

LIMITATIONS OF CURRENT FINANCIAL REPORTING: A CASE FOR INTEGRATED REPORTING

(Use of factor analysis scores in multiple linear regression model for prediction of disclosures sought in new form of reporting)

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Purpose- *The landscape of corporate reporting is about to change completely. The article aims to determine the disclosures required if the new form of reporting is adopted as an upshot of limitations of the current financial reporting and sustainability reporting. Though top few companies have in the recent past started preparing Corporate Social Responsibility (CSR) reports and sustainability report as per Global Reporting Initiative (GRI) guidelines along with Annual Report, there seems to be certain gaps which the companies need to fill. Though Integrated Reporting is successfully adopted in South Africa and countries of Europe, its viability or need in India has been examined with the help of current research paper.*

Design/methodology/approach- *The research paper comprises of a literature review, extraction of factors using Exploratory Factor Analysis (EFA) and Multiple Regression Analysis among the factors identified as dependent and independent. Factor scores of limitations of financial reporting and the disclosures sought in new form of reporting emerging due to the limitations were then used in the Multiple Regression to predict the degree of dependence of disclosures sought as a result of failure of current financial reporting.*

Findings- *A new form of reporting is evolving due to the limitations of current financial reporting, which should have information about ecological footprints of operations, Economic, Social, and Environmental impact.*

Research limitations/implications- *The research paper underpins the idea of incorporation of Environmental, Social & Governance (ESG) issues and Sustainability*

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into the core strategy of business. It is hoped that this research will provide insights relating to the importance of understanding environmental, and social sustainability in achieving long term success.

Key words: ESG, Sustainability, Social and Environmental Impact, Non-Financial Information, Integrated Reporting.

INTRODUCTION

The globally synchronized economic slump is “not an accidental event” and extends beyond a purely financial crisis and “failure to address it soon will have more than cyclical consequences”(Eccles & Krusus, 2010).

When the bubble finally bust, many companies were found into bankruptcy and it highlighted the growing concern among stakeholders that current financial reporting practices enables business leaders to conceal unsustainable business strategies (Roberts, Keeble, & Brown, 2002). Much of the information included in current corporate reports is not designed to offer forward-looking information about strategy, performance, and risk. There is an increasing sense among stakeholders that existing corporate reporting, which is characterized by a strong focus on financial performance and a lack of information about corporate strategy and non-financial performance, is becoming unfit for the purpose (Busco et al., 2013). Since companies cater for a wide range of stakeholders with different interests, the presentation of the company's financial performance alone is not enough (IIRC, 2011); (IOD, 2009). Information on financial performance is backward looking which does not help stakeholders with information for decision making (Bray, 2011); (KPMG, 2012). India is third largest CO₂ emitter in the world. Significant changes to government policies and strategies, corporate behavior and strategies are, therefore, required to decouple economic growth from greenhouse gas emissions. This calls for the financial performance to be supplemented with other information to enable the stakeholders to obtain a holistic view of the Company's performance in order to assess its ability to create and sustain value. A new “green” development paradigm needs to be developed to build more equitable, low-carbon, resource productive and zero-waste economies (Swilling & Annecke, 2012) ; (Zyl, 2013).

Taking stakeholders' views into account is central to developing a robust understanding

of a company's economic, environmental, and social impacts, and of how these relate to business value and resilience. An ever-greater number of companies and other organizations are recognizing the need to make their operations more sustainable. At the same time, governments, stock exchanges, markets, investors, and society at large are calling on companies to be transparent about their sustainability goals, performance, and impacts (GRI, 2013). The premise behind these non-financial reports is that only the impacts that are measured and accounted for in a report will receive the necessary attention by the organization's management and owners. Reporting is, therefore, seen essential to ensure that organizations are socially and environmentally responsible (Triple Bottom-Line, 2009).

Although a few companies integrate their financial results with CSR/Sustainability reporting, most companies issue separate reports. This tends to lead to reports that may not reflect the significant interdependence between an organization's governance and strategies of its financial and non-financial results (James, 2013); (IIRC, 2011). According to Hibbitt (1999) if sustainability accounting does not make visible the tension between capitalism and the planet's ability to bear the load, it is supporting the status quo and this situation is a crucial impediment to any real progress (Gray & Milne, 2004); (Azcarate, Carrasco, & Fernandez, 2011) . In India The New Companies Act 2013 mandates that every company having a net worth of 500 crore INR, or more or a turnover of 1000 crore INR or more, or a net profit of five crore INR or more, during any financial year shall constitute the corporate social responsibility committee of the board, these companies would be required to spend at least 2% of the average net-profits of the immediately preceding three years on CSR activities, and if not spent, explanation for the reasons thereof would need to be given in the director's report(section 135 of the 2013 Act). The committee shall formulate the policy on the following activities:

- Eradicating extreme hunger and poverty
- Promotion of education
- Promoting gender equality and empowering women
- Reducing child mortality and improving maternal health
- Combating human immunodeficiency virus, acquired immune deficiency syndrome, malaria, and other diseases
- Ensuring environmental sustainability
- Employment enhancing vocational skills

- Social business projects
- Contribution to the Prime Minister's National Relief Fund or any other fund set-up by the central government or the state governments for socio-economic development and relief, and funds for the welfare of the scheduled castes and Tribes, other backward classes, minorities and women(www.mca.gov.in).

