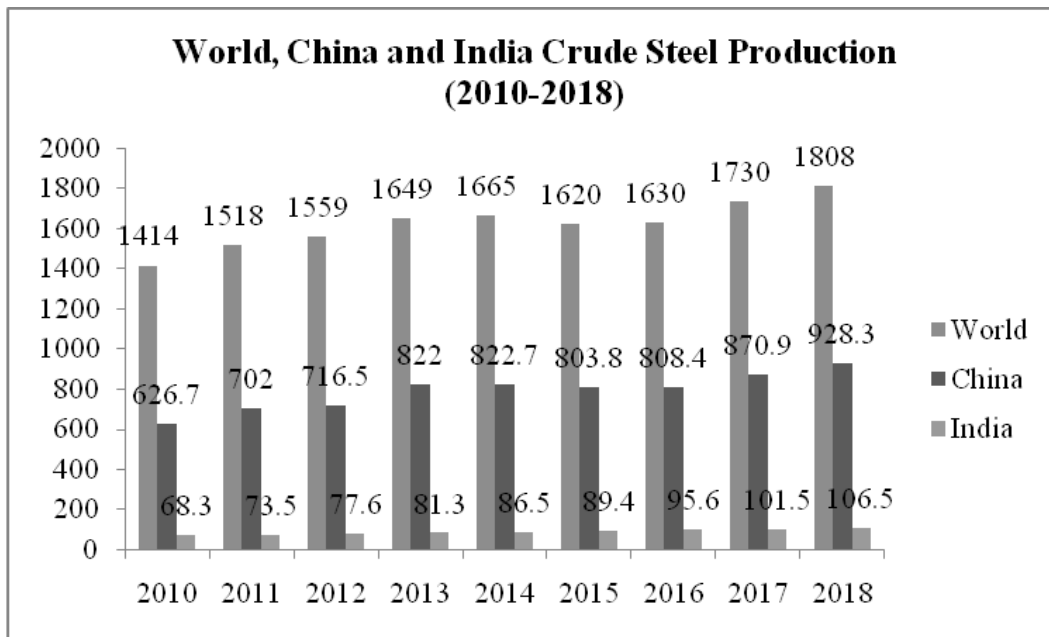


Figure 2

Table - 2 shows the world, China and India's crude steel production from 2010 to 2018. In 2010 world total crude steel produced 1414 million tonnes and it reached to 1808.4 million tonnes in 2018-19. The country of China growth position 626.7 million tonnes to 928.3 million tonnes during the period 2009-10 to 2018-19. In India 68.3 million tonnes crude steel produced in 2009-10 and it increased to 106.5 million tonnes in 2018-19. It increased 55.93% against 2009-10.

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
World	9	394	1414	1808	14593	1621.44	38.542	115.625	13369.028	-.250	.717	.428	1.400
China	9	301	627	928	7101	789.00	30.736	92.208	8502.250	-.405	.717	-.141	1.400
India	9	38	68	106	780	86.67	4.278	12.835	164.750	.174	.717	-1.054	1.400
Valid N (listwise)	9												

From the descriptive statistics found, Mean statistic of world steel is 1621.44 and std. Error is 38.542. The highest steel producer country China indicates Mean statistic is 789.00 and Std. Error 30.736. India is second highest steel producer country point out Mean statistic 86.67 and Std. Error 4.278. The Std. Deviation has seen 115.625 in the world, 92.208 in the China and 12.835 in India. The Variance shows 13369.028, 8502 and 164.750 respectively in World, China and India. The Skewness Std. Error and Kurtosis Std. Error noticed .717 and 1.400 each.

Table 3 : Total saleable steel of India, SAIL and TATA from 2010 to 2018 in (million tonnes)

Year	India's total saleable steel	SAIL	TATA	% of SAIL Produced	% of TATA Produced
2010	68.3	12.63	6.44	18.49	9.43
2011	73.5	12.89	6.69	17.54	9.10
2012	77.6	12.40	6.97	15.98	8.98
2013	81.5	12.38	7.94	15.19	9.74
2014	86.5	12.88	8.93	14.89	10.32
2015	89.4	12.84	9.07	14.36	10.14
2016	95.6	12.38	9.09	12.95	9.51
2017	101.5	13.86	11.68	14.15	11.93
2018	106.5	15.06	12.70	14.14	11.92

Source: Joint Plant Committee (JPC), Annual Reports 2016

Table 3 shows saleable steel of SAIL and TATA steel and point out the percentage of saleable steel produced by SAIL and TATA against the India's production. SAIL produced 12.63 million tones in 2010 and it reaches to 15.06 million tones in 2018. In the year 2018 it increased 8.66% against the previous year 2017. The percent of growth rate is decreased from 18.49% to 14.14% during the period 2010 to 2018. TATA steel produced 6.44 million tones in 2010 and it also increased to 12.70 million tones in 2018. TATA steel growing his production from 9.43% to 11.92% during the period from 2010 to 2018.

From the above table 3 analysis the descriptive statistics shows SAIL mean value 49780.00 and std. Deviation 7720.701 and TATA steel mean value 44591.40 and std. Deviation was 14391.493. The model summary reveals R value .921a, R Square .848, std. Error of the estimate 3191.175. When change in statistics F value 44.681, df1 is 1 and df2 is 8 and significant of change is .000. From Anova test df is 1, Mean square shows 44.681 and significance .000b. Now, it noticed both company SAIL and TATA Saleable steel smoothly growing time to time.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	49780.00	7720.701	10
TATA	44591.40	14391.493	10

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.921 ^a	.848	.829	3191.175	.848	44.681	1	8	.000

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	455014262.883	1	455014262.883	44.681	.000 ^b
	Residual	81468795.117	8	10183599.390		
	Total	536483058.000	9			
a. Dependent Variable: SAIL						
b. Predictors: (Constant), TATA						

Table - 4 : Sales and Other Operating Incomes (Net) (Rs. In Crores)

YEAR	SAIL	TATA
2010	44918.67	30187.02
2011	47964.57	34819.89
2012	45562.70	39101.47
2013	47580.99	42498.67
2014	46731.56	42367.78
2015	44469.84	43088.60
2016	50302.71	53675.42
2017	59446.81	61283.03
2018	67500.13	73016.00
Total	454477.98	420037.88
Average	50497.55	46670.78
Income correlation of SAIL and TATA = 0.56		

Source: Annual report of SAIL and TATA Steel.

The above table 4 indicates that sales and other operating income (Net) of SAIL and TATA Steel companies. During the period of study total income of SAIL and TATA is Rs. 454477.98 crores and Rs.420037.88 crores. SAIL net income increased from Rs. 44918.67 crores to Rs. 67500.13 crores. It is 1.50 times increased of the study period. TATA has increased from Rs. 30187.02 crores to Rs. 73016.00 crores. It also increased 2.42 times. The average income of SAIL Rs. 50497.55 crore and TATA Rs. 46670.78 crores. The sales and other operating incomes correlation of SAIL and TATA shows 0.56 which is accepted.

The descriptive statistics shows, SAIL Mean value 49780.00 and Std. Deviation 7720.701 and TATA Mean value 44591.40 and Std. Deviation was 4391.493. From Model summary found that R is .921a, R square .898, Adjusted R square is .829, Std. Error of the Estimate 3191.175. When Change in Statistics, F value 44.681, df1 is 1, df2 is 8, significance F Change is .000. The Anova test found that df is 1, Mean square is 455014262.883, F is 44.681 and Sig. is .000b. Now in Unstandardized coefficients B value .494, Std. Error is .074, Beta is .921 and t value 6.684. From the analysis it is found both industry favourable.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	49780.00	7720.701	10
TATA	44591.40	14391.493	10

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.921 ^a	.848	.829	3191.175	.848	44.681	1	8	.000

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	455014262.883	1	455014262.883	44.681	.000 ^b
	Residual	81468795.117	8	10183599.390		
	Total	536483058.000	9			
a. Dependent Variable: SAIL						
b. Predictors: (Constant), TATA						

Table - 5 : Profit before tax (Rs. In Crores)

YEAR	SAIL	TATA
2010	7194.31	9776.85
2011	5150.87	9857.35
2012	3240.66	7836.60
2013	3224.55	9713.50
2014	2358.91	8508.89
2015	(7007.50)	1543.34
2016	850.86	5356.93
2017	(758.94)	6638.25
2018	3337.89	16227.25
Total	17591.61	75458.95
Average	1954.62	8384.33
Correlation on Profit Before Tax of SAIL and TATA = 0.72		

Source: Annual Report of SAIL and TATA Steel.

Table 5 shows profit before tax of SAIL and TATA. In the year 2010 the profit before tax position is Rs. 10132.03 crores and it decrease to Rs. 2358.91 crores in 2015 and in the year 2016 it suffer loss (Rs. 7198.44) crores. The total profit is Rs. 23102.89 crores and average profit is Rs. 3300.41 crores during the study period. TATA got before tax profit Rs. 7214.30 crores in the year 2010 and the profit increased to Rs. 9857.35 crores in 2012 and again it fall down to Rs. 6126.52 crores in 2016. The total profit is Rs. 59034.01 crores during the study

period and average profit is Rs. 8433.43 crores. The correlation on profit before tax of SAIL and TATA is 0.72 which is not favourable for the companies.

From Descriptive statistics Mean value of SAIL is 2772.40 and Std. Deviation 4620.077. The Mean value of TATA point out 8267.30 and Std. Deviation 3770.497. The Model summary shows R is .540a, R square .292 and Standard error of the estimate 4124.224. When change in statistics df is 1, df2 is 8 and Sig. F Change is .107. By the Anova test df is 1 Mean square is 56032256.317, F value 3.294 and significance .107b. Now the profit before tax shows better growth against the previous year.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	2772.40	4620.077	10
TATA	8267.30	3770.497	10

Model Summary										Durbin-Waston
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.540 ^a	.292	.203	4124.224	.292	3.294	1	8	.107	.661
a. Predictors: (Constant); TATA										
b. Dependent Variable: SAIL										

Anova						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	56032256.317	1	56032256.317	3.294	.107 ^b
	Residual	136073764.083	8	17009220.510		
	Total	192106020.400	9			
a. Dependent Variable: SAIL						
b. Predictors: (Constant), TATA						

Table - 6 : Profit after tax (Rs. In Crores)

YEAR	SAIL	TATA
2010	4904.74	6865.69
2011	3542.72	6696.42
2012	2170.35	5062.97
2013	2616.48	6412.19
2014	2092.68	6439.12
2015	(2986.44)	955.65
2016	(2017.62)	3444.55
2017	(277.23)	4169.55
2018	1159.07	10533.19
Total	11204.75	50579.33
Average	1244.97	5619.93
Correlation on Profit After Tax of SAIL and TATA = 0.67		

Source: Annual Report of SAIL and TATA Steel.

Table 6 point out the profit after tax of SAIL and TATA steel companies. The study period has been taken from 2010 to 2016. In the year SAIL has got profit after tax Rs. 6754.37 crores. It has decreased to Rs. 2092.68 crores in 2015 and in 2016 it shows loss (Rs. 4137.26) crores. The total profit of SAIL is Rs. 17894.08 crores. The average profit is Rs. 2556.30 crores. In the year 2010 TATA got profit after tax Rs. 5046.80 crores. Its highest profit goes to Rs. 6865.69 crores in 2011. Then it fall down to Rs. 4900.95 in 2016. Every year the profit position is fluctuating but not suffer loss during the study period. The total profit shows Rs. 41414.14 crores and its average profit is 5916.31 crores during the study period. The correlation on profit after tax of SAIL and TATA shows 0.67. It is favourable for the companies.

Table 6 Descriptive statistics shows SAIL Mean value 1795.90 and Std. Deviation 2987.332. other company TATA Std. Deviation 5562.70 and Std. Deviation 2524.054. The significance of 1-tailed test found .070. The Model Summary noticed R is .502a, R square .252, Adjusted R square .159 and Std. Error of the estimate 2740.226. From the Anova test df is 1, Mean square is 20246664.217, F is 2.696 and Significance is .139b which is favourable and accepted.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	1795.90	2987.332	10
TATA	5562.70	2524.054	10

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Waston
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.502 ^a	.252	.159	2740.226	.252	2.696	1	8	.139	.359
a. Predictors: (Constant), TATA										
b. Dependent Variable: SAIL										

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20246664.217	1	20246664.217	2.696	.139 ^b
	Residual	60070692.683	8	7508836.585		
	Total	80317356.900	9			
Dependent Variable: SAIL						
Predictors: (Constant), TATA						

Table - 7 : Total Assets (Rs. In Crores)

YEAR	SAIL	TATA
2010	58726.03	78555.91
2011	76337.02	95802.99
2012	84218.46	101876.93
2013	91961.89	111040.41
2014	99326.87	115677.12
2015	98269.44	105114.46
2016	106539.47	111465.41
2017	114189.80	125114.34
2018	116437.73	137498.36
Total	846006.71	982145.93
Average	94000.75	109127.33
Total Assets correlation of SAIL and TATA = 0.94		

Source: Annual Report of SAIL and TATA Steel.

Table 7 indicates the total assets position of SAIL and TATA from the period 2010 to 2016. In 2010 the total assets position of SAIL is Rs. 51242.87 crores, it increased to Rs. 98269.44 crores in 2016. The assets position increased every year of SAIL. The TATA has shows total assets Rs. 64232.78 crores in 2010 and it increased to Rs. 123208.15 crores. The position of total assets of TATA increased every year. The Total Assets correlation of SAIL and TATA steel shows 0.94.

Table 7 Descriptive statistics Mean value of SAIL shows 89724.90 and Std. Deviation 22152.004. the Descriptive statistics Mean value of TATA point out 104637.70 and Std. Deviation 21362.586. The Sig. (1-tailed) test notice .000. From the Model summary point out R value .966a, R square .933, Adjusted R square .925 and Std. Error of the Estimate 6062.941. When Change statistics, F value .933, df1 is 1, df2 is 8 and Sig. F Change has seen .000. The Anova test indicates df is 1, Mean square is 4122327585.989 and Significance is .000b. The Unstandardized coefficients indicates 1.002, Standardized Error .095, Standardized coefficient (Beta) is .966. The t value 10.590 and Significance is .000 which is positive and accepted.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	89724.90	22152.004	10
TATA	104637.70	21362.586	10

Model Summary ^b										Durbin-Waston
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.966 ^a	.933	.925	.6062.941	.933	112.144	1	8	.000	.999
a. Predictors: (Constant): TATA										
b. Dependent Variable: SAIL										

Anova ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4122327585.989	1	4122327585.989	112.144	.000 ^b
	Residual	294074030.911	8	36759253.864		
	Total	4416401616.900	9			
a. Dependent Variable: SAIL						
b. Predictors: (Constant), TATA						

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constnt)	-15104.801	10083.077		-1.498	.173					
	TATA	1.002	.095	.966	10.590	.000	.986	.966	.966	1.000	1.000
Dependent Variable: SAIL											

CONCLUSION

The Indian steel industry is among the upcoming industries of the world. It has a number of iron ores, which means that it has plenty of resources from which to draw its raw material. The rate of production of steel in India has been going up at a steady rate in the last few years. In the recent times Odisha and Jharkhand have been identified as the potential steel destinations of India - the ones that would provide the Indian steel industry with its necessary raw material. There are also a number of steel companies in India like Tata and SAIL that are either coming up or have established themselves as prominent forces in the world steel scenario. India has traditionally been regarded as one of the top steel producers of the world. In 2018-19 it was ranked as the second largest producers of steel in the world, which is testimony to the standing of the Indian steel industry of world. India is also supposed to have the best growth potential in the context of steel and is preceded only by China, which is a prominent steel producing and consuming country of the world. According to the Ministry of Steel, India is expected to become the largest producer of crude steel in the world in future.

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CONSUMER PROTECTION: NEW AGE CHALLENGES

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ABSTRACT

The consumer protection policy creates an environment whereby consumers receive value for money for goods and services availed by them. One of the disquieting features of consumerism is that an average Indian consumer continues to be in a pitiable condition due to poverty, illiteracy, ignorance and general apathy. Adulterated food, spurious medicines and sub-standard domestic appliances are pushed over the counter with considerable ease. Glossy and unethical advertisements appear in the print and the electronic media to lure them. So it became imperative to protect the consumers from adulterated sub-standard goods and deficient services and also to provide compensation for the same. The Consumer Protection Act was enacted in the year 1986 with the objective of providing better protection to the consumers against fraudulent practices adopted to by business houses. The Act provides effective safeguards to consumers against various types of exploitations and unfair dealings, relying mainly on compensatory rather than punitive or preventive approach. Against such a backdrop, the present work examines the rights of consumers and the protective measures provide to safeguard their interest. It specially deals with the statutory measures of consumer grievance redressal provided by the Consumer Protection Act 1986, their merits, deficiencies and the challenges ahead.

Key Words : *Consumerism, Consumer Movement, Consumer Protection, Consumer Forum.*

INTRODUCTION

Consumer justice aims at consumer protection which is coextensive with the growth of consumerism and consumer movement. Consumerism, consumer movement and consumer protection are the concepts which arose due to the exploitation of the consumers by business houses. Consumerism is the social movement seeking to promote, preserve and protect the rights and powers of the consumers vis-a-vis the sellers in the market place. Even today there is a lack of awareness amongst the consumers about their rights. Advancement of civilisation, industrialisation and establishment of big business houses are responsible for the conversion of buyers market into the sellers market rendering the concept of consumer

sovereignty a myth. Consumer who was once sovereign has now become a pathetic victim of exploitation by big business houses-national and multinational.

Consumer movement started in all the civilised countries to combat the evils of exploitation of the masses. In India most of the consumers are innocent, ignorant and illiterate. The movement spearheaded by a few voluntary organisations was not enough to combat the evils of the massive scale of exploitation. Even today as most of the consumers are ignorant about their rights business houses big and small continue to fleece them. Voluntary organisations are discernible more in urban areas than in the rural areas and even in those places such organisations barring a few have little concern for the consumers. A majority of such organisations are taken more as a pass time avocation trying to gain recognition for themselves than to genuinely serve the consumer community. Against such a backdrop Consumer Protection Act was passed in India in the year 1986. This no doubt marked a good beginning but it has its own fair share of shortcomings alike most social welfare legislations. The objects of the Act are no doubt laudable but the implementation thereof has been left entirely at the mercy of people with humanitarian outlook.

MECHANISM UNDER THE CONSUMER PROTECTION ACT, 1986

The Act provides for two types of mechanism viz. (i) Three tier protection councils- District Consumer Protection Councils, State Consumer Protection Councils and Central Consumer Protection Councils for promotion of consumer rights and (ii) Three tier Consumer Disputes Redressal Agencies- District Forum, State Commission and National Commission for vindication of consumer rights inclusive of administration of consumer justice by applying the existing substantive law relating to consumer protection.

The Consumer Protection Act, 1986 has provided for three-tier Consumer Disputes Redressal Agencies such as a District Forum for each District, a State Consumer Disputes Redressal Commission for each State and a National Commission for the entire country. These adjudicatory bodies have been created to provide inexpensive and expeditious remedies to the consumers. All the three Consumer Disputes Redressal Agencies viz the District Fora, the State Commissions and the National Commission are vested with original jurisdiction based on the pecuniary value of the subject matter involved in the dispute. Further, the State Commissions and the National Commission have also been conferred with appellate jurisdiction.

Modern social welfare legislations not only encourage establishment of tribunals but also prescribe special procedures, sometimes supplementing and at times substituting the general procedural law. The Consumer Protection Act, 1986 has not only established the above three tier tribunals called Consumer Disputes Redressal Agencies but also adopted provisions similar to the one prescribed by the Civil Procedure Code in respect of jurisdiction and trial of suits. The Civil Procedure Code requires evidence to be taken and witnesses to be examined

and cross-examined. There are provisions relating to the summoning and enforcing the attendance of the opposite parties or the witnesses, examining the witnesses on oath, discovery and production of documents or other material objects as evidence and receipt of evidence on affidavits, the requisitioning of the reports of the analysis test from appropriate laboratories or from any other relevant source, issuing commission for the examination of witnesses and other allied matters.

Further, in consonance with the principles of natural justice, fair opportunity is to be afforded to the parties to prove their allegations or defend themselves in the proceedings. These redressal agencies have been empowered only to grant reliefs provided under sec.14 of the Consumer Protection Act, 1986. Unlike Civil Courts they lack inherent power to pass orders granting any other relief, deemed fit and proper under the facts and circumstances of the case.

PROBLEMS AND PROSPECTS

The Consumer Protection Act, 1986 is a social welfare legislation enacted with the pious intention of protecting consumers who are victims of exploitation. The necessity of passing the Act in 1986 was guided by many factors i.e., changing practices by the businessmen at the market place, liberalised industrial licensing policy adopted by the government for promoting rapid industrialisation, mass propaganda by sophisticated means of advertisements by the business world etc., which more or less perplexed the consumers and affected their buying behaviour. All these factors widened the inequality in the bargaining power of the consumers vis-a-vis the seller in the market place. Consequently, in consonance with legislations adopted in many advanced countries, the government was compelled to come to the rescue of the helpless and exploited consumers by way of enactment of the legislation. This certainly marked a humble beginning and most of the literature on the subject hail it as a 'Consumer-Charter'.

However, an objective assessment of the implementation of the Consumer Protection Act clearly indicates that despite a good beginning, the success achieved till date is much less than the initial euphoria it had generated. The problem of consumer protection in a country like India is really of gigantic proportion. It concerns a huge mass of unorganised people scattered throughout the length and breadth of the vast country, the majority of whom are illiterate and poor. The Act aims at protecting them from commercial exploitation by well organised, rich, greedy and shrewd business people including organised retailers, producers and big business houses, national and multinational companies.

Further, one of the inherent difficulties of the protection agencies or the consumer protection law is that in a majority of cases the victims are neither aware about their rights nor the nature of the damages they are put to. Thus, it becomes all the more necessary that consumers

in general be made aware about the different aspects of consumer protection. This need to be done by educating and encouraging them to form voluntary organisations. Consumer movement to be effective and successful has to be four dimensional that is to say it should involve government, business houses, voluntary organisations and consumers. Since, in almost all the cases consumers are the victims, imparting education to them in the matter of consumer protection becomes highly essential. Governments both Central and State ought to put in their best efforts to build a strong consumer movement.

Similarly, one consumer protection council at the national level and one for each state and district is not enough for discharging duties for which they are constituted. Moreover, their composition is so unwieldy that they are not even able to meet for the prescribed minimum number of time in a year.

Though representation is provided to registered consumer associations in the councils, the associations themselves are neither adequate nor active as they are supposed to be. There are about 500 voluntary organizations in the country with a population of over 1.3 billion. Even at a modest estimation of one association per one lakh population, requires ten thousand voluntary associations, actively engaged in consumer protection. Therefore, not only there must be sufficient number of voluntary organisations but also a good number of them committed to serious work.

Even the existing insignificant number of associations exist only in metros, urban and semi-urban areas. The rural and hinterland population, mostly illiterate and poor, remains untouched by such associations. A deeper insight clearly reveals that such organisations are generally formed for acquiring self-recognition in the society rather than vindicating the rights of the member consumers or even educating them. Unless government evinces keen interest in this matter and boosts the voluntary organisations, they will never be able to tackle the problem of such a gigantic proportion. Further more, like the haphazard and piecemeal growth of consumer protection law, the growth of voluntary associations has also been sparse and sporadic.

As a matter of fact, the consumer protection councils at the National, State and District level have not been able to achieve anything remarkable though more than three decades have already passed since the enactment of the Act.

The inadequate number of three tier consumer redressal agencies have also failed to achieve the purpose for which they have been established. Consumer Disputes Redressal Agencies constituted under the Act cater to the needs of only a segment of the urban consumers, ignoring a vast majority of rural as well as the urban consumers.

Even when the awareness level of the consumers is at the lowest ebb, the Consumer Disputes Redressal Agencies have not been able to cope up with the volume of work as it is evident

from the fact that a good number of cases await disposal much beyond the time limit prescribed by the Act.

The Consumer Disputes Redressal Agencies do not have power to grant relief beyond the one sought, even if deemed fit and proper by them, as their power of granting such relief is circumscribed by limits imposed by section 14 of the Consumer Protection Act.

Though the Act has entrusted the responsibility of implementation of its provisions on the State and the Central Government, they have not showed much interest in this regard.

The appointment of the members of the tribunals is made by Government but practically number of posts of presidents and members of the consumer disputes redressal agencies remain vacant for a long period of time, thereby resulting in delay in the delivery of justice. That apart, the remuneration offered to them is not proportionate to the work expected from them. The want of infrastructure is evident from the fact that adequate buildings are not available for accommodation either for the office or the staff.

CONCLUSION

Admittedly, the consumer movement in India has come of age. From simple awareness generation, it took over to direct action and then to testing and litigation. Its contribution to the enactment of Consumer Protection Act, 1986, has been historic. Both business and bureaucrats have started taking consumers seriously. Consumer grievance cells have been established in important organisations and corporations. Consumers are represented on a number of consumer welfare committees set up by various organisations. However, with widespread economic reforms on the anvil and the increasing popularity of e-commerce in the country serious challenges lie ahead for consumers at large.

CHALLENGES AHEAD

It is now over three decades that the Consumer Protection Act, 1986 has been enacted, after years of hard toil by various consumer organisations. Viewed from a critical angle, the functioning of the redressal machinery is far from satisfactory. As a result of which the number of cases pending before various fora is increasing year by year.

Unless consumer groups initiate determined action and see that the institutions set up for protection work effectively, the redressal agencies will go the civil courts way where litigants have to wait for years and spend much for settlement of their disputes. Making the Consumer Protection Act effective is therefore a big challenge for consumer movement in India.

Even if, there are more than 500 consumer organisations in existence, they are more or less concentrated in the urban areas. Rural areas, where the greater part of our consumers lives, still remain untouched by the consumer movement. Though the aim is to have a Consumer

Disputes Redressal Forum in every district, neither it is easy on the part of poor rural consumers to approach the forum with complaints, nor do they have knowledge about the ways and means of asserting their rights. So, the solution lies in imparting training to the foot soldiers of the consumer movement ready and willing to work actively in the rural areas. Mass/social media should be used to effectively penetrate into rural households. Creating consumer awareness in the vast reaches of rural India with its variety of customs, traditions and languages and not much formal education is no less challenging for the consumer movement.

