Impact of Corporate Social Responsibility on Firm Performance: Role of Environmental and Internal Social Responsibility

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Abstract:

This study focuses only on internal social and environmental aspects of corporate social responsibility as per general orders 2009 to define the CSR of a firm. Using the hand collected data of non-financial listed companies of Pakistan Stock Exchange from their annual reports from 2010 to 2015; this study finds that CSR is significantly positive impact on firm performance across all three proxies, while the relationship is stronger for Tobin Q as compared to return on assets and return on sales. It means that the firms those have higher levels of CSR disclosure tend to have higher market value because of overwhelm response from stakeholders, which not only improves the image of the company but also enhances client loyalty.

Moreover, this study finds no significant difference in the findings of internal social and environmental disclosure, but the significant positive impact of internal social disclosure and environmental disclosure on firm performance suggests that Pakistani firms keep in mind agency as well as legitimacy theoretical prospects at the time of designing their CSR strategies

Keywords: CSR; internal social CSR; environmental CSR; firm performance; Pakistan.

JEL Classification: G30; G32; M10; M14.

Introduction

The states of the world are going about the business of environmental friendly and employees friendly with different degrees of grimness, via different methods, and at different speed. The environmental issue is a global issue, but the condition is relatively worse in developing countries, where implementation of rules and regulation is very poor. Pakistan is not a unique economy in this regard which is experiencing a poor environmental management due to lack of awareness and law enforcement, unavailability of technology and expertise (Jeswani, Wehrmeyer and Mulugetta 2008). The industrial effluents are the major contributors in poor environmental conditions (Azizullah *et al.* 2011) and the human health is at stake due to unfettered emission of liquids and gases from the industries (Bhutto, Bazmi and Zahedi 2011). It is not only the government, but also other stakeholders in the state such as individuals and firms' responsibility to work for the betterment of environmental issues in the country (Ștefănescu 2018).

The condition of labor is not ideal in developing countries due to the ambiguous employment policies of the firms as well as poorly protected labor laws. Due to the high unemployment rate, firms are not practicing ethically towards their employees in terms of fair wages, healthy and protected working environments (Ghayur *et al.* 1996) as well as other

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internal social responsibilities such as education and health of employees' children and family specifically country such as Pakistan (Danish and Usman 2010).

To keep the firms aware with their social responsibilities, the government of Pakistan has introduced environmental and labor protection laws time to time[2], and the Security Exchange Commission of Pakistan (SECP) also issued the detailed guidelines[3] to the firms regarding the aspects of their social responsibilities. The literature (Gray, Kouhy and Lavers 1995, Cormier and Magnan 1999, Cormier, Magnan and Van Velthoven 2005, Gray and Bebbington 2001, Deegan and Gordon 1996, Brammer and Pavelin 2006, Brammer, Pavelin and Porter 2009) of corporate social responsibility (CSR) shows an upward trend in level of CSR disclosure from the firms to satisfy all stakeholders especially through social and environmental activities. Economically, the CSR disclosure enhances the financial performance of the firm (Callan and Thomas 2009, Waddock and Graves 1997, Song Zhao and Zeng 2017, Saragih *et al.* 2019, Razumovskaya *et al.* 2018, Kurniawati and Arsjah 2019, Kong, Antwi-Adjei and Bawuah 2020).

Considering the agency and legitimacy theories along with inconclusive findings with regards to how firms can internalize their CSR activities (Naseem *et al.* 2020), we study only internal social and environmental aspects of corporate social responsibility as per general orders 2009 to define the CSR of a firm. In the context of Pakistan, this study is unique of its type which not only tests the effects of CSR (internal and environmental) disclosure on performance of the firm, but also compares that the firms' agency theory's prospect (internal social disclosure) out performs the firms' legitimacy theory prospect (environmental disclosure) or vice versa.

Using the hand collected data of KSE-100 index non-financial firms from 2009 to 2015. We found a significant evidence of enhancement in performance of firms with higher CSR disclosure. These findings hold using all proxies of performance such as Tobin Q, return on assets (ROA) and return on sales (ROS). Furthermore, firms with higher internal CSR activities have significantly better performer. These findings suggest the existence of agency theory with respects of CSR that management uses it as a tool to mitigate the internal agency problem through firms' involvement in employees' family wellbeing. At last, we find a significant positive effect of firms' environmental activities on performance in non-sensitive industries. Overall, the findings confirm the existence of the theories discussed in this paper in case of Pakistan.

