Jinnah Business Review
Jan 2023, Vol. **11**, No. 1, pp. 1-13

Impact of Corporate Social Responsibility Disclosure Reports on Sale Performance: Evidence from Pakistani Non-Financial Firms

K. Saeed*[1], S. Gul[2]

[1] *Bangor University, UK*
[2] *Capital University of Science and Technology, Islamabad, Pakistan*

Abstract. This manuscript investigates how corporate social responsibility disclosure reports impact on firm sales performance. The proxies used for sales performance and corporate social responsibility are return on sales and corporate social responsibility (CSR) disclosure index respectively. Data has been collected from 166 non-financial firms listed on the Pakistan Stock Exchange (PSX) for the period of 11 years from 2009 to 2019. The study has adopted panel data for statistical analysis. The study concluded that the corporate social responsibility (CSR) disclosure index has a significant negative impact on return on sales. Shareholders and agency theory shows that corporate social responsibility (CSR) activities create a financial burden for companies. These theories support this study's results. According to shareholder theory, firms do not operate for society but also for their stakeholder's benefits. The theory also states that companies need to focus on shareholders' wealth maximization instead to invest in corporate social responsibility (CSR). Leverage, gross domestic product, financial development of banks, and foreign direct investment have also a negative impact on return on sales. The financial development of the private sector has a significant positive impact on return on sales. The findings of the study provide fundamental support to corporate managers and policymakers on how they bring improvement in corporate social responsibility (CSR) with the adoption of techniques regarding this study.

Key words: Corporate Social Responsibility, Foreign Direct Investment, Sale Performance, Liquidity.

1 Introduction

The main objective of the study is to investigate the impact of corporate social responsibility disclosure (Abbreviated as CSR onward) on a firm's sales performance. Nowadays CSR has become an important strategy for every organization to raise profit maximization (Calabrese et al., 2016). According to the world business council for sustainable development, corporate social responsibility (CSR) is a promise of a business to take action morally, for economic well-being, workers, and society.

CSR is the activity for the betterment of the organizations to attain ethical values, improve the overall performance of the company, and for the economic development of that country

*Corresponding author.
Email: kiransaeed40@gmail.com

(Mujahid and Abdullah, 2014). According to the world business council for sustainable development, corporate social responsibility (CSR) is a the promise of a business to take action morally, for economic well-being of workers, and society. According to Edwards and Rothbard (2005), an organization needs to look at its environment and social challenges. An important role of business is must be careful about society, the environment, and their products as well. This study helps managers and policymakers to know how they bring improvement in corporate social responsibility (CSR) with the adoption of techniques regarding this study. Study also assists to know that how corporations can increase the profit of their organizations and satisfy their stakeholders.

The corporate social responsibility (CSR) concept was introduced as corporate responsibility in the year 1950. The first time Howard Bowen published a book on corporate social responsibility was in 1953. Now corporate social responsibility is considered an important strategy of business for many organizations (Luo and Bhattacharya, 2006). Milton Friedman wrote in 1970 in New York Times about the significance of corporate social responsibilities in private corporations for the formation of value for shareholders. Nowadays the primary objective of this idea is usually adopted by corporations to fulfill the needs of stakeholders engaged in business activities (Ajala, 1993).

There is a small number of studies that explore the relationship between CSR and sales performance in Pakistan. These studies do not focus on the influence of corporate social responsibilities on return on sales. Does corporate social responsibility (CSR), influence the organization's profitability in a positive, negative, or natural way? It's interesting since these questions somehow puzzle firms which corporate social responsibility and want to balance between a firm's corporate social responsibility and financial performance. Some authors say that there is a positive relationship between a firm's profitability and corporate social responsibility (CSR), whereas some studies show the negative impact of corporate social responsibility (CSR), on firm profitability (Aras et al., 2010). Friedman (2007) shows the negative impact on sales performance and others show the mixed and neutral impact on sales performance (McWilliams and Siegel, 2001). The difference between previous research results allows this study to add new variables to the study. There exists a gap to study the non-financial sectors of Pakistan. This study explores the impact of CSR disclosure on sales performance in the non-financial sector of Pakistan.