Another matter of concern for the consumers is the likely fall out of the various economic reforms undertaken by the government. Undoubtedly, economic reforms have brought many benefits, notably up-to-date technology, more competition, better products, more employment and investment opportunities etc. But some possible adverse effects must also be taken into account like the import of drugs, pesticides and cosmetics, sometimes banned in the countries of their origin, becomes easier with liberal import procedures. Consumer groups will have to be on their guard against such products and services. For example, treatment for obesity, hair restoration and arthritis etc; which were not approved in the countries of their origin have found their way into this country through collaboration and launched with a lot of fanfare. Consumer organisations need to initiate action against them for the misleading and exaggerated claims made. Laws against advertisements for cigarette and liquor are flouted through advertisements on hoardings, bill boards, cable television and sponsorship of mega sports events with the products being openly endorsed by celebrities. Consumer movement should remain highly alert against the trend of dubious or hazardous products entering the country in the wake of economic reforms.

Some other emerging areas of consumer protection are environment protection (green consumerism) investor protection and freedom of information etc. Relentless increase in pollution of all kinds has adversely affected the quality of our lives and taken a heavy toll on our health. Consumer groups should supplement and complement the efforts of the environmentalists and strive hard to reduce pollution at least in their area of influence.

Lastly, the concern of consumer movement should also be to discourage racism, communalism, violence and conspicuous consumption. Violence is today the real hero in most T.V. serials and films. It enters our homes, assaults our senses and affects all of us, especially the children. In other words the Consumer Movement should be directed towards service to the people and the environment instead of just ensuring value for money for the consumers. Consumer movement should cherish a new vision embodying three new cultures, i.e., the culture of balance and harmony (so well provided by nature), the culture of trusteeship and stewardship (we as the guardians of the Earth) and the culture of accountability (we as the custodians for the next generation)

SUGGESTIONS

Three decades is neither a short nor a long period for assessing the gains made by any national level social movement converted into a legislation but it is a matter of satisfaction that the consumer movement has taken roots in this country of vast population that too with wide diversities. In order to attain the object of spreading awareness across the community at large, both the government and the consumer protection agencies must work hand in hand. Besides that, in order to ensure protection under the Act, the following suggestions need be given a serious consideration at appropriate level.

GENERAL SUGGESTIONS

First, in addition to the existing National Consumer Protection Council, State Consumer Protection Councils and District Consumer Protection Councils, Village Consumer Protection Councils, Mandal/Tahsil Consumer Protection Councils, must be established to ensure that the spirit of consumerism percolates from the urban to the rural areas. Such Councils may be gradually withdrawn as soon as effective voluntary organisations are formed in the rural areas. Until then the grass root level functionaries and operatives of urban based consumer organisations should be encouraged to penetrate into the rural areas and promote awareness about consumer protection in association with local gram panchayats.

Second, special programmes for generating awareness and dissemination of information need to be unleashed through electronic media i.e., Radio, T.V. and the social media which have a high reach in rural areas and small townships. Steps should also be taken to see that these programmes catch the imagination of the audience and carry the message of consumer protection convincingly.

Third, information, education and communication material on consumer rights and protection should be prepared in simple local language and widely circulated at regular intervals.

Fourth, information about the types of cases taken to consumer fora and decisions thereon also need to reach the general public for creating awareness about the benefits that can be derived by seeking redressal of their grievances.

Fifth, it is also necessary that ways and means should be explored for incorporating certain basic essentials of consumer protection in the schools, colleges and universities curricula.

Sixth, symposia and seminars should be organised by the Government and educational institutions with the active participation of Voluntary Consumer Associations in every district on regular basis.

Seventh, programmes should be organised to impart training on important provisions of the Consumer Protection Act and the essentials of consumer movement to the activists, workers and volunteers of consumer organisations operating in various parts of the country. These

programmes may be of short duration but the primary objective of which should be to equip the rank and file of the consumer movement and assist them in effectively carrying the message of consumer protection to every nook and corner of the country and provide assistance to consumers in securing redressal of their grievances.

Eight, it is suggested that expenditure involved in spreading awareness should be met from the consumer welfare fund created by the Government of India.

Ninth, it is further suggested that a reasonable percentage of surcharge or income tax collected from national and multinational companies-manufacturer of goods and providers of services, should be contributed towards the enrichment of the Consumer Welfare Fund.

SUGGESTIONS FOR STRENGTHENING THE LEGISLATION

In order to make consumer justice easy, affordable and expeditious as envisaged by the Act, the following measures have been suggested.

First, it is observed that the establishment of lower Consumer Disputes Redressal Agencies for broadening the base of the existing three tier Consumer Disputes Redressal Agencies is highly essential as their number, at present, is grossly inadequate to cope up with the needs of the consumers, more particularly the rural areas. Therefore, matters of value less than Rs.5000 may be entrusted to the Panchayat Consumer Disputes Redressal Agencies and those of value up to Rs.1,00,000 to the Mandal or Taluk Consumer Disputes Redressal Agencies with right to appeal to the District Forum. The Panchayat Consumer Forum may be presided over by the President of the panchayat and the Mandal or Taluk Consumer Forum by the Samiti President with the Panchayat Presidents concerned as members thereof. This will help the consumers of rural areas, by dispensing with the necessity of approaching the district forum for settlement of petty consumers disputes and thereby save much time, energy and money. This will also ensure that justice is delivered at the door steps of the consumers cost effectively and expeditiously much in conformity with the objects of the Act.

Second, the remuneration of the President and the Honorarium payable to members should be in commensurate with their work. The present remuneration/honorarium is grossly inadequate and therefore be revised appropriately.

Third, adequate infrastructure should be provided to enable the Consumer Disputes Redressal Agencies to function effectively as the Government both Central and States are found to be more or less indifferent towards this issue.

Fourth, it is essential that to ensure that non judicial members who are selected to work on the bench of Consumer Disputes Redressal Agencies are apolitical in nature.

Fifth, panels of specialists like doctors, engineers, architects, industrialists and other experts should be prepared for each Consumer Disputes Redressal Agency with the approval of the

appropriate Government and whenever a dispute involving a technical matter arises, the President be authorised to opt for the subject expert concerned as an additional non-judicial member for settlement of that particular dispute.

Sixth, the present practice of appointing retired District Judges or those who are qualified to be appointed as District Judges as president of the District Forums should be discouraged. It is suggested that Presidents of District Forums should be sitting District Judges or Additional District Judges.

Seventh, the presence of lawyers should be permitted only where the case justifies their engagement, as the general perception is that lawyers create stumbling blocks in the expeditious disposal of cases.

Eight, the establishment of the office of the consumer ombudsman will act as a check on the omissions and commissions and the indifferent attitude shown in the implementation of the provisions of the Act by the Government and plug the loopholes found in the administration of consumer justice by the Consumer Disputes Redressal Agencies. In fact a number of posts are lying vacant in various Consumer Disputes Redressal Agencies due to indifference of the government both Central and State. These vacancies should be filled at the earliest for ensuring expeditious disposal of cases.

Ninth, the statutory time limit for disposal of a consumer complaint by the Consumer Disputes Redressal Agency is 90 days where no laboratory report is required and within 150 days where required; which at present is observed more in its breach by the Consumer Disputes Redressal Agencies at all levels. Hence, it is suggested that the number of adjournments granted in proceedings before Consumer Disputes Redressal Agencies be statutorily limited to discourage the prevailing practice of granting adjournments indiscriminately.

Tenth, in all cases of frivolous or vexatious litigation before the Consumer Disputes Redressal Agencies at all levels, heavy cost should be imposed on the party indulging in such practice and the amount so received be awarded as compensation to the opposite party and if need be a part thereof be retained for the development of the Consumer Disputes Redressal Agencies.

Eleventh, a procedure should be prescribed for scrutiny of complaints filed before the Consumer Disputes Redressal Agencies at the stage of admission itself, in order to ascertain whether they are covered under the Act or not and further whether they should be pursued or not opposed to the present practice of admitting the case straightaway and issuing notice to the opposite party in each and every case.

SUGGESTIONS FOR ADMINISTRATIVE SUPERVISION

The following measures are suggested for over all supervision of the functioning of the administration of consumer justice in the interest of affording devoted consumer protection under the legal domain of the Act.

First, a separate Ministry - Ministry of Consumer Affairs and Justice - be constituted both at the Centre and the States.

Second, a Consumer Code comprising the existing segments of Civil and Criminal laws including the various post independence social welfare enactments concerning consumer protection along with various notifications etc., be prepared.

Third, Consumer Redressal Agencies be given exclusive jurisdiction in all matters of consumer disputes to avoid any conflict or confusion created by concurrent jurisdiction with other bodies.

Fourth, the concept of consumer may be widened diluting the requirement of 'consideration', as gratuitous consumers deserve as much protection as consumers for consideration. This will solve the difficulties experienced by consumers especially at the hands of Government and Charitable hospitals.

Fifth, the practice of holding Consumer Adalats by various public sector undertakings and banks may be adopted by other multinational and big national business organisations and that such adalats be held at least once a quarter.

A Consumer does not want compensation, but expects full satisfaction from products and services availed in lieu of his hard earned money. The object of Consumer Protection Law is to make the manufacturers of products and providers of services realise that they owe their existence to the consumers and their satisfaction. The ideal Consumer Protection Laws should aim at enabling the dethroned consumer regain sovereignty and supremacy in the market place. If steps are taken on the lines of the above suggestions soon the consumer will regain the same.

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INNOVATION IN SOCIAL MEDIA MARKETING USING DATA ANALYTICS: A CRITICAL REVIEW ON SOCIAL COMMERCE

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ABSTRACT

Social Commerce is the intersection of social media, internet and the E-Commerce. Nowadays Organizations are using Social Medias like Facebook, Twitter and LinkedIn to increase their brand value and for a good return on investment. A proper social media strategy can lead the brand and increase the customer base. The main important task is to retain the customer loyalty through proper innovation in branding. Data analytics can be used as tool for analyzing customer behavior and market trends. Our social practices have been fundamentally changes by Social Medias and have recorded. Two decades before all our social interactions were not public and also not documented. During our interaction in Social Medias nowadays everything is public and digitally recorded in structured, semi-structured and unstructured formats. Organizations are using these huge amounts of data known as Big Data for analyzing the social behavior of consumers and generating business out of it.

INTRODUCTION

The organizations have started using the power of Social Media for predicting the health of the business by capturing consumer data and behavior. They are using different data analytic tools for converting these data into information those will help them in making strategic decisions. In fact, we will see more use of data analytics in social commerce in future to study the usage of social network by consumers and their behaviors, experiences for advertisement and segment marketing. Due to globalization, competition and increase in customer expectations the organizations have changed their marketing strategies and adopted social media analytics approach for good return on investment. The way of doing business has been reshaped by social media analytics. It's exalting enterprises to interact their client and cultivate relationships with their brands, merchandise and services. For marketing consultants, the worth of social media lies in collection communities with common interests, distinguishing geographical boundaries and enabling consultants in segmenting and managing their target customers. It helps them to capture people's interaction with a complete or a selected brand so they'll analyze the buyers' interest in buying their offerings.

Social media analytics facilitateto realize a correct balance between media messages and totally different segments of target customers. This balance is achieved by the utilization of the acceptable technology to capture client preferences and so applying predictive analytics

to spot the set of business patterns and find new business opportunities. By the use of these analytical insights, firms will build strategies, methods and campaigns to focus on customers and return a value to the business. The analyst commit the common mistake during use of social media analytics is that they treat the patterns derived from social media as a separate entity from the buyer data derived from alternative analytical tools. This can be not the correct approach. To reach at the goal by using data analytics in Social Media, the information need to be integrated with the information from alternative sources to realize bigger client insight. These collective insights will help the analyst in achieving goal. Business analyst must always be keen on increasing the brand value by advocating and defining the brand value, reputation and loyalty on social media. They must be quick to analyze the current customer trends and use predictive analytics to find target customers and maximize the ROI on their business.

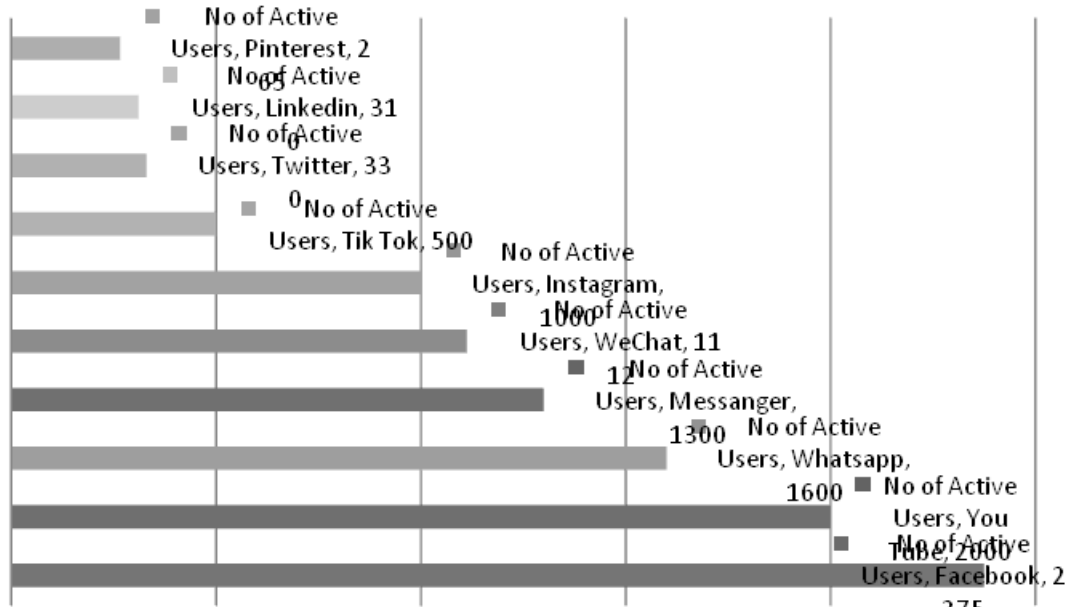


Figure 1.0: No of Active Users in Social Media as of July, 2019 (In Millions)

Source: Statista, July, 2019

The mantra for social media analytics is to "act now". The market budget is quickly change channels from previous strategies like print and broadcast media to digital media. As a result, social media is rising as a major catalyst for getting client insight.

IMPACT OF SOCIAL MEDIA ON BRAND BUILDING

Social Media provides opportunities those need to be grasped by organizations for the success of business. For this, the organizations need to understand the social media marketing

landscape. The organizations have to analyze and understand the followings to increase the brand value and a good return on investment.

- When the users are using the social media?
- Which social media they are using most?
- What are their activities?
- How are they interacting with brands?
- What are their views about the products and services?
- How are they being influenced by the social media?

According to many researchers social media is more and more a platform where a customer precisely loyalty to his favorite brands and plenty of firms obtain to reap edges from brands to promote their products and services. As per Nielsen (2011), the customers who share their experiences through social media, a minimum of forty one percent say they are doing therefore for good discounts. Maximum users in social media trust the recommendations and references from their friends and family members. As per on-line survey by Nielsen's, two out of three users were either somehow or extremely influenced by online advertisement with a social media. As per the study social media has a key role in protecting brands and increasing brand value. Fifty eight percent of social media users write reviews about the products to safeguard other users from unhealthy experiences. The study also shows that nearly one in four users share their negative consumers additionally use social media for acknowledge that they expect better customer grievance.

According to a study by MarketForce (2012) products as per suggestions by friends and users suggest and encourage their friends to b

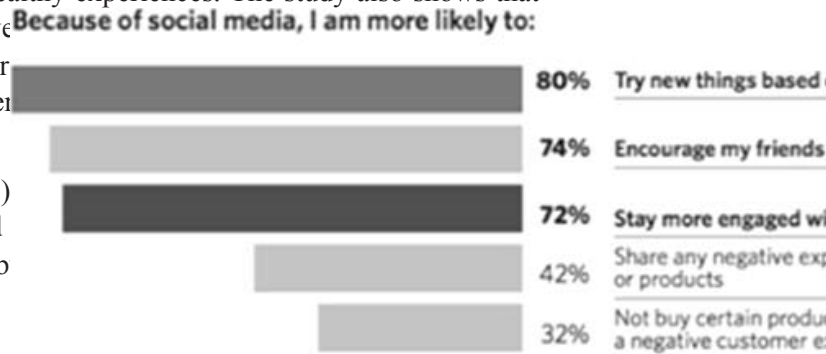


Figure 2.0: Percentage of Users Influenced by Social Media

Source: MarketForce, 2012

All 'Like's are not purchasers and those users are not fans. They are different from customers. According to further analysis, around eighty percent of users claim that they purchase new products based on suggestions from relatives and friends. Seventy four percent of users encourage friends to purchase new products. Few users claim that their purchase decision is influenced by the posts of companies.

Users listen, follow and react to the posts they "hear" through social media. A person cannot be convinced by the users who are more active and engaged because around 42% of users share any negative experiences and 32% claim that they don't buy bound product attributable to negative shared by customers.

FOUR PHASES SOCIAL MEDIA MARKETING FRAMEWORK

The organizations need proper strategies to for social media marketing. There is a four phases framework to understand the consumer behaviors, approaches and expectations. This framework will help marketers to understand the benefits out of social media marketing and have a positive return on investment.

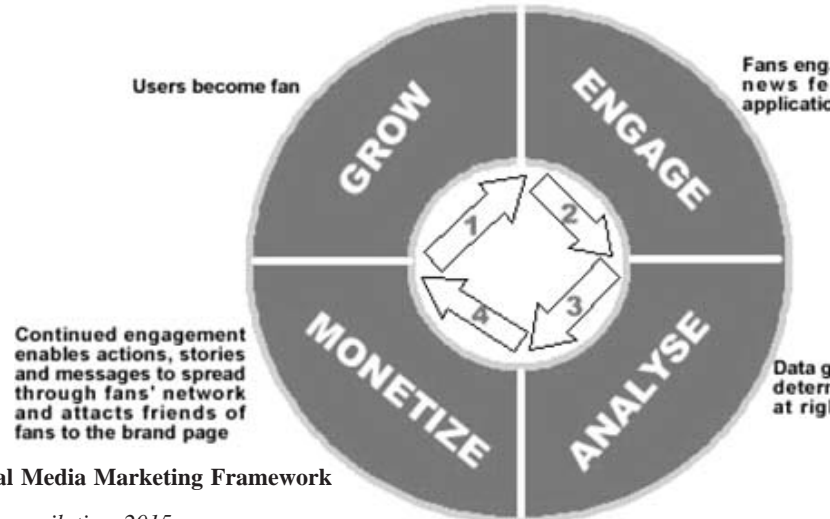


Figure 3.0: Four Phases Social Media Marketing Framework

Sources: Own compilation, 2015

1. Growth Phase

The objective of this phase is to increase the fan base. Then it is important to understand the business benefits out of it and also the users thinking. For this we have to set a quarterly and

a yearly goal. A proper social media marketing strategy is required to achieve this goal.

To shape the social media marketing strategy we have to understand the users' expectations. To understand the user's expectations, we need continuous interaction with them through exclusive content writing, offers and promotions. Once the user becomes fan and trusts the brand, we have to analyse their expectations, likes and dislikes before monetization. To increase the fan base we have to use paid content strategy and exclusive promotions. By word of mouth it will attract more social media users towards brand and convert them to fan followers.

1. Engagement Phase

After the users become fan now we have to continuously engage them with brands. It needs an appropriate plan for the engagement through likes, shares and comments. Without engagement it will be difficult to retain the fans and make them revisit to the page. A successful engagement initiatives lifts brand and brand advocacy.

The brand managers of the organizations have to use earned, owned, paid or collaboration marketing content to engage the customers. Each brand has its own social profile page that contents active conversations. In paid media strategy we have to craft advertisements to influence the user action. These owned properties attract traffic by properly planned paid media strategies. Earned media is the free media for getting exposure in social media through the contents generated by the discussion about the brand. This is the best economical method to increase brand value through conversation about the brand and recommendations. In collaboration one brand can recommend other brands in different product category and also can share fan base for promotion and branding.

2. Analysis Phase

Social Media analysis can help a business to increase the brand value. It also enhances the visibility and reputation of brand in social media. The analytical tools help the brand managers to protect the brand image. In this phase the organizations try to find the target consumers and proper marketing strategies to increase brand value with minimum investment. It can reduce the effort of branding by ensuring the right time and place for promoting the brand. It can also reduce the time and money by identifying the right platform for advertisement. It ensures that maximum target customers will be online at that particular time and place. Data generated by social media are analyzed to determine the place and time for advertisement for the target customers.

3. Monetize Phase

After building trust and engagement with the brand, now a fan will move for monetization and advocacy. In this phase, we collect high quality leads through analysis and convert those

leads to sales. Account retention is also an important activity in this phase by understanding the purchasing behaviors of customers. The data analytics tools are used for consumer profiling based on psychographic and demographic. Based on user's experiences, segmentations have been done to offer special discounts and premier services.

INNOVATION IN DATA ANALYTICS

The social media websites like Facebook and Twitter are using artificial intelligence and machine learning for analyzing user data and convert those into business. They are using different algorithms for processing data and analyzing them in different ways to extract information those are valuable for business. The users are getting advertisements about products and services based on their likes and clicks. During election the result can be predicted by analyzing trends and posts by users.

To accelerate the growth, the organization needs extensive data analysis strategies for huge amount of data generated by Social Medias. The organization is using predictive analytics for investment and growth. The innovation in technology has created a market for analytical companies to help organizations in building their technology adoption model and implementation. Deep learning can be used for social media filtering based on user's interest, likes and posts.

CONCLUSION

As per the market trends, the data analytics in social media is more active now a days. The analytics tools are used in all sectors to improve business process efficiency. The innovation in data analytics sector and good marketing initiatives has increased the brand value. The continuous engagements with users in social media will increases effectiveness of branding and a positive return on investment. We have to be very careful as negative things about brand can spread fast and easily. More use of machine learning and artificial intelligence are required in data analytics for better data management and prediction.

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AN ANALYTICAL STUDY ON ASSESSMENT, MEASUREMENT AND EVALUATION (AME) OF SERVICE QUALITY IN PRIVATE BANKS

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ABSTRACT

The subject "quality" is nowadays, in a globalized world, one of the key concerns of businessmen to face the competition on industries and service areas. Financial groups are measuring no efforts to achieve quality excellence, starting by customer services and relationship. When the expression "Quality" is used, we usually think in terms of an excellent product or service that fulfills or exceeds our expectations. These expectations are based on the intended use and the selling price. Products are determined by its quality. Hence based on observation it is considered elusive. Quality can be quantified as $Q = P/E$. Where $Q =$ Quality, $P =$ Performance and $E =$ Expectations. Quality is a complex phenomenon based on perceptions by individuals with different perspectives on products and services. These perceptions have been built up through the past experience of individuals and consumption in various contexts.

Indian banking sector opened its doors to private and international players after the economic liberalization in the year 1991. It has been almost 2 decades of operation of the private banks in India. Much has evolved in the overall structure of banking during this time but have the private banks delivered the type of quality that the customers expect them to. This research is an effort to evaluate the service quality of the private banks in Southern parts of Odisha of the country India. The study is based on primary data collected in the cities of South Odisha through a structured questionnaire designed on the basis of SERVQUAL Model. The banks under study are the five top private banks from South Odisha region. The study has found that none of the banks have been able to meet the customer expectations and are still dwelling on the 'zone of pain'. The research is very useful for managers, policymakers, implementers as well as academicians. The research provides implications for managers as well as policy makers to understand the customer expectations in India. It can be a guideline for bigger role for the BCSBI (Banking Codes and Standard Board of India). Implications for future research are also discussed. The novelty of the research lies in the context that no

effort has been made so far to effect research on sector specific contribution of banks. There is also very little literature available to identify the need-service gap in this area. The study adds value to the knowledge in the field of banking service quality for development and also opens new areas of research.

Key Words : *Customer Satisfaction, SERVQUAL Analysis, GAP Analysis, Private Sector banks, Service Quality.*

INTRODUCTION

Customer satisfaction is one of the key factors in modern marketing and customers' behavior analysis. Generally speaking, if the customers are satisfied with the provided goods or services, the probability that they use the services again and again. Also, satisfied customers will most probably talk enthusiastically about their buying or the use of a particular service; which will lead to positive advertising (File and Prince, 1992) and (Richens, 1983). On the other hand, dissatisfied customers will most probably switch over to a different brand and; this will lead to negative advertising. The importance of satisfying and keeping a customer in establishing strategies for a market and customer oriented organization cannot be neglected (Kohli and Jaworski, 1990). Customer satisfaction is often considered the most important factor for thriving in today's highly competitive business world. Services have unique characteristics that distinguish them from the physical goods (Zeithmal, 1996). Services are often characterized by intangibility, inseparability, heterogeneity, and perishability (Lovelock, 1996). Because of the quality of services being intangible, understanding how the customers would evaluate the quality of the organization's services is often very hard (Zeithmal, 1996). In addition, the services are real time, i.e. they are used by the customers as soon as they are offered. They cannot be stored and quality passed like physical goods. Therefore any bad service will most probably be experienced by a customer, which results in customer's dissatisfaction while using the service (East, 1997).

Customer satisfaction is a popular research topic among researchers of different areas. Banking industry is not an exception to this. Banking is one of the numerous services in which the customer satisfaction has had an importance in the corresponding research areas. This is essentially because the banking sector is becoming more and more competitive (Lindenmeier and Tscheulin, 2008). Retail banks are pursuing this strategy, in part, because of the difficulty in differentiating based on the service offering. Typically, customers perceive very little difference in the services offered by retail banks and any new offering is quickly matched by competitors (Devlin et al., 1995).

REVIEW OF LITERATURE

Afroz Nushrat Nahida (2019) assessed the service quality of banks in Tangail and its impact on customer satisfaction. The study also tried to test the relationship that exists between

service quality and customer satisfaction. It was concluded that improvements of service quality should be conducted on all the five service quality dimensions, especially the dimensions of responsiveness and empathy. This study also found a positive relationship between all service quality dimensions and customer satisfaction. Accordingly, the results of this research paper confirmed the theory of literatures regarding the relationship between service quality dimensions and customer satisfaction. Although this research provides some significant insights into service quality in banks of Tangail, there is still a chance to extend the findings to gain a more comprehensive understanding of the nature of banking services. The future research may highlight the service quality in banking in total, comparative analysis on SERVQUAL in banking industry. The future research may be directed to analyze the application of SERVQUAL to other service industries by incorporating other dimensions of service quality.