1. Literature Review

CSR has been considered a burden on the shareholders till 1980s. Firms disclose the CSR information not only to fulfill the legal requirements, but also to develop the understanding of investors about the risk and opportunities (Kaya 2016). Since the development of stakeholder theory, the mindset of firms towards CSR has been changed. A good example is CSR case study of Ford Corporation[4].

In the words of Gray, Owen and Maunders (1987), CSR disclosure is a process of communicating the social effects of a business's economic action within society and society at large, which contribute towards the goal of firm through developing good corporate image, attracting the investors, and retaining the capable employees. Internal and external CSR are two major components of the CSR. The internal CSR disclosure refers to the information of firm activities relating to the social economic benefits of the firms' own employees, while the external CSR disclosure discloses the information of firms' activities with respect to social betterment (Hameed *et al.* 2016).

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[2] The first comprehensive environmental law "Environmental protection ordinance of Pakistan" passed in 1983. The main purpose of this Ordinance was the foundation of institutions like Federal and Provincial Environmental Protection Agency (PEPA) and Pakistan Environmental Protection Council (PEPC). In 1997 second environmental law "Pakistan environmental protection act" was passed. To achieve the goals of environmental protection act three steps have been executed. (i) Create awareness of environmental protection act and it is compulsory for industries to educate their employees regarding their environmental protection instruments within certain time period; (ii) Environmental protection policy change being accomplished by suitable motivations; (iii) Enforcing the industry that they should make industry clean by using clean equipment and insulation subsidies effluent treatment plants. Pollution charges act was passed in 2001. According to this, fine will be charged on wastage of resources. This fine will be charged on the basis of wastage (water, gasses, and other resources) per unit, and cost per unit will be charged on the basis of wastage level.

[3] SECP issued an Order dated july 4, 2009 to listed firms with respect to CSR activities disclosure in audited reports. According to this order, companies must disclose with respect to their policies regarding energy conservatopm, corporate philanthropy, efforts relatd to environmental issues, investments toward social welfare, share of disable person in jobs, policies and practics regarding healthy working environment and healty soiety, national cause donation, rural development programs and industrial relations.In 2012 SECP issue "corporate social responsibility general guidelines". Firms have freedom for choice of disclosure channel which is suitable for communication with their stakeholders. According to these guidelines firms disclose CSR activities voluntarily as much as possible for their own interest.

[4] For the detail of example of the case study see the Lee (2008).

1.1. Corporate Social Responsibility and Firm Performance

Today, CSR is considered a management tool to push the firm performance up, to reduce information asymmetry and to the cost of capital (Armitage and Marston 2008) as well as enhance the firm transparency (Reverte 2009). However, findings are ambivalent on the current topic: from the dark side of the literature, some authors (Patten 1991, Tjia and Setiawati 2012, Iqbal *et al.* 2012) found no significant nexus on relationship between performance and CSR disclosure, while Margolis and Elfenbein (2008) report that firms with more CSR activities suffer from value loss. The negligence towards social responsibility may have a closely linked with economic profit of the firm due to the payment of penalties, and may have an indirect effect because of weakening brand image through fall in reputation in society.

The studies (Callan and Thomas 2009, Waddock and Graves 1997) of the brighter side of the CSR disclosure suggest that the firms' activities towards the betterment of stakeholders enhance financial performance and limit the costs such as transaction, selection and capital (Song *et al.* 2017). The relationship between performance and CSR disclosure is stronger with long term performance measure (Tobin Q), and the firms those have higher levels of CSR disclosure tend to have higher market value (Liu and Zhang 2017) because of overwhelm response from stakeholders which not only improves the image of the company but also enhances client loyalty (Aguilera *et al.* 2007).

The divergence among management involvement to meet the CSR exists among the countries. For example, a positive behavior of management towards CSR is more likely in countries which have a culture of addressing the long-lasting anxieties of the society through narrowing the gap between level of power traits (Waldman *et al.* 2006). Pakistan is a below average institutional socialist country, where the power distance is relatively high among different actors of the society. That is why it is not surprising that the attention of business communities is not well-known towards the issues of social responsibility with respect of other countries. Apart from existence of environmental and labor laws in the Pakistan, to increase the awareness about the elements of social responsibility to the firms, the SECP issued a CSR general order in 2009 focusing on core elements close to the need of all stakeholders and provided the voluntary guidelines of CSR activities in 2013. These guidelines are designed following stakeholders prospective and United Nation agenda of country s' sustainable development 2030.