Based on legitimacy, stakeholder, and agency theory the aim of the study is, to explain how CSR increases or decreases the firm's sales performance. Several researchers use the legitimacy theory to explore the association between corporate social responsibilities and sales performance. According to the theory a firm can operate in society if it operates according to the value system of society (Gray et al., 1995). Stakeholder theory focuses on stakeholders, theory considers stakeholders as a key component of business that affects businesses. Freeman and Medoff (1984) states that a stakeholder is a group of people who can affect by the objective of the business. After the freeman definition, many researchers further work on this definition.

The study explores the connection between corporate social responsibility reports disclosure and company sales performance. Sales performance is measured by return on sales from the buyer's perspective using the data of Pakistani-listed firms. Return on sales is the proxy of sales performance (Shi et al., 2020).

2 Prior Research and Hypotheses Development

Literature in regards to corporate social responsibility (CSR) is rich with many studies, these studies investigating the relationship among corporations, financial performance, profitability of the firms and Corporate Social Responsibility exercises of the businesses e.g., (Friedman, 2007; Nelling and Webb, 2009). However, as per quantitative studies considers it is revealed that there is agitated proof of the relationship between CSR and corporations' profitability.

There exists a negative impact of CSR on return on sales. According to Friedman (2007), a firm should not waste its resources on corporate social responsibility (CSR), and he argues that the company should maximize profit for the shareholders because shareholders demand a return. A firm should maximize profits for good efficiency and the satisfaction of shareholders. Friedman states agency theory, that firms do not waste resources on corporate social responsibility (CSR) because we can use these resources in another way to maximize profit and wealth. According to agency theory corporate social responsibility negatively affect performance. Nelling and Webb (2009) applied a fixed-effect model by using time series data revealed that there is no relationship between CSR and financial performance.

Aupperle et al. (1985) confirmed that profitability is negatively related to a firm's financial performance, and CSR. The cost of a firm increases by investing in CSR activities that are not socially responsible and also a financial burden for the company. This study results supports the result of my study that CSR negatively impact on return on sales. Many researchers study corporate social responsibilities which are different from each other since 1950s. Research conducted in the UK on the topic of CSR, profitability, and productivity. The result shows that there is no significant association between corporate performance and CSR.

Jiao and Xie (2013) revealed that a firm can more invest in corporate social responsibility (CSR), activities not only for generating more profit for shareholders but also for the benefit of other stakeholders e.g. customers, employees general public, and society. They try to explore the relationship between corporate social responsibility (CSR) and profitability. The authors used a single case study method to handle both qualitative and quantitative analysis of data and found that there is no clear relationship between CSR and the profitability of firms in the last five years. They found that corporate social responsibility (CSR), activities are negatively related to profitability.

Some studies state that there is no relation between CSR and performance (McWilliams and Siegel, 2001). They said that corporate social responsibility (CSR) just a quality of a firm like other qualities and a firm uses this quality for the maximization of performance. Aupperle et al. (1985) revealed that there is no relation among CSR and performance. According to Carroll (2016), if corporate social responsibility (CSR) is not beneficial for the company, it also not harmful for the company. Aras et al. (2010) proved that a connection exists among size of firm and CSR but not among corporate social responsibility and firms financial performance. Nelling and Webb (2009) studied that by using statistical techniques then there was a relationship among the variables but when fixed-effect model is used then the relationship was weaker, they state the corporate social responsibilities do not affect the financial performance.

According to earlier researches, the financial performance of a firm rises when a company follow corporate social responsibility activity but according to Tobin's financial performance is reduced when ROA and ROE are used (DiSegni et al., 2015). ROE and ROA are the proxies of short-term profitability that are used in earlier studies (Kaul and Luo, 2018).

Hu et al. (2021), conducted a study on the value appropriation of manufacturing companies that use internet technology. During Covid-19 export manufacturing companies have laid-off employees and dealt with value appropriation problems and also survival problems resulting in serious corporate social responsibility (CSR) challenges around the world especially in developing countries. While some studies discuss the relevant problem in non-western countries, authors adopt overall world perspective of transaction cost theory and business model to fill the gap by investing in different dimensions of CSR execution, firm performance. They take a sample of Chinese listed manufacturing companies; the result of the study shows that the CSR dimension is negatively related to the performance of the firms.