This clearly shows the Government's sensitization to CSR issues. Through this the Government has made the Corporate its party in addressing social and environment issues.

EMERGENCE OF INTEGRATED REPORTING

Integrated reporting is a new concept globally. South Africa has taken the lead by urging its companies to embrace the concept in their reporting (Makiwane, 2012). Integrated Reporting is now required for listed companies in South Africa on an '**apply or explain**' basis (KPMG, 2012). Many other companies throughout the world are starting to adopt Integrated Thinking in day-to-day business decision-making, and are quite transparent in their public disclosures (KPMG, 2012).

Integrated reporting will provide useful information for company executives to assist them in planning, budgeting, and implementing strategies that lead to the efficient and effective utilization of resources, which will tend to help control or reduce costs (James, 2013). Integrated reporting i.e., representation of the financial and non-financial performance of a company in a single report, doesn't only mean **merging financial and sustainability reports into one report**, its true meaning is to **link** sustainability strategy to business strategy and help the company and its stakeholders identify the non-financial priority areas. Integrated Reporting demonstrates the linkages between an organization's strategy, governance, and financial performance and the social, environmental, and economic context within which it operates.

OBJECTIVES OF THE RESEARCH PAPER

1. To study the construct of Limitations of Financial reporting.
2. To see the impact of those limitation on the need or evolution of a new form of reporting.
3. To study the role of non-financial information on the value determination of an

organization.

4. To predict the requirements of new form of reporting as outcomes of limitations of financial reporting.

HYPOTHESES OF THE RESEARCH

H01: Limitations of financial reporting do not predict a new form of reporting which should have information about system effectiveness.

Ha1: Limitations of financial reporting do predict a new form of reporting which should have information about system effectiveness.

H02: Limitations of financial reporting do not predict a new form of reporting which should have information about economic, social and environmental impact.

Ha2: Limitations of financial reporting do predict a new form of reporting which should have information about economic, social and environmental impact.

H03: Limitations of financial reporting do not predict a new form of reporting which should have information about ecological footprints of operations.

Ha3: Limitations of financial reporting do predict a new form of reporting which should have information about ecological footprints of operations.

REVIEW OF LITERATURE

Literature review was considered to be instrumental in devising, identifying and employing the survey instrument.

A study by Cronje (2007) shows that Corporate Annual Reports may be perceived as product of two interconnected information processing systems-Mandatory financial information system and discretionary financial information system, the study found that the needs of the users to reduce uncertainty and risk in their decision making have an impact on constantly evolving accounting practices(Cronje, 2007).

As intangible assets play an even more important role in companies' value-creating process than ever before (Singh & Gupta, 2013) it has become more important to communicate these "hidden" assets to external stakeholders. Singh and Gupta (2013) found a significant impact of the human asset valuation information on investors' decision regarding their selection of the company.

Amir et al., (2012) investigated the relationship between environmental & social disclosure and shareholders wealth in Singapore. They found that there is a positive and considerable relationship between sustainability reporting and amount of paid dividend and share price as well. Findings of this research show that there is a positive and significant relationship between environmental & social performance disclosure and revenue.

Singh (2013) recommends that the Sustainable Development and Business: Vision 2050 of WBCSD (World Business Council for Sustainable Development), should incorporate higher level goals of development. Holistic development of human beings including the spiritual dimensions and enhancement of levels of consciousness must be incorporated. Further the integrated reporting also needs to be incorporated to make this challenging vision a reality. The study further emphasized that we need to develop a culture of learning organization which learns not only by itself but also from the learning of other organizations.

Eccles et al., (2012) found that High Sustainability companies considerably outperformed Low Sustainability companies over the long-term, both in terms of stock market and accounting performance.

A study by Eccles et al., (2011) provided insights into market interest in nonfinancial information. The study divided 247 nonfinancial metrics in this database in five groups:

1. Carbon Disclosure Project (CDP) data,
2. Environmental metrics,
3. Social metrics,
4. Governance metrics, and
5. Disclosure scores.

The study predicted that as more companies disclose more nonfinancial information, as more knowledge is developed by research and teaching programs in business schools, and as more sophisticated valuation models are developed by investors, market interest in nonfinancial data will exponentially increase in the future.

According to the literature, it is clear that organizational reporting has evolved over the last few decades from a purely financial focus, to embrace factors outside of traditional financial reporting.

1. Limitations of Current Financial Reporting leading to Emergence of Integrated Reporting

1.1 Lack of Incorporation of Environmental, Social, and Governance Issues (ESG)

The over-consumption of finite natural resources, the risk of catastrophic 'accidents,' and the implications of climate change are possibly among the greatest challenges facing the world today – financial reports as we currently know them do not include this information, and investors cannot easily assess these risks. Over time, other types of corporate reporting have grown to fill these gaps, including Corporate Social Responsibility (CSR) reporting, carbon or environmental reporting, sustainability reporting, and now integrated reporting. These additional reports disclose *non-financial* information about Environmental, Social, and Governance (ESG) strategies and practices and perhaps more importantly, point towards additional material risks for a company (e.g., British Petroleum, Nike, Coca Cola and other companies all faced environmental risks that had significant downward impacts on their share prices because investors were simply unaware of those risks, and those risks had not been discussed in external reports).