Maignan and Ferrell (2004) support the stakeholder prospective and report the significant large response from the stakeholders in favor of more socially responsible firms which indeed, help the firms to create a competitive advantage. Now a day, CSR considers an integral part of firms' corporate strategy (Ullmann 1985) to create the balance to satisfy the demands of different stakeholders. CSR also signals to the various stakeholders that the firm is partially altruistic and not completely agnostic (Godfrey, Merrill and Hansen 2009). A fair CSR disclosure practice helps the firm to increase intangible resources which signals the investor to make better judgment about the company, which would be beneficial for business in the long run. The capitalization on the CSR activities is only possible when the firm responds the issues of the society effectively and timely. Consistent with this argument, if firms in Pakistan continuously and timely contribute to social welfare issues pinpointed in SECP CSR general order 2009, then it can be expected to get an aggressive and strong positive response from stakeholders (Maignan and Ferrell 2004) which helps to achieve competitive advantage for sustainable CSR performers. Consistent with the notion that the first hypothesis is as below:

H1: The CSR activities enhance the firm performance

As per above literature review, the CSR is considered a strategy of the firm to boost its performance through building reliable intangible resources. It is documented that a fair and appropriate social practice not only enhances the firms' ability to retain the competence and experience employees as well as attracts the young and talented labor force to become a part of firm, but also helps the firm to improve social legitimacy. Literature has lack of evidence whether social investment relating to agency theory or social investment relating to legitimacy theory pays back aggressively? This question is still unanswered instead of researchers' understanding (Van der Laan, Van Ees and Van Witteloostuijn 2008) that the different dimensions (internal and external) of corporate social responsibility require different level of investment and produce different monetary outcomes. Therefore, this study not only tries to figure out the nexus among internal and external (environmental) social responsibilities and performance, but also compares which strategy is paying more in the market, having a high unemployment rate, poorly protected labor laws, and experiencing a poor environmental management.

1.2. Internal Social Disclosure and Firm Performance

It is well documented in the literature that the firms engage actively to make the life of its employees and their family comfortable through well designed social welfare program, have less agency problems between employees and management. Such as Francis, Nanda and Olsson (2008) show that the firms have aggressive policies to disclose their social welfare programs, have relatively lower levels of asymmetric information and better trust among the stakeholders. Consequently, such firms' performance flourishes rapidly as a result of reduction of agency problems. It has proofed that the real costs of internal social performance are nominal as compared to the benefits as a result of the enhancement of productivity of employees (Waddock and Graves 1997).

The common practice of firms' internal social responsibility is based on the standards mentioned in documents of international organizations[5]. The firm internal social reporting has three-dimensional (Carroll 1999). The institutional dimension of internal CSR helps the firms to communicate with union and other related bodies on regulative issues (Christmann and Taylor 2006). The other dimension called organizational which deals with policy making and job designing. The major aim here is to provide the risk-free working environment and sustain the involvement of the employees in the job (Turker 2009). The last dimension of the internal CSR focuses directly on individual's professional development. This can be done through educating the employees with modern tool necessary to complete tasks as well as through introducing schemes (pension plans and profit-sharing) to keep employees off-company life in the comfort zone (Aguilera *et al*. 2007).

Using the resource based view, Cavazotte and Chang (2016) test the effect of specific dimensions (such as pension plans, education, health care and profit sharing) of internal social responsibility on firm performance. Their findings suggest firms with better pension plans for employees enjoy strong performance in short, medium, and long run. A quick response is coming from the investment on education and training of employees, while the benefits from schemes like profit sharing and health care appear relatively late but these benefits are long-lasting. The previous studies (Brammer *et al*. 2009, Cooper and Wagman 2009) are in favor of argument of retention and loyalty of the competent workers with the firm as results of internal CSR. The elements of internal CSR such as a fair selection of employees, equality of pay and benefits of employees retain quality employees (Cormier, Ledoux and Magnan 2011). This indeed creates good employee-management relationship that builds the employees' believe in the company and enhances sense of responsibility among work as a result firms' productive increases (Freeman and Reed 1983, Siegel 2009). The committed, honest, and talented employees may lead the firm to explore the unforeseen profitable opportunities (Greening and Turban 2000, Fombrun and Gardberg 2000), which help the firm to get sustainable growth.