Srinivas D & Rao N. Hanumantha (2018) in their study concluded that the concept that is mostly lacked in the banks are responsiveness and empathy which leads to dissatisfaction among customers. So far as the satisfied customers are concerned, there exist a long gap between the expected service quality and actual service quality. The primary objective of the banks should be to generate a strong confidence among the customers which can be achieved through the provision of a good Service Quality level accurately and timely with a strong performance.

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Franco C. Eugene & Jowerts G. Bright (2017) concluded in their study that Banks are providing huge services to their customers' in an effective and efficient way due to intense competition among banks and to maintain their business in the banking industry. The performance of bank is a function of quality of services they serve to their customers. This study was dealt to assess and evaluate quality aspects in different banking services and their approaches to the customers. SERVQUAL, which is universally accepted instruments to assess the service quality were the base to outline variables to assess the service quality in banks on those five dimensions (Tangibles, Assurance, Reliability, Responsiveness and Empathy). This study reveals that the customers were very much satisfied on the service quality of the banks in the region but at the same time they expect a lot more from the banks in the present scenario owing to different technological developments in banks. Hence, this study gives a further scope to research to explore this mechanism in depth to provide quality banking services to facilitate the customers, the society and the economy as a whole.

Ravichandran et al (2010) studied on influence of Service Quality on customer satisfaction-application of SERVQUAL model in Indian retail banking sector. The paper endeavours to fill the gap in the service quality which determines customer satisfaction and attitudinal loyalty literature by exploring the dimensions of customer perceived service quality with that of the expected service quality in the context of the Indian retail banking industry. They considered additional three extra variables in addition to the original SERVQUAL scale. The variables are Service charge charged by the bank, interest rate and Customer complain handling system as suggested by the researcher like (Bahia and Nantel, 2000, Suresh Chander et al. 2002) after careful validation by academicians and industry experts and in the case of the Attitudinal measurement domain five variables are explicitly extracted from the Behavioral Intention Battery proposed by (Zeithaml, Berry and Parasuraman, 1996 and Zeithaml V A, 2000). Their result suggested that though prompt service has both an objective and subjective component for the provider and consumer of a service, the results in this study suggests that recognizing responsiveness as another form of responsibility is essential to every customer of banking system in order to increase customers' overall satisfaction with banking service. So the study affirms that the service quality level in the proposed study on private banks was at adequate level and the regression on overall service quality lists out the various SERVQUAL items which has a spread in all the dimensions of the SERVQUAL model.

Padhy and Swar (2009) have critically examined the service-quality issues (from the perspective of customers) with respect to a developing economy - Orissa. The three groups of banks in Orissa (public sector, private sector and foreign sector) have been compared with respect to each of the five factors of service quality. The three groups of banks in Orissa seem to vary significantly in terms of the delivery of the five service quality factors. From the customer perceptions of service quality the technological factors (core service and systematization of the service delivery) appear to contribute more in differentiating the three sectors while the people-oriented factor (human element of service delivery) appears to contribute less to the discrimination. The results of the study also indicated that private banks seem to be performing well followed by public sector banks. Thus, the study has established that the technological factors seem to be the differentiating factor among the three groups of banks as far as customer perceptions of service quality are concerned.

According to **Atilgan et al. (2008)**, in most of the service settings customers may not received the level of service they expected before the actual service experience. The performance of the service falls either under customers' expectations or above expectation. When expectations are exceeded, service is perceived to be of high quality and also to be a surprise. When expectations are not met, service quality is deemed unacceptable. When expectations are confirmed by perceived service, quality is satisfactory. However, quality, which falls short of expectations, has a greater effect on customer satisfaction than quality which exceeds satisfaction (Zeithaml and Bitner, 2000). The notion that service quality and

customer satisfaction are distinctive variables has achieved some degree of consensus among researchers. The construct of service quality is evaluated by the actual service performance in terms of particular service attributes in the specific context; whereas satisfaction is measured by the customers' overall service experiences. Customer satisfaction depends on a variety of factors, including perceived service quality, customers' mood, emotions, social interactions, and other experience-specific subjective factors.

Carrillat et al. (2007) used data from 17 studies to compare the predictive validity of the SERVQUAL model and the SERVPERF model; the authors reported that the two models were equally valid predictors of overall service quality. In summary, although the perception-only measure has been shown in several empirical studies to possess impressive convergent and predictive validity, the gap model appears to have better diagnostic capabilities.

Zillur Rahman (2005) in his study found perceptual problems among customers i.e. the respondents were not able to distinguish between expectation and perceived service level measures of the sample involved. No positive scores were found. The largest discrepancies were found along the "reliability" dimension. This was alarming since it was identified as the most important dimension in their overall perceptions. This indicated that the sample population appears not to be getting what they expect from their banking service experience.

Kilborne et al. (2004), who applied SERVQUAL to banking service quality in the USA and the UK, reported a four-factor structure of "tangibles", "reliability", "responsiveness", and "empathy".

Shainesh and Tanuja Sharma (2003) attempted to analyze the linkage between service climate and service quality. Contacting 271 employees, 300 customers and 48 banks in India, they tested whether employees' and customers' perception of service climate would differ across foreign, private and public banks. They found that the employers' perception of foreign and private banks were similar. They also found that significant differences existed across bank types. Among the three sets of banks public sectors banks scored low on three dimensions of service climate.

Curry and Sinclair (2002) supported the usefulness and relevance of the SERVQUAL methodology for determining consumer priorities and measuring service performance in the context of public-sector banking services.

Yong (2000) described the four factors as Reliability which refers to the ability to perform the promised service dependently and accurately. Responsiveness reflects the willingness to help a customer and provide prompt service. Tangible, on the other hand refers to the appearance of the physical facilities, equipment, personnel and communication material. Empathy refers to caring, individualized attention the firm provides its customer. SERVQUAL's shortcomings result from the weakness of the traditional disconfirmatory definition of service quality which it incorporates. Yong (2000) notes several problems in this

traditional definition of service quality. First, customers' needs are not always easy to identify, and incorrectly identified needs result in measuring conformance to a specification that is improper.

Jim et al (1999) studied the service quality of delivering loan products. They found that substantial differences existed between bankers and customer groups in the perceived importance of service quality dimensions.

According to *Palmer (1998)*, ad hoc studies cannot measure the complex concept of quality. As consumers evaluate the level of the service's performance, they typically cannot help but compare the performance to what they expected. In turn, these expectations provide a baseline for the assessment of a customers' level of satisfaction. These models of Service Quality contended that it is the difference between what a consumer expects to receive and his or her perceptions of actual delivery. They further suggested that when product and service performance exceeds a standard, it will lead to satisfaction, while performance falling below this standard results in dissatisfaction. According to Mowen (1997), this expectancy disconfirmation approach helps explain consumer perceptions of service quality as well as consumer satisfaction judgments.

Kangis and Voukelatos (1997) conducted a comparative study of Greek private and public banks. They found that expectations and perceptions of services received were marginally higher in the private than in the public sector banks in most of the dimensions measured.

Stafford (1996) reported the distinct elements (attributes) of bank service quality as perceived by customers. Seven attributes were found in assessing bank service quality. The first attribute, named "bank atmosphere"; included cleanliness, as well as an overall positive and courteous attitude by employees (kindness, friendliness, and pleasantness). The second attribute, "relationship", indicates the importance of a personal relationship with the bank employees, where customers are recognized easily by long-term employee. The third attribute, "rates and charges", indicates that low costs and high interest rates can affect an individual's perception of bank service quality. The fourth attributes, "available and convenient services", indicates a full array of services that available, easily accessible and convenient. The fifth attribute, "ATMs", indicates available, convenient, and working automatic teller machines. The sixth attribute, "reliability/honesty", indicates the importance of a solid bank rating and honest, reliable employee. The seventh attribute, "teller", indicates adequate and accessible teller.

Lakhe and Mohanty (1994) have defined service quality as the conformance to the standard set by the customer and marketers for a certain sum of money. The customer perceives that service quality to be high if it is perfect on his expectation. Therefore, it becomes imperative for service providers to meet or exceed the target customer's service quality expectations. The customers compare the perceived service with the expected service.

MEASURING CUSTOMER SATISFACTION IN BANKING

Customer Satisfaction, a business term, is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicator within business and is part of the strategy for customer retention. The entry of private sector commercial banks can be traced to the period of privatization and the need to satisfy customers all the more by the banking sector in South Odisha Region. However no consistent effort was taken on the part of policy makers to trace the level of satisfaction from the services till the year 2003 when BCSBI (Banking Codes and Standards Boards of India) an autonomous body was formed to monitor the level of services provided by the Indian banks. Other economic systems are also experiencing the same changes occurring in their external environments. The outcome of this rivalry is that a lot of financial institutions are focusing on the customer satisfaction and trying to keep them by any possible means (Lindenmeier and Tscheulin, 2008). Customer satisfaction in banking has not been neglected by researchers. Kearsley (1985) in his study discussed the types and uses of computer-based training (CBT) in bank training to achieve better customer satisfaction. Rust and Zahorik (1993) provided a mathematical framework for assessing the value of customer satisfaction. The framework enables managers to determine which customer satisfaction elements have the greatest impact, and how much money should be spent to improve particular customer satisfaction elements. They demonstrated the application of their Customer Satisfaction using Fuzzy Cognitive Map. Athanassopoulos (2000) performed a complete survey on customer satisfaction in retail banking services in Greece. The study proposed an instrument of customer satisfaction that contains service quality and other attributes. The performance implications of the customer satisfaction instrument are also explored. (Manrai and Manrai, 2007) developed and tested some hypotheses regarding the relationship between customer satisfaction and bank service switching behavior as it is mediated by the importance of a particular bank service to a particular customer and by the nature of competitive offerings for different types of banking services available from other banks. Gil et al. (2007), in their research exhibited that services encountered directly and significantly affect perceived service value which is the final antecedent to customer satisfaction in banking industry. Finally, Sweeney and Swait (2008) investigated the important role of brand of banks in managing the churn of current customers and improving their satisfaction.

SERVQUAL MODELS

A quite large number of models have been derived by experts round the world to derive the level of service quality and therefore the customer satisfaction perhaps the best and the most widely validated research is one by Parasuraman et al. (1995) popularly known as SERVQUAL Model. This is the one that will be used in this research to evaluate the level of service quality of Private Sector banks in India. Below is a discussion on the SERVQUAL Model:

GAP Model (Parasuraman et al. 1985)

The GAP model was proposed by Parasuraman et al. (1985). The model presupposes that service quality is the differences between expectation and performance relating to quality dimensions. These differences are referred to as gaps. The gaps model conceptualizes five gaps which are:

- Gap 1:** Difference between consumers' expectation and management's perceptions of consumers' expectations (not identifying what consumers expect);
- Gap 2:** Disparity between management's perceptions of consumer's expectations and service quality specifications (inappropriate service-quality standards);
- Gap 3:** Variations between service quality specifications and service actually delivered (poor delivery of service quality);
- Gap 4:** Difference between service delivery and the communications to consumers about service delivery (promises mismatch delivery);
- Gap 5:** Difference between consumer's expectation and perceived service; this gap depends on size and direction of the four gaps associated with the delivery of service quality on the marketer's side.

Based on the above five gaps, the SERVQUAL instrument was developed. It initially consisted of ten dimensions which were later refined into five dimensions namely, reliability, responsiveness, tangibles, assurance (communication, competence, credibility, courtesy, and security) and empathy (which capture access and understanding or knowing the customers). Later in year 1991 SERVQUAL was revised by replacing "should" word by "would" and in 1994 by reducing the total number of items to 22, but five dimensional structure remaining the same. In addition to this empirical research, the authors later came out with the extended service quality model. According to this extended model most factors involve communication and control process implemented in organizations to manage employees.

OBJECTIVES OF THE STUDY

The main objectives of the study are:

- a. To have a clear understanding of the level of service quality in the Private Sector banks of South Odisha in India.
- b. To find out the gap in the dimensions of service quality based on the SERVQUAL analysis.

RESEARCH METHODOLOGY

The study is exploratory in nature. It provides a description of contemporary satisfaction parameter in the Indian Banking Sector. The determination of the sample and the area of study is justified below:

The research consists of 5 banks from the private sectors from South Odisha region. The Top 5 banks of Private Sector Banks selected are HDFC Bank, ICICI Bank, Yes Bank, Axis Bank and Kotak Mahindra Bank,

The questionnaires were distributed manually to the customers of these banks in the cities of South Odisha. The purpose of choosing the South Odisha Region as the study area because private banks in these areas are serving their customers more as compared to other cities. The basic reasons of opening more number of private banks are the income level of the customers are fairly high in these areas. The respondents are selected at random on visits to banks. Therefore, for the purpose of our research the probability sampling process has been used. The sample size was considered for the study were 1400.

ANALYSIS AND FINDINGS

Following is the detailed analysis of the 5 banks under study based on the SERVQUAL analysis.

SERVQUAL analysis for ICICI Bank

Table 1 depicts the SERVQUAL score of the five dimensions for ICICI Bank. The highest expectation score for the tangibility dimension is for E4 and the lowest is for the E3. The perception score for this dimension is highest for the P2 and lowest for P1. For the reliability dimension the highest score for the expectation is for E5 and the lowest is for the E8. As against expectation the perception score for reliability dimension was highest for P6 and lowest for P5. In case of responsiveness dimension the highest expectation was for E12 and the lowest was for E10. The perception scores for this dimension were highest for P11 and lowest for P10. For the assurance dimension the highest expectation score was for E17 and the lowest for E14 and E15. The perception score was highest for P15 and the lowest for P17. For the empathy dimension the highest expectation score was for E21 and the lowest for E22. As against the expectation scores the perception score for this dimension are highest for P19/22 and the lowest for P18.

Table 1: Average 'SERVQUAL' of various dimensions for ICICI Bank

Tangible	(E)	Tangible
E1: Excellent banking companies will have modern looking equipment.	4.13	P1: Your bank has modern looking equipment
E2: The physical facilities at excellent banks will be visually appealing	3.89	P2: Your bank's physical facilities are visually appealing
E3: Employees at excellent banks will be neat appearing	3.93	P3: Your bank's reception employees are neat appearing
E4: Materials associated with the service (such as pamphlets or statements) will be visually appealing at excellent banks.	4.42	P4: Materials associated with the service (such as pamphlets or statements) are visually appealing at your bank.
		Average Tangible SERVQUAL score
Reliability		Reliability
E5: When excellent banks promise to do something by a certain time, they do.	4.52	P5: When your bank promises to do something by a certain time, it does so.
E6: When a customer has a problem, excellent banks will show a sincere interest in solving it.	4.41	P6: When you have a problem, your bank shows a sincere interest in solving it.
E7: Excellent banks will perform the service right the first time.	4.38	P7: Your bank performs the service right the first time.
E8: Excellent banks will provide the service at the time they promise to do so.	4.27	P8: Your bank provides its service at the time it promises to do so.
E9: Excellent banks will insist on error free records	4.40	P9: Your bank insists on error free records.
		Average Reliability SERVQUAL score
Responsiveness		Responsiveness
E10: Employees of excellent banks will tell customers exactly when services will be performed.	4.57	P10: Employees in your bank tell you exactly when services will be performed.

Assurance		Assurance			
E14: The behaviour of employees in excellent banks will instill confidence in customers.	4.10	P14: The behaviour of employees in your bank instill confidence in you.	3.33		-0.77
E15: Customers of excellent banks will feel safe in transactions	4.19	P15: You feel safe in your transactions with your bank.	3.60		-0.59
E16: Employees of excellent banks will be consistently courteous with customers.	4.47	P16: Employees in your bank area consistently courteous with you.	3.47		-1.00
E17: Employees of excellent banks will have the knowledge to answer customers' questions.	4.75	P17: Employees in your bank have the knowledge to answer your questions.	3.11		-1.64
		Average Assurance SERVQUAL score			-1.00
Empathy		Empathy			
E18: Excellent banks will give customers individual attention	4.95	P18: Your bank gives you individual attention	3.64		-1.31
E19: Excellent banks will have operating hours convenient to all their customers.	4.92	P19: Your bank has operating hours convenient to all its customers	3.96		-0.96
E20: Excellent banks will have employees who give customers personal attention.	4.93	P20: Your bank has employees who give you personal attention.	3.84		-1.09
E21: Excellent banks will have their customer's best interests at heart.	4.96	P21: Your bank has your best interest at heart.	3.79		-1.17
E22: The employees of excellent banks will understand the specific needs of their customer	4.75	P22: The employees of your bank understand your specific needs.	3.93		-0.82
		Average Empathy SERVQUAL scores			-1.07

SERVQUAL analysis for HDFC Bank

Table 2 depicts the SERVQUAL score of the five dimensions for HDFC Bank. The highest expectation score for the tangibility dimension is for E4 and the lowest is for the E2/3. The perception score for this dimension is highest for the P2 and lowest for P1. For the reliability dimension the highest score for the expectation is for E5 and the lowest is for the E8. As against expectation the perception score for reliability dimension was highest for P6 and lowest for P7. In case of responsiveness dimension, the highest expectation was for E71 and the lowest was for E10/11. The perception scores for this dimension were highest for P11 and lowest for P13. For the assurance dimension the highest expectation score was for E17 and the lowest for E12 and E13. The perception score was highest for P15 and the lowest for P14/16. For the empathy dimension the highest expectation score was for E21 and the lowest for E18/19/20. As against the expectation scores the perception score for this dimension are highest for P19/22 and the lowest for P18.

Table 2 : Average 'SERVQUAL' of various dimensions for HDFC Bank

	(E)		(P)	Gap Score P-E
Tangible		Tangible		
E1: Excellent banking companies will have modern looking equipment.	4.72	P1: Your bank has modern looking equipment	3.74	-0.98
E2: The physical facilities at excellent banks will be visually appealing	4.71	P2: Your bank's physical facilities are visually appealing	3.97	-0.74
E3: Employees at excellent banks will be neat appearing	4.71	P3: Your bank's reception desk employee are neat appearing	3.82	-0.89
E4: Materials association with the service (such as pamphlets or statements) will be visually appealing at excellent banks.	4.74	P4: Materials associated with the service (such as pamphlets or statements) are visually appealing at your bank.	3.93	-0.81
		Average Tangible SERVQUAL score		-0.86
Reliability		Reliability		
E5: When excellent banks promise to do something by a certain time, they do.	4.54	P5: When your bank promises to do something by a certain time, it does so.	3.69	-0.85
E6: When a customer has a problem, excellent banks will show a sincere interest in solving it.	4.46	P6: When you have a problem, your bank shows a sincere interest in solving it.	4.01	-0.45
E7: Excellent banks will perform the service right the first time.	4.46	P7: Your bank performs the service right the first time.	3.38	-0.54
E8: Excellent banks will provide the service at the time they promise to do so.	4.37	P8: Your bank provides its service at the time it promises to do so.	3.82	-0.64
E9: Excellent banks will insist on error free records	4.46	P9: Your bank insists on error free records.	3.96	-0.52
		Average Reliability SERVQUAL score		-0.44
Responsiveness		Responsiveness		
E10: Employees of excellent banks will tell customers exactly when services will be performed.	4.12	P10: Employees in your bank tell you exactly when services will be performed.	3.36	-0.76
E11: Employees of excellent banks will give prompt service to customers.	4.12	P11: Employees in your bank give you prompt service.	3.53	-0.59
E12: Employees of excellent banks will always be willing to help customers.	4.36	P12: Employees in your bank are always willing to help you.	3.36	-1.00
E13: Employees of excellent banks will never be too busy to respond to customers' requests.	4.71	P13: Employees in your bank are never too busy to respond to your request.	3.07	-1.64
		Average Responsiveness SERVQUAL score		-1.00

Assurance		Assurance			
E14: The behaviour of employees in excellent banks will instill confidence in customers.	4.12	P14: The behaviour of employees in your bank instill confidence in you.	3.36		-0.76
E15: Customers of excellent banks will feel safe in transactions	4.12	P15: You feel safe in your transactions with your bank.	3.53		-0.59
E16: Employees of excellent banks will be consistently courteous with customers.	4.36	P16: Employees in your bank area consistently courteous with you.	3.36		-1.00
E17: Employees of excellent banks will have the knowledge to answer customers' questions.	4.71	P17: Employees in your bank have the knowledge to answer your questions.	3.07		-1.64
		Average Assurance SERVQUAL score			-1.00
Empathy		Empathy			
E18: Excellent banks will give customers individual attention	4.90	P18: Your bank gives you individual attention	3.57		-1.33
E19: Excellent banks will have operating hours convenient to all their customers.	4.90	P19: Your bank has operating hours convenient to all its customers	3.92		-0.98
E20: Excellent banks will have employees who give customers personal attention.	4.90	P20: Your bank has employees who give you personal attention.	3.79		-1.11
E21: Excellent banks will have their customer's best interests at heart.	4.91	P21: Your bank has your best interest at heart.	3.72		-1.19
E22: The employees of excellent banks will understand the specific needs of their customer	4.76	P22: The employees of your bank understand your specific needs.	3.92		-0.84
		Average Empathy SERVQUAL scores			-1.09

SERVQUAL analysis for Yes Bank

Table 3 depicts the SERVQUAL score of the five dimensions for Yes Bank. The highest expectation score for the tangibility dimension is for E4 and the lowest is for the E3. The perception score for this dimension is highest for the P4 and lowest for P1. For the reliability dimension the highest score for the expectation is for E5 and the lowest is for the E8. As against expectation the perception score for reliability dimension was highest for P9 and lowest for P5. In case of responsiveness dimension the highest expectation was for E12 and the lowest was for E10. The perception scores for this dimension were highest for P11 and lowest for P10. For the assurance dimension the highest expectation score was for E17 and the lowest for E14/15. The perception score was highest for P15 and the lowest for P16. For the empathy dimension the highest expectation score was for E21 and the lowest for E22. As against the expectation scores the perception score for this dimension are highest for P19 and the lowest for P18.

Table 3 : Average 'SERVQUAL' of various dimensions for Yes Bank

	(E)		(P)	Gap Score P-E
Tangible		Tangible		
E1: Excellent banking companies will have modern looking equipment.	4.30	P1: Your bank has modern looking equipment	3.59	-0.44
E2: The physical facilities at excellent banks will be visually appealing	3.94	P2: Your bank's physical facilities are visually appealing	3.78	-0.16
E3: Employees at excellent banks will be neat appearing	3.92	P3: Your bank's reception desk employee are neat appearing	3.64	-0.28
E4: Materials association with the service (such as pamphlets or statements) will be visually appealing at excellent banks.	4.53	P4: Materials associated with the service (such as pamphlets or statements) are visually appealing at your bank.	3.87	-0.66
		Average Tangible SERVQUAL score		-0.38
Reliability		Reliability		
E5: When excellent banks promise to do something by a certain time, they do.	4.53	P5: When your bank promises to do something by a certain time, it does so.	3.36	-1.17
E6: When a customer has a problem, excellent banks will show a sincere interest in solving it.	4.44	P6: When you have a problem, your bank shows a sincere interest in solving it.	3.79	-0.65
E7: Excellent banks will perform the service right the first time.	4.44	P7: Your bank performs the service right the first time.	3.57	-0.87
E8: Excellent banks will provide the service at the time they promise to do so.	4.36	P8: Your bank provides its service at the time it promises to do so.	3.66	-0.70
E9: Excellent banks will insist on error free records	4.47	P9: Your bank insists on error free records.	3.72	-0.75
		Average Reliability SERVQUAL score		-0.83
Responsiveness		Responsiveness		
E10: Employees of excellent banks will tell customers exactly when services will be performed.	4.27	P10: Employees in your bank tell you exactly when services will be performed.	3.74	-0.53
E11: Employees of excellent banks will give prompt service to customers.	4.41	P11: Employees in your bank give you prompt service.	4.00	-0.41
E12: Employees of excellent banks will always be willing to help customers.	4.50	P12: Employees in your bank are always willing to help you.	3.87	-0.63
E13: Employees of excellent banks will never be too busy to respond to customers' requests.	4.37	P13: Employees in your bank are never too busy to respond to your request.	3.87	-0.50
		Average Responsiveness SERVQUAL score		-0.41

Assurance		Assurance		
E14: The behaviour of employees in excellent banks will instill confidence in customers.	4.11	P14: The behaviour of employees in your bank instill confidence in you.	3.35	-0.76
E15: Customers of excellent banks will feel safe in transactions	4.11	P15: You feel safe in your transactions with your bank.	3.53	-0.58
E16: Employees of excellent banks will be consistently courteous with customers.	4.35	P16: Employees in your bank area consistently courteous with you.	3.35	-1.00
E17: Employees of excellent banks will have the knowledge to answer customers' questions.	4.71	P17: Employees in your bank have the knowledge to answer your questions.	3.05	-1.66
		Average Assurance SERVQUAL score		-1.00
Empathy		Empathy		
E18: Excellent banks will give customers individual attention	4.90	P18: Your bank gives you individual attention	3.57	-1.33
E19: Excellent banks will have operating hours convenient to all their customers.	4.90	P19: Your bank has operating hours convenient to all its customers	3.92	-0.98
E20: Excellent banks will have employees who give customers personal attention.	4.90	P20: Your bank has employees who give you personal attention.	3.79	-1.11
E21: Excellent banks will have their customer's best interests at heart.	4.91	P21: Your bank has your best interest at heart.	3.73	-1.18
E22: The employees of excellent banks will understand the specific needs of their customer	4.76	P22: The employees of your bank understand your specific needs.	3.92	-0.84
		Average Empathy SERVQUAL scores		-1.09

SERVQUAL analysis for Axis Bank

Table 4 depicts the SERVQUAL score of the five dimensions for Axis Bank. The highest expectation score for the tangibility dimension is for E4 and for the rest of the parameters it is the same. The perception score for this dimension is highest for the P2 and lowest for P4. For the reliability dimension the highest score for the expectation is for E8 and the lowest is for the E5. As against expectation the perception score for reliability dimension was highest for P6 and lowest for P5. In case of responsiveness dimension the highest expectation was for E12 and the lowest was for E10. The perception scores for this dimension were highest for P11 and lowest for P10. For the assurance dimension the highest expectation score was for E17 and the lowest for E14 and E15. The perception score was highest for P14 and the lowest for P17. For the empathy dimension the highest expectation score was for E21 and the lowest for E14/15. As against the expectation scores the perception score for this dimension are highest for P19 and the lowest for P18.