A study was conducted on the food sector of the Karachi stock exchange for the period of four years from 2002 to 2006. The study used the multivariate regression analysis and concludes that their exist is a negative relationship of size on firm's productivity Bhutta and Hasan (2013). A study conducted in Malaysia from the time period of 2012 to 2014 with a sample size of 120 firms associates the impact of firm size on profitability (Alarussi and Alhaderi, 2018).

Agency theory is clarified by Jensen (1976), who identified that disclosing information in reports minimizes the agency cost. An agency relationship is a relation among agent and principle and agency cost arises when conflict exists between agents and principle interest. Agency theory helps to reduce the agency conflicts among shareholders (principal) and managers (agents). According to agency theory firm should work for shareholders' interest and for-profit maximization, the firm should not waste resources for social purposes. Managers use shareholders' resources for corporate social responsibility (CSR). From the social viewpoint resources that spend on corporate social responsibility (CSR) would be more sensibly spent for the firm efficiency. Agency costs can be reduced by setting a contract between top management and shareholders (Solomon, 2020).

The difference between previous research results allows this study to add new variables in the study. Previous studies used inflation, interest rate, and unemployment rate as macroeconomic variables to check the impact on return on sales. This study uses gross domestic product, foreign direct investment, and financial development of banks and private sector as macroeconomic variables to check the impact on return on sales (Klasing Chen et al., 2015). Szegedi et al. (2020) examine the impact of CSR on ROE, ROA to measure the accounting base financial performance of the Pakistani listed banking sector. There exists a gap to study the non-financial sectors of Pakistan. This study explores the impact of CSR disclosure on sales performance on non-financial sector of Pakistan.

Based on the above-given arguments, the following hypotheses are formulated:

- *[H_1:] There is a significant negative impact of CSR on sales performance.*
- *[H_2:] There is a positive or negative impact of leverage on sales performance.*
- *[H_3:] There is a significant positive impact of liquidity on sales performance.*
- *[H_4:] There is a positive or negative impact of size on sales performance.*
- *[H_5:] There is a positive impact of the gross domestic product on sales performance.*
- *[H_6:] Financial development of banks negatively impacts sales performance.*
- *[H_7:] There is a positive impact of financial development of private sector on sales performance.*
- *[H_8:] Foreign direct investment negatively impacts sales performance.*

3 Data Description and Methodology

3.1 Population and Sample

Non-financial firms which are listed on the Pakistan stock exchange all are taken as a population. The sample size used in this study is 166 non-financial companies listed on PSX from the period 2009 to 2019.The collection of data is based on the availability of data of non-financial firms listed on the Pakistan stock exchange. Data related to CSR disclosure is available only for some of these specific companies. During the selection of data companies with missing observations were excluded from the sample and including those firms which provide complete information related to the study is part of this work. To estimate the degree of CSR disclosure in yearly reports, a checklist containing 20 items was adopted from Haniffa (2002) and Cooke (2005) to modify the checklist and includes the items which are significant to Pakistani firms.

3.2 Econometric Model

The panel regression model has been used for testing the study hypotheses. Return on sales is the dependent variable in regressions. The following econometric model has been used to check the impact of the CSR disclosure index and other explanatory variables on return on sales.

$$\gamma_{it} = \text{fi}_0 + \sum_{i=1}^{n} \text{fi}_\text{i} \ \chi_\text{i} \ + \ {''}_\text{it}$$

$$ROS_{it} = \text{fi}_0 + \beta_1 CSRDI_i + \beta_2 LEV_{it} + \beta_3 LIQ_{it} + \beta_4 SIZE_{it} + \beta_5 LGDP_t$$