The review of previous research on Internal CSR (Aguilera *et al*. 2007, Van der Laan *et al.* 2008, Cavazotte and Chang 2016, Cooper and Wagman 2009)) suggest firms' extensive investment in employees as value enhancing function of the firm. Thus, the hypothesis 2 is set as below:

H2: There is significant positively relationship between internal CSR and performance

1.3. Environmental Activities and Performance

A firm's aggressiveness towards the protection of the environment not only helps the firm to build its soft image, but also helps the firm to keep a strong competitive position in the market. This positive image may increase the firm's sales and capitalization in market through getting the environmental permits for new product faster as compared to competitors (Porter and Kramer 2011). The contribution to improve the environmental performance assists the firm to strong the ties with regulators, decreases the charge of penalties, and investment cost. Eventually, the performance of firms may enhance (Heal 2005). The study such as Waddock and Graves (1997) reports a positively significant relation with performance and firms policies towards environmental issues. In the views of researchers (Porter and Kramer 2011, Flammer 2015), the environmental friendly policies can make the firm well reputed, trustworthy, and attract the customers to boost up the sales and employees to work efficiently. Berthelot, Cormier and Magnan (2003) pinpoint the factors[6] drive the environmental performance, while market dynamics kept special focus at the timing of environmental disclosure and management thoroughly investigates the costs and benefits of disclosure (Clarkson *et al.* 2008). There is a direct link between firm future earnings and environmental disclosure. Financial analysts consider the disclosure related to environmental issues important and precise for earnings forecasts (Aerts, Cormier and Magnan 2008).

The findings propose that larger, aggressively observable companies and more environmentally sensitive firms are likely to disclose more (Gray *et al.* 1995, Cormier *et al*. 2005, Gray and Bebbington 2001, Patten 1991, Hackston and Milne 1996). Environmental sensitive firms increase environmental disclosure yearly basis, but non-sensitive firms disclose the information opportunistically (Deegan and Gordon 1996). They conclude that environmental disclosure is sensitive towards the industry. This result argues that firms fall in (metals, paper and pulp, water, textile, power generation, and chemicals) sectors (Brown and Deegan 1998) disclose more environment-related information as compared to other sectors (da Silva Monteiro and Aibar-Guzmán 2010).

Another view to enhance firm performance tested by Cormier and Magnan (2015). They argue that firm has two prospects (economic and legitimacy) in mind at the time of settling on the environmental disclosure strategy. They conclude that legitimacy prospect helps the firm to achieve the economic base targets of environmental performance, *e.g.,* they report the improvement in quality of analysts' forecast following the detailed environmental disclosure for environmental sensitive firms, while the environment legitimacy of firm plays a moderate role to enhance the understanding of analysts

[5] The most of standards are borrowed from European Union's Green Paper (2001), the United Nations' Global impact, international labor organization (1998), and guides of Global Reporting Initiative (2011)

[6] Leverage, ownership structure, and its' investors information asymmetry etc.

towards the environmental disclosure which ultimately helps to quality forecast. Moreover, the market may react adversely for environmental unfriendly firms. Overall, management may consider the environmental activities to mitigate the information risk (Cormier *et al.* 2005, Freedman and Jaggi 1988).

Freedman (1988) shows a significant positive relationship between environmental disclosure and economic performance, but this relationship is stronger in lead year as compared to current year (Song *et al.* 2017, Connelly and Limpaphayom 2004). In the short run, cost of disclosure increases the expense of firm but in the long run, disclosure strategy is a competitive advantage to the firm and communicating the environmental strategies with its external stakeholders reinforces and differentiate a firm's position in the market. Reliable and appropriate environmental disclosure not only enhance the firm earning capability and higher the share prices, but also helps to improve the environmental legitimacy (Cormier and Magnan 2015). Therefore, the study expects:

H3: Environmental activities of firm enhance the firm performance, but this relationship is stronger for non-sensitive industry as compared to environmental sensitive industries.