Table 4 : Average 'SERVQUAL' of various dimensions for Axis Bank

	(E)		(P)	Gap Score P-E
Tangible		Tangible		
E1: Excellent banking companies will have modern looking equipment.	4.70	P1: Your bank has modern looking equipment	3.30	-1.40
E2: The physical facilities at excellent banks will be visually appealing	4.70	P2: Your bank's physical facilities are visually appealing	3.42	-1.28
E3: Employees at excellent banks will be neat appearing	4.70	P3: Your bank's reception desk employee are neat appearing	3.27	-1.43
E4: Materials association with the service (such as pamphlets or statements) will be visually appealing at excellent banks.	4.71	P4: Materials associated with the service (such as pamphlets or statements) are visually appealing at your bank.	3.02	-1.69
		Average Tangible SERVQUAL score		-1.45
Reliability		Reliability		
E5: When excellent banks promise to do something by a certain time, they do.	4.71	P5: When your bank promises to do something by a certain time, it does so.	3.57	-1.14
E6: When a customer has a problem, excellent banks will show a sincere interest in solving it.	4.77	P6: When you have a problem, your bank shows a sincere interest in solving it.	3.94	-0.83
E7: Excellent banks will perform the service right the first time.	4.72	P7: Your bank performs the service right the first time.	3.76	-0.96
E8: Excellent banks will provide the service at the time they promise to do so.	4.73	P8: Your bank provides its service at the time it promises to do so.	3.81	-0.92
E9: Excellent banks will insist on error free records	4.72	P9: Your bank insists on error free records.	3.88	-0.84
		Average Reliability SERVQUAL score		-0.93
Responsiveness		Responsiveness		
E10: Employees of excellent banks will tell customers exactly when services will be performed.	4.53	P10: Employees in your bank tell you exactly when services will be performed.	3.65	-0.88
E11: Employees of excellent banks will give prompt service to customers.	4.60	P11: Employees in your bank give you prompt service.	3.92	-0.68
E12: Employees of excellent banks will always be willing to help customers.	4.66	P12: Employees in your bank are always willing to help you.	3.78	-0.88
E13: Employees of excellent banks will never be too busy to respond to customers' requests.	4.60	P13: Employees in your bank are never too busy to respond to your request.	3.78	-0.82
		Average Responsiveness SERVQUAL score		-0.65

Assurance		Assurance		
E14: The behaviour of employees in excellent banks will instill confidence in customers.	4.23	P14: The behaviour of employees in your bank instill confidence in you.	4.23	-0.78
E15: Customers of excellent banks will feel safe in transactions	4.23	P15: You feel safe in your transactions with your bank.	3.61	-0.62
E16: Employees of excellent banks will be consistently courteous with customers.	4.50	P16: Employees in your bank area consistently courteous with you.	3.41	-1.09
E17: Employees of excellent banks will have the knowledge to answer customers' questions.	4.73	P17: Employees in your bank have the knowledge to answer your questions.	3.18	-1.55
		Average Assurance SERVQUAL score		-1.01
Empathy		Empathy		
E18: Excellent banks will give customers individual attention	4.90	P18: Your bank gives you individual attention	3.57	-1.33
E19: Excellent banks will have operating hours convenient to all their customers.	4.90	P19: Your bank has operating hours convenient to all its customers	3.93	-0.97
E20: Excellent banks will have employees who give customers personal attention.	4.90	P20: Your bank has employees who give you personal attention.	3.80	-1.10
E21: Excellent banks will have their customer's best interests at heart.	4.91	P21: Your bank has your best interest at heart.	3.73	-1.18
E22: The employees of excellent banks will understand the specific needs of their customer	4.76	P22: The employees of your bank understand your specific needs.	3.93	-0.83
		Average Empathy SERVQUAL scores		-1.08

SERVQUAL analysis for Kotak Mahindra Bank

Table 5 depicts the SERVQUAL score of the five dimensions for Kotak Mahindra Bank. The highest expectation score for the tangibility dimension is for E2 and the lowest is for the E3. The perception score for this dimension is highest for the P3 and lowest for P1. For the reliability dimension the highest score for the expectation is for E5 and the lowest is for the E8. As against expectation the perception score for reliability dimension was highest for P6 and lowest for P5. In case of responsiveness dimension the highest expectation was for E12 and the lowest was for E10. The perception scores for this dimension were highest for P10/11 and lowest for P12/13. For the assurance dimension the highest expectation score was for E16 and the lowest for E14 and E15. The perception score was highest for P15 and the lowest for P17. For the empathy dimension the highest expectation score was for E21 and the lowest for E22. As against the expectation scores the perception score for this dimension are highest for P22 and the lowest for P21.

Table 5: Average 'SERVQUAL' of various dimensions for Kotak Mahindra Bank

	(E)		(P)	Gap Score P-E
Tangible		Tangible		
E1: Excellent banking companies will have modern looking equipment.	4.76	P1: Your bank has modern looking equipment	3.53	-1.23
E2: The physical facilities at excellent banks will be visually appealing	5.00	P2: Your bank's physical facilities are visually appealing	3.99	-1.01
E3: Employees at excellent banks will be neat appearing	4.84	P3: Your bank's reception desk employee are neat appearing	3.89	-0.95
E4: Materials association with the service (such as pamphlets or statements) will be visually appealing at excellent banks.	4.93	P4: Materials associated with the service (such as pamphlets or statements) are visually appealing at your bank.	3.86	-1.07
		Average Tangible SERVQUAL score		
Reliability		Reliability		
E5: When excellent banks promise to do something by a certain time, they do.	4.59	P5: When your bank promises to do something by a certain time, it does so.	3.44	-1.15
E6: When a customer has a problem, excellent banks will show a sincere interest in solving it.	4.46	P6: When you have a problem, your bank shows a sincere interest in solving it.	3.88	-0.58
E7: Excellent banks will perform the service right the first time.	4.38	P7: Your bank performs the service right the first time.	3.68	-0.70
E8: Excellent banks will provide the service at the time they promise to do so.	4.26	P8: Your bank provides its service at the time it promises to do so.	3.80	-0.46
E9: Excellent banks will insist on error free records	4.38	P9: Your bank insists on error free records.	3.84	-0.54
		Average Reliability SERVQUAL score		-0.68
Responsiveness		Responsiveness		
E10: Employees of excellent banks will tell customers exactly when services will be performed.	4.51	P10: Employees in your bank tell you exactly when services will be performed.	3.25	-1.26
E11: Employees of excellent banks will give prompt service to customers.	4.62	P11: Employees in your bank give you prompt service.	3.25	-1.37
E12: Employees of excellent banks will always be willing to help customers.	4.67	P12: Employees in your bank are always willing to help you.	3.13	-1.54
E13: Employees of excellent banks will never be too busy to respond to customers' requests.	4.56	P13: Employees in your bank are never too busy to respond to your request.	3.13	-1.43
		Average Responsiveness SERVQUAL score		-1.12

Assurance		Assurance		
E14: The behaviour of employees in excellent banks will instill confidence in customers.	4.12	P14: The behaviour of employees in your bank instill confidence in you.	3.33	-0.79
E15: Customers of excellent banks will feel safe in transactions	4.12	P15: You feel safe in your transactions with your bank.	3.43	-0.69
E16: Employees of excellent banks will be consistently courteous with customers.	4.35	P16: Employees in your bank area consistently courteous with you.	3.20	-1.15
E17: Employees of excellent banks will have the knowledge to answer customers' questions.	4.70	P17: Employees in your bank have the knowledge to answer your questions.	3.00	-1.70
		Average Assurance SERVQUAL score		-1.08
Empathy		Empathy		
E18: Excellent banks will give customers individual attention	4.90	P18: Your bank gives you individual attention	3.8	-1.1
E19: Excellent banks will have operating hours convenient to all their customers.	4.90	P19: Your bank has operating hours convenient to all its customers	4.07	-0.83
E20: Excellent banks will have employees who give customers personal attention.	4.90	P20: Your bank has employees who give you personal attention.	3.8	-1.1
E21: Excellent banks will have their customer's best interests at heart.	4.92	P21: Your bank has your best interest at heart.	3.7	-1.22
E22: The employees of excellent banks will understand the specific needs of their customer	4.77	P22: The employees of your bank understand your specific needs.	4.16	-0.61
		Average Empathy SERVQUAL scores		-0.97

CONCLUSION

Table 6 depicts the Average Weighted SERVQUAL scores of the private sector banks under study. In case of the private sector banks also it has been observed that the banks are in the 'zone of pain'. HDFC Bank is the best among the private banks and Axis Bank is the worst of the five banks under study in terms of service delivery. HDFC Bank has to work in the empathy dimension to perform better and move to the 'zone of satisfaction' and then to the 'zone of delight'. Yes Bank which is just near HDFC Bank in service delivery has to work in assurance and empathy dimensions. ICICI Bank has also to work in the assurance and empathy dimensions. Kotak Mahindra Bank has to work in the responsiveness, assurance and the empathy dimensions. Axis Bank has to work in the dimensions of tangibility, assurance and empathy to move out of the 'zone of pain' to 'zone of satisfaction' and 'delight'.

Table 6: Average Weighted 'SERVQUAL' Scores of Private Sector Banks

Name of bank	Dimensions of Service Quality					Average Weighted SERVQUAL Score
	Tangible	Reliability	Responsiveness	Assurance	Empathy	
ICICI Bank	-0.45	-0.79	-0.74	-1.00	-1.07	-16.92
HDFC	-0.86	-0.59	-0.44	-0.99	-1.09	-15.29
HSBC	-0.38	-0.83	-0.41	-1.00	-1.09	-15.41
Axis Bank	-1.45	-0.93	-0.65	-1.01	-1.08	-19.27
Kotak Mahindra Bank	-1.06	-0.68	-1.12	-1.08	-0.97	-18.94

The present research has been undertaken with the help of SERVQUAL analysis and is trying to find the level of service quality in the Private Banks. Further research in this field can be carried out with the help of other tools of measuring service quality like the Kano's Model of Product quality or Fuzzy based algorithmic analysis. The research provides a new approach to understanding the contribution and the condition of the Private Sector Banks. A lot more interesting approach can be a comparative study between Public and Private Sector banks in India. Along with that a comparison of foreign banks and performance on service delivery in India and the same banks service delivery in other country can be a good piece of work.

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SEMINAR:
CHANGING DIMENSION OF BUSINESS EDUCATION

**EDUCATION TRAINING OF SECONDARY SCHOOL STUDENTS
IN TEACHING LEARNING OF BUSINESS IN ODISHA**

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As we know that secondary school education has a big impact on their lives affecting not just their further education, training or employment, but also their social lives, finance and health outcomes. A key function of secondary schools is to prepare students to transition successfully toward a future career path. This involves providing curriculum opportunities to build students' general capabilities, support students' interest and aspiration, and support them to make informed decisions about their subject choice and pathways. Students are more engaged in education and highly motivated about their future if they have a clear understanding of secondary education but the education system of our Odisha does not include any subject related to business so that students are not that much aware about the business education that's why students are faced many problems to select commerce as a stream in higher secondary education. The students are always in a dilemma that whether the business education can be a better career option or not. Business education is widely recognized as an effective pivot for development of professional or skilled manpower in all aspects of commercial, industrial and managerial areas. Apart from the above-mentioned reason, there are some other reasons: lack of interest in some business studies subjects due to internal and external influence, lack of teachers in business studies affects the teaching and learning of business studies courses and insufficient text books on business studies subjects in the school library bring about ineffective teaching and learning of business studies in secondary schools.

Key Words : *Secondary Education, Business Education, Training, Teaching and Commerce.*

QUALITY EDUCATION: DISCIPLINE - BUSINESS

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Education is sacred and a person who teaches is God of this developing world. In the changing world, people develop their skill either by self-realization process by the teacher. The best mentor escorts values of a life with hurdles. This paper demonstrates the historical perspective of education as an event and as a discipline.

"Those who know, do. Those that understand, teach." - Aristotle

At this moment, the concept changes to the profession of seller-buyer more than a guru-disciple relation. The difference is somewhere it is costly and at other, it is on the cheap

standard. The paper rises question- Is education able to afford bread or is it to offer the impression of the infinitive in knowledge? And the answer based on worth practicality in learning despite the completion of every stage of education with impractical steps. The paradox lies in unfairness teaching and analysis of weak and strong, not on the basis of quality education but on different points such as discrimination in caste, color, favoritism, and human personality.

This paper targeted the rising burden of education on a student for better life and the sense of a better life - as the future source of bread for him and his family rather than values and lesson for a healthier existence. Education symbolizes discipline and good living but the trend is taking the line of good wealth for both students and teachers.

History stated the meaning of education with values, the practicality of business. The true teacher acts as a bridge over which they call their students to cross; then, having assisted their passage, blissfully downfall, inspiring and encouraging them in every step to create their soul stone hearted and ready to tackle any difficulties.

Key Words : *Business Education, Ashram and Gurukul techniques, Paradox in bias behavior, Methodology of teaching, Practical and impractical.*

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GLOBAL SCENARIO OF BUSINESS EDUCATION: A BIBLIOMETRICS ANALYSIS

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The field of business education is expanding and continues to impact the corporate world in term of supplementing capable executives and leaders. In this article, an attempt has been made to analyze 957 (808 articles obtained from Scopus document search and 149 articles obtained from Web of Science document search) research articles published over 20 years. The major emphasis of this review is to explore the research issues pertaining to the field of management education. Using Vosviewer 1.6.11, author wise, country wise and organization wise analysis has been performed to identify the key contributions and deficiencies in the existing intellectual structure of the field. In this paper bibliometric analysis has been performed to find out the pattern of work or research trend in business education. This work paves the way for the future research in this field.

Key Words : *Business Education, Scopus Document, Web of Science, VoS Viewer, Bibliometric Analysis*

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CHANGING DIMENSIONS OF BUSINESS EDUCATION

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History of education started with the creation of Rig-Veda which explains the philosophy of life and the practices in the realm of the learning. Thus history of the education in India is nearly 5000 years old. Education is a principal vehicle for promoting sustained growth in the economy of a country. For individuals, it is also a major instrument of achieving upward mobility. It is an absolute necessity for the youths of the country for their better prospects and living and thereby the advancement of the country. This is because the standard of education is closely related with the employment standards, social status and living conditions of its citizens. Education is a process that teaches us to learn and enables us to develop things in a creative manner. The education is not only knowledge of facts but also to have values. The business education in 21st century should consider the globalization and its implications in business field at national and international levels. Changing global conditions demand that we think about commerce education for the 21st century. The era of 21st century has tremendously influenced the various dimensions of business education. The education is not practical -oriented and did not lead to develop skills and qualities of students to face the work situation. In this context this paper will examines the changing dimensions of business education. This study will help to develop broad strategies and long term policies. And make able to foresee the impact of socio-economic changes at the national and international level.

Key Words : *Business education, dimensions, globalization, life skill education, socio-economic changes.*

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THE CHANGING ROLE OF INDIAN BUSINESS EDUCATION IN GLOBAL PERSPECTIVE

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We all are well aware of the fact that the history of education starts with the creation of Rig-Veda which narrates the philosophy of life and the practices in the realm of the learning. Thus, the history of education in India is nearly 5000 years old. Defining education is a brain storming issue all over the world. Education is an on-going process that teaches us to learn different spheres of life. And learning helps us to develop and understand things in a creative manner. After Industrial Revolution, the world is drastically changing at an increasing pace. The era of 21st century has tremendously influenced the various dimensions of Commerce education. Commerce Education has a strong role to play in building the nation. The objectives

of Commerce Education can be achieved only through qualitative change in the system. The output of Commerce Education should be multidimensional and should also be acceptable at global competitive level. However, it is a bitter truth that the commerce graduates lack practical knowledge of their respective fields. The education is not practical -oriented and does not lead to develop skills and qualities of students to face the real-life work situations. The practical-oriented Commerce Education is a need of the hour. It is often criticized that the Commerce syllabus is unable to meet the different types of challenges posed by Trade and Business in the real world. Thus, there is an urgent need to improve and introduce innovations in business education. The present paper examines the changing role of Indian Business Education in the global perspective.

Key Words : *Business Education, Changing Role, Practical Knowledge.*

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PERCEPTION ON BUSINESS EDUCATION- AN EMPIRICAL STUDY ON THE STUDENTS' OF BUSINESS EDUCATION IN BERHAMPUR UNIVERSITY

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Entrepreneurship becomes more dynamic in present globalised era. Due to changes in business environment Business education also become more dynamic in nature and become necessary to serve present requirement of the business world. This has been evidenced by growing business educational institutions and student enrolments. But this has raised a pertinent question that whether such institutions are serving as per the requirement of the students towards changing business environment? To address such question the present study is an attempt to measure the perception of students towards business education. For the purpose of the study a structured questionnaire has been designed and data has been collected from 120 respondents of various departments providing business education in Berhampur University. Statistical tools like one way ANOVA and Post-hoc test has been used. This study will help the policy makers, researchers, higher education department.

Key Words : *Business Environment, Business Education, Globalization, Entrepreneurship*

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EMPLOYEE PERCEPTION TOWARDS TECHNOLOGY ADOPTION - A STUDY IN SELECTED ORGANIZATIONS OF BHUBANESWAR

Ratikanta Biswal*, V. Shweta Chandrika & Prof. Sanjaya Kumar Satapathy*****

The use of information technology in the banking sector is driven by the need to improve and redefine customer service. However, technology up gradation would not be successfully implemented if employee's factors are overlooked. Increased globalization has exerted pressure on organizations over the past decades have forced organizations worldwide to face unprecedented levels of competition and operate in a dynamic business environment. In an effort to remain competitive, there has been an increasing need in organizations to connect and integrate the information supplied by each department in a single Information Technology (IT) infrastructure. This study was to explore employees' perception and behavior towards technology adoption and not just assumes psychological validation of technology adoption rather; it provides a profound understanding by way of exploring how employees at grass root levels perceive certain influential factors in relation to their adoption and acceptance of technology. Four key determinants influencing employees' perception namely, improved performance, job favorableness, practicality of use and ease of use were identified and their corresponding relationships were analyzed.

Key Words : *Information Technology, Employee Perception, Technology Adoption*

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AN EMPIRICAL STUDY ON SOCIAL ACCOUNTABILITY OF CORPORATE SECTOR IN INDIA

Prashant Kumar Pandey* & Prof. S. K Baral**

Purpose- The Aim of this research paper is describe the different aspects Corporate Social Responsibility and its impact on deprived section of society under Social Accountability.

Methodology/Design/ Approach- This paper is analytical in nature and exhaustive literature on the topic for the concept building primary data collected through secondary data will be used from various sources like research paper, websites, magazine and report etc.

Findings- The Finding of this study is that companies like **Orient Paper, ACC Cement Ltd.** and **SAIL** are doing very well for deprived society in the state of Madhya Pradesh of India through their CSR sustainable programs.

ORIGINALITY/VALUE - Paper show that impact of corporate social responsibility of companies on community is very crucial, its play a vital role in upliftment of deprived Society.

Limitation of the study: The research is conducted in limited time constrains and under certain terms and conditions.

Key Words : *Sustainability, Corporate Social Responsibility, Social Accountability, Community Development.*

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PUBLIC TRANSPORT SERVICE QUALITY AND PASSENGER SATISFACTION: A STUDY WITH REFERENCE TO NEKRTC

Dr. B Vijaya*

Public bus transportation plays a pivotal role in India in bringing about greater mobility both within and between urban and rural areas. Through increased mobility, road transport also contributes immensely to social and economic development of different regions of the country. Public transport is provided by surface road transport using buses by the State Road Transport Undertakings (SRTUs) and by private operators.

In this paper, scientific analysis of the Public Transport Service Quality and Passenger Satisfaction A study with reference to NEKRTC is carried out at different levels considering physical and financial parameters through qualitative techniques.

Key Words : *Service Quality, Fact of the study and interpretation of data*

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TECHNICAL SESSION-I: ENTREPRENEURSHIP IN 21ST CENTURY

RURAL WOMEN MICRO ENTREPRENEURS IN SELECTED BLOCKS OF GANJAM DISTRICT

Subhadarshini Pradhan*

A nation would not march forward if women were left behind-Swami Vivekananda. Since rural women constitute major Population of Odisha therefore their role in the economic

growth and development is significant. It is found that rural women endowed with invaluable talent of creativity and innovation, they effortlessly impart their creativity into various home made products and services and contribute towards the economic development of Odisha and nation as well. However in spite of all these creativity and innovations rural women have lack of entrepreneurial skills and face many challenges while running their business. Hence it is felt that there is need to conduct a "Study on rural women micro entrepreneurs in selected blocks of Ganjam district. The main objectives of this paper is to analyse the socio-economic conditions and challenges face by rural women entrepreneurs in selected blocks of Ganjam District. The present study is based on both primary and secondary data. The researcher has been selected 150 respondents from selected blocks of Ganjam District by convenience sampling method. The study concludes that women in Ganjam doing business in informal way and operating micro enterprises and they are facing various problems relating to finance ,marketing, personal, social, Technological, Production etc.

Key Words : *Entrepreneurship, Unorganized sector, Micro enterprise, Employment, Economic development.*

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INVESTMENT IN COMMERCIAL CROPS: A NEW DIMENSIONAL ENTREPRENEURIAL ACTIVITY

Khaja Mohinuddeen J*, Maria Swathi, Gayathri M P*** & Panduranga******

Indian agriculture is traditionally promoted cereal based cropping system. The diversification towards more productive and remunerative crop becomes the new milestone and need to be achieved in Indian agriculture. A shift in favor of economically viable horticulture crops provides best alternative for such diver fiction drive and strategy. It is known fact that well established and maintained fruit orchards can offer better yields than traditional crops and it will definitely help in the improvement of individual farmer's as well as the country's economy. Many policy makers, development specialist and trade analyst, today, realized that the horticulture sector has potential synergy in generating the employment and earning the foreign exchange for the country.

One of the significant developments seen during the last few decades is that the farming community has moved from rural confine production. As a result, Indian horticulture made a rapid stride in maintaining the growth rate of five to six percent in the last two decades. India is the second largest producer of fruit in the world after China. The edapho-climatic variations in the country practically make it possible to grow wide varieties of tropical in the country practically make it possible to grow wide varieties of tropical and subtropical fruits. In addition, there minor fruits especially pomegranates and fig are emerging as important crops in horticulture development of India.

The present study is focused on the economic impact and cost-benefit analysis of Fig and Pomegranate crops production by the farmers in Ballari district of Karnataka. This paper directs the emerging agro-based entrepreneurs in investing commercial crops in which outlook the new dimensional entrepreneurial activity in complex environment.

Key Words : *Commercial Crops, Entrepreneurship, Fig, Pomegranate, Karnataka*

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MICROFINANCE AND EMPOWERMENT OF RURAL WOMEN ENTREPRENEURS IN INDIA IN THE 21ST CENTURY: A STUDY

Manisha Prajapati*

Microfinance plays a big role to empower women entrepreneurs by providing financial assistance for the micro small and medium enterprises especially to the women. Microfinance Institutions (MFIs) offer its participants with financial and social intermediation services to assist enhance their businesses. Woman is the family that leads to society and country. Women's social and economic development is important for any society or country's overall economic development. Entrepreneurship is the state of mind that many women have in it, but in India it has not been capitalized in the way it should be. The 21st century presents more difficulties in a few perspectives like innovation, globalization and the impact of social media. The objective of the study is to visit the literatures on entrepreneurship related to women, opportunities and the challenges. The study seeks the gap by establishing the outcome of microfinance on empowerment of rural women entrepreneurs in India.

Key Words : *Microfinance, women entrepreneur, opportunities, challenges. MSMEs.*

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DETERMINANTS OF ENTREPRENEURIAL INTENTION OF COMMERCE STUDENTS: AN EMPIRICAL STUDY

Pratik Deb Roy* & Dr. Kingshuk Adhikari**

The study of entrepreneurial intention has gained popularity among the researchers since it is generally believed that the intention is one of the good predictors of behaviour of a human being. The understanding of entrepreneurial intention of the educated youth is very important in shaping the entrepreneurial activities in a country. A large number of factors determine the

status of entrepreneurial intention of students. Intention is probably one of the crucial indicators of future growth of entrepreneurship. In India, unemployment rate among the educated youth is rising because the educated youth are not willing to join in low-grade informal jobs and at the same time regular salaried jobs in Government sector is not sufficient keeping in view the increasing output from central and state universities of India.

Keeping in mind the rise in the rate of educated unemployment, policy makers and academicians consider entrepreneurship development as one of the possible alternatives for social and economic development but inclination towards entrepreneurship as a career option among the students is perhaps one of the determining factors for developing entrepreneurship in a particular region. But entrepreneurial intention of students may be influenced by numerous factors. In this context, the present paper is a modest attempt to assess the perception about select factors capable of influencing entrepreneurial intention among the students pursuing liberal commerce education in Silchar town of Assam.

Key Words : *Independence, Self Confidence, Creativity, Uncertainty.*

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ORGANIC FARMING -A NEW AVENUE OF RURAL ENTREPRENEURSHIP

Mukesh Kumar Sharma*

Arzoo Agrawal, M.Pavani, Pritam Mahapatra, Aruna Sharma**

The Indian organic farming industry is estimated at US\$20 million and almost entirely export oriented. According to APEDA 2005, agency involved in promoting Indian organic products with a worth of rupees 72 million are being exported from India.

According to a report published earlier in 2016 in a joint study conducted by industry body ASOCHAM and private research firm TechSci Research, the Organic foods market in India is estimated to be over USD 0.50 Billion. It is further projected to treble in the upcoming years, reaching up to USD 1.36 Billion within the next four years, i.e. by 2020. Following some comprehensive policy implementation and rigorous efforts, Sikkim has been officially named the first fully organic state in the country in 2015.