1.2. Difficulties in Reporting of Sustainability Issues (DSI)

It is generally accepted that sustainable development calls for a convergence between the three pillars of economic development, social equity, and environmental protection (Singh, 2013). Sustainability of a company means conducting operations in a manner that meets existing needs without compromising the ability of future generations to meet their needs. It means having regard for the impact that the business operations have on the economic life of the community in which it operates. Sustainability includes economic, social, and governance issues (IOD, 2009). Sustainability is a concept that 21st Century companies need to remember and incorporate into their businesses to ensure their future success. The sustainability reports have had little impact on mainstream financial accounting and corporate reporting methodologies, as they are often disconnected from the corporate's financial reports and fail to provide a link between sustainability issues and corporate's core strategy (King, 2011). Although the initiatives have explicitly adopted the definition of sustainable development in the Brundtland Report, the consequences and challenges of that definition have not been internalized because the initiatives only cover aspects of weak sustainability thereby favoring

managerial capture and consequently dashing the expectations that were generated when the report was published (Azcarate et al., 2011).

1.3. Distrust for Corporate Actions (DCA)

Corporations are perceived by stakeholders as a collective entity capable of action resulting from intentional and goal-oriented behavior. Corporate distrust reflects the belief of stakeholders about the intent of corporate behavior in general. Corporate distrust is developed by individuals as information is gathered from various sources such as friends, co-workers, organizations, and media sources. This attitude can also be influenced by one's experiences with specific organizations available in memory, as well as experiences with organizations in general (Adams et al., 2010). In the aftermath of the recent financial crisis and corporate scandals, many people increasingly perceive business as one of the major causes of social, environmental, and economic problems (Busco et al., 2013). There are many corporate disasters which have caused environmental damage to a great magnitude such as, Bhopal Gas Tragedy, meltdown of a nuclear reactor at the Three Mile Island, oil spills in Niger Delta, use of the Love Canal as a dumping site by Hooker Chemical which led to a very high rate of miscarriages, tumors, and birth defects among the residents. The massive flood and landslides occurred in the State of Uttarakhand in India in June 2012 is also attributed to several hydropower projects and mining projects going on in the river valleys in Uttarakhand which were diverted through tunnels and the natural course of rivers were changed. These power project companies unheeded the environmentalists' voice.

1.4. Failure of Financial Reporting To Provide a Complete Picture (FFR)

According to IIRC, 83 percent of a company's market value in 1975 could be determined by the financial and physical assets on its balance sheet. In 2009, those assets accounted for only 19 percent of a company's value. Investors have to look elsewhere to determine the value of the other 81 percent. Unable to find objective or comprehensive information on that value in financial reports, investors face more risk than they did in the past. Integrated reporting is designed to provide more of the relevant information that financial reports fail to offer. Singh (1999) provided the new dimensions of measuring and reporting those aspects which are not being reported by organizations but are very important for decision making particularly related to human capital. Singh & Gupta (2008) have tested the contribution based model of measuring the value of human asset in manufacturing companies and the importance of reporting the same properly by the

companies so that proper decisions can be taken. Singh & Gupta (2013) validated the results in service sector companies also.

2. Disclosures sought in new form of reporting (Integrated Reporting)

According to IIRC, "Integrated Reporting results in a broader explanation of performance than traditional reporting" (IIRC, 2011). The alternative of the current financial reports and the so-called sustainability reports starts with creation of an Integrated Report. This method could ensure the necessary changes in corporate behavior if the Integrated Report contains sufficient information to highlight the weaknesses in the current corporate strategy and identify areas calling for improvement and attention by management and the board (Zyl, 2013). Therefore, the quest of the researcher in this journey was to find out the Limitations of Current Financial Reporting in India; whether a superior form of reporting as developed and adopted by other countries like South Africa, USA, countries of EU, is desired in India too. In order to cater task, specific outcomes of having a new form of reporting were pre-decided keeping in mind the support of the literature. The following could be the part of information required to be contained in Integrated Report. Since there is no prescribed guideline on the format and contents of it, therefore, IIRC and GRI are working together on it. The possible inclusions are discussed below:

2.1 System Effectiveness & Process Effectiveness (SYSEFF)

System effectiveness is a measure of the extent to which a system can be expected to complete its assigned mission within an established time frame under stated environmental conditions. In a survey in 2011 by McKinsey the share of executives citing operational efficiency and lowering costs as their company's top reasons for addressing sustainability had risen 14 percentage points since 2010 to 33 per cent – overtaking corporate reputation, which was chosen by 32 per cent of respondents. If the preparation of an Integrated Report leads to more sustainable business processes and a greater awareness of business operations that are not sustainable, the report should contain sufficient information that would enable the companies to learn from the process. The report would reveal that companies are beginning to understand their positive and negative impacts relating to natural environment and society regarding equity, health, and poverty (Zyl, 2013).