$$+\beta_6 LFDB_t + \beta_7 LFDT_t + \beta_8 LFDPS_t + {''}_\text{it}$$

Sales performance is the dependent variable, as measured by return on sales (ROS) in this study. Yan et al. (2020), also used return on sales as a proxy of sales performance. ROS is calculated as a ratio of operating income to total sales. Independent variables are the corporate social responsibility disclosure index (CSRDI). Disclosure index is the quantification of disclosure level in company annual reports. CSR disclosure index is a good proxy for the voluntary disclosure level provided by a company (Botosan, 1997). Annual reports are the main source of corporate information. A dichotomous approach is applied if every item in the research instrument-rated 1 if CSR disclosed and 0 if not disclosed. A score of each item was added to obtain the overall score of each firm. CSRDI calculation formula is as follow:

$$CSRDIj = \frac{\Sigma \text{Xij}}{\text{nj}}$$

X_{ij}: dummy variable; 1= if item i was disclosed; 0 = if item i was not disclosed.

Liquidity (LIQ) is measured by a current ratio (CR) in this study. LIQ is calculated by the Current Ratio (Current Asset divided by Current Liabilities). LEV which represents leverage, calculate by total debt divided by total assets. Size is calculated by the natural log of total assets. LFDPS represents Log of financial development of the private sector, LFDB represents the log of financial development of banks, LFDI represents Log of foreign direct investment and LGDP which is a log of gross domestic product.

4 Results and Discussion

To examine the impact of corporate social responsibility, leverage, liquidity, size, gross domestic product, foreign direct investment, financial development of the private sector, and financial development of banks on return on sales, a sample was taken out from non-financial sector which is registered on Pakistan Stock Exchange.

4.1 Descriptive Statistics

Descriptive statistics define data in a meaningful system. It tells about minimum value, maximum value, mean value, median value, and standard deviation of the data. It also describes skewness and kurtosis of data. Descriptive results for dependent variable return on sales and explanatory variables; corporate social responsibility disclosure index, size, financial development of banks, foreign direct investment, financial development of the private sector, and gross domestic product have been explained in following table.

Table 4.1: Descriptive Statistics

Variables	Mean	Median	Max	Min	Std. Dev	Skewness	Kurtosis
ROS	0.085	0.051	0.953	1.00E-05	0.110	3.141	16.7
CSRDI	0.609	0.051	3.014	0.000	0.607	1.288	4.117
LEV	0.517	0.531	0.903	0 .031	0.195	-0.239	2.200
LIQ	0.046	0.013	0.580	0.0002	0.078	3.06	14.176
SIZE	15.762	15.579	20.256	12.575	1.475	0.343	2.737
LFDB	2.858	2.82	3.12	2.73	0.128	1.031	2.643
LFDI	-0.289	-0.26	0.33	-0.96	0.360	-0.062	2.479
LFDPS	2.863	2.83	3.12	2.73	0.126	0.987	2.595
LGDP	6.953	6.94	7.09	6.9	0.053	0.550	1.897

Note: The dependent variable is sales performance which is measured by ROS and the independent variable is corporate social responsibilities disclosure index (CSRDI), Liquidity (LIQ), leverage (LEV), size, LFDPS represent Log of financial development of the private sector, LFDB represents the log of financial development of banks, LFDI represents Log of foreign direct investment, and LGDP which is a log of gross domestic product, are other explanatory variables.

The above table describes the descriptive statistics of all variables that are used in this study, the mean value of return on sales is 0.085, its mean firms earn an average of 8.5% on sales. The median value is 0.051 and the standard deviation is 0.110. Return on sales is used as a proxy of sales performance. The minimum and maximum values of return on sales are 0.000015 and 0.953. Skewness and kurtosis are 3.141 and 16.7.

The mean value of the corporate social responsibility disclosure index is 0.609, the median value is 0.051 and the standard deviation is 0.607. The minimum and maximum values of the corporate social responsibility disclosure index are 0.000 and 3.014. Skewness and kurtosis are 1.288 and 4.117.