Development is not only associated with quantity but also with quality. Production and marketing of crops and agricultural products should be done in such a manner that it has minimal detrimental impact on the natural environment at the time of satisfying its customers' needs and this is the concept of green marketing.

Key Words : *Organic farming, Rural entrepreneurship, Sustainable development, Green marketing.*

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EMPOWERING WOMEN THROUGH ENTREPRENEURIAL DEVELOPMENT IN INDIA

Ananya Mishra*

The Indian women have come a long way to achieve equitable rights and position in a male dominated country like India because of the deep rooted traditions of our society. Women of 21st century is no more a traditional resource, confined within the four walls of their homes with domestic chores, rather they are an educated, innovative and productive part of our economy. With the introduction of economic reforms a revolutionary trend has been observed in terms of women's participation in business and industry as well as economic growth. In India women constitute around 48% of population but their participation in economic activities is only 34%. Therefore women empowerment has been an important objective of Government and Non-government organization. According to the Sixth Economic Census releases by Ministry of Statistics and Programme Implementation, women constitute around 14% of the total entrepreneurship in India i.e. 8.05 million out of the total 58.5 million entrepreneurs. Empowerment of women is central to achieving the objective of inclusive, equitable and sustainable development and it is not only a National goal but also a global agenda. This paper highlights the status of women entrepreneurs in India. It focuses on analysing the policies of Government for development and promotion of women entrepreneurs in India. It has been found that despite of various beneficial programmes, women entrepreneurs in India are facing several challenges which need an effective solution. The study concludes that despite of lack of equal access to education and employment, inequalities in labour market and unequal dispersion of unpaid care and domestic work, women in India are flourishing as successful entrepreneurs and exploring new avenues of economic participation. On the basis of this study certain suggestions are proposed to encourage the spirit of women entrepreneurs in India.

Key Words : *Women Entrepreneur, Empowerment, Equitable, Economic Growth, Sustainable Development.*

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RURAL ENTREPRENEURSHIP: AN INSTIGATOR OF ECONOMIC DEVELOPMENT

Anjana Dash*

India is the home of 68.84% of rural people. Therefore thinking of development of India without rural development is like building castle in the air. For ensuring rural development rural population needs to be empowered through enhancement of welfare facilities and unshackling the huge potential innovation of entrepreneurship. Starting up enterprises in rural areas is called rural entrepreneurship. Rural entrepreneurship plays a key role not only in the rural development but also in development of the nation. It can be considered as a major solution to various economic dilemmas like-unemployment, economic disparity, migration, poverty and development of stagnant areas. This study has been made to analyse the role of rural entrepreneurship in development of the economy and to find out the challenges faced by them in current scenario. This study has also attempted to discuss various government measures taken for rural entrepreneurship in India and to suggest certain remedial measures for the development of rural entrepreneurship. From this study it has been found that despite of playing a pivotal role in the economic development in terms of its contribution towards generation of employment, production etc. rural entrepreneurs face various challenges relating to availability of finance, infrastructural facilities, skilled labour, raw material, marketing assistance etc. and various political and structural problems. Keeping this in mind Government of India has taken various measures for their growth and development. Still there are some areas in which government needs to focus for better result.

Key Words : *Rural entrepreneurs, Economic development, Rural entrepreneurship, Employment*

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OPPORTUNITIES AND CHALLENGES OF WOMEN ENTREPRENEURS IN INDIA

Anoop Patel* & Shantanu Saurabh**

Women Entrepreneurs can be seen everywhere in the start-up ecosystem of India. Women too are seen leaving their high-profile jobs as well as some stepping out of the four walls of their homes and joining the pool of Entrepreneurship in India. Women entrepreneurs can enhance economic development in current time in India as well as in world also; they increase business opportunities, profitable access to markets. The present study is an effort to recognize the opportunities available to Indian women entrepreneurs and the challenges faced by them. For the purpose of the study data are collected from secondary sources.

Key Words : *Entrepreneurs, opportunities, ecosystem, challenges, development.*

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ENTREPRENEURSHIP IN START UP INDIA DURING 21ST CENTURY

Kunal Mishra*

After achieving Independence in 1947, India adopted a modern egalitarian Constitution. India largely continued operating under the governance structures that the Raj had bequeathed. In contrast to United States and China the fundamental objectives was different. United States and China achieved independence in 1776 and a regime change took place in both the countries by 1949 drastically. For India continuity included the rules and conventions for functioning of the Parliament, on the line if its pre-independence version of several decades. These were designed by the Raj for the containment rather than empowerment of the people. They are outdated having been modelled on 19th Century norms in United Kingdom and United States which have made changes in their legislative rules. Although it has been elapsed 72 years of Independence, the economic reforms carried out by the Government found in a wayside. The reason is that, our bureaucrats have been in conditioned to work under the governments that continue to operate just as Raj did. The post colonial republic India must do away with such notions and make a fundamental affirmation that good, decent, honest, qualified and eminent people can be found in all walks of life.

For centuries human being do some work for his sustainability. When India got her Independence the population of India was 37 crore and by it has been 1.25 billion. No other problem in India is so serious as that of unemployment. After independence it was thought that as a result of implementation of successive five year plans, it would be possible to provide regular employment to all those who sought it. In the five year plans, programmes were drawn for wage employment in the areas of construction, manufacturing, mining, production, electricity, transport, trade, banking and in other social services. No doubt, a large number of employment opportunities were created but it has failed due to steady growth of population.

India is rich in population. The Human raw material in India is as fine as can be found anywhere else on earth. We are second to none in intelligence and the spirit of enterprise and we have all the skills and capability to be a great economic power. How we manage to remain poor is an uncomfortable question, the answer to which would not be flattering to our politicians and ideologues. Manpower is our greatest and valuable resource but the unemployed labour force is not only causing hindrance to the economic progress of the country but at the same time becoming the cause of wide spread poverty. Unemployment has become grimmer with each passing day even if all the efforts undertaken by the Government for restructuring

the economy of India. To curb the problems, entrepreneurship development is the best possible solution to find employment avenues for the unemployed during the 21st Century.

Key Words : *Population, Unemployment, Economy, Entrepreneurship, Development.*

IMPACT OF MICRO, SMALL AND MEDIUM ENTREPRENEURS (MSMES) ON ECONOMIC GROWTH IN INDIA

Agnihotri Behera*

The exceptional growth of micro, small and medium enterprises (MSMEs) has been executed in the development of our country economically. It has contributed to the GDP growth, employment generation and export. The MSME is playing vital role in development of the country. In 21st century the MSMEs sectors are engine for economy development. The aim of this paper is to study the current status of MSMEs in India and its contribution to GDP in India. Because this sector, through the production of 6000 products contributed 8% to GDP of the country. It constitute 45% portion of the manufacturing output and 40% of the total export of the country. So this paper has made to understand the role of MSMEs in the development of country. The data has been collected from various secondary sources such as Government reports and websites, various articles and newspapers.

Key Words : *MSMEs, GDP, Economic development.*

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AN ANALYSIS ON THE PROBLEMS AND PROSPECTS OF RURAL ENTREPRENEURSHIP

Dr. Binita Nanda* & Miss Swetta Mohanty**

Entrepreneurship is the process of creating new enterprise, bearing any of its risk with the view of making profit. Entrepreneurship is an important / engine for the growth of economy. Rural entrepreneurship refers to the entrepreneurship rising at village level which can occur in a variety of areas such as business, agriculture, industry as well as acts as a useful factor for economic development. Rural entrepreneurship plays an imperative role in the overall development of the country's economy. The development of rural entrepreneurship aids the advancement of self employment, resulting in wider distribution of economic as well as industrial activities and helps in the maximum utilization of locally available raw materials and labour. It plays a vital role in the development of Indian Economy as majority of its population belongs to rural area. Promoting rural entrepreneurship is essential for removal or reduction of poverty and helping in Economic growth of our Country. This paper aims at identifying the

opportunities available for rural entrepreneurs in Odisha and what strategies should be implemented to create more rural entrepreneur for the development of rural area in order to achieve a balanced regional development. The primary data has been collected from selected district in the state of Odisha. The paper also comprises of secondary data collected from information from different websites.

Key Words : *Entrepreneurship, rural entrepreneurs, economy, economic growth, balanced regional development.*

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A PROPOSED APPROACH TO THE INTRODUCTION OF ENTREPRENEURSHIP EDUCATION IN INDIAN SCHOOLS IN DEVELOPING ENTREPRENEURSHIP SKILLS

Sudepta Raha* & Parag Shil**

Entrepreneurship plays an important role in enhancing the country's economic condition. It creates job opportunities which help an economy to grow. Integration of Entrepreneurship and innovation in education inspires the younger people towards self-employment as well as stimulates to equip themselves with the required skills, knowledge and experiences for start-ups. In the present slowdown in the development rate of our economy, there is lack of job opportunities which created unemployment among the youths. The only way to improve the economy condition is to provide jobs to the unemployed person. So, entrepreneurship education is must, which may lead a person to be an entrepreneur who himself/ herself will be a job creator but not a job seeker. Thus the paper intends to propose the introduction of entrepreneurship education in schools and the benefits of it which will help a young one to plan for his/her carrier well in advance. This paper is exploratory in nature and secondary sources have been undertaken to gather the data and information relating to it.

Key Words : *Entrepreneurship, Entrepreneur, Education, School, Opportunities, Skills, Knowledge.*

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SANGAM CLUSTER LEVEL FEDERATION OF WOMEN: A JOURNEY FROM DEPRIVATION TO POSSESSION

Sujata Rani* & Pratyush Gaurav**

What comprises the core of development is when people begin to believe that they matter when they realize that they have the right to a life of dignity and assertively take their right place in the society. The land of Bihar continuously reiterates the stories of inequality based on gender, caste and class. The story Sangam CLF, an institution for the women, by the women and to the women is an epitome of not only women empowerment but also enhanced income established women identity as entrepreneurs and integrated approach to grappled social evils. Shifting from individual focused out caste thinking to livelihood based inclusive growth thinking; a story of valour, diligence, collectivism, staking their rights and decision making. This institution fully owned and governed by the women is a complete master piece of Self-Help Groups of women infused with confidence and strength have become forces to reckon their community. Mainstreamed themselves in the social strata, eradication of social evils and finding potential sustainable livelihoods for themselves.

Key Words : *Life of dignity, Inequality, Inclusive growth, Mainstream, Ownership*

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GOVERNMENT STRATEGIES TOWARDS ENTREPRENEURSHIP DEVELOPMENTS PROGRAMS: PROSPECTS OF EASY OF DOING BUSINESS INDICATORS

Kaushik Das*

Business is one of the economy back bone of any country. Government policies play a vital role for creating a smooth business environment for any business. Though after adopting LPG (Liberalization, privatization and globalization) policy in 1991 business scenario has significantly changed, there are some restrictions and limitations that forces back to business for its prosper. Construction permits, getting electricity, trading across borders, paying taxes, resolving insolvency, enforcing contracts, starting a business, getting credits, protecting minority investors and registering property are some of the indicators of easy of doing business factors which needs to be more simplified so that the more and more FDI and home industries can grow. This paper enumerates the strategies in different sectors of the country & the position of the country in Ease of Doing Business (EDB) after 1991 to 2019.

Key Words : *EDP, FDI, EDB*

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BUDDHIST HANDLOOM WEAVERS IN 21ST CENTURY: A STUDY ON ODISHA

Mr. Samira Patra*

The history of handloom weavers as the name indicates goes back to the era of Lord Gautam Buddha, the pole star of Asia. The Buddhist handloom weavers are those weavers who were the followers of Buddhism as well as the weavers of handloom products. These handloom products were primarily used for the Buddhists. The 'ikta' style of weaving practiced in Odisha since ancient times is renowned all over world. It is believed that the cloth had by then reached the ports of Odisha. The fame of Odisha spread far and wide after the immortal poet Jayadeva presented the 'Geethasuuthram' woven in Cuttack District in the 12th-century to the Jagannath Puri temple. It is after this that the Odisha State and its craft won universal recognition.

Thus, it may be concluded that Export of hand-woven cloth dates back to the time of Gautama Buddha. This is an attempt to study the Buddhist handloom weavers of Odisha. The study is based on both primary and secondary data. The primary data have been collected through well design questionnaire and direct interviews. The sample data consists of 100 Buddhist handloom weavers' respondents. The collected data were classified and tabulated according to the requirements of the study. There are various tools like percentage calculations, valid percentage calculation, chi-square test, Likert 5 points scale for ranking the perception Buddhist handloom weavers etc. have been used for analysis and interpretation of results. The present study concluded on that the Buddhists handloom weavers have huge handloom potentiality and entrepreneurial avenues which can help the Buddhist handloom weavers to reach at the destination.

Key Words : *Entrepreneurial avenues, Buddhism, Buddhist handloom weavers, Ikta, Export of hand woven products.*

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AN EMPIRICAL STUDY ON SUSTAINABLE ENTREPRENEURSHIP-A SPECIAL REFERENCE TO TRIBES OF MADHYA PRADESH STATE OF INDIA

Prashant Kumar Pandey* & Prof. S.K Baral**

Tribal people constitute the weakest section of India's population. The sustainable socio-economic development of the tribal people can be accelerated through development of entrepreneurship amongst them. Entrepreneurship development can only be possible if the adequate support facilities are provided to them from various sources. The Schedule tribes

are most indigenous people, have their own unique language, Culture and Social system mostly they are used isolated geographical region for residence and they also poor in socio-economic parameter. because of that they still outside from the scope of growth for decades. Upon independence, Central Government of India prepared the special tribal groups for their growth and security in the Constitution, as with the Schedule Cast. There are almost 650 Schedule Tribe classes in India, with Seventy five of the STs in India being most backwards and the largest tribal groups. Most of the hill and undulating plateau areas is hilly and inaccessible. In the tribal areas of education, highways, pharmacy, communication, drinking water, sanitation, and other areas the services for utilities and development are therefore lagging behind, which have long resulted in a wider range of growth laggards between the tribes and the population as a whole. The present study has been undertaken where large-scale migration of tribes including tribal takes place. This paper aims to find out some inputs of migration of tribal and try find out its remedy for their sustainable socio-economic effects with in major areas in India including a special reference to Madhya Pradesh state with the help of secondary data.

Key Words : *Entrepreneurship Development, Tribes, Migration, Sustainable Socio-Economic, Challenges.*

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ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT: A STUDY ON THE PERCEPTION OF UNIVERSITY STUDENTS

Dipankar Das*, Dr. Ram Chandra Das & Shawon Roy*****

Entrepreneurs are treated as the human capital of an economy because they possess the quality of risk-bearer, organizer and also an innovator. The role of entrepreneurs has changed over the period of time all over the world and entrepreneur's importance has been commendable in any country's economic growth and development. Government of India is constantly supporting the entrepreneurs of our country by providing different loans and advances, helping them to establish their own business, making them self-sufficient by providing vocational skills and creating many employment opportunities for them in their respective areas. In the present paper an attempt has been made to analyze the perception of university students about the entrepreneurship development and their role towards the economic development of Barak Valley in Assam. Statistical tools, such as, mean, standard deviation and percentage have been used to analyse the primary data. The study reveals that

there are various factors of entrepreneurship which makes an impact towards the economic development of not only Barak Valley in Assam but also the country as a whole. The study also suggests that the Government of India should give more emphasis to the improvement of various policies, schemes and programs for the entrepreneurship development in our country.

Key Words : *Problems, Prospects, Entrepreneurship, Economic Development, Employment.*

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DIMENSIONS OF ENTREPRENEURSHIP DISPARITY IN MSMES: AN INTER-DISTRICT AND INTER-STATE ANALYSIS WITH SPECIAL REFERENCE TO ODISHA

Rajat Kumar Mallick* **Pragyan Parimita Nayak**** **Rashmita Khatei*****
Lipuna Khatei**** **Manindra Hanhaga******* **Kiranbala Swain*******

In a developing country like India, Micro, Small and Medium Enterprises (MSMEs) are one of the most vibrant and sensitive sectors. The significance of Micro, Small and Medium Enterprises (MSMEs) is attributable to its capacity of employment generation, low capital and technology requirement, use of traditional or inherited skill, use of local resources, mobilization of resources and exportability of products. The entrepreneurship in MSMEs plays a leading role in promoting equitable economic and social development of the country. Though MSMEs promotion has remained in focus of Indian development strategy in most of the Five-Year Plans, the progress of Indian MSMEs is not as expected due to several hurdles that they face. The existence of inequality in entrepreneurship of MSME sector is a major concern of bringing socio-economic equality in the country and particularly in Odisha.

This paper examines the existence of disparity in growth of MSMEs entrepreneurial activity throughout the length and breadth of the state Odisha as well as in India. More particularly it examines the changing dimension of entrepreneurship disparity in MSME sectors among different social groups of the country. This study also finds the important causes of existence of such entrepreneurial disparity in MSME sector. Statistical devices like average annual growth rate (AAGR), compound annual growth rate (CAGR), arithmetic mean and coefficient of variation (CV) have been used to analyse the secondary data collected from various trusted sources to find out entrepreneurship disparity in MSME sectors and to suggest possible measures for the reduction of this inequality in Odisha as well as India.

Key Words : *MSMEs, Entrepreneurship Disparity, Social groups & Regional disparity, JELCode: L26*

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ISSUES AND OPTIONS FOR WOMEN ENTREPRENEURSHIP IN 21ST CENTURY

Prof. Dhyana dipta Panda*, Mrs. Sarita Dhal & * Dr. Nishi Kanta Mishra*****

Women are considered half of the population in our country. They are still to be empowered with socially, politically, economically and legally for a better nation. In these connection women entrepreneurship is like a catalyst for women empowerment. Though there are lot of issues and challenges for women to become an entrepreneur still most of women now take entrepreneurship as a profession to lead an in-dependant life in this male dominated society. This article will highlight those issues and how those issues will be solved so that it will not be a challenge in near future for a woman to become a successful entrepreneur. At the same time this paper has also make an attempt to suggest remedial measure so that more and more women both from rural land urban area will undertake this scope to become an entrepreneur.

Key Words : *Women Eentpreneur, Catalyst, Politically, Challenges & Profession.*

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HUMAN RESOURCE MANAGEMENT -AN EMERGING TOOL FOR ENTREPRENEURSHIP IN THE 21ST CENTURY

Shwati Sudha* & Ankita Singh**

The concept of entrepreneurship was firstly mentioned in the review of literature on individual and entrepreneur (Kirzner, 1973). Entrepreneurship can be defined in two different ways which involves the creation of a new organization in the first way and the second way leading to continuation within an already existing organization. Human Resource Management (HRM) seems to be an essential part of any organization from the initial phase. Ignorance of it can cause inflation in the efficiency rate leading to a loss to the organization. This research is analytical in nature which is based upon the sources from secondary date involving a

review of literature from 22 different papers. It focuses on the objective of specifying HRM as a tool for entrepreneurship and secondly on preparation of a model focusing on the different phases of HRM. The research concluded that HRM follows a series of phases starting from hiring of employees leading to creating a compensation package for them and lastly managing the employees. These phases involves a combination of many different steps starting from identifying a need for employees and ending at evaluating the employees to successfully make HRM an emerging tool for entrepreneurship in the 21st century.

Key Words : *Entrepreneurship, HRM, Compensation, Hiring, Managing*

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RETROSPECTS AND PROSPECTS OF WOMEN ENTREPRENEURS IN BERHAMPUR CITY, ODISHA

Mrs. Madhumita Nayak*

It has been so far proved that; men are not only the sole bread earners but women are also now-a-days emerging as successful earning members in most families. Women have successfully proved themselves in all areas including entrepreneurship as they play a vital role in this society. Berhampur city is considered to be the oldest business hub of our state Odisha. Here women participation in business is as old as the city itself. In this present context, an effort has been made to focus various economic conditions and problems faced by such women-entrepreneurs which includes shortage of finance, marketing problems, lack of entrepreneurial education and training, traditional gender values and family responsibilities. Further, it is proposed to assess the efforts and schemes made by the Government to improve these situations and provide suggestions to promote more women entrepreneurs on the basis of survey findings. This study will be descriptive study based on the primary data and is restricted to Berhampur City only.

Key Words : *Entrepreneurship, women, Berhampur, problems, prospects, Odisha*

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ENTREPRENEURSHIP IN 21ST CENTURY: TAKING THE SAMBALPURI HANDLOOM INDUSTRY INTO 21ST CENTURY

Rishab Prasad Soni*, Shibashis Nanda & Roshan Agrawal*****

Traditional weavers were one of the pioneer examples of an entrepreneur of ancient era as they have been engaged in producing, selling, promoting and expanding their art in a profitable

way. Sambalpuri Handloom Industry is globally recognized for introducing "Sambalpuri Saree" which was meant for protecting and developing the ancestral heritage of the weavers and contribute to their socio-cultural development. The weavers' society contributes largely to the economy of Western Odisha by providing employment & international exposure. Due to the inclination of market demand towards the modern attires and trends, this sector is facing a lot of challenges to cope with the 21st century. The study focuses on how the Sambalpuri handloom industry can adapt and sustain itself with the changing demands of the 21st century. As the society is on a voyage to the future with 21st century, the traditional industry is slowly losing their presence. This study tries to find out a proper marketing strategy for the traditional art and sustain it for the future with an appropriate and modern strategy that would both ensure the survival of the industry as well as adapt it for the future. This study also attempts to address and protect the weavers from various financial, technological and socio-cultural issues and identify possible means of their sustainability. This study concludes with the present scenario of the industry & the weavers and suggestions for making the business model a modern one suitable for a future-oriented market of 21st century.

Key Words : *Weavers, Sambalpuri Saree, Dynamism, 21st Century, Market*

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A STUDY OF THE MEASURES ADOPTED FOR THE SUSTAINABLE BANKING IN INDIA: A STUDY OF THE INDIAN BANKING SECTOR

Sangram Keshari Panda* & Prof. Prabodh Kumar Hota**

Commonly identified cause of bank crisis is the NPA (Non Performing Assets). Apart from the NPA burden there are various other serious matters which affect the performance of the commercial banks operating in India and other parts of the globe. The major step, to bring stability and protecting the banking system from various forms of risk, was taken by the Basel Committee for Banking Supervision through three accords, commonly known as the BASEL- I, II and III. Apart from the Basel norms the central bank of the country has also puts it whole effort to bring transparency and ensuring sustainability in the banking system. This paper makes an attempt to highlight such attempt made by various regulators in the banking industry and their impact of the profitability of the banking sector. For this purpose secondary data has been collected from the website of the various central bank for a period of 10 years. After identifying the various parameter that boosts sustainability of banks and inferential study has been made by using chi-square method the degree of the dependency has been estimated by using OLS regression between the parameters of sustainability (capital adequacy ratio, various risk weighted parameters LGD, PD, provisioning of loan assets etc..) and performance indicators such as net operating income, net asset value.

Key Words : *Capital Adequacy, LGD, PD, BASEL norms, NPA*

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ENTREPRENEURIAL OPPORTUNITIES IN 21ST CENTURY: A BACKGROUND STUDY FROM INDIAN PROSPECTIVE

Mr. Shribascha Nayak* & Mr. Sailendra Kumar Singh**

A country's regional growth, maintainable economic development and generation of employment depend on the development of its industries which in turn depends on the growth of entrepreneurship. For this entrepreneurs serve as catalyst for entrepreneurship. The last report of 2014, G20 leader's summit called for upgraded financial development by the "advancement of rivalry, enterprise and advancement" there was additionally a call for techniques to lessen the joblessness, especially among the young ones, through the "support of business enterprise". A key finding from this report was that job creations in many countries were not due to large corporate, but small independent enterprises. So, why not give these entrepreneurs a chance for growth, an opportunity to develop for themselves and nation. In the present context, this descriptive study has tried to take some entrepreneurial opportunities and government's agendas for entrepreneurial development. From this, we have found that though there is a lack of prior knowledge, creativity and experience still a lot of fortunes are available. It also seems that the government has taken various steps for this said purpose.

Key Words : *Entrepreneur, Entrepreneurship, Business enterprise, Entrepreneurial opportunities, Economic development, Government's agendas.*

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CHALLENGES FACED BY RURAL WOMEN ENTREPRENEURS IN GANJAM DISRICT: A CASE STUDY OF HINJILICUT BLOCK

Miss Subhadarshini Pradhan*

Rural women endowed with invaluable talent of creativity, innovation, they effortlessly impart their creativity into various home made products and services and contribute towards the economic development of Odisha and nation as well. However in spite of all these creativity, competencies and innovations rural women have lack of entrepreneurial skills and face many challenges. Hence it is an attempt made by the researcher to conduct a study on "challenges faced by rural women entrepreneurs in Ganjam disrict: A case study of Hinjilicut block". The

main objective of this paper is to study the problems faced by rural women Entrepreneurs in Hinjilicut block of Ganjam District. Present study is based on both primary and secondary data. The required data for the study has been collected mainly from primary sources. The researcher has been selected 120 respondents from Hinjilicut Block of Ganjam District by convenience sampling method and chi square test has been used to analyse the data. Findings of the study reveals that there is no relationship between problems of rural women entrepreneurs and their socio-economic variable age. The study concludes that women in Hinjilicut operate micro enterprises within the boundaries of their local area and facing many challenges in running their business.

Key Words : *Entrepreneurship, Unorganized sector, Micro enterprise, Employment, Economic Development*

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ROLE OF RURAL ENTREPRENEURSHIP IN POVERTY ALLEVIATION: A STUDY OF RURAL ODISHA

Rashmikanta Barik* & Chinmaya Ranjan Kumar**

Rural entrepreneurship has an imperative role to play in the development of Indian economy. The majority of the population in India lives in villages. The village is the back bone of the country. Village or rural industries play an important role in the national economy, particularly in the rural development. Entrepreneurship plays an eminent role in creating an avenue for employability for rural communities, providing self-employment for those who have started a business of their own thereby enhancing the economic status of the rural sector as well. Entrepreneurship has transformed many entrepreneurs into successful business persons and generated income for rural communities. Entrepreneurs in rural area have transformed their vicinity into trading hubs thus enabling them to become urbanized areas. Rural entrepreneurship can be considered one of the solutions to reduce poverty, migration, economic disparity, unemployment and develop rural areas and backward regions.