2. Methodology

The study uses the data of 69 non-financial firms from KSE-100 of Pakistan from 2009 to 2015. We collect the data manually from respective companies' annual reports. To construct the index of CSR, this study used a content analysis approach based on elements from "CSR general order 2009" for companies issued by the SECP. The CSR index of the study consists on 72 items of environmental and internal social activities. Out of 72, 39 items are discussed under environmental disclosure and rest of items is discussed under internal social disclosure[7].

Following the previous literature as discussed above, the study defines the variables appear and discussed in Table 1.

Table 1. Definitions of variables

Variables	Explanation	Data Source	References
Dependent Variables			
Return on asset (ROA)	Earnings from operations/ Book Value of Total Assets	Annual reports	Said *et al.* (2009)
Return on sale (ROS)	Net Income / Total Sales	Annual reports	Callan and Thomas (2009)
Tobin Q	Log of [market value of stock+ book value of total debt/ total assets]	Annual reports	Callan and Thomas (2009), Connelly and Limpaphayom (2003)
Independent Variables			
CSR disclosure	Score 1 is assigned to the element of CSR if the firm is involved in that activity, otherwise 0. After that, an index ratio is calculated. Index ratio is defined CSR score achieved by firm divided by total score.	Annual reports, or any other reports	Said *et al.* (2009), Lui and Zhang (2016)
Internal Social disclosure	Score 1 is assigned to the element of internal CSR if the firm is involved in that activity, otherwise 0. After that, an index ratio is calculated. Index ratio is defined internal CSR score achieved by firm divided by total score.	Annual reports, or other reports	
Environmental disclosure	Score 1 is assigned to the element of Environmental Social responsibility if the firm is involved in that activity, otherwise 0. After that, an index ratio is calculated. Index ratio is defined Environmental Social responsibility score achieved by firm divided by total score.	Annual reports, or other reports	Nor *et al.* (2016) and Said *et al.* (2009)
Firm Control Variables			
Age	From how many year firm incorporated	Annual reports	Fontana *et al.* (2014)
Size	Natural log of book value of total assets.	Annual reports	Menon and Williams (1994)
Growth	Percentage change in sales of the firm	Annual reports	Qiu *et al.* (2014)
Liquidity	Ability of firm to convert its assets into cash. Liquidity ratio current Asset / Current Liability	Annual reports	
Leverage	Total Debt/ Total Assets	Annual reports	Qiu *et al.* (2014)

[7] The detail of index can be shared with the readers through email on demand.

Variables	Explanation	Data Source	References
Firm Sensitivity	Dummy variable if firm fall in environmental sensitive industry *i.e.* petroleum, oil & gas, chemicals, and paper manufacturing etc. than 1 fall in non-sensitive industry than 0	Annual reports	Song *et al.* (2016), and Cormier and Magnan (2013)
Corporate Governance Variables			
Board ownership	No of shares held by board member / Total number of shares	Annual reports	Lui and Zhang (2016)
Non-executive directors	Total number of non-executive directors	Annual report	Lui and Zhang (2016)
Foreign ownership	No of shares owned by foreigner / Total outstanding shares	Annual reports	Said *et al.* (2009)
CEO duality	A dummy equal to one for firm if both chairman and CEO is the same person	Annual reports	Said *et al.* (2009)
Board size	Natural log of total board of directors	Annual reports	Lui and Zhang (2016)
Board meetings	Total number of meeting held during the year	Annual reports	Lui and Zhang (2016)

2.1. Model Specification

The following model has been design to test the hypotheses of the study.

$$\begin{aligned} Performance_{it} = {} & \alpha_0 + \beta_1\ Index_{\ it} + \beta_2 Age_{it} + \beta_3 Size_{it} + \beta_4 Growth_{it} + \beta_5\ Liquidity_{it} \\ & + \beta_6 Leverage_{it} + \beta_7 Directors\ Ownership + \beta_8 Nonexective\ Directors \\ & + \beta_9 Foreign\ Ownership_{it} + \beta_{10} CEO\ duality_{it} + \beta_{11} Board\ Size_{it} \\ & + \beta_{12} Number\ of\ Board\ meeting_{it}\ +\ \varepsilon_{it} \end{aligned}$$

where: *Performance* is dependent variable using three different proxies as ROA, ROE, and Tobins' Q as defined in Table 1. There are three variables (CSR index, internal social index, and environmental index) of interest as defined in above Table 1. The definitions control variables are as Table 1. Moreover, ε_{it} is error term.