The mean value of leverage is 0.517 which means the company uses 51% debt, the median value is 0.531 and the standard deviation is 0.195. Minimum and maximum value is 0.031 and 0.903. Skewness and kurtosis value is -0.239 and 2.200. Minimum and maximum value of liquidity is 0.0002and 0.580. The mean value is 0.046, median value is 0.013 and standard deviation is 0.078. Skewness and kurtosis value is 3.06 and 14.176. Mean value of size is 15.762, median value is 15.579 and standard deviation is 1.475. Minimum and maximum value is 12.575 and 20.256. Skewness and kurtosis value is 0.343 and 2.737.

The mean value of the log of financial development of banks is 2.858, median value is 2.82 and the standard deviation is 0.128. Minimum and maximum value is 2.73 and 3.12. Skewness and kurtosis value is 1.031 and 2.643. The mean value of the foreign direct investment is -0.289, median value is -0.26 and standard deviation is 0.360. Minimum and maximum value is -0.96 and 0.33. Skewness and kurtosis value is -0.062 and 2.479.

The mean value of financial development of private sectors is 2.863, median value is 2.83 and standard deviation is 0.126. Minimum and maximum value is 2.73 and 3.12. Skewness and kurtosis value is 0.987 and 2.595.The mean value of gross domestic product is 6.953, median value is 6.94 and standard deviation is 0.053. Minimum and maximum value is 6.9 and 7.09. Skewness and kurtosis value is 0.550 and 1.897.

4.2 Correlation-Matrix Analysis

To check the potency of the relationship among independent and dependent variables correlation analysis is done. In Table 2 correlation analysis is done and analysis tells about association among dependent and independent variables and also between independent variables.

Correlation tells about the association between the variables. It tells about variables that are strongly or weekly correlated with each other. Return on sales is negatively correlated with CSRDI (-0.022), which means when the corporate social responsibilities increase then return on sales will decrease.

Liquidity and return on sales are negatively correlated with each other. Liquidity is negatively correlated to return on sales (-0.021).This indicates that when liquidity decreases then return on sales will increase because firms having low liquidity earn more profit. Liquidity means firms can pay their short-term obligations. Firms with low liquidity earn a high profit because they meet their obligations timely. Leverage is negatively correlated to return on sales (-0.028). This means when leverage decreases return on sales will be increased. Because high performing firms use their internal resources first then go for external resources. Firms that finance low debt earn more profit. Size is positively correlated to return on sales (0.160) it means both are move in the same direction. When size of the firm increases return on sales will also increase. Large firms have more return on their sales so company profitability increases. The financial development of banks is positively correlated to return on sales (0.270). The financial development of the private sector is positively correlated to return on sales (0.277). Foreign direct investment is negatively correlated to return on sales (-0.025). Gross domestic product is positively correlated to return on sales (0.418).

Liquidity is positively correlated with corporate social responsibility disclosure index (0.266). When liquidity increase then corporate social responsibilities disclosure index will also increase. Leverage is negatively correlated to corporate social responsibility disclosure index (-0.089). Size is positively correlated with corporate social responsibility disclosure index (0.533). Larger firms disclose more social responsibilities than smaller firms. Corporate social responsibility disclosure index is negatively correlated with financial development of banks (-0.162). Foreign direct

Table 4.2: Correlation Analysis

Variables:	**ROS**	**CSRDI**	**LIQ**	**LEV**	**SIZE**	**LFDB**	**LFDI**	**LFDPS**	**LGDP**
ROS	1								
CSRDI	-0.022	1							
LIQ	-0.021	0.266	1						
LEV	-0.028	0.089	0.193	1					
SIZE	0.160	0.533	0.089	0.025	1				
LFDB	0.270	-0.162	0.005	0.127	-0.127	1			
LFDI	-0.024	-0.061	0.031	0.026	-0.049	0.674	1		
LFDPS	0.276	0.163	0.033	0.129	-0.127	0.590	0.66011	1	
LGDP	0.418	0.181	0.024	-0.158	0.151	-0.555	0.030	-0.565	1

Note: The dependent variable is sales performance which is measured by ROS and the independent variable is corporate social responsibilities disclosure index (CSRDI), liquidity (LIQ), leverage (LEV), size, LFDPS represent Log of financial development of private sector, LFDB represent log of financial development of banks, LFDI represent Log of foreign direct investment and LGDP which is log of gross domestic product, are other explanatory variables.

investment negatively correlated with corporate social responsibility disclosure index (-0.061). Financial development of private sector is negatively correlated with corporate social responsibility disclosure index (-0.163). Gross domestic product is positively correlated to corporate social responsibility disclosure index (0.181).