The main objective of the study is to examine the role of entrepreneurship in poverty alleviation in Odisha. The sources of data collection are secondary data. The data is analyses through various statistical tools like regression. The dependent variable is Poverty Alleviation Index. It is concluded that Entrepreneurship development is a key tool for poverty reduction; stimulating employment and economic growth in Odisha. Entrepreneurship boosts economic growth, enhances educational attainment and increases the rate of economic growth. The study recommends that Entrepreneurship development should be inculcated into the school's curriculum to promote human empowerment and development through entrepreneurial education and training and also the federal government should provide enabling environment conducive for the smooth operation of both indigenous entrepreneurs and foreign investors'

in order to boost the economy, reduced unemployment and ravaging level of poverty in Odisha.

Key Words : *Rural Entrepreneurs, Poverty Alleviation. Regression, Odisha.*

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SIDBI: A STEP TOWARDS SUSTAINABLE DEVELOPMENT OF ENTERPRISES IN INDIA

Salmamani Tudu*

The SIDBI banks being an important nerve of modern organized society can play an important role for sustainable growth of enterprises. It is the principal Financial Institution for the promotion, Financing and Development of the MSMEs sector and for co-ordination of the functions of the institutions engaged in similar activities. Its major operations are in the areas of re-finance assistance, direct lending and development and support services. SIDBI remain committed to convert dreams into realities, shape and attached feathers for enterprises growing with flying colours. It can plan multiple roles by delivering multiple advantages to Indian economic development. The objective of this paper is development of enterprises through SIDBI as well as development of economic in India. The paper develops an approach of qualitative measurement of the enterprise and how to assess the SIDBI is playing a very proactive role in reaching out to MSMEs by extending direct/indirect financial assistance under different schemes to meet credit needs of the MSME entrepreneurs. In this paper data have been collected from secondary sources. Methodologically, the studies have taken two parameters direct and indirect finance. The statistical tools used for analysis and present the interpretation.

Key Words : *Entrepreneurship, SIDBI Assistance, MSMEs, Sustainable Development..*

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STARTUP AND ENTREPRENEURIAL GROWTH IN INDIA

Satyananjan Garu* & Kedarnath Sabar**

Start-up particularly refers to young dynamic people getting together and starting their own business and brings their own idea to the people for betterment of society. Innovation is the key era of entrepreneurial growth in recent trends. In 21st century focuses on the growth of small business in whole over world. Due to competition, every nation promotes startup skill to develop new unique product and services and bring it to the market. Startup and innovation

brings to channelize the skill and potentials 21st century youths. The main focus of this paper is analyzing the entrepreneurial growth not possible without startup skill and innovation for a country. The study is descriptive in nature and data are collected from the secondary sources. The study will make an attempt to explore the benefits of startup ecosystem and its impact on entrepreneurship in India.

Key Words : *Entrepreneurship, young, Innovation, Growth, Business, competition*

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SUSTAINABILITY OF RURAL ENTREPRENEURSHIP ON TASAR WORKS: A STUDY ON FAKIRPUR IN KEONJHAR DISTRICT OF ODISHA

Subrat Sahoo*

Textile industry is one of the largest industries in Odisha in the both sector of mill made and handmade (handloom) sector based on cotton and silk sector. The tasar based textile is mainly depended on handloom weavers. They are now organized through co-operative societies controlled by government of Odisha, for sustainability. The Orissa Co-Operative Tasar And Silk Federation (SERIFED) was established in 1962 as state level Apex organization. Now at present time there are 39280 farmers in tasar through 62 number of primary Tasar Rearing Co-Operating Society (TRCS), 7320 farmers in mulberry through 36 Mulberry Rearing Co-Operating Society (MRCS) and 8230 weavers through 61 Weaver Co-Operating Society (WCS) are getting proper marketing facilities to sale their products through Orissa Co-Operative Tasar And Silk Federation (SERIFED). In the present study a microscopic geographical area taken i.e. a village fakirpur in keonjhar district of Odisha which is a tasar handloom cluster. Since due less earning potentiality of their tasar handloom sector their industry is either to perish or reduced to minimum. The present study is focused on the sustainability possibility of their industry in fakirpur taking into consideration the challenges faced and opportunities available to their industry in the present market-oriented environment. The methodology applied in this study is by collection of secondary data of base level societies and primary survey using census data of about 350 families in the village fakirpur. Expected outcome based on this first based primary census survey method will trace the factors of challenges and synergic potentiality for sustainability.

Key Words : *Sustainability, Tasar, handloom, silk*

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SUSTAINABILITY OF WOMEN ENTREPRENEURSHIP IN ODISHA: A CASE STUDY

Dr. K. K. Das* & Rupsa Mahapatra**

Women entrepreneurship contributes immensely to society and it broadens the base of private sector. The 50% of the population belongs to women workforce. Looking at the poverty, unemployment, labour market scenario, the district of Cuttack, Odisha could not be able to engage the existing unemployed workforce along with casual labourers who have no regular source of work or income. It is also clear that the share of the self-employed women workers in the Cuttack workforces has increased tremendously of which a large percentage are economically poor. Therefore, it is pivotal to promote a sustainable women entrepreneurship to address the poverty, unemployment, and inclusive growth. Sustainability and growth of women entrepreneurship in long run is one of the burning topic in the present era. The government has created number of programmes and plans to uplift and empower women through entrepreneurship who were not able to achieve its objectives. The present study aims at finding the sustainability of women entrepreneurship by analysing the past and present status to draw a conclusion about their future course of action.

Key Words : *Women entrepreneurship, Sustainability, Poverty, Unemployment, Inclusive growth*

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THE DYNAMICS OF ENTREPRENEURIAL ECOSYSTEM- A STUDY

Sarbani Mishra*

The concept of entrepreneurial ecosystem has emerged in recent years as a framework to understand the nature of places where entrepreneurial activity exhibits. This paper attempts to study the necessity and usefulness of entrepreneurial ecosystem. This paper further highlights the critical factors that forms the support of an entrepreneur and also analyzes the support required by the potential entrepreneur to become an entrepreneur. This study also reveals the effect of entrepreneurial ecosystem on personality traits and characteristics of entrepreneur personals.

Key Words : *Entrepreneurial ecosystem, Entrepreneur, Environmental factors*

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THE ROLE OF ENTREPRENEURSHIP IN THE 21ST CENTURY: A PERSPECTIVE

Prof. Amal Kumar Roul*

Entrepreneurship aims to bring about the cohesive integration of social, economic, institutional, and cultural environments, both at the individual level and the group level. The entrepreneurship concept has been built on the strong historical roots that have led to advancements in entrepreneurial research and its related areas. This chapter provides coverage of the various theoretical perspectives underlying the origin and evolution of entrepreneurship. For example, the role of entrepreneurial activities has been recognized in economic growth and development. Besides this, entrepreneurship also provides opportunities for a company or a firm to take on a start-up project to foster creativity and innovation which further helps in value co-creation. Entrepreneurship is the practice of forming a new business or commercial enterprise, usually in an industry or sector of the economy with a large capacity for growth. Entrepreneurship is generally synonymous with resourcefulness, ingenuity, and the ability to take calculated risks in order to introduce a new, untested product or service into the marketplace. These traits are often referred to collectively as the "entrepreneurial spirit." Entrepreneurship is driven by the entrepreneur, a person who launches and oversees the operations of a new business venture. The entrepreneur is generally self-employed, self-motivated, and ambitious and is willing to take chances to meet his or her goals. Unlike the capitalist, a businessperson who generally limits his or her role to financing commercial ventures, the entrepreneur is the driving force behind the formation of a new business and asserts a great deal of control over the key management decisions. Many entrepreneurs also assume responsibility for hiring and managing employees. Successful entrepreneurs tend to be highly skilled at organizing and motivating their employees.

Key Words : *Mindset, Passion, Visualization, Belief*

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WOMEN ENTREPRENEURS OF 21ST CENTURY: A STUDY ON RURAL ODISHA

Dr. Niharika Padhy*

Odisha is a land of villages. Census 2011 reveals that, 83.32 percent of the total population of Odisha lives in villages. Women comprise nearly half of the population of Odisha. About 53.90 percent of the total female population of rural Odisha encompasses the labour force. They do arduous labour for the economic development of the nation at the grassroots level. They take care and responsibility of domestic livestock and poultry. But they do not receive none of the advantages that livestock generates and the sale proceeds of livestock. They

play the key role in the 'care economy', which not only provides care to the young, old and the sick, but also is vital for ensuring a productive workforce. As this work is not remunerated, it is undervalued and lies outside general conceptualization of the economy. Women engaged in unpaid work often face a double work in a day as they work at home round the clock as long as their domestic duties are not completed. This means women are time poor and time burdened labour. It impacts on their health and wellbeing. To alleviate this burden and to make women free, they must be given opportunity to work as entrepreneurs. The present study focuses on how self help groups play an important role in promoting the economically disadvantaged rural women of Odisha as prospective entrepreneurs giving due importance to environmental and socially responsibility investing.

Key Words : *Care economy, Time poor, Time burdened, Entrepreneurs, Self help groups.*

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TECHNICAL SESSION-II: **SUSTAINABLE BANKING IN INDIA**

THE ROLE OF GREEN HRM IN SUSTAINABLE BANKING: AN OVERVIEW

Diptimayee Sahu*, Kalpana Sahoo* & Alisha Sahu *

Human resource is one of the crucial assets of every organization irrespective of their nature, size and performance. Managing such human resources is indispensable for long term sustainability. Due to changing environment now business firm faces twin problem of economic growth and conservation of its environment. Economic growth without conserving its surrounding has an adverse impact on its sustainability. In this regard not only the quantity of human resource but also the quality of human resource is essential. The quality of human resource can be captured by various means, such as; efficiency, rational behaviour, belongingness to the organisation, opportunistic attitude etc. out of such quality environmental consciousness of the human resource is the need of the hour as environmental conscious stake holders has been constantly observing the environmental performance of the organisation. This study is an attempt to highlight the various green HRM practices followed by the banking industry, relationship between banking social responsibility and the green human resource management. The study will help the regulators, bankers ,policy makers, researchers in their respective field.

Key Words : *Green HRM, Sustainable Banking.*

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DOES AGE OF A BANK MATTER FOR ITS SHAREHOLDERS WEALTH MAXIMISATION?

Sibani Jena*, Subhashree Mohapatra* & Priyanka Biswal*

The objective of every firm is to maximise its shareholder's wealth irrespective of its size, nature, performance. Shareholder's value maximisation is an important indicator of sustainability for every firm. The degree of wealth maximisation depends upon many factors called determinants. Out of such determinants, age is the crucial one. Banks are vital institutions in any society as they significantly contribute to the development of an economy to facilitate the business. Banking industry has witnessed establishment of many new bank both in public and private ownership during the last two decades. But the scenarios raise a pertinent question that does age of bank matter to its value? Is there any difference between old and new firm in their firm valuation to address such question the study of an attempt to investigate the impact of bank age on its value by taking a period of 10years i.e 2008-18. The study has used t test and OLS regression for purpose of the study. This helps policy makers, creditors, rating agents etc in their respective fields.

Key Words : *Public Sector bank, Private Sector bank, Firm value, Age, Shareholder's wealth.*

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A STUDY ON CHALLENGES AND OPPORTUNIOR OF AGRICULTURE FINANCIAL INCLUSION IN INDIA

Siddarth N M* & Dr. A. P. Hosmani **

India is the one of the biggest agricultural global centre and the foremost producer of spices, pulses, and milk. Not only that, our nation has the largest area that is used to cultivate cotton, wheat, and rice. Agriculture seized almost 65% share in India's GDP. Though, agriculture endures to be the source of livelihood for about more than 50% of the employed population, three-quarters of which is based in the rural parts of India. Agricultural is huge productiveness and has an impact on every citizen of the country, one or the other way directly or indirectly. Like any other sector, agriculture too has its own set of challenges, some of which are very critical and impeding. Let's take a look at some of the major problems that India faces in relation to agriculture and their possible solutions.

Key Words : *Agriculture, Challenges and Opportunior*

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KEY INITIATIVE FOR BANK SUSTAINABILITY -A CURRENT SCENARIO

Binayee Mishra *

The banking sector is driving force in the financial sector of any economic. In India it has emerged as a crucial facilitator for sustain the growth momentum of our economy Banking Services constitute a traditionally pre-eminent sector in the global economy, whether measured by their size, numbers, or influence in world development and other industries. Furthermore, in recent years this industry has received growing attention by practitioners due to the dramatic changes in the competitive environment. In particular, established banks confront strong competitive pressures from new entrants and new customer demands. These trends urge banks to react via sustainability (Bravo et al, 2009; Babic-Hodovic et al, 2011; Pérez & Rodríguez del Bosque, 2013; Walsh et al, 2014; Brammer et al, 2015). Sustainable strategies become a distinctive factor, especially under conditions of increased competition and product standardization (Bhattacharya & Sen, 2004) as is happening in the banking sector (Bravo et al, 2009). In this manner, banks have embraced sustainability as a new competitive arena (Pomeroy & Dolnicar, 2009). As the demand for a more sustainable society increases, adopting a sustainable banking approach serves as a competitive advantage for banks that are focused on attaining bank loyalty. Sustainable development defined as is an institutional commitment and an integral part of our pursuit of both good corporate citizenship and the fundamentals of sound business practices. This paper tries to highlight banks key stakeholders and their needs and expectations, synergies of sustainability in banking and significant areas of bank sustainability footprint with the help of secondary sources of data. Finally, the study concludes with mentioning some suggestions to make the practices of sustainable banking effective through relevance of each stakeholder to a bank.

Key Words : *Banks, sustainability, stakeholder, competitive advantage, sustainable development*

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BURNOUT IN 21ST CENTURY BANKING SECTOR: A LITERATURE SURVEY FROM INDIAN PERSPECTIVE

Prof. (Dr.) Vishal Sood* & Ms. Aishwarya Mitra**

Ensuring a financial gain in banking has been a pivotal issue since now and ages. Mergers and Acquisition are playing a significant role to cater challenges posed by outside world. It contributes towards improving economies of scale and in this process one bank loses its identity or existence. It is a process that results into survival or existence of one bank whereas the others lose their corporate identity. The process of keeping the head high in globalized

economy and dominating the market in order to enjoy the larger segment in market one has to follow the path of growth, which contains various challenges and issues. Therefore, the aim of this research is to study the growth of banks through mergers and acquisitions and to answer the issue of burnout due to overburden of growing NPA. This article is divided into four parts primarily, introduction and conceptual framework of mergers and acquisition. The second part discusses the historical background of merging banks and it is followed by review of literature and studies for and against the issue of merger. The third part discusses all the mergers and acquisitions in detail along with the factors responsible. Finally, the article concludes that a firm must devise a strategy phase wisely as to reduce the burden of NPA and the merger can be made with all ease and grace. This article will be helpful for policy makers, strategy makers, HR people, bankers, researchers, and scholars in understanding pre and post effect of merger and acquisition.

Key Words : *Merger, Acquisition, Corporate Identity, Economies, NPA*

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GREEN BANKING PRACTICES IN INDIA: A CASE STUDY OF STATE BANK OF INDIA

Jayanta Kumar Bihari* & Laxmipriya Swayin**

Now-a -days almost all the countries are changing their approach towards environmental issues like weather shocks, climate change, cost of fossils and fuels to basic infrastructure and industrial planning, desire to design more sustainable, resilient pathways to economic growth and are taking Green steps. As the growth engine of the economy, commercial banks can provide important leadership for the required economic renovation that will provide new opportunities for financing and investment policies as well as portfolio management for creation of a strong and successful low carbon economy. Adoption of greener banking practices will not only be useful for environment, but also benefit in greater operational efficiencies, a lower vulnerability to manual errors and fraud, and cost reductions in banking activities. The main objective of this paper is to deeply understand how the Indian banking sector leader i.e., STATE BANK OF INDIA responding to environmental turbulence and to provide an overview of its action in view of green banking adoption, awareness, drivers, challenges and gaps etc. by secondary data and reports published. The results reveal that the banking leader is taking different green steps like carbon neutrality, energy saving, use of renewable energy, waste management, digital innovation etc. This paper tries to find out the ways to Go Green through 'Green Banking'.

Key Words : *Green Banking, Corporate Social Responsibility, Environmental issues, Global Warming, Sustainable Development, Low Carbon Economy.*

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BALANCED SCORECARD MODEL IN BANKING SECTOR: A COMPARATIVE STUDY OF ICICI AND HDFC BANK

Rajanikanta Khuntia*

Banking Sector, being a principal player of Money and Capital market in India, plays a very vital role in the economic progress of the nation. Presently, banks are entrusted with a wide range of exercises and offering a variety of financial products and services to an enormous number of clients. At the same time banks are working in an environment encompassed by various challenges and threats from different edges. Structuring innovative products, adopting new technologies, building infrastructures, improving client relations, meeting employees' expectations and most importantly keeping investors' interest are the primary strategic objectives that banks should concentrate to survive in the intense competition. At this critical juncture, a performance evaluation system is absolutely essential to measure the strategic achievement of commercial banks. Sole dependence on financial or accounting based performance measures is inadequate in the complex environment. The increased significance of non-financial performance measures has induced multiple innovations in the area of performance evaluation system. One of the popular and effective innovations is called Balanced Scorecard (BSC) which has been developed by Kaplan and Norton in 1992. The BSC supplements the conventional financial measures with non-financial measures focused on at least three other perspectives - customers, internal business processes, and learning and growth. This paper endeavours to study the application of Balanced Scorecard (BSC) as a performance management tool in Indian Banking Sectors. The study analyses and makes a comparative study of two new generation private sector banks namely ICICI bank and HDFC bank based on the BSC model.

Key Words : *Balanced Scorecard (BSC), financial measures, Indian Banking Sector, non-financial measures, performance evaluation system and strategic objectives.*

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ONLINE ENTREPRENEURSHIP: A COMPARATIVE STUDY ON SELECTED SHOPPING WEBSITES IN INDIA

Due to revolution in telecommunication sector number of users of internet have increased in India in the recent past of the 21st century & customers are using internet very often for

shopping online because of several reasons. So the popularity of the online shopping trend gave an idea of undertaking this research work to know the attitude of customers towards online shopping, relative challenges faced by the internet shopping giants & to know the preference of people to shop from three different popular online shopping websites i.e. Amazon.com, Flipkart.com & Snapdeal.com, one global company & two Indian companies. In this study a convenient sample of 100 respondents in the city of Bhubaneswar was chosen. The findings revealed that majority of the online shoppers prefer Amazon followed by Flipkart & least preference is given to Snapdeal. There is a positive attitude of customers towards online shopping because of several factors like availability of good quality products at lower prices, wide range of products, best payment methods etc.

The suggestions from the respondents were that all the companies should display original products with full & actual product description & offer better product return policy.

Key Words :

BANKING STRATEGIES TOWARDS SUSTAINABLE GROWTH- LESSONS FROM INDIA

Sudeshna Sarkar*

Sustainable development will best be achieved by permitting markets to work within a set up of cost-effective rules and economic instruments. One of the major economic agents influencing overall industrial activity and economic progress are the financial establishments like the banking sector. During a globalised economy, the industries and firms are at risk of rigorous environmental policies, stringent law suits or client boycotts. Since the banking sector is one of the important stakeholders within the Industrial sector, it is exposed to credit risk and liability risks. Further, environmental impact would possibly affect the standard of assets and additionally rate of return of banks within the future. Green Banking is any kind of banking form, that the country and nation gets environmental advantages. A standard bank becomes a Green Bank by directing its core operations toward the betterment of atmosphere. This paper explores the importance of Green Banking, sites international experiences and highlights important lessons for banking and development in India. It focuses on the Green Banking activities of the commercial banks of India and additionally tries to grasp why this policy was adopted. But, we discover that there has not been abundant initiative in this regard by the banks and alternative financial institutions in India although they play a crucial role in India's rising economy. Therefore, we recommend attainable policy measures and initiatives to encourage Green banking in India.

Key Words : *Green Banking, Credit risk.*

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SUSTAINABLE FINANCIAL PERFORMANCE THROUGH INVESTMENT ON GREEN BANKING: AN CASE STUDY ON STATE BANK OF INDIA

Ganesh Prasad Panda*, Sudhansu Sekhar Panda & Dr. Sabat Kumar Digal*****

Financial Institutions are considered environment friendly because they do not impact environment much through their own internal operations. Green Banking operates in financial institutions focusing on the environment and ecology, which targets to conserve nature and natural resources. As a commercial entity is always motivated by profit, it would be very interesting to investigate the nexus between the investment of a commercial bank on green banking and its profitability. This paper aims to investigate the relation between profitability and investment on green banking. State bank of India has been taken as the case study here. The period of the study has been taken from 2011-12 to 2018-19. In our study, the various green banking variables such as amount of mobile banking transactions, amount of ATM transactions as Independent variable and Net Profit as dependent variable has been taken. Besides that Bank deposits are taken as control variable. Regression analysis has been applied for the analysis of the data. Besides, normality, multi-co linearity, stability, serial correlation are tested before applying the regression model. The result shows that Green banking investment exerts no significant positive influence on the banks profitability.

Key Words : *Sustainable Banking, Green Banking, ATM, Internet Banking, Profitability*

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GROWTH SUSTAINABILITY & STOCK PRICES: AN EMPIRICAL INVESTIGATION IN INDIAN BANKING SECTOR

Dr. Shradhanjali Panda*, Dr. Kishore Kumar Das & Ms. Ananya Mitra*****

"As people get richer, they can buy more food. Once the basic metabolic needs of the body are taken care of, all that extra food goes into building strength, allowing people to produce much more than they need to eat merely to stay alive. This simple biological mechanism creates an S-shaped relationship between income today and income tomorrow".

(Abhijit V. Banerjee & Esther Duflo, "Poor Economics")

The above quote for the Noble winning work suits aptly to the rational investment strategy. While investing in stocks, investors focus on growth trend in short run rather than following a sustainable growth rate promising positive returns in long run. What they ignore is the basic

fact that today's growth sustainability ensures positive return for tomorrow. The common mistake they make is getting carried away by short term high growth rate of the company than growth sustainability. This common investment blunder affects adversely their return as this rapid growth for a short term is averaged in long run. But, investors' willingness to pay more for the companies makes the stocks overpriced. In this paper it is tried to study how the growth sustainability (using ROE and retention ratio) affects the deviation between the intrinsic value and the market value of the stocks. For this purpose, Multiplier Valuation Approach using P/E ratio has been used in order to estimate the intrinsic value and Banking stocks are used as sample in the present work. Using simple statistical tools the sustainability of growth rate is studied and the comprehensive work aims at identifying the over-pricing or the under-pricing of the stocks at different phases of growth rates. Findings of the present work show the deviation between intrinsic and market value of stocks is not significant (at 5% significance level) for the banks that follow growth sustainability. Thus the paper concludes at testing the impact of growth sustainability on correct market mechanism of the stock pricing.

Key Words : *Growth Sustainability, Intrinsic Value, Market Value, Over Pricing, Over pricing.*

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A STUDY ON "GREEN BANKING" ADOPTED BY INDIAN BANKS FOR SUSTAINABILITY

Mr. Mangulu Charan Dash*, Mr. Bamadeb Mishra & Mr. Sangram Padhy*****

Sustainable banking integrates environmental, social and governance (ESG) criteria into traditional banking, and sets ESG benefits as a key objective. Integrating sustainability into the banking activity is an increasingly necessary but extremely challenging issue currently facing financial institutions. It is therefore becoming ever more important to understand the key determinants of sustainable banking and how they inter-relate with each other. Sustainable banking brings several business benefits. Research by Global Alliance for Banking on Values (a network of sustainable banks) has shown that sustainable banks have higher and more stable profits, as well as stronger growth than other banks. This research aims to analyse the various strategies adopted by banks for sustainability.

Key Words : *Sustainable Banking, Traditional Banking, Financial Institutions, Global Alliance, Growth*

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SERVICE QUALITY MANAGEMENT: A COMPARATIVE STUDY OF PUBLIC SECTOR BANKS

Dr. Kalpana Panigrahi*

In 21st century delivering superior service quality has become the prerequisite for the success of Indian banks due to liberalization and globalization. The banks are now have to be of world class in standard for survival, committed to excellence in customers, shareholders and employees satisfaction, and to play a leading role in the expanding and diversifying financial sector by reaching the bottom line. Now 'Quality' is a buzz word in the marketers' dictionary. Poor quality places a firm at a relatively competitive disadvantage position. Thus in this competitive scenario service quality management (SQM) is the prime concern of banks. The present paper is the outcome of an empirical study conducted with the objective to know and compare the service quality management of public sector banks (PSBs) operating in the state of Odisha, India. It covers Managers' perceptions on service quality management of banks and attributes of SQM in Banks. The study has been conducted through a structured questionnaire. The sample consists of 84 managerial staff from five leading PSBs of Odisha. In order to accomplish the objectives the data are processed through SPSS (statistical package for social sciences) and analysis was made by drawing cross-tables, calculating percentage, and ANOVA test were used to analyse the data.

Key Words : *PSBs, SQM, attributes of SQM*

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IS YOUR BANK BALANCE SAFE? - A COMPARATIVE ANALYSIS OF DEPOSIT INSURANCE COVERAGE IN INDIA WITH OTHER COUNTRIES

Sudeepta Raha* & Dr. Parag Shil**

A person may lose a large chunk of their savings if a bank fails to sustain. To curb the losses of the depositors, RBI introduced a deposit insurance corporation in India, known as Deposit Insurance and Credit Guarantee Corporation (DICGC) which aims to contribute towards financial stability by securing public confidence in the banking system through provision of deposit insurance, particularly for the benefit of the small depositors. But, the desolate part lies with the fact that all depositors in a bank is insured up to a maximum amount of Rs.1,00,000 only, including both principal and interest amount held by him, which essentially means that a bank failure would be nothing short of an unprecedented catastrophe, because a depositor would be left with just Rupees One Lakh of what was his entire life's savings, which for most of the people usually amount to several lakhs. This paper intends to examine deposit

insurance coverage system in India as well as of other countries and highlights on the grievances faced by the depositors who lose their huge savings due to bank failure. The study is based on secondary sources which include various publications on deposit insurance coverage, journals, websites, reports, and articles. The study reveals that, India is among the countries that offer the lowest protection to depositors in cases of bank failure.