2.2 Economic, Social and Environmental Impact (SOCENV)

There are some wrong perceptions about sustainable development that it means the present level and pattern of development should be sustained for future generations as well. Instead sustainable human development puts people at the center of development and points out forcefully that the inequities of today are so great that to sustain the present form of development is to perpetuate similar inequities for future generations (Singh A. K., 2002). Economic sustainability can only be achieved if equity-also known as social justice-is addressed. It can be described as the attempt to reverse the increasing disparities in wealth and consumption through increasing the access to environmental and other resources by disadvantaged sections of society (Gray, R., 2006). A rapid and continuing rise in the use of fossil fuel-based energy and an accelerating use of natural resources are continuing to affect key ecosystem services, threatening supplies of food, freshwater, wood fiber, and fish. More frequent and severe weather disasters, droughts and famines are also impacting communities around the world (Singh A.K., 2013).

There is broad consensus over the need to include indicators that help to measure and compare business performance and enable visualization of the best social and environmental practices (Grafé & Jankowska, 2001); (Azcarate, Carrasco, & Fernandez, 2011) According to Gray (1994) *“a sustainable organization is one which leaves the biosphere at the end of the accounting period no worse off than it was at the beginning of the accounting period”*; (Gray R. , 1994) (Azcarate, Carrasco, & Fernandez, 2011). There is a need for indicators that report on business performance linked to the state of the environment (Grafé & Jankowska, 2001).

2.3 Ecological Footprints of Operations & Innovations (ECOOP)

The Worldwatch Institute, an environmental group, argues in a recent report that, with the rate at which natural resources are consumed more than doubling in the past 50 years and up to 2bn more aspiring consumers, humanity is “outstripping its resource base at an unprecedented global scale”. It is a message that companies need to take seriously. Some companies are even putting hard numbers on their environmental footprint. Investors are also increasingly interested in the environmental performance of the companies they put money into. Humans already depend on the equivalent of 1.5 planets to provide the resources they use and to absorb their waste, according to the Global Footprint Network. This, it says, means it takes the earth a year and a half to regenerate what human beings use in a year. In collaboration with the Global Footprint Network, WBCSD calculated

the Vision 2050 ecological footprint against business-as-usual and found that by 2050, despite increases in population, humanity will be using the equivalent of just over one planet, based on the changes we embrace in Vision 2050, as opposed to the 2.3 planets we would be using if we continue on the business-as-usual path we are on today. The world will be in a much better position if we maintain the course implied in the pathway and its elements (Singh, 2013).

Some companies believe that it is possible to grow while maintaining or reducing their environmental footprint. Unilever, the Anglo-Dutch consumer goods company, says it plans to double the company's size while halving its environmental footprint and sourcing all of its agricultural raw materials sustainably. This will lead to innovations as companies will find ways to make their operations sustainable.

RESEARCH METHODOLOGY

In the light of aforesaid objectives and hypotheses an instrument was developed to collect opinion on accounting professionals on limitations of financial reporting (Difficulties in reporting of sustainability issues, Distrust for Corporate Actions, Failure of financial reporting, and Need for incorporation of ESG issues) and the disclosures sought in the new form of reporting viz., System Effectiveness, Social and Environmental impact, Ecological footprints of operations. Annual reports of BSE listed companies of India were studied for the period between 2011 and 2013. A questionnaire was then developed which comprised of 81 items selected to indicate the level of current financial reporting, awareness on Integrated Reporting, disclosures sought in the new form of reporting i.e., an Integrated Report and the benefits that may result from the transition to new form of reporting. Items were divided in 4 sections named as follows.

- A. Corporate Annual Reports- as a Communication Medium (43 statements)
- B. Integrated Reporting (6 statements)
- C. Information to be included in Integrated Report (17 statements)
- D. What opportunities could be there from adoption of Integrated Reporting (15 statements).

The questionnaire was administered through Survey methodology and the technique used for survey was Probability based **Stratified Random Sampling**. Out of the total 230 responses received 185 questionnaires deemed fit for analysis.

Multiple regression and factor analysis have been used to interpret the multivariate relationships between Limitations of financial reporting and Disclosures sought in new form of reporting (i.e., Integrated Reporting). Multiple Regression is a statistical tool useful for predicting assumed dependent variable. Factor analysis is applied to a single set of variables to discover which variables are relatively independent of one another. It reduces many variables to a few factors. It also produces several linear combinations of observed variables which are called as factors. The factors summarize the pattern of correlations in the observed data. Because there are normally fewer factors than observed variables and because factor scores are nearly uncorrelated, use of factor scores in other analyses may be very helpful (Tabachnick & Fidell, 2001). Loadings were correlation coefficients between variables and factors. **Varimax** rotation was used to facilitate interpretation of factor loadings. Coefficients were used to obtain factor scores for selected factors.

Kolmogorov-Simirnov normality test was applied for all variables. After normality test, it was determined that all data were normally distributed.

Regression model was developed for each of the possible outcomes of Limitations of current financial reporting. In the following equations the constant has been ignored since the independent variables will never take value zero. **Score values** of selected factors were considered as independent variables for predicting disclosures sought in new form of reporting.