3. Main Findings

The summary statistics of the study has shown in Table 2. This table shows the means and standard deviation of all dependent, independent and control variables respectively. The mean of Tobin Q is 6.5425, ROA .1014 and ROS has .1090. Tobin Q has 1.1682 Standard Deviation ROA has .0981 and ROS has .1275. The maximum mean is 33.6513 and minimum is .0834. The minimum standard deviation is .0981 and maximum is 19.0734. The mean value of the CSR, internal social and environmental disclosure index is 0.4744, 0.4725, and 0.4766 respectively.

Table 2. Descriptive statistics

Variables	N	Mean.	Std. Dev.	Max	Min
ROA	411	.1014	.0981	1.0602	-.0599
ROS	394	.1090	.1275	1.3355	-.1895
Tobin Q	345	6.5425	1.1682	9.5974	2.9108
CSR Index	413	.4744	.2555	.8860	0
Internal social Index	413	.4725	.2360	.8809	0
Environmental Index	413	.4766	.2999	.9459	0
Env Sensitivity	412	.5072	.5005	1	0
Age	413	33.6513	19.0734	68	1
Leverage	411	.5035	.2496	2.7243	.0037
Liquidity	411	2.6149	12.1346	194.651	.0462
Size	411	16.8929	1.3304	20.5043	12.9588
Growth	391	.2228	1.0910	19.6084	-1
Non-executive Dirc	389	.7482	.1733	1	0
Director Ownership	374	.1378	.2682	3.4221	0
Foreign Ownership	374	.0834	.1904	2.3539	0
Board Size	389	8.7532	2.0359	15	6
CEO duality	389	.1105	.3139	1	0
Board Meeting	388	5.7551	2.9925	35	1

The Table 3 shows correlation among all the independent and control variable. CSR index highly correlated with internal social index and environmental index because CSR index is the combination of environmental and internal social index. All the three variables are used in three different models, so there is no risk of multicollinearity problem. The rest of variables do not have a high correlation among each other.

Table 3. Correlation Matrix

	CSR index	Internal social Index	ENV Index	ENV Sens	ENV sensitive index	Age	Leverage	Liquidity	Firm Size	Growth	Non-exc Director	Director Own	Foreign Own	Board Size	CEO duality	Board Meeting
CSR index	1															
Inter social Index	0.94	1														
ENV Index	0.96	0.83	1													
ENV Sens	0.19	0.09	0.126	1												
ENV sens index	0.59	0.48	0.64	0.80	1											
Age	0.13	0.14	0.12	-0.14	-0.04	1										
Leverage	-0.10	-0.07	-0.11	0.04	-0.04	-0.17	1									
Liquidity	0.03	0.05	0.01	-0.12	-0.07	0.17	-0.62	1								
Firm Size	0.31	0.27	0.32	0.26	0.33	-0.01	0.17	-0.04	1							
Growth	-0.13	-0.13	-0.13	0.00	-0.07	-0.11	0.06	-0.04	0.01	1						
Non-exc Director	0.01	0.01	0.01	0.04	0.06	-0.02	0.06	0.06	0.16	0.04	1					
Director Own	-0.30	-0.28	-0.29	-0.00	-0.09	-0.07	-0.09	-0.03	-0.22	0.00	-0.21	1				
Foreign Own	0.07	-0.06	0.07	-0.11	-0.02	-0.05	-0.11	0.05	-0.01	-0.01	-0.09	0.36	1			
Board Size	0.26	0.21	0.27	0.10	0.22	0.03	0.18	-0.06	0.35	-0.05	0.31	-0.12	-0.11	1		
CEO duality	-0.11	-0.13	-0.09	-0.01	-0.09	0.16	-0.11	0.09	-0.02	0.12	-0.08	-0.04	-0.11	-0.17	1	
Board Meeting	0.10	0.11	0.086	0.18	-0.14	-0.07	0.11	0.00	0.30	-0.03	-0.09	-0.02	-0.06	0.18	-0.07	1

3.1 CSR Activities and Performance

To test first hypothesis, the ordinary least square (OLS) method. These results of table IV report that there is positively significant between CSR activities and performance at a significance level of less than 0.1%. This relationship holds across three proxies of the performance (ROA, ROE, and Tobin Q) but the relationship is stronger for the market measure as compared to accounting measures of firm performance. Overall, these findings are in the line with hypothesis 1 and supported the findings of previous studies (Callan and Thomas 2009, Kurniawati and Arsjah 2019, Siregar 2018) but these findings are opposite to Saragih *et al.* (2019).