Key Words : *Financial crisis, Deposit Insurance Coverage, Depositors, Countries, Amount, People.*

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MACROECONOMIC AND BANK SPECIFIC DETERMINANTS OF NPA IN INDIA

Pravata Kumar Jena*, Ranjeeta Nayak & Usha Rani Sethi*****

The Success of an economy depends not only upon creation of good organizations but also proper management of those organizations. Growing trend of Non-performing assets, an indication of improper management of banking system, can hamper the economic growth of a developing country like India. A major problem of discussion for Indian economy today is inefficient handling of bank assets. This paper analyzes different macroeconomic and bank specific factors affecting Indian bank NPA. Fixed effect model for panel data set is used for empirical analysis. The results indicate that exchange rate, gross advances, bank size, lending interest rate have significant influence on bank NPA. This can be taken as a guide for modifying regulations, which will help for reduction of NPA as well as economic development of India.

Key Words : *Non-Performing Assets, Banking System, Bank Assets, Macroeconomic*

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CAN TRANSITION TO FEE-BASED ACTIVITIES ENHANCE BANK SUSTAINABILITY? EVIDENCE FROM INDIAN BANKS

Chetna Rath*, Ch. Roshan Kumar Patro & Dr.Malabika Deo*****

In the era of stiff competition, banking sector in India has always made an attempt to match up the pace by bringing about newer and better innovative practices. Fee-based activities of the banks is one such initiative preferred recently to lure the customers by providing services backed by fees in order to generate income without lending loans or charging interest. Ranging

from cashless transactions to advisory services provided in a quick and efficient manner, the banks have started providing all these facilities by charging a nominal fee. This paper has made an attempt to focus on such kind of practices adopted by the banks in order to sustain in the long run by providing various eco-friendly and customer-oriented services. By taking a sample of banks from sectors like public, private and foreign; independent t-test has been applied to determine the effect of such services on the ultimate performance and how those measures have helped to rise as well as sustain. The study concludes that a transition from interest-oriented services to non-interest bearing services is the need of the hour to remain sustainable in the long-run.

Key Words : *Fee-based services, Cashless transactions, Non-interest bearing services, Sustainable banking practices*

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ROLE OF INFORMATION TECHNOLOGY IN BANKING SECTOR WITH REFERENCE TO ODISHA

Dr. S. K. Badatya* & Dr. R.N. Misra**

A well developed banking system is necessary for economic development of our country. Banks mobilize savings from the public and provide them for economic development. Banks are now providing number of innovative services to the society. Indian banking sector has already undergone a huge transformation in the years since independence. After the implementation of LPG policy the Indian banking sector has seen a lot of changes provide better quality services to the customers. The age of digitization and move towards the adoption of new technology have transformed the way banks do business today. Information Technology has played a vital role in shaping India's banking scenario. Digitization is the process of converting data into digital format. Digitalization means the adoption of technology. But these two words are being used interchangeably. Digital banking is also known as "cyber banking", In India, Reserve Bank of India outlined the mission to ensure that payment and settlement systems are safe, efficient, interoperable, authorized, accessible, inclusive and compliant with international standards. Various initiatives by Reserve Bank of India, in mid-eighties and early-nineties, resulted in offering technology based solutions.

Key Words : *Digitization, transformation, Electronic Clearing Service, innovative services.*

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SUSTAINABLE BANKING IN INDIA: A STUDY ON SELECT BANKS LISTED UNDER S&P BSE 100

Dr. Nitashree Barman* & Dipankar Das**

Banks are the significant constituents of Indian financial system. The significant role played by the banks as distinct from non-banking financial institutions can be understood under the purview of their diversified scope of doing business. The differences between these two categories of financial institutions mainly lies in the sphere of intermediation of savings of public, credit creation, dealing with the range of customers, involvement in payment mechanism, etc. In the present era, there is an increasing consensus among the corporate players on sustainable development. The sustainable development refers to the concept entailing the pursuance of economic objective along with the corporate social performance. In this context, the present study attempts to study the sustainability of banking in India from the standpoints of economic and corporate social responsibility performance. Further, the selection of banks has been made based on top 100 stock listed in BSE. Accordingly, the selected banks under the study are State Bank of India, Punjab National Bank, Bank of Baroda, HDFC Bank Ltd., ICICI Bank Ltd., Axis Bank Ltd., Indusind Bank Ltd., YES Bank Ltd., Bandhan Bank Ltd. Among the public sector banks, the performance of State Bank of India is found to be overweighing the other banks. The private sector banks are also found active in discharging CSR activities.

Key Words : *Sustainable Development, Economic Performance, Corporate Social Responsibility, Public Sector Banks, Private Sector Banks*

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A CASE STUDY ABOUT FINANCIAL LITERACY AMONG WOMEN PROFESSIONALS IN JAIPUR DISTRICT

Dr. Rishi Kant Mittal*, Dr. Ankit Acharya & Mahendra Sankhala*****

"Financial literacy plays an important role in the socio-economic development of a country besides political and legal framework. Moreover, women play an important role in the economic growth and development of a country. In a country like India with 50% female population, their contribution to economic growth is unprecedented. Women must be financially literate to be economically strong. Women education is essential for improving their status in the society and also to empower them.

In modern times, women are equal earning partners in a family but it is often observed that they do not possess required financial knowledge and skills to make sound investments. With

abundant and complex financial products and services available in the market, it is essential for women to have basic financial knowledge and Information to ensure safe returns on their money. The present study focuses on how different socio-economic and demographic factors influence financial literacy of professional women in Jaipur district of Rajasthan."

Key Words : *Literacy, Finance, Economic Growth.*

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FACTOR ANALYSIS OF CUSTOMER'S PERCEPTION IN BANKING SYSTEM

Golakh Kumar Behera*, Shaswati Das & Prof. R.P. Mahapatra***

Purpose- This paper aims to investigate the perception of customers about different factors namely Branch Ambience, Employee Behaviour, Product Satisfaction and Trust and Loyalty in banking system.

Design/Methodology/Approach- A survey method approach was adopted in this study. The proposed model was empirically evaluated through a structured questionnaire taking a sample of 288 respondents, using simple random sampling. The research instrument was validated through different validity checkings. The hypothesis was tested using Structural Equation Modelling in AMOS software.

Findings- The Customer perception for the banks chosen for the study, six are public sector banks and four are private sector banks. This model seeks to find the combined influence of Branch Ambience, Employee Behavior and Product Satisfaction on Trust and Loyalty. As observed in the earlier analyses, Product Satisfaction is the most influencing variable among the three. It is completely mediating the influence of Branch Ambience on Trust and Loyalty and is partially mediating the influence of Employee Behaviour on Trust and Loyalty. Here, Product Satisfaction has been taken as the mediating variable for both Branch Ambience and Employee Behaviour.

Practical Implications- In a banking system banks can increase customer trust and loyalty directly by improving employee behaviour and product satisfaction.

Originality/value- The major contribution of this study is that it attempts to analyse the different factors involved in banking system to attract the customers by building their trust and loyalty. This study deals with the customers' perspective towards bank performance by considering the perceptions of the customers towards their banks' services.

Key Words : *Banking, Trust and loyalty, Customers perception, SEM and AMOS*

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APPLICATION OF BALANCED SCORECARD MODEL IN BANKING SECTOR: AN EMPIRICAL STUDY OF SELECTED BANKS

Rajanikanta Khuntia* & Prof. (Dr.) Pradyot Keshari Pradhan**

Banking Sector, being a principal player of Money and Capital market in India, plays a very vital role in the economic progress of the nation. Presently, banks are entrusted with a wide range of exercises and offering a variety of financial products and services to an enormous number of clients. At the same time banks are working in an environment encompassed by various challenges and threats from different edges. Structuring innovative products, adopting new technologies, building infrastructures, improving client relations, meeting employees' expectations and most importantly keeping investors' interest are the primary strategic objectives that banks should concentrate to survive in the intense competition. At this critical juncture, a performance evaluation system is absolutely essential to measure the strategic achievement of commercial banks. Sole dependence on financial or accounting based performance measures is inadequate in the complex environment. The increased significance of non-financial performance measures has induced multiple innovations in the area of performance evaluation system. One of the popular and effective innovations is called Balanced Scorecard (BSC) which has been developed by Kaplan and Norton in 1992. The BSC supplements the conventional financial measures with non-financial measures focused on at least three other perspectives - customers, internal business processes, and learning and growth. This paper endeavours to study the application of Balanced Scorecard (BSC) as a performance management tool in Indian Banking Sectors. The study analyses and makes a comparative study of four new generation banks namely ICICI, HDFC, Axis and SBI banks based on the BSC model.

Key Words : *Balanced Scorecard (BSC), financial measures, Indian Banking Sector, non-financial measures, performance evaluation system and strategic objectives.*

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FINANCIAL INCLUSION: ROLE OF SBI KIOSK BANKING IN MALAPPURAM DISTRICT OF KERALA

Mohamed Nisfar*

Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost (The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan). One of the fundamental aims of comprehensive financial inclusion is to increase the outreach of the formalized well-functioning banking system to reach the unreached poor population and the unbanked areas. In the essence of financial inclusion, KIOSK banking is an important concept and basically developed for rural areas of country where less number of banks are and people can't reach to the bank to use their services. Like the ordinary bank branches, the kiosks will offer all the basic services of banking. The basic methodological approach in this study is to evaluate the role of SBI KIOSK banking in achieving goal of financial inclusion. The primary data is to be collected through questionnaire and interaction with the target sample of SBI KIOSK banking agents in the district of Malappuram, Kerala.

Key Words : *Financial inclusion, Financial services.*

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GREEN BANKING IN INDIA

Sonalika Pati*

Banks have helped in country's economic development and have transferred the hopes of people into the reality. In recent years Indian banks have witnessed the growing trend and have transformed its operational strategies to a large extent. Banks are the lifeline of nation. Green banking is different from traditional banking, as green banking focus on promoting environment friendly banking. Green banking is also known as ethical banking. Green Banking is the new phenomenon in the financial world which concentrates on environmental and socially responsible investing. This paper attempts to analyze the adoption of green banking among different banks and its customers in India.

Key Words : *Green banking, Traditional banking, Environment friendly, Socially responsible.*

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GREEN BANKING PRACTICES - A REVIEW

Anwesa Dutta*

Society has been experiencing most complicated issues of climate change. People nowadays are more conversant with global warming and its inherent consequences on human life. So change is the need of the hour for survival and that is why continuous efforts need to be made for environmental management in a sustainable manner. It is not only the duty of the government and the entities causing direct pollution but also of other stakeholders such as Banks and Financial Institutions which are playing a fundamental role in the development of the society. Though banking activities are not physically related to the environment, the external impact of activities of their customers is substantially connected to it. So there is need for banks to adopt green strategies into their operations, buildings, investments and financing strategies. The purpose of this paper is to highlight the green rating standards given by RBI, the World Bank's environmental and social norms, the initiatives taken by public and private sector banks in India in the adoption of Green Banking practices and to enlist the significant strategies for adoption of Green Banking.

Key Words : *Green Banking, Green Banking Strategies, Indian Banks Initiatives, Green Building, and Banking, Green Coin Ratings by RBI, World Bank Environmental and Social (E&S) Norms*

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SUSTAINABILITY IN THE BANKING INDUSTRY IN INDIA: A CASE STUDY OF INDIAN PUBLIC SECTOR BANK

Dr. Bhagabata Behera*

Globally financial institutions are expanding their mission from ones that prioritize vision of Social and Environmental Sustainability. Banks are integrating consideration of Ecological limits, Social equity and Economic Justice into corporate strategies and core business areas including credit investment, underwriting & advisory to put sustainability objectives on an equal footing to maximisation of shareholders value and client satisfaction through financing transactions that promote sustainability. In the banking sector, new standards and codes of conduct promote corporate accountability, transparency, and consideration of impacts on environment and society. One clear example is the Equator Principles, based on IFC's social and environmental performance standards and adopted by an increasing number of banks that operate in developing countries.

The effort of present paper is to critically review the practice of sustainable banking by

Indian Public sector banks in accordance with RBI guidelines in light of global initiatives and also explores the issues and challenges faced by Indian banks while implementing it in ground level. Empirical studies reveal that despite of several global initiatives and RBI directives underway but the response of Indian Public sector banks are very embracing.

Key Words : *Sustainable banking, CSR, non-financial reporting, sustainability reporting*

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GREEN BANKING: AN APPROACH TOWARDS INDIAN CONTEXT

Dr. Kirti Ranjan Swain* & Dr. Biswa Mohan Jena**

Banking sector plays an important role in the economic growth of a nation. As the banks are among one of the major sources of financing instrument for commercial projects so they can play a major role in promoting environmental sustainability by funding the socially and environmentally responsible investment projects. The concept of Green banking is comparatively a new concept. It is a paperless banking, which not only reduces the cost of banking activities but also helps in environment sustainability. It helps in reducing the use of paper, power and energy. The main objective of this paper is to know about the role of green banking in environment sustainability in Indian public sector banks. This paper also deals with the green initiatives and developments took place in the banking sector in India and sites international developments. The Role of the Reserve Bank of India in formulation of policies on green banking has been focused upon for green growth. Various financial services which have adopted green approach in their businesses are banks, stock brokerages, insurance companies, and consumer finance companies. This paper aimed at finding out the various initiatives taken by the Indian banking industry to protect the natural environment and bring about sustainable development in the society.

Key Words : *Green Banking, Sustainable Development, Environment, Environmental Issues, Indian Banking Industry.*

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GROWTH AND DEVELOPMENT OF BANKING SECTOR IN INDIA: AN OVERVIEW

Dr. Sudhansu Sekhar Nayak*, Rajendra Kumar Sahu
& Dr. Ranjan Kumar Swain*****

In view of several developments in 1990s, the entire banking products structure has undergone a major change. As part of the economic reforms, banking industry has been deregulated and made competitive. New players have added to the competition. IT revolution has made it possible to provide ease and flexibility in operations to customers. Rapid strides in information technology have redefined the role and structure of banking in India. Due to exposure to global trends after information explosion led by internet, customers-both individuals and corporate- are now demanding better services with more products from their banks. Financial market has turned into a buyer's market. Banks are also changing with time and are trying to become one-stop financial supermarkets. Banks also offer advisory services termed as private banking to high relationship-value clients. Corporate are also deriving benefit from the increased variety of products and competition among the banks.

Key Words : *Deregulated, Explosion, Innovation, segment, Acquisition, pursuit*

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ENTREPRENEURSHIP DEVELOPMENT IN AGRICULTURAL SECTOR

Sai Prasad Sahu* & Souvik Ranjan Sahu**

Agriculture has been a new phase since the entry of entrepreneurship quality because the entrepreneurial skill helps to give farmers better yields for their products by using the agricultural products for manufacturing industries like cotton thread through cotton cultivation, coffee powder through coffee seeds, fruits juice through fruits, jute bags through jute cultivation. Entrepreneurs try to link the grain farmers to manufacturing industries so that they may get a better price for their produce.

Entrepreneurial development programme is defined as a program designed to help an individual in strengthening his entrepreneurial motive and in acquiring skills and capabilities necessary for playing his entrepreneurial role effectively. This situation can be changed by generating employment opportunities for them in rural areas itself. Agro entrepreneurship can be used as paramount medicine for the solution of this complexity. Developing entrepreneurship in agriculture will solve the entire problem. Some of them are trimming down the burden of agriculture, create employment opportunities for rural youth, increase national income, sustain

industrial development in rural areas, cut down the pressure on urban cities, etc. By developing entrepreneurship skills among farmers, they will no more depend on other for their survival if farmers will be in good condition then our economy will rise as 70 % of economy in India is depend upon agriculture and agriculture is rightly said as the backbone of India.

Key Words : *Entrepreneurship, Agriculture, Farmer, Cultivation, Agro-Entrepreneurship*

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IMPACT OF POLICY INTERVENTIONS ON ENTREPRENEURIAL INTENTION

Debasis Pani* & Dr. Sunil Kumar Pradhan**

Entrepreneurship is the order of the day, which not only provides employment opportunities to many but also provides solution to many economic problems. Entrepreneurship has become an inextricable part of development for the country like India.

India needs more entrepreneurs to come in the form of start-ups and small, medium enterprises. However to accelerate the growth of entrepreneurship the role of Government is indispensable. Government indirectly creates a conducive entrepreneurial eco-system to foster entrepreneurship. The various facilities like access to credit, access to entrepreneurial training, access to mentoring facility and many more could result in a better entrepreneurial eco-system. The government can creates this by formulating appropriate policy interventions.

The outcome of the appropriate policy interventions by the Government would definitely results in a better entrepreneurial eco-system.

The thrust of this research lies in knowing the impact of various policy interventions by the Government on the intention to start entrepreneurship and to know the extent of influence of the demographic variable on intention to start entrepreneurship. To accomplish this research a sample of 100 students consists of commerce and management students were taken. The data collected were analysed with multiple regression, multiple correlation and One-way ANOVA.

Key Words : *Policy Interventions, Entrepreneurial Eco-system*

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INVESTIGATING THE LINKAGE BETWEEN MONETARY EXPANSION AND THE PRICE LEVEL IN INDIA SINCE 1950S

Sanjib Debnath*, Dr. Ritwik Mazumder & Susmita Das*****

This paper is an attempt to test short run causality between broad money supply and whole-sale price index (WPI) in India during 1951-2013 adopting a Toda-Yamamoto (1995) modified Granger causality approach under a VAR environment. Exponentially detrended annual time series data on broad money supply and the whole-sale price index are used for this purpose. Alternative tests for structural breaks reveal significant but dissimilar breaks in the variables. The empirical results are suggestive of uni-directional causality from broad money supply to WPI. The study further finds that broad money supply and WPI in India have a long-run co-integrating relationship and short run causal relations could hence be expected.

Key Words : *Broad money supply, WPI, Modified Granger Causality, Toda-Yamamoto (1995) and VAR.*

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EMPLOYEES AWARENESS & PERCEPTION ON GREEN BANKING PRACTICES: A CASE STUDY

Ms. Anuradha Dash* & Dr. Madhuchhanda Mohanty**

Sustainability and economic growth both cannot go hand in hand. The concept is oxymoron in nature. The new era of business is facing a lot of criticism when it comes to the rate at which they are harvesting the natural resources. As per the modern environmentalist, the rate of harvesting shouldn't exceed the rate of regeneration. Environmental sustainability is a modern concept where business houses are showing inclination towards increasing the rate of renewable resources & depletion of non-renewable resources. Green banking is a combination of all the practices and processes that focus mainly on the extraction of internal carbon footprints. The present study is an attempt to understand the various green practices adopted by private and public sector banks located in Cuttack, Odisha. The study also highlights the level of awareness and perception of green practices among its employees.

Key Words : *Indian Banking Sectors, Sustainability, HR practices, Green Banking*

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MOBILE BANKING IN INDIA: ITS OPPORTUNITY AND CHALLENGES

Sangita Kandhapani *, Susanta Kumar Kochiary & Jitendra Kumar Sethi *****

Technology is one of the change agents in the economy which has changed the face of many institutions. Bank is one of such institution which constantly explores the opportunity of technology enabled services to provide better customer experience and convince. Mobile banking service is one of them. Mobile phone is common technology devices that become a part of every individual in the era of information. India is the second largest telecom market in the world and due to introduction of 4G and high internet penetration the popularity of mobile enabled services has been increased in a rapid manner. This study is an attempt to highlight the conceptual aspects of mobile banking in India. Further it intends to identify the opportunities and challenges face by banking industry due to mobile banking. The study will help the regulators, bankers, policy makers, researchers in their respective field.

Key Words : *Bank, Mobile banking, Opportunities, Challenges, India*

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DEMONETISATION AND GROWTH OF MOBILE BANKING IN INDIA

Laxmidhar Samal*

The rapid growth of Mobile users in India, through wider coverage of mobile phone networks, has made mobile as a platform for banking services for different section of bank customers. Recent innovations in telecommunications sector and adoption of 4G technology enable banks to provide banking services through mobiles. Moreover low cost 4G data added feather in it by popularising mobile banking among the young masses. Further, on 8th November, 2016 Government of India announced demonetisation banning the high denominated currency notes to curb black money as its primary objective and secondly to encourage digital economy.

In light of the above facts this paper analyses the growth of mobile banking in India over the period of time and critically evaluates the impact of demonetisation on mobile banking. In order to analyse the growth of mobile banking in India log-liner growth model is used.

Key Words : *Mobile Banking, Demonetisation, Growth*

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MUDRA BANK: AN ECONOMIC GAME CHANGER TO MSMEs

Mr Debadutta Nayak* & Dr. Artta Bandhu Jena**

Government Has One Religion-India First- Mr. Narendra Modi, Prime Minister of India

According to the NSSO survey of 2013, there are 5.77 crores small business units which are engaged in small manufacturing, trading or services related activities. Most of these units are owned by people belonging to scheduled caste, scheduled tribe and other backward classes. These units only get 4 % institutional finance. With regard to institutional finance, such micro/small business units would turn them into strong instruments of GDP growth and also generating employment. 75 % workers are engaged in directly and indirectly in non-agricultural sector in India as informal jobs. 79 % of informal workers have no written job contracts. 71 % are not eligible for leave facility. 72 % are not eligible for any social security benefits in India. Almost all of the self-employed, the substantial component of workforce, and over 40 % of those in salaried jobs are in informal works. The report also highlighted that 80 % of the workers are engaged in activities in which they do not have the right to engage themselves in any union or association. On these backdrops, the paper would discuss the responsibility, benefits and product for the purpose of institutional finance of MUDRA Bank as well as the growth and development of SMEs sectors in India.

Key Words : *MUDRA bank, GDP, SMEs sectors, Institutional Finance*

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AGRICULTURAL FINANCING FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN INDIA: A PERCEPTIONAL STUDY ON SAMBALPUR DISTRICT

Ashok Kumar Sahoo*

As per an outstanding saying, the Indian worker is conceived owing debtors lives underwater and bites the dust in the red. The mass lack of education of Indian individuals when all is said in done and rustic individuals, specifically, aggravated the issues of agrarian credit with around 70 to 80 percent of the farmers being an absence of education. Accordingly, the farmers were not in a situation to pass judgment on the wellspring of credit, which supplies the equivalent at the rate, which is lower than the one gathered by the private cash banks. Awareness is a way of sustainable development. This study illuminates different issues and difficulties that are as of now facing by the country farmers and conceivable arrangement

thereof. This paper throws light on the availability agricultural financing problems in the country and possible solutions thereof, which will leads to sustainable agricultural development in the country.

Key Words : *Agricultural finance, Agricultural development, Farmers club*

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NON-PERFORMING ASSETS OF INDIAN COMMERCIAL BANKS: A CRITICAL EVALUATION

Sanjeev Kumar Singh* & Meera Singh**

Banking system plays a crucial role in the development of its vibrant economy. Banking is an important segment of the all sectors and acts as a back bone of economic progress. The banking sector is facing severe problems of increasing Non- Performing Assets. NPAs is one of the main anxieties for scheduled commercial banks in India. A high degree of NPAs means a high possibility of a huge number of credit defaults which affect the profitability and net-worth of scheduled commercial banks. The problem of rising NPAs is not only affecting the scheduled commercial banks but also the whole Indian economy. It is essential to prevent rising of NPAs for better economic and future of the country. A study is made in this paper to understand NPAs, the trends and status of NPAs in banks and also examines the impact of NPAs on Indian economy.

Key Words : *Non Performing Assets, Commercial Banks, Indian Economy.*

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SOCIAL EMPOWERMENT OF WOMEN THROUGH MICRO-CREDIT: CASE OF SALEPUR BLOCK, ODISHA

Dr Ch Sudipta Kishore Nanda* & Dr Biswajit Prasad Chhatoi**

Micro credit enhances the social empowerment of women. It means equal status, participation and power of decision making at the household level, community level and above all at village level. Social empowerment of women enables them to participate in the decision making process in democratic Institutions.

OBJECTIVE OF THE STUDY: The objective of the study is to measure the impact of micro credit in the Salepur Block at Cuttack District, Odisha where more than two hundred Self help Groups are functioning has been selected for the study.

METHODOLOGY AND PERIOD OF STUDY: The Researcher has collected data from the given samples by way of questionnaire as well as secondary data from various sources.

This questionnaire contains aspects of implementation of Micro credit. The questionnaire contains various types of questions, especially multiple choice questions and few descriptive questions. Before applying this method, the researcher done pilot testing of the questionnaire with the help of few women from Salepur Block, Cuttack District, Odisha.

SIGNIFICANCE OF THE STUDY: This study is important for the two major aspects. Firstly, it can give understanding of practical approach or implementation overview of the Micro -credit to rural women. Secondly, it also gives comparative overview of implementation of micro credit which enhances the social empowerment and helps in capacity building. It is dynamic study in nature. So the significance of the study is very high. Further, some observations may be useful to academicians, industry people and policy maker.

PURPOSE OF THE STUDY: The purpose of this study is to contribute to the understanding of banking with poor and impact of financial involvement in the form of SHG - Bank linkage programme for women for providing micro credit facilities.

LIMITATIONS OF THE STUDY: As researcher has collected data from only one block, it may not represent the whole. Researcher has evaluated few parameters but it may be more than that for further research.

FINDINGS: Micro credit which has provided the rural poor access to finance without the burden of collateral through Self Help Groups has empowered the rural women economically and socially. Though, the credit provided is micro in nature, it has produced macro changes in the lives of the women who received it.

Key Words : *Micro Credit, SHG, Social Empowerment*

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THE PROBLEM OF RISING NON- PERFORMING ASSETS IN BANKING SECTOR IN INDIA: COMPARATIVE ANALYSIS OF PUBLIC AND PRIVATE SECTOR BANKS

Dr.Kishore Kumar Das* & Sworup Ranjan Palai**

The growth of the economy and development of the country depends upon the efficiency and stability of the banking sector. The most important factor which measures the health of the banking industry is the size of NPAs. Non-Performing assets are playing a vital role and have direct impact on the financial performance of banks i.e. their profitability. It denotes the efficiency with which a bank is optimizing its total resources and therefore, serving an index to the degree of asset utilization and managerial effectiveness. NPAs affects the profitability of the banks in terms of rising cost of capital, increasing risk perception thereby affecting

liquidity position of banks. This paper attempts to first examine the level of NPAs in the banking sector in India and then analyze the causes for increasing NPAs. In the final part of the paper, measures which banks can take to reduce their NPAs have been suggested. The study also compares the performance of the public sector banks with the private sector banks. The secondary data collected from different sources has been used in the study. The study shows that the magnitude of NPAs is increasing in public sector banks as compared to the private sector banks. Therefore banks need to effectively control their NPAs in order to increase their profitability and efficiency.