The regression equations are presented as;

$$y_i(SYSEFF) = \beta_1ESG + \beta_2DCA + \beta_3DSI + \beta_4FFR + \varepsilon_i \dots\dots\dots (1)$$

$$y_{ii}(SOCENV) = \beta_1ESG + \beta_2DCA + \beta_3DSI + \beta_4FFR + \varepsilon_{ii} \dots\dots\dots (2)$$

$$y_{iii}(ECOOP) = \beta_1ESG + \beta_2DCA + \beta_3DSI + \beta_4FFR + \varepsilon_{iii} \dots\dots\dots (3)$$

Where β is regression coefficient

ESG, DCA, DSI, and FFR are independent variable and y is the dependent variable. ε ... is the error term.

Determination coefficient (R^2) was used as predictive success criteria for regression model (Draper and Smith 1998). All data were analyzed using statistical package **Statistical Package for Social Sciences (SPSS) version 20** and Microsoft **Excel 2010** for windows.

The main objective of the present research paper was using a multivariate statistical approach, factor analysis, to classify predictor variables according to interrelationships and to predict disclosures sought in new form of reporting. The variables for factor analysis were gathered through exploratory research which was carried out through literature survey and a structured questionnaire. For this purpose, factor analysis scores of factors of limitations of financial reporting were used as independent variables in multiple linear regression models for prediction of disclosures sought in new form of reporting.

Reliability and Validity

Reliability and validity are two important characteristics of any measurement procedure. Reliability refers to the confidence we can place on the measuring instrument to give us the same numeric value when the measurement is repeated on the same object. Validity on the other hand means that our measuring instrument actually measures the property, it is supposed to measure. Reliability of an instrument does not warranty its validity (Gaur & Gaur, 2009).

The reliability of the instrument was tested using Cronbach's alpha. **Cronbach's (alpha)** is a coefficient of internal consistency and was found to be greater than 0.7 which is commonly accepted threshold (Nunnally & Berstein, 1994), hence laying foundation for further analysis. The relative calculations were carried out in Stats Tool Package (Gaskin, 2012).

Cronbach's α is:

$$\alpha = \frac{N^2 Cov}{\sum s^2_{item} + \sum Cov_{item}}$$

Table No.1: Cronbach's Alpha Score of Antecedents (Predictor variables)

Antecedents	Items summated	Cronbach's Alpha
Difficulties in reporting of sustainability issues	6	0.928
Lack of integration of ESG issues	5	0.889
Distrust for corporate actions	4	0.795
Failure of financial reporting	3	0.836

Table No.2: Validity Specifications

Reliability/ Validity	Criteria
Reliability	<ul style="list-style-type: none"> ● CR>0.7
Convergent Validity	<ul style="list-style-type: none"> ● CR>AVE ● AVE>0.5
Discriminant Validity	<ul style="list-style-type: none"> ● MSV<AVE ● ASV<AVE

Table No.3: Validity scores

	CR	AVE	MSV	ASV
DCAA	0.801	0.507	0.019	0.013
DSIA	0.932	0.702	0.020	0.019
FFRA	0.840	0.637	0.099	0.045
ESGA	0.882	0.600	0.099	0.040

Some of the variables which were having the standardized loading estimates less than 0.5 were the candidates for deletion and the factor which had the problem of under-identification i.e., factors having less than 3 variables were also dropped from the analysis. This way only four factors remained which qualified the validity test and are shown in table 3. All factors have CR above 0.5 and AVE less than CR and greater than 0.5, Maximum shared variance and Average shared variance less than Average variance explained. Similarly reliability and validity of the outcome variables were tested after conducting factor analysis.