Firm size is significantly but negatively related with performance. This is opposite to the previous studies. The reason is that we have collected top listed firms and previous studies collected overall firms. Leverage, Liquidity and Growth have a positive nexus with performance. The positive significant relation of foreign ownership suggests that foreigner take pressure on board for disclosure and firm disclose more CSR information.

3.2. Internal Social Activities and Performance

Table 5 reports the results of internal social activities regression on performance. These results show that internal social activities are positively significantly related with performance at a significant level of less than 0.1% across all three (ROA, ROS, and Tobin Q). These findings are in the lines of the agency hypothesis. It means that firms those spend more on the welfare of their employees are not only enhance their accounting performance, but also market performance. The effect is swifter in market based measures as compared to accounting based performance measures. It is a fact that external investors are more likely to have an interest in firm having least agency problem. Overall, the strong positive significant relation to long term performance measure as compared to short term performance measures are coherent with the findings of studies such as (Reverte 2009, Waddock and Graves 1997, and Thomas 2009).

Overall, findings of the control variables are similar to the findings of the table V. The R square of models with ROS as dependent variable is stronger (0.3553) as compared to models with ROA (0.163), and Tobin Q (0.2342).

3.3 Environmental Activities and Performance

The findings of the Table 4 analyze the effects of environmental activities on performance. These findings show that firms with higher environmental activities perform better disrespect to the different performance measures such as ROA, ROS, and Tobin Q. The confidence level of ROA model is higher (significance at a level less than 1%) as compared to ROA and Tobin Q model (significance at a level less than 5%).The findings support the hypothesis number three. Similar to our above findings, environmental disclosure enhances the firm value more aggressively in the long term performance measure as compared to short term performance measures, but the spread is small as compared to above Table 4 and Table 5. These results are similar to Deegan and Gordon (1996), Nor *et al.* (2016), and Cormier and Magnan (2013).

Table 4. Impact of CSR disclosure on firm performance

	ROA		ROS		Tobin Q	
Variables	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Constant	.3695**	.1208	-.1983**	.0716	7.2788***	.8000
CSR index	.1454***	.0346	.1198***	.0248	1.0402***	.2895
Leverage	.01425	.05244	-.0414	.0478	-.0498	.5051
Liquidity	.0259	.0164	.0474***	.0083	.2390*	.1082
Firm Size	-.0171*	.0066	.0077	.0041	-.0811	.0491
Growth	.0048	.0026	.0014	.0016	-.0277	.0249
Age	-.0004	.0004	-.0007**	.0002	.0046	.0033
Dirt own	-.0067	.0277	.0281	.0183	-.4872*	.1951
Non-exc Dirt	.0718	.0632	.1103***	.0335	.3949	.3467
CEO Duality	-.0317	.0192	.0126	.0200	-.4000**	.1510
Board meeting	.0002	.0019	.0011	.0015	-.0488**	.0188
Board Size	-.0089*	.0037	-.0016	.0027	-.0486	.0285
Foreign own	.1022	.05327	.0401	.0266	.8167*	.3238
No	355		353		332	
R2	0.1445		0.3573		0.2190	

Note: Standard errors in parentheses: * p<.05, ** p<.01, *** p<.001.

Table 5. Impact of internal social activities on performance

	ROA		ROS		Tobin Q	
Variables	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Constant	.3518**	.1194	-.2119**	.0726	7.1184***	.7985
Internal social index	.1861***	.0330	.1237***	.0257	1.3417***	.3051
Leverage	-.0057	.0513	-.0536	.0500	-.1075	.5050
Liquidity	.0241	.0162	.0452***	.0085	.2274*	.1077
Firm Size	-.0169**	.0064	.0087*	.0041	-.0780	.0483
Growth	.0050	.0027	.0011*	.0015	-.0275	.0375
Age	-.0005	.0004	-.0007**	.0002	.0041	.0033
Dirt own	.0036	.0286	.0229	.0187	-.4653*	.1912
Non-exc Dirt	.0718	.0629	.1066**	.0333	.3840	.3397
CEO Duality	-.0260	.0184	.0146*	.0199	-.3621*	.1507
Board meeting	.0000	.0018	.0009	.0015	-.0512**	.0193
Board Size	-.0083*	.0035	-.0006	.0026	-.0444	.0275
Foreign own	.1003	.0538	.0442	.0279	.7957*	.3117
No	355		353		332	
R2	0.1630		0.3550		0.2342	

Note: Standard errors in parentheses: * p<.05, ** p<.01, *** p<.001.