Leverage is negatively related to liquidity (-0.193). Size is positively correlated with liquidity (0.089). Financial development of banks positively correlated with liquidity (0.005). Financial development of private sector is positively correlated with liquidity (0.033). Foreign direct investment is positively correlated with liquidity (0.031). Gross domestic product is positively correlated with liquidity (0.024).

Size is positively correlated with leverage (0.025). Financial development of private sector is positively correlated with leverage (0.129). Financial development of banks is positively correlated with leverage (0.127). Leverage is positively correlated with foreign direct investment with (0.026).). Leverage is negatively correlated with gross domestic product with (-0.158).

The financial development of private sector is negatively correlated with size (-0.127). Financial development of banks is negatively correlated with size (-0.127). Gross domestic product is positively correlated with size (0.151). Foreign direct investment is negatively correlated with size (-0.049).

Foreign direct investment is positively related with financial development of banks (0.674). Financial development of private sector is positively correlated with financial development of banks (0.590). Gross domestic product is negatively correlated with financial development of banks (-0.555). Foreign direct investment is positively correlated with financial development of private sector (0.660). Foreign direct investment is positively correlated with gross domestic product (0.030). Financial development of private sector is negatively correlated with gross domestic product (-0.565).

4.3 Regression Analysis

Regression analysis is formulated to understand the effect of explanatory variables on sales performance. These results have been applied to understand the impact of CSR and other explanatory variables on firm sales performance. In Table 3 regression analysis has been done.

4.4 Common Effect Model

Table 4.3: Impact of Corporate Social Responsibility Disclosure Index on Return on Sales (CCM)

Variable	Coefficient	Std. Error	T-Statistic	P-value	Sig.
C	3.938	0.641	6.143	0.000	(***)
CSRDI	-0.016	0.005	-3.096	0.002	(***)
LEV	-0.073	0.014	-5.339	0.000	(***)
LIQ	-0.049	0.035	-1.407	0.160	
SIZE	0.0213	0.002	10.299	0.000	(***)
LFDB	-0.933	0.662	-1.409	0.159	
LFDI	-0.039	0.014	-2.800	0.005	(***)
LFDPS	1.133	0.662	1.712	0.087	(*)
LGDP	0.680	0.077	-8.777	0.000	(***)
R-squared		0.259	Observations		1374
F-statistic		59.674	Prob. (F-statistic)		0.000

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.1$

4.5 Redundant Effect Model

Likelihood Ratio test is used to check which model is appropriate between fixed effect and random effect for the analysis.

Table 4.4: Likelihood Ratio Test

Effects Test	Statistics	d.f	Prob.
Cross-section F	5.76	(1631202)	0.000
Cross-section chi-square	793.14	163	0.000

A result of likelihood test is significant, P-Value < 0.05 it mean fixed effect model will be appropriate.

4.6 Hausman Test

Random effect test is used to check which method is best for study; probability is significant which shows that fixed effect model appropriate for the study.

Table 4.5: Hausman Test

Test Summary	Chi-sq. Statistics	Chi-sq. d.f.	Prob.
Cross-section random	18.686697	8	0.0166

Results of Hausman test is significant, P-Value ¡ 0.05 it also indicates that fixed effect model will be appropriate.

4.7 Fixed Effect Model and Random Effect Model

The random effect test and redundant effect test shows that the fixed effect model is appropriate for the study. The main objective of result discussion is to ensure that study results are whether consistent with other previous studies.

There is a negative impact of CSR on return on sale which indicates that when corporate social responsibility to decrease firm return on sales will increase. Agency theory and shareholder's theory describe that CSR is a financial burden for corporations and this type of activity is wastage of resources. It means the firm cannot waste its resources on corporate social responsibility but should focus on stockholders' interest within the framework of the society's demand. Investors demand high returns and say that firms should focus on profit maximization, not on corporate social responsibilities. The results of the study are also consistent with the results of (Friedman, 2007).