MULTIPLE REGRESSION ANALYSIS

Test of Hypothesis No.1. Dependent Variable-System and Process Effectiveness

Table No.4.Regression Statistics

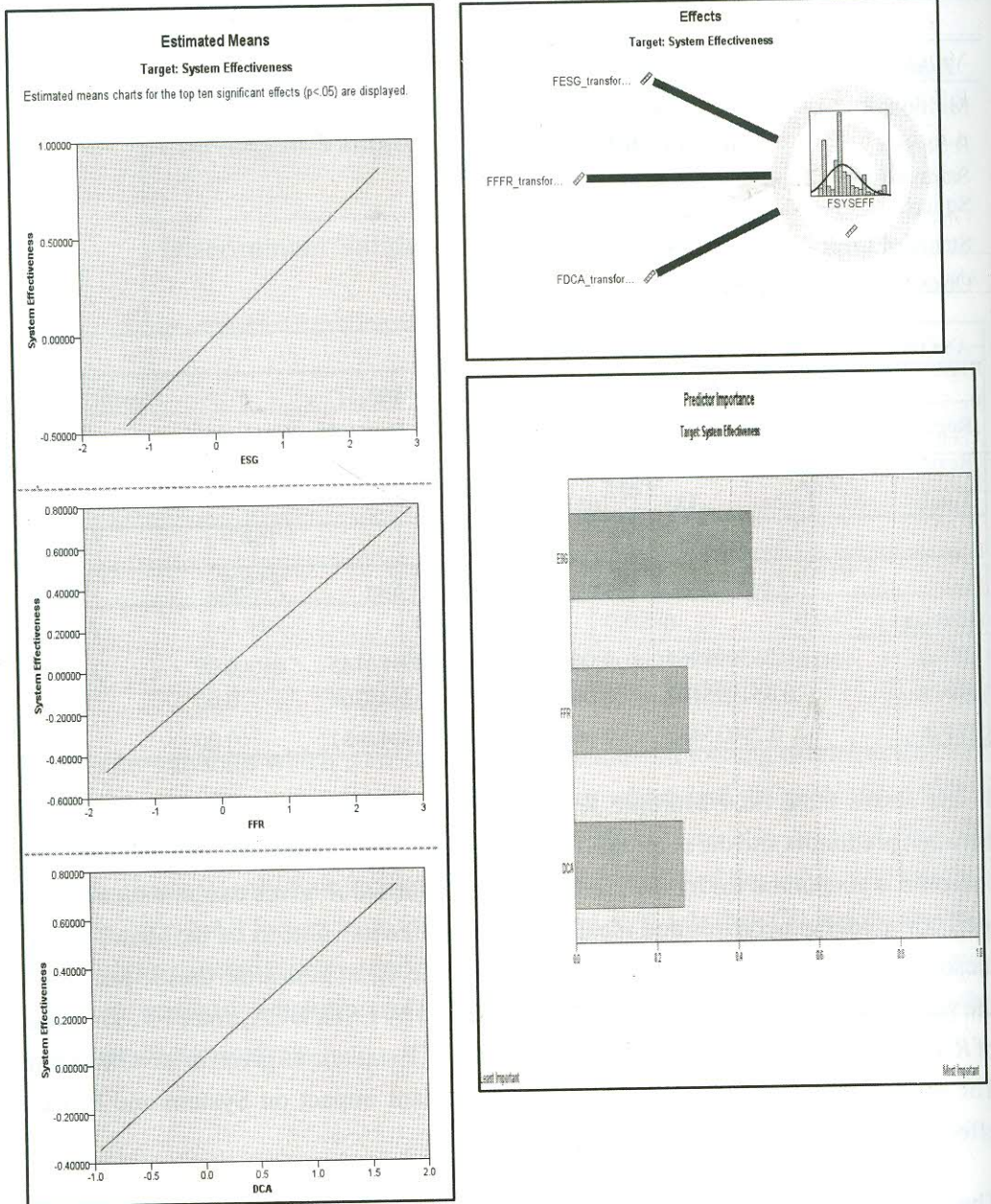
Multiple R	0.578741771
R Square	0.334942037
Adjusted R Square	0.322139202
Standard Error	0.819978817
Observations	185

ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	61.62924021	20.54308007	30.553453	0.00
Residual	182	122.3704774	0.67236526		
Total	185	183.9997176			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
Intercept	0				
FESG	0.355998964	0.060449603	5.889186145	0.00	
FDCA	0.351995107	0.060449626	5.822949304	0.00	
FFFR	0.29035437	0.060449653	4.803242981	0.00	

In the above table no.4 Multiple R is the value of multiple correlation coefficients between predictors and the outcome. R^2 is a measure of how much of the variability in the outcome is accounted for by the predictors. The adjusted R^2 gives us some idea of how well our model generalizes and ideally we would like its value to be the same, or very close to, the value of R^2 . The value of R^2 is 0.33 (Table 4), an indication that 33 per cent of the variations in System effectiveness are explained by ESG, DCA, and FFR. The value of R^2 is significant as indicated by p value (0.000) of F statistic as given in ANOVA table. The other independent variables have no significant impact on System and Process effectiveness.

Thus, our first null hypothesis H01 that limitations of financial reporting do not predict a new form of reporting which should have information about system effectiveness, is not accepted.

Figure 1



Source: Survey Data Analysis 2013.

Test of Hypothesis 2 Dependent Variable Social and Environmental Impact**Table No. 5. Regression Statistics**

Multiple R	0.340706588
R Square	0.116080979
Adjusted R Square	0.105786339
Standard Error	0.942734984
Observations	185