Key Words : *Bank, Performance, Efficiency, Non-performing assets, Profitability.*

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RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND SUSTAINABILITY: EXPERIENCE FROM INDIAN BANKING SECTOR

Dr. Sanjeeb Kumar Dey* & Debabrata Sharma**

During the last two decades both corporate governance and corporate sustainability has been an integral part of economic discussions around the world. Both play a significant role in a firm's success. While corporate governance focuses on the welfare of the stakeholders, sustainability gives emphasis on the societal aspects of business. In case of banks, the importance of these two factors grows exponentially as banks are the backbone and wheels of growth of an economy particularly in a developing country like India. In this paper, we will conduct an empirical analysis to examine the relationship between corporate governance and sustainability of selected Indian banks. The corporate governance variables selected for the study are board size, board meetings, board committees, board composition and board independence. We will use ESG (environmental, social and governance) scores as proxy for sustainability of selected banks. The data will be collected from Bloomberg database and annual reports of respective banks for a five year period ranging from 2015 to 2019.

Key Words : *Corporate governance, sustainability, Bank, India, ESG Score.*

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FIRM CHARACTERISTICS AND CASH HOLDINGS IN INDIAN IRON & STEEL INDUSTRY

Maheswar Sethi* & Rabindra Kumar Swain**

This paper investigates the effect of firm characteristics on cash holdings in Indian Iron & Steel industry over a period from 2005 to 2017. The result of pooled ordinary least squares regression documents that cash holdings are affected by firm characteristics. Growth opportunities, leverage, dividend, net working capital, R&D expenditure and profitability positively affect cash holdings whereas interest expenses, firm age and cash flow volatility negatively affect cash holdings. However, the effect of firm size, cash flow, assets tangibility, cash conversion cycle and inverse of Altman's Z score on cash holdings is insignificant. Further, the study reveals that R&D expenditure, interest expenses and cash flow volatility are the major firm characteristics affecting cash holdings in Iron & Steel industry. This study is confined to Indian Iron & Steel manufacturing firms only and only few firm characteristics have been considered to analyze their effect on cash holdings. The findings of this study are useful for corporate boards, managers, investors and rating agencies while taking financial decisions. This paper contributes to the existing literature on determinants of cash holdings by considering the nature of Iron & Steel industry in affecting the cash holdings.

Key Words : *Cash holdings; Firm characteristics; Iron & Steel industry; Trade-off theory; Pecking order theory; Agency theory*

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SUSTAINABLE BANKING IN INDIA: DREAM AND REALITY

Rajaram Majhi*

Banking sector is one of the important components of Indian economy. As per the Reserve Bank of India (RBI), India's banking sector is sufficiently capitalised and well-regulated. The financial and economic conditions in the country are far superior to any other country in the world. Credit, market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well. Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry. The digital payments system in India has evolved the most among 25 countries with India's Immediate Payment Service (IMPS) being the only system at level 5 in the Faster Payments Innovation Index (FPII).

After becoming second time India's Prime Minister in 2019, Narendra Modi declared that his dream was to make India a \$5 trillion economy by 2024, only slightly higher than where the International Monetary Fund expects India to be that year (\$4.7 trillion). Yet, even this target has surprised many economists, who consider it to be overly ambitious. What has happened to the economy in the intervening five years perhaps explains the scepticism. Growth has slowed down. Fresh investments have dried up even as banks remain wary of lending, saddled as they are with a huge pile of toxic assets. Bankers remain wary of the risks associated with long-term projects. Investments and growth will revive only when the wheels of finance begin moving again.

This paper is aims at identifying the sustainable growth of banking sector and knows the reality and dream about the banking sector of India. The main objective of paper is that to analysis the report of banking industry of last five years.

Key Words : *Sustainable growth, Banking sector, Indian Economy*

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POST MERGER PERFORMANCE EVALUATION OF PUBLIC BANKS IN INDIA, A CASE STUDY

Dr. Kishore Kumar Das*, Mr. Chinmaya Kumar Sahoo & Priyanka Gupta *****

The whole universe or the world is a market of competition in which all the human being behaving like mammoth for winning the contention among them. There are many affirmations that substantial enterprises have merged tiny contenders in themselves. This research article discuss about the review article on coalition in banking sector has been erupted from the case of Punjab national bank ltd. and Oriental bank of commerce ltd. The main aim of this paper mergers and addition is very useful for the magnification and evolution in any sector and the Indian banking sector is no deviation. This study implies is the impact of mergers and addition in the Indian banking sector. It affects on financial system non intervention, new entry players and product and new advance technology, globalization of finance sector market, the rate of change in customer behaviour, services and demands etc. The study based on basic number of branches, area of the market and benefit from the merger, the article also hoist queries from the point of human resources management and organisational behaviour development of the research scholar and the researcher.

Key Words : *Bank, Human, Enterprise, Merge, Banking Sector, Study, Research, Market*

THE ROLE OF BANCASSRANCE IN INDIA

Sabit Khora*, Aliva Mahapatra & Supriya Patnaik*****

Banking sector is one of the most evolving sectors in the economy. Bank has customised its services and entering into different segments in order widen its services and to enlarge its market share. Banks are now designing hybrid services to achieve more customer base and to provide variety of services under a single umbrella. Among the recent development of banking services bancassurance is one of them. It's a combination of the term 'Bank' and 'Insurance'. It indicates that insurance companies have started selling there products through bank. Though bancassurance is popular in western countries but in India it is still in its infant stage. This study is an attempt to explore the conceptual aspect of bancassurance in India, its regulatory formalities. The study further intends to highlights the opportunities and challenges faced by banking industry in the context of bancassurance. This study helps policy makers, researchers, bankers, insurance companies and investors in their respective filed.

Key Words : *Bancassurance, Banking, Distribution Channel, Insurance, India, Economy*

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SUSTAINABLE BANKING IN INDIA - A COMPARATIVE ANALYSIS

Sudam Sahu* & Dr. Lalit Mohan Pattnayak**

This concept of "Sustainable Banking" will be mutually beneficial to the banks, industries and the economy. Not only "Sustainable Banking" will ensure the greening of the industries but it will also facilitate in improving the asset quality of the banks in future. There are lot of opportunities and challenges for Indian banks in adopting 'Sustainable Banking' as profitable business. Sustainable Banking if implemented sincerely will act as an effective ex ante deterrent for the polluting industries that give a pass by to the other institutional regulatory mechanisms. Therefore, for Sustainable Banking, Indian banks should adopt Sustainable Banking as a business model without any further delay.

In this paper, attempt has been made to analyse how for Indian banks have included the concept of sustainable banking in core banking activities especially in terms of paperless banking. A five year study period i.e., from 2014-15 to 2018-19 has been chosen for analysis. The data has been collected from secondary sources e.g RBI Bulletin, Website of Banks, etc.

Basically Sustainable Banking tries to reduce as much paper work as possible and depends on electronic transactions for operations of the banks. Less paper work impacts less

environment degradation. Here most of the banks have adopted green banking policy. During the period of study, it is observed that there has been tremendous increase in online banking, debit and credit card use both at ATM and POS, RTGS, NEFT, Mobile banking, etc. The increase is significant both in terms of Volume and Value. Further, there is a decline in paper vouchers, the CAGR being -0.46. Thus, it can be concluded that the Indian Banking industry is in the path of sustainable banking.

Key Words : *Sustainability, RTGS, NEFT, Mobile Banking*

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ROLE OF RURAL BANKING IN INDIA: ISSUES AND CHALLENGES

Anindita Bosu*

Most of the population in India lives in rural area. They are away from the banking services. Therefore India has adopted a multi-pronged approach towards financial inclusion. The term financial inclusion is the efforts to bring the poorer and weaker segments of the society within the fold of the formal banking system which is initiated both by the Reserve Bank and the Government. All India Rural Credit Survey reviewed the pave way for commercial banks entering into rural banking in a big way. The banking is one of the most essential parts of the human life. In current faster lifestyle people may not do proper transitions without developing the proper bank network. The banking system in India is dominated by nationalized banks. This paper discusses only Role of Rural Banking & its opportunities & challenges etc. and also have discussed institutional rural banking and have concentrated on the new emphasis given to rural banking in the last few years introducing the concept of inclusive banking. Some of the issues emerging from several studies have also been presented. As it appears, demand for credit has increased in the rural areas for production and also for consumption purposes. Rural banking is graduating to be an attractive proposition for commercial banks as it is one of the priority sector of commercial banks. The problematic issues in rural banking are lack of infrastructure, reluctance of staff to serve in remote rural areas, high transaction cost in rural branches, large number of accounts dealing in small amounts, difficulty in getting financial information on rural borrowers leading to some amount of uncertainty in the minds of the bankers.

Key Words : *Rural Banking, Financial Inclusions, Regional Rural Banks, Priority Sector, Commercial Banks.*

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GREEN BANKING IN DEVELOPMENT OF INDIAN BANKING SECTOR

Satabdi Deo* & Dr. Rasmita Sahoo**

Sustainability is a buzz word in finance industry. For business long term sustainability of economy is important for survive. Green banking is different from traditional banking, as green banking focus on promoting environment friendly banking. Green banking is also known as ethical banking of India. The main objective of this paper is to review Indian practices on sustainability and green banking. The importance of Green banking highlights the sustainable banking and developments in India and recent activities of commercial banks in the area of Green banking. The Banking sector is more benefited from the implementation of Green Banking. We examine the development of green initiatives in banking sectors with special focus on Indian banking Industry. The findings is utmost need to create awareness, implement and follow green banking as much as possible in today's business world of innovative technologies so as to make our environment human friendly and enrich the sustainability.

Key Words : *Green Banking, Sustainable Development, Banking Sector*

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INNOVATION IN FINANCIAL SERVICES OF MUTUAL FUND COMPANIES: A STUDY IN SILCHAR TOWN

Shubhasish Das* & Dr. Rajat Sharmacharjee**

To remain sustainable, Mutual Fund plays an important role by innovative financial services globally, particularly in India. Financial intermediaries like mutual funds play a vital role in financial innovation. Financial innovations protect the investors' interest too. To increase the investment in Mutual Fund, new innovative financial services are waited by the employees to offer to their customers. This paper started with the identification of various innovative financial services provided by mutual fund companies. The study also attempts to find which innovative financial services of mutual funds attract the investors from the point of view of employees of mutual fund companies.

In this study both primary and secondary data are used. Judgmental sampling method has been used for the collection of data. Statistical tools such as percentage, mean and t -test are used. 5- Point Likert Scale has been also used. The sources of secondary data are from SEBI, AMFI, Banks official website (SBI, ICICI Pru, HDFC, etc.), Journals, Magazines, various website related to this topic.

Key Words : *Mutual Fund, Innovative Financial Services, Awareness, SEBI*

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SUSTAINABILITY REPORTING IN SELECTED COMMERCIAL BANKS OF INDIA

Shibashish Sahu* & Swarnalata Nayak**

Sustainability reporting is now a mainstream activity among global corporations, sustainability report will not work as an effective policy mechanism unless they are placed in a system that can effectively utilize. Commercial banks being pillar of the economy plays a vital role in the economic development of country. As environmental protection and economic development both are important sustainability reporting has become a prominent tool for mitigating the reverse impact of economic development, leading towards a sustainable economic development. Though sustainability reporting is still in nascent stage in India, the growing importance at the global level has motivated the Indian banks and other business firms to adopt sustainability reporting as a tool to enhance their competitiveness. Sustainability issues are the highest priorities for the bank are directly related to their business operations like financial inclusion, financial literacy, technology etc. It has emerged as a communicational tool for the companies to enhance the confidence of their stakeholders by disclosing their social and environmental effect. Keeping in view the importance of commercial banks in the economy and growing importance of Sustainability Reports. This study has been conducted on some selected commercial bank to examine the extent of sustainability reporting by banks operating in India. The study aims to reveal present sustainability reporting practice prevailing in Indian commercial banks.

Key Words : *Sustainability; Sustainability Report; Commercial Banks; GRI Guidelines, environmental performance.*

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SUSTAINABLE BANKING IN INDIA: A PARADIGM SHIFT

Dr. Niharika Padhy*

The climate catastrophes are increasing day by day across the globe. In view of the same the concept of sustainable banking has been adopted giving importance to environmental and socially responsible investing. It has gained a worldwide momentum. Reserve Bank of India (RBI) in the pursuit of its core values laid emphasis on Sustainable Development (SD), Corporate Social Responsibility (CSR) and Non-Financial Reporting (NFR) in respect of

banks in operation in India as they play a vital role in the equitable and sustainable economic development of the country. Economic development of any country in relation to its environmental protection and social responsibility is the need of the day. SD in the banking sector basically refers to the maintenance of the quality of environmental and social systems in the quest of economic development. CSR is the integration of environmental and social concern of banking companies in their business operations. Therefore, sustainable banking in India is considered as the sine-qua-non for overall development of the national economy. It is the spin around which the development activities of the bank revolve. NFR is a holistic approach to the triple bottom line i.e. the environmental, social and economic accounting. In Indian banking arena sustainable banking practices have shot to prominence. But to enhance the competitiveness of Indian banks in global market, to set goals and to measure performance, disclosure of NFR by the banks in India carries much importance. The transparency of NFR enhances the confidence of the stakeholders. It is the best strategy for a bank not only to assess its own footing towards social and environmental responsibility but also the practice of sustainable banking. The present paper aims at studying the prevailing practices of Sustainable Banking in India.

Key Words : *Corporate Social Responsibility; Sustainable Banking; Non-Financial Reporting; Environmental protection; Economic accounting.*

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INCUMBENCY CHART OF OFFICE BEARERS

Orissa Commerce Association (OCA) started in 1970 in G. M. College Sambalpur, which was the first College to have B. Com. as an under Graduate course in Orissa. The pioneering founding members of OCA are:

1. Prof. Paresh Chandra Ray
2. Prof. Suryakanta Das
3. Prof. Batakrushna Mohanty
4. Prof. Durga Prasad Nayak

Sl. No	Year	Venue	President	Secretary	Managing Editor of Orissa Journal of Commerce
1.	1970	G.M. College, Sambalpur	Sri Harthar Patel, Ministry of Industries, Govt. of Orissa	*	*
2.	1971	Khalikote College, Berhampur	Prof. P.C.Ray, Secretary, Board of Secondary Education, Orissa	*	*
3.	1973	Ravenshaw College, Cuttack	Prof. P.C.Ray, Secretary, Board of Secondary Education, Orissa	*	*
4.	1974	G.M. College, Sambalpur	Prof. (Dr) Surya Kant Das Professor of Commerce, Utkal University, Bhubaneswar	Prof. Batakrushna Mohanty, Prof. of Commere, G. M. College, Sambalpur	Dr. Abhaya Kumar, Reader, Department of Commerce, Utkal University
5.	1976	Utkal University, Bhubaneswar	Mr. M.P. Modi, I.A.S. Managing Director, IDC	*	*
6.	1977	Bhadrak College, Bhadrak	Prof. (Dr) Surya Kant Das Professor of Commerce, Utkal University, Bhubaneswar	*	*
7.	1978	S.C.S. College, Puri	Prof. Batakrushna Mohanty, Principal, G.M. College, Sambalpur	*	*
8.	1980	Berhampur University, Bhanja Vihar, Berhampur	Prof. Batakrushna Mohanty, Principal, G.M. College, Sambalpur	*	*
9.	1981	K.S.U.B. College, Bhanjanagar	Prof. Ganga Prasad Panda, Principal Lingaraj Law College, Berhampur	*	*
10.	1982	Dhenkanal College, Dhenkanal	Shri Durga Prasad Nayak, Principal, Sonepur College, Sonepur.	Dr. Girija Prasad Acharya	Dr. Pramod Ku. Sahu, Berhampur University
11.	1983	Ispati College, Rourkela	Prof. Bijay Narayan Pattnaik, Utkal University, Bhubaneswar	Dr. Girija Prasad Acharya	*
12.	1985	F.M. College, Balasore	Prof. (Dr.) J.J. Rao, Ravenshaw College, Cuttack	Dr. Girija Prasad Acharya	*
13.	1986	Ganjam College, Ganjam	Prof. (Dr) Ramakanta Jena, Dean, Faculty of Commerce, Utkal University, Bhubaneswar	Dr. Girija Prasad Acharya	Dr. Ghanashyam Panda, Berhampur University
14.	1987	L.N.College, Jharsuguda	Prof. (Dr) Pramod Ku. Sahu, Professor, Berhampur University, Berhampur	*	Dr. Ghanashyam Panda, Berhampur University
15.	1988	Dhenkanal College, Dhenkanal	Prof. Sambhu Prasad Mishra, Professor of Commerce, G.M. College, Sambalpur	*	Dr. Ghanashyam Panda, Berhampur University
16.	1990	Dept. of Commerce, Berhampur University	Sri S.C. Patro, Head, P.G. Department of Commerce, Khalikote College	Dr. Swaroop Ch. Sahoo	Dr. Gunaridhi Sahoo, Principal, Khalikote, Berhampur

(Contd...)

17.	1994	Bhadrak College, Bhadrak	Prof. (Dr) Ganaridhi Sahu, Principal, Khalikote College, Berhampur	Dr. Jagannath Panda	Dr. Swaroop Ch. Sahoo
18.	1995	S.C.S. College, Puri	Prof. (Dr) Girija Prasad Acharya, Professor of Commerce, Ravenshaw College, Cuttack	Dr. Bidhu Bhusan Panigrahi,	Prof. Pramod Ku. Sahu, Berhampur University
19.	1997	Womens' College, Jharsuguda	Smt. Ayodhya P. Nayak, BJB College, Bhubaneswar	Dr. Damodar Biswal, S.C.S. College, Puri	Prof. Pramod Ku. Sahu, Berhampur University
20.	1998	Pranath College, Khurda	Prof. (Dr.) Pradeep Chandra Tripathy, Professor, Utkal University, Bhubaneswar	Prof. Tahulu Sahoo, Principal Womens College, Jharsuguda	Prof. Pramod Ku. Sahu, Berhampur University
21.	1999	Khalikote (Auto) College, Berhampur	Prof. (Dr) R.P. Choudhury, Principal, Khalikote College (Auto), Berhampur	Malay Kumar Mohanty, Ravenshaw College (Auto)	Prof. Pramod Ku. Sahu, Berhampur University
22.	2000	Ispat College, Rourkela	Prof. Minaketan Mohapatra Principal, Debenkanal College	Malay Kumar Mohanty, Ravenshaw College (Auto)	Prof. Pramod Ku. Sahu, Berhampur University
23.	2001	Maharshi College of Natural Law, Bhubaneswar	Prof. (Dr) Damodar. Biswal, Professor, Ravenshaw College (Auto), Cuttack	Malay Kumar Mohanty, Ravenshaw College (Auto), Cuttack	Prof. Pramod Ku. Sahu, Berhampur University
24.	2004	Kendrapara College, Kendrapara	Prof. (Dr) Jagannath Panda Professor Berhampur University, Berhampur	Prof. Ranjan Kumar Bal, Utkal University	Prof. Pramod Ku. Sahu, Berhampur University
25.	2005	V.N.College, Jajpur Road	Prof. (Dr) Umesh Ch. Pattnaik Professor Berhampur University, Berhampur	Prof. Ranjan Kumar Bal, Utkal University	Prof. Jagannath Panda, Berhampur University
26.	2006	Raygada College, Raygada	Prof. Tahulu Sahu, Principal Belpahar College, Belpahar	Prof. Ranjan Kumar Bal, Utkal University	Prof. Jagannath Panda, Berhampur University
27.	2007	P.G. Department of Commerce Utkal University, Bhubaneswar	Prof (Dr) Samson Moharana Professor Utkal University, Bhubaneswar	Prof. Kishore Ch. Rout, Berhampur University	Prof. Jagannath Panda, Berhampur University
28.	2008	Fakir Mohan Autonomous College, Balasore	Dr. Arun Kumar Barik, Head, Department of Commerce, Vyasagar College, Jajpur Road	Prof. Kishore Ch. Rout, Berhampur University	Prof. Ranjan Kumar Bal, Utkal University
29.	2009	Govt. Autonomous College, Angul	Maj (Dr.) Abhay Kumar Panda, Principal, Fakir Mohan Autonomous College, Balasore.	Prof. Kishore Ch. Rout, Berhampur University	Prof. Ranjan Kumar Bal, Utkal University
30.	2010	Department of Commerce, Ravenshaw University	Smt. Baladev Kar, Principal, Govt. College (Auto), Angul	Dr. Kshiti Bhusan Das, Utkal University	Prof. Ranjan Kumar Bal, Utkal University
31.	2011	P. G. Department of Commerce, Berhampur University	Prof. Malay Kumar Mohanty, Former Registrar, Ravenshaw University, Professor G. M. College, Dean Sambalpur University	Dr. Kshiti Bhusan Das, Utkal University	Prof. Ranjan Kumar Bal, Utkal University
32.	2012	P. G. Department of Commerce, Utkal University	Prof. P. K. Biswasnry, Professor, Berhampur University	Dr. Kshiti Bhusan Das, Utkal University	Prof. Ranjan Kumar Bal, Utkal University
33.	2013	Choudwar College, Choudwar	Prof. Prasant Kumar Saha, Vice-Chancellor, Utkal University	Prof. Kshiti Bhusan Das, Utkal University	Prof. Malay Kumar Mohanty
34.	2014	P. N. (Auto) College, Khurda	Prof. Ranjan Kumar Bal, Professor, Utkal University	Prof. Kshiti Bhusan Das, Utkal University	Prof. Malay Kumar Mohanty
35.	2014-15	Kendrapada (Auto) College	Prof. Kshiti Bhusan Das, Professor, Utkal University	Dr. G. K. Panigrahi	Prof. Malay Kumar Mohanty

(Contd...)

36.	2016	Belpahar College, Belpahar	Prof. Girish Ku. Patra, Kendrapada (Auto) College	Dr. G. K. Panigrahi	Prof. Malay Kumar Mohanty
37.	2017	F. M. University, Balasore	Prof. Jayanta Kumar Parida, Professor, Utkal University	Dr. G. K. Panigrahi	Prof. Malay Kumar Mohanty
38.	2018	Ravenshaw University, Cuttack	Prof. Bhagaban Das, Professor, F. M. University	Major (Dr) S. A. Taber	Prof. Malay Kumar Mohanty
39.	2019	P. G. Department of Commerce, Utkal University	Prof. Sanjay Kumar Satapathy, Professor, Ravenshaw University	Major (Dr) S. A. Taber	Prof. Malay Kumar Mohanty
40.	2019-20	KIIT, Deemed to be University,	Prof. P. K. Hota,	Major (Dr) S. A.	Prof. Malay Kumar

* **Information not available:** People concerned are requested to provide the above missing information with proper references. If any error has crept in the above incumbency chart inadvertently, persons are requested to intimate the correction with the required documentation.

About the KISS

Declared Deemed to be University by the Ministry of HRD, Govt. of India in 2017, becoming the first exclusive tribal university in the world

KISS is the largest residential tribal institute in the world providing holistic education from KG to PG, skill training, food, sports training, health care and all other basic necessities of life absolutely free to 60,000 indigenous (tribal) children (30,000 students in KISS, Bhubaneswar; 15,000 well-placed alumni; and 15,000 students in various satellite centres). Founded in 1992 by eminent educationist and social activist Prof. Achyuta Samanta, KISS has brought a silent revolution among tribal population to eradicate poverty through education. KISS focuses on holistic education, nutrition & well-being and developing change leaders.

There have been numerous stories of change and achievement in this institution, each student being an incredible story of overcoming adversities. The students have excelled in academics and extracurricular activities. They have moved to create a name for themselves in prestigious National and International arenas challenging the quagmires of poverty, hunger and alienation.

The success of KISS has attracted the attention of planners and administrators of different governments within the country and abroad calling for replication of KISS in their respective areas. While a branch of KISS, KISS-DELHI, is operating successfully in the National Capital Region of Delhi with the collaboration of the Government of Delhi, plans are in the offing to open branches of KISS in all the 30 districts of the state of Odisha, 10 states in India and in 10 foreign countries. KISS has grown as an amazing social initiative and is catching the fancy of great thinkers throughout the globe.

KISS At A Glance–

Special Consultative Status with the Economic and Social Council (ECOSOC) since 2015 – the highest recognition to a non-government organization from the United Nations

Among top 189 NGOs of the world and top 10 NGOs of India in the prestigious ranking of global NGOs by NGO Advisor, a Geneva-based independent media organization

Champion Level-Platinum Certification by Guide Star India for NGO Transparency (2016)

Aligned with and proactively working to achieve the Sustainable Development Goals (SDGs) of the United Nations

Expansive, self-contained, eco-friendly campus for 30,000 students in Bhubaneswar with facilities at par with a good public institute

Plans to educate 2,00,000 indigenous (tribal) children over the next decade and on-going development of branches in all 30 districts of Odisha, in addition to 10 other states, with the support of respective state governments

Students are high achievers in academics, co-curricular activities and national and international sports, making it a highly successful model of tribal empowerment through education

Tie-ups with many world organizations including UNESCO, UNICEF, UNFPA, and US Federal Government

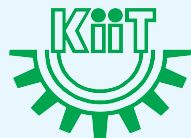
Visited and appreciation from high dignitaries, including Heads of State, Ambassadors and 20 Nobel Laureates, from 80 countries

Extensive coverage in leading national and international media, including The Time, Wall Street Journal, South China Morning Post, Readers' Digest, Asia Post and Public Broadcasting Service (PBS)

Included in the Guinness World Records on four counts



With Best Compliments:



Kalinga Institute of Industrial Technology (KIIT)
Deemed to be University
Bhubaneswar, Odisha-751024