There is a significant negative impact of leverage on return on sales. This negative impact was supported by the pecking order theory, which state that firm should use their internal resources to finance their assets first, and when firms internal resources is insufficient and there is no other option than firms should use external resources to finance their assets. Based on this pecking order theory high performing firms use low debt levels in their capital structure as compared to other firms. There is a significant and positive impact of gross domestic product and financial development of private sector on return on sales. There is a significant negative impact of financial development of banks and foreign direct investment on return on sales. The R-squared value explains that 58.4% variation occurred in sales performance (dependent variable) is explained by independent variables corporate social responsibility (CSR).

5 Conclusion

This study has been conducted to examine the relationship among sales performance and corporate social responsibility disclosure index of 166 non-financial firms listed on the Pakistan stock exchange during the time period of 2009 to 2019. Firm sales performance is measured with return on sales. The main purpose of the study is to investigate the impact of CSR disclosure on sales performance under empirical validity of theories in developing country Pakistan. These theories contain stakeholder theory, legitimacy theory, and agency theory, to check the impact

Table 4.6: Effect of CSRDI on Return on Sales (FEM, REM)

	Fixed Effect			Random Effect		
Variables	**Coefficient**	**t-Statistic**	**Prob.**	**Coefficient**	**t-Statistic**	**Prob.**
C	3.723	7.069	0.000	3.931	7.600	0.000
CSRDI	-0.018 **	-1.952	0.051	-0.020 ***	-2.793	0.005
LEV	-0.047 *	-1.909	0.057	-0.065 ***	-3.489	0.001
LIQ	0.053	1.146	0.252	0.012	0.295	0.768
SIZE	-0.003	-0.314	0.754	0.020 ***	5.512	0.000
LGDP	0.593 ***	-8.233	0.000	0.918	-1.730	0.084
LFDB	-1.019 *	-1.915	0.056	-0.042 ***	-3.807	0.000
LFDI	-0.045 ***	-4.031	0.000	1.118 **	2.108	0.035
LFDPS	1.209 **	2.273	0.023	-0.676 ***	-10.658	0.000
R-Squared			0.584			0.299
Adj. R-Squ			0.524			0.295
F-Statistics			9.869			72.698
Prob-F-stat.			0.000			0.000

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.1$

of CSR on sales performance. Past studies have explained more about corporate social responsibility disclosure but no one uses corporate social responsibility disclosure impact on return on sales in Pakistani non-financial firms. Research contains descriptive statistics which describe the data, it tells about mean, median, maximum value, and minimum value of data; also about the standard deviation of data. Correlation is used to reveal how strongly variables are related to each other. Panel data regression is applied in which the fixed-effect method is used as a final model for statistical analysis. Study use sales performance as a dependent variable which is measured by return on sales and CSR disclosure as an independent variable. Leverage, liquidity, size, financial development of banks and private sector, GDP, and FDI all are included in the study to find the impact on sales performance.

This study found a significant but negative association between corporate social responsibility and return on sales. It reveals that social responsibility is a cost for the firms and stakeholders' demand for high profit. So, when corporate social responsibilities will increase that return on sales will move in the opposite direction. The study also revealed a significant negative relationship of leverage on return on sales. A firm that is high in leverage tends to be low in profits. Foreign direct investment, Gross domestic product, and financial development of banks have a significant negative impact on return on sales. The financial development of the private sector is significantly positively correlated to return on sales. Size and liquidity are not significantly related to return on sales.

The limitation of this study is regarding data collection, variables specification, and determinants used in this study. There is a limitation regarding model specification in terms of not involving all possible elements regarding corporate social responsibility disclosure. Based on the above results there are some recommendations for future work. Large sample size should be included instead of focusing on the non-financial sector of the Pakistan stock exchange. This study only uses corporate social responsibilities disclosure for exploring the effect on sales performance, the future study can include some other variables also which can affect sales. This experimental research in the Pakistani non-financial sector will inspire future researchers in inventions in research in this area and can also apply to other areas.