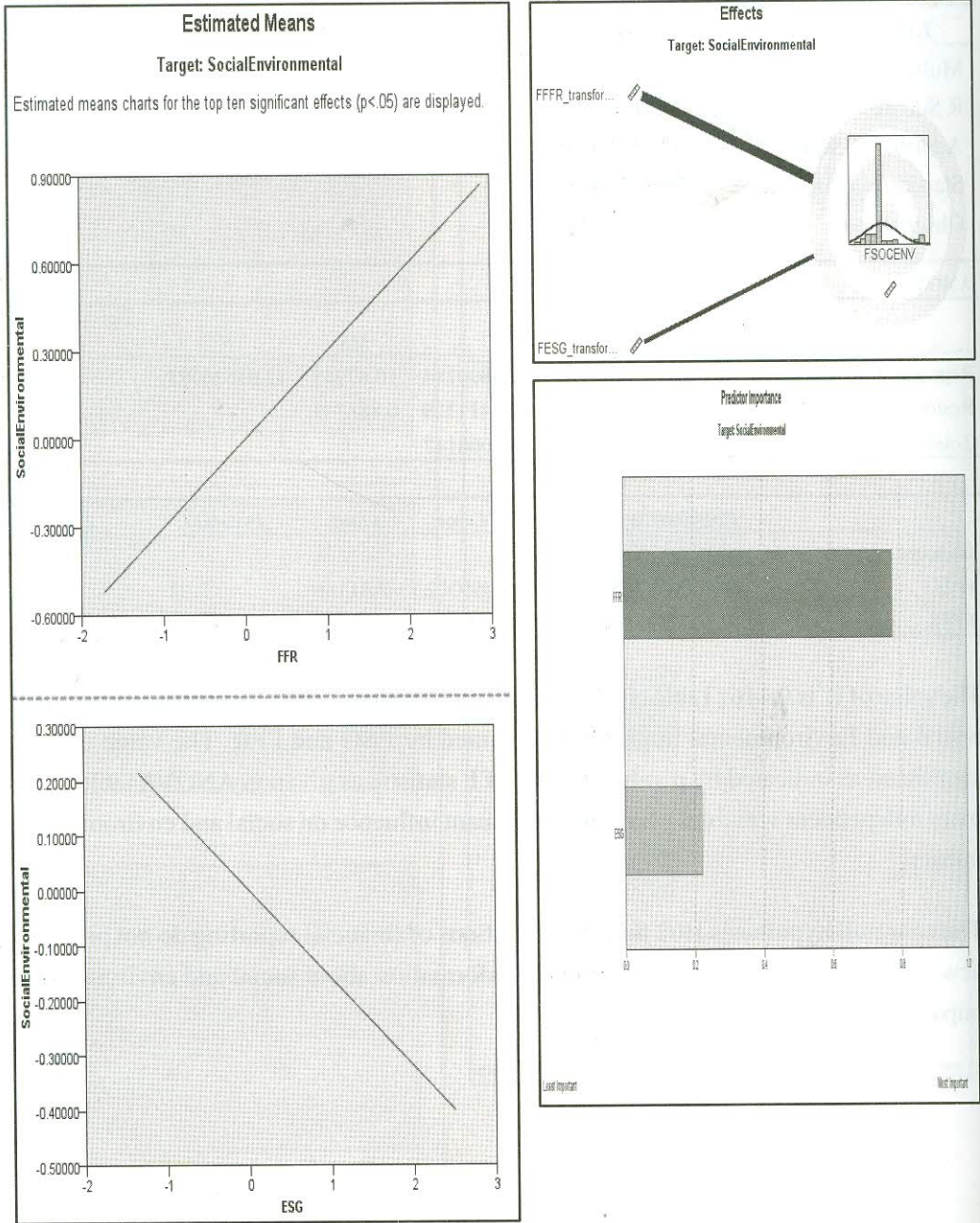
ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	21.35890184	10.67945	12.01626995	0.00
Residual	183	162.6411129	0.888749		
Total	185	184.0000147			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0			
FESG	-0.160658733	0.069499302	-2.31166	0.02
FFFR	0.300449256	0.069499359	4.323051	0.00

The value of R^2 is 0.116 (Table No.5), indicates that nearly 12 per cent of the variations in Social and Environmental impact are explained by ESG and FFR. The value of R^2 is significant as indicated by p value (0.000) of F statistic as given in ANOVA table. The other independent variables have no significant influence on social and environmental impact.

Thus our null hypothesis H02 that the limitations of financial reporting do not predict a new form of reporting which should have information about social and environmental impact is not accepted.

Figure 2



Source: Survey Data Analysis 2013.

Test of Hypothesis 3 Dependent variable-Ecological Footprints of operations and innovations

Table No.6 Regression Statistics

Multiple R	0.534324638
R Square	0.285502819
Adjusted R Square	0.276133982
Standard Error	0.847585966
Observations	185