The relationship of control variables is similar to the above tables. Moreover, this study did not find and significant relationship between environmental disclosure of sensitive industrial and performance. The reason is that sensitive industries have some special rules and regulation which they must have to follow, but non sensitive industries have no special rules. That is why they are failing to create legitimacy in the society. On the other hand, an environmental disclosure for non-sensitive industrial firms is viewed positively from the society that is why investors' reactions toward these firms are more positive. Liquidity, non-executive directors and foreign ownership has a positive significant relationship with performance. Age has a significant, but a negative relationship with short term performance, but not for market value (Tobin Q).

Table 6. Impact of environmental disclosure on firm performance

	ROA		ROS		Tobin Q	
Variables	Coef.	Std. Err	Coef.	Std. Err	Coef.	Std. Err
Constant	.2963**	.1069	-.1820*	.0748	6.9340***	.7898
Environmental index	.1765**	.0593	.0944*	.0371	.9792*	.3804
Env Sensitivity	-.0086	.0237	.0361*	.0178	-.4851*	.2455
SensEnv Dis	-.1031	.0595	-.0250	.0420	-.1155	.4110
Leverage	-.0029	.0524	-.0320	.0480	-.1882	.5248
Liquidity	.0224	.0147	.0508***	.0084	.2127*	.0941
Firm Size	-.0112	.0063	.0060	.0042	-.0373	.0520
Growth	.0040	.0027	.0009	.0020	-.0238	.0332
Age	-.0006	.0005	-.0006*	.0002	.0030	.0035
Dirt own	.0083	.0259	.0188	.0177	-.3446	.2190
Non-exc Dirt	.0846	.0623	.1063**	.0342	.5055	.3578
CEO Duality	-.0393	.0226	.0068	.0200	-.4695**	.1666
Board meeting	.0012	.0018	.0008	.0015	-.0360*	.0178
Board Size	-.0089*	.0038	-.0013	.0028	-.0556	.0294
Foreign own	.0797	.0506	.0548*	.0256	.5949	.3426
No	355		353		332	
R	0.1644		0.3599		0.2448	

Board meeting and firm size have a significant but negative relationship with performance. This result is opposite to the previous studies. The reason is that we have collected top listed firms and previous studies collected overall firms. This table shows that leverage has negative impact on performance because if a firm uses more debt than investors and employees feel hesitation to take connection with firm and firm save expenses for the payment of interest

Conclusion

The objective of this study is to test the nexus between CSR disclosure and performance. Moreover, this study separately tests the relationship among internal social activities, environmental activities and performance. Using the hand collected data of KSE- 100 index non-financial firms from 2009 to 2015. This study finds a positively significant nexus between CSR activities and firm performance using both short term (accounting) measures as well as long term (market based) measure of firm performance. Overall, findings reveal that the relationship is stronger for the market measure as compared to accounting measures. It means that if the firm works according to norms and culture of the society in return society gives its legitimacy.

Furthermore, we find support of the agency theory in Pakistani firms too. Such as, internal social activities enhance the firm performance. These results prove that agency theory also exists because management tries to remove the agency problem by disclosing social information.

Last, this study reports a positive significant effect of environmental disclosure on firm performance. But, this relationship is valid for firms operating in non-sensitive industries. This result also shows that extra environmental disclosure by sensitive industries creates negative impact on firm performance due to additional cost faced by the shareholders. Overall, the findings confirm the existence of the theories discussed in this paper in case of Pakistan.

This study is really helpful for business, investors, and researchers. The findings of the study are almost different from previous studies conducted in developing countries especial Pakistan. Another feature of this study is that it shows a positive relationship between CSR with the firm performance, but previous studies conducted in Pakistan show negative or no relationship.

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