References

Ajala, V. O. (1993). *Public relations: In search of professional excellence*. Afrika-Link Books.

Alarussi, A. S. and Alhaderi, S. M. (2018). Factors affecting profitability in malaysia. *Journal of Economic Studies*.

Aras, G., Aybars, A., and Kutlu, O. (2010). Managing corporate performance: Investigating the relationship between corporate social responsibility and financial performance in emerging markets. *International Journal of productivity and Performance management*.

Aupperle, K. E., Carroll, A. B., and Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of management Journal*, 28(2):446–463.

Bhutta, N. T. and Hasan, A. (2013). Impact of firm specific factors on profitability of firms in food sector.

Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *Accounting review*, pages 323–349.

Calabrese, A., Costa, R., and Rosati, F. (2016). Gender differences in customer expectations and perceptions of corporate social responsibility. *Journal of Cleaner Production*, 116:135–149.

Carroll, A. B. (2016). Carroll's pyramid of csr: taking another look. *International journal of corporate social responsibility*, 1(1):1–8.

Cooke, P. (2005). Regionally asymmetric knowledge capabilities and open innovation: Exploring 'globalisation 2'—a new model of industry organisation. *Research policy*, 34(8):1128–1149.

DiSegni, D. M., Huly, M., and Akron, S. (2015). Corporate social responsibility, environmental leadership and financial performance. *Social Responsibility Journal*.

Edwards, J. R. and Rothbard, N. P. (2005). *Work and Family Stress and Well-Being: An Integrative Model of Person-Environment Fit Within and Between the Work and Family Domains.* Lawrence Erlbaum Associates Publishers.

Freeman, R. B. and Medoff, J. L. (1984). What do unions do. *Indus. & Lab. Rel. Rev.*, 38:244.

Friedman, M. (2007). The social responsibility of business is to increase its profits. pages 173–178.

Gray, R., Kouhy, R., and Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of uk disclosure. *Accounting, Auditing & Accountability Journal*.

Haniffa, R. (2002). Social reporting disclosure: An islamic perspective. *Indonesian Management & Accounting Research*, 1(2):128–146.

Hu, Q., Zhu, T., Lin, C.-L., Chen, T., and Chin, T. (2021). Corporate social responsibility and firm performance in china's manufacturing: A global perspective of business models. *Sustainability*, 13(4):2388.

Jensen, M. C. (1976). Reflections on the state of accounting research and the regulation of accounting.

Jiao, Y. and Xie, W. (2013). How does csr influence a firm's profitability?:-a case study of sandvik.

Kaul, A. and Luo, J. (2018). An economic case for csr: T he comparative efficiency of for-profit firms in meeting consumer demand for social goods. *Strategic Management Journal*, 39(6):1650–1677.

Klasing Chen, M., Hooge, S., and Segrestin, B. (2015). Creating value for everyone–when product design crafts ecosystem regulations. Technical report, HAL.

Luo, X. and Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of marketing*, 70(4):1–18.

McWilliams, A. and Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of management review*, 26(1):117–127.

Mujahid, M. and Abdullah, A. (2014). Impact of corporate social responsibility on firms financial performance and shareholders wealth. *European Journal of Business and Management*, 6(31):181–187.

Nelling, E. and Webb, E. (2009). Corporate social responsibility and financial performance: the "virtuous circle" revisited. *Review of Quantitative finance and accounting*, 32(2):197–209.

Shi, Y., Wu, J., and Zhang, Y. (2020). Corporate social responsibility in supply chain: Green or greenwashing? *Available at SSRN 3700310*.

Solomon, J. (2020). *Corporate governance and accountability*. John Wiley & Sons.

Szegedi, K., Khan, Y., and Lentner, C. (2020). Corporate social responsibility and financial performance: Evidence from pakistani listed banks. *Sustainability*, 12(10):4080.

Yan, J., Zheng, Y., Bao, J., Lu, C., Jiang, Y., Yang, Z., and Feng, C. (2020). How to improve new product performance through customer relationship management and product development management: evidence from china. *Journal of Business & Industrial Marketing*, 36(1):31–47.