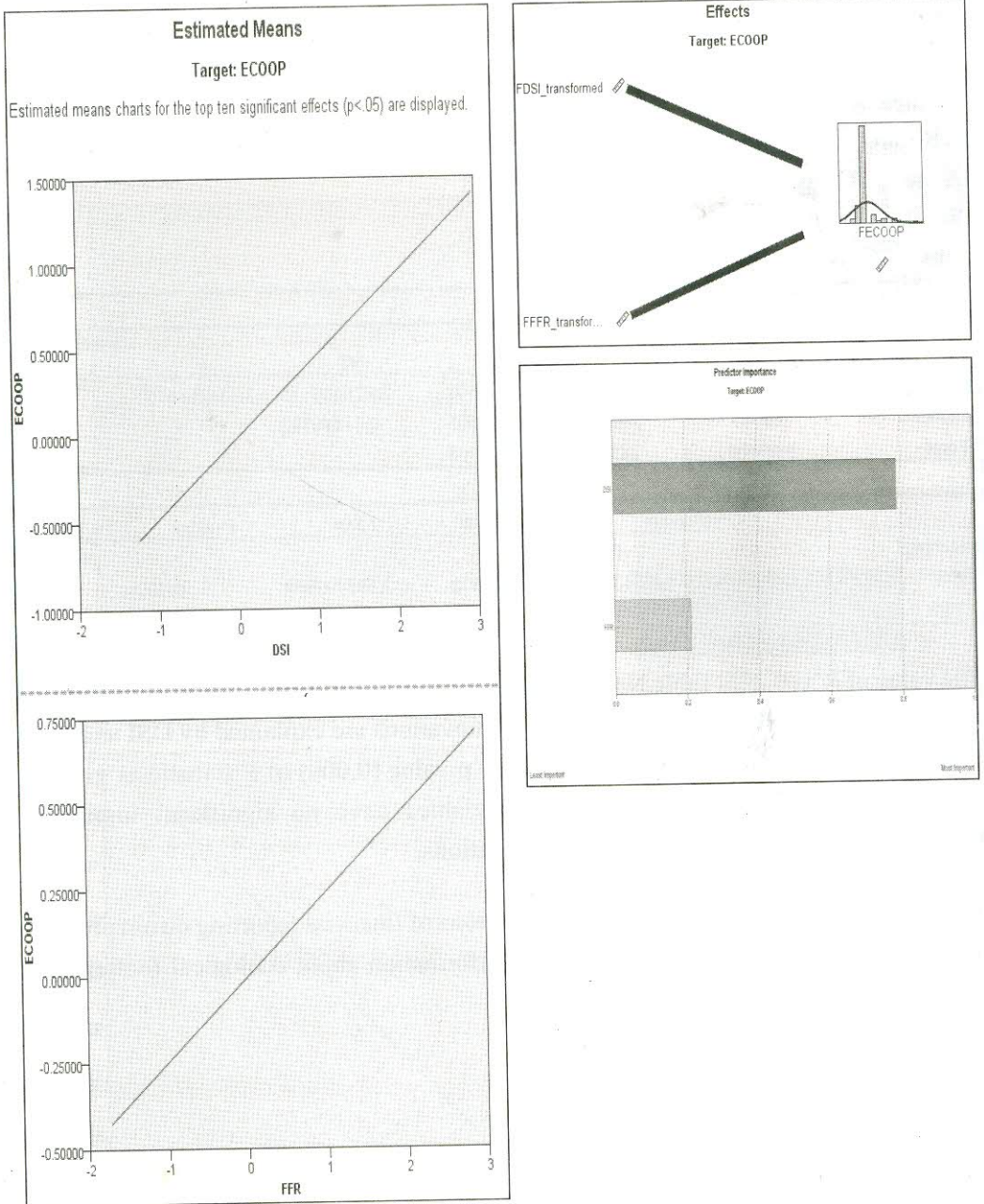
ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	52.5325503	26.26627515	36.56208675	0.00
Residual	183	131.4675605	0.71840197		
Total	185	184.0001108			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0			
FDSI	0.47442913	0.062484872	7.592703909	0.00
FFFR	0.245804875	0.062484879	3.933829734	0.00

The value of R^2 is 0.285 (Table No. 6), indicating that nearly 29 per cent of the variations in Ecological Footprints of operations and innovations are explained by DSI and FFR. The value of R^2 is significant as indicated by p value (0.000) of F statistic as given in ANOVA table. The other independent variables have no significant impact on Ecological footprints of operations and innovations.

Thus our third hypothesis H03 that the limitations of financial reporting do not predict a new form of reporting which should have information about ecological footprints of operations and innovations is not accepted.

Figure 3



Source: Survey Data Analysis 2013.

CONCLUDING OBSERVATIONS

1. The research paper concludes that lack of integration of ESG issues, distrust for corporate actions, and failure of financial reporting in giving complete picture of the company call for a new reporting which should have information on System effectiveness as 33 per cent of the variations in System effectiveness is explained by these predictors.
2. The research paper found there is a need for the incorporation of sustainability issues in to the core strategy of business. Though integrating non-financial information into one report called as process of **integrated reporting** is not a panacea in itself, still it can make management and board identify areas requiring improvement and attention. In this way, the report can trigger the necessary changes in corporate behavior and could move companies towards becoming more sustainable.
3. The adoption of integrated reporting will lead to innovations as 29 per cent of the variations in Ecological Footprints of operations and innovations are explained by DSI and FFR together.
4. It is learnt that Environmental, Social, and Governance (ESG) performance index should be developed and be made comparable, as it is found a factor responsible for more information sought in integrated reporting.
5. Financial reports fail to address the distrust among civil society of the intentions and practice of business. So, if the companies disclose more information on their environmental activities and make the stakeholders aware of such initiatives, it could add value to the firm.
6. By integrating sustainability issues into core business strategy, a firm will be able to drive operational efficiencies and thereby the new strategy can be a source of innovative and new environment friendly products.
7. The Companies Act 2013 makes an effort to introduce the culture of corporate social responsibility (CSR) in Indian corporates by requiring companies to formulate a corporate social responsibility policy and at least incur a given minimum expenditure on social activities. So, its accounting and reporting will be a permanent feature of the Company's annual reports in future.

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