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Impact of Corporate Social Responsibility on Financial Distress, a Case of Non-Financial Listed Firms in Pakistan

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Abstract

The purpose of this study is to examine the impacts of corporate social responsibility on financial distress of non-financial Pakistani listed firms. To validate this association, a sample of 100 non-financial Pakistani listed firms has been taken for the period of 2015 to 2019 by using correlation matrix, panel regression analyses. The proxy variables for CSR is CSR investment in terms of donations, Workers welfare fund (WWF), salaries and wages. Altman Z-score model is used to measure financial distress of non-financial Pakistani listed firms. Firm size and firm age are used as control variables in the study. Based on 100 non-financial listed firms, this study found that there is negative relationship between CSR practices and financial distress (FD) level. It means that those firms who perform CSR practices in their business activities having little chances to go into FD situation of non-financial firms in Pakistan.

Keywords: *Corporate Social Responsibility, Financial Distress, Altman Z-Score Model, Non-Financial Firms.*

Introduction

In the concept of finance, the maximization of profit and shareholder wealth is the main objective of the organization (Arnold & Valentin, 2013). This principal objective of organization focuses the shareholder interests, but now a day's business activities, stakeholders are not only focusing on the financial activities of the organization, but they also have non-financial interests in business activities such as community development, environmental protection, social welfare and charitable activities for deserving people of the society. Khan et al., (2019) argued that activities on trust base can keep strong relationship with various stakeholder and customer that can lead to increase market share and reputation of the company. Apart from this Abdullah & Khan (2019) studied that the people of societies expected that firms must play a significant rule in the society. It must help the people of society and society rather than their traditional rules such that production of goods and services for profit maximization. Gupta and Pirsch (2008) reported that economic

and non-economic activities of the firm are necessary for the success and survival of any organization in the market, which should be concern to stakeholders (Ali, Shah & Khattak; 2020).

Sohail et al., (2019) studied that investment in CSR practices should not be treated as expenses, but it should be treated as long term future investments because on these investments firms can gain reputation and goodwill in the competitive environments, which bring results higher financial benefits. Orlitzky, Schmidt, and Rynes (2003) have also keep up this concept that CSR practices should be treated as investments. Friedman (2007) gave his perspective that an organization should not follow CSR practices because these practices is only unnecessary expenses and out of scope of profit making organization. He further argued that CSR practices should be followed in that manners, if it should increase long term profit maximization. Aim of this study is to examine the role of CSR practices on financial distress (FD) of non-financial firms listed in Pakistan.

The development and implementations of CSR strategies is challenging issues for today's businesses and corporations (Rasheed, Arshed, Malik, & Mahmood, 2018). In today's business firms and organization is required to gain competitive advantages on their competitors to gain power and influences in the market and to fulfill the stakeholders needs and expectations (Iqbal, Ahmad, & Kanwal, 2013). Consequently, to increase dominance and influences in the market, a firm faces new challenges and issues to manage the financial resources of the firms in a way that not only enhance the financial efficiency of the firms but also fulfill the societal and environmental demands (Fauzi & Idris, 2009).

This study mainly focuses on the impact of CSR practices on financial distress (FD) of non-financial firms listed in Pakistan. The idea of CSR in Pakistan is not much familiar and develops, as the developing nation only focusing on the profit maximization. Moreover, in Pakistan there are few financial and non-financial firms that having their own CSR policies, from these companies most of the firms are multinational. So, the concept of CSR in Pakistan is in premature stage and still more work is required on this concept (Mujahid & Abdullah, 2014; Ghalib, Ali, M. D., & Shah, (2019). Therefore, this study tries to investigate the relationship between CSR practices and financial distress of non-financial firms in Pakistan.

Main Objectives

These studies consider all financial and non-financial firms in Pakistan as population. These study select top 100 CSR non-financial firms in Pakistan as sample on the basis of convenient sampling for the period of 2015-2019 from the population. Thus the total firms-years observation of this study is 500. Data is gathered from the main websites of non-financial firms in Pakistan, annual reports and financial statements of non-financials firms for the period of 2015-2019.

This study measure CSR practices through CSR investments in terms of donation, WWF, salaries, wages and other benefits as independent variables while FD level measure through Altman Z-score model. Size and age of the firms are used as control variables of non-financial firms in Pakistan for the period of 2015-2019. Panel data is used which is secondary in nature. Panel data models are used specifically common effect model.

Review of Literature

This part of the study presents theoretical and empirical literature about CSR and FD that has been published in the last couple of years. The CSR practices, FD are important concepts in the business and academic world. These concepts are studied and investigated regularly in academia and as a result a substantial international literature was found for further study. Based on these literatures, this study considers evaluating the effects of CSR practices on FD of financial and non-financial firms in Pakistan.

Corporate Social Responsibility

Davis (1960) stated that CSR is an "all those business activities and decisions made by business managers to assist the community rather than financial and technical interest. These actions not only asses the organization but also help the society.

Carroll (1999) was the prominent scholar who calculated four category of CSR consisting ethical responsibility, economical responsibility, legal responsibilities and discretionary responsibility. Carroll (1999) stated that the selection and choosing of corporate social performance by management and administration must follow the criteria that gave an accurate and concise explanation of how, why, where and in what technique the stakeholders and owners of the firm are connected to social behavior and responsibility.

Determinants of Corporate Social Responsibility

Education

This indicator reveals that how much is paid by the financial and non-financial firms for welfare of the people of the society and for their employees who cannot support their education charges. Education is come under CSR practices and considers one of the factors of CSR. An organization is required to take this factor into consideration because of this factor the firms gain reputation and Good-will in the society. (Iqbal et al., 2013).

Health

This factor reveals that how much is paid by the financial and non-financial firms for the betterment of health of the people of the society and for their internal employees of the organization. Financial and non-financial firms offered different amount in forms of donation for the betterment of health facilities in different hospitals of the country. (Iqbal et al., 2013; Reayat, N., Shah, A. U. M., & Ali, M. D,2020).

Donation

Firms provide amount in the form of donation to the people of society that is affected due to natural disasters like flood, earthquake and other catastrophic conditions. These are charitable activities from a person or organization which is given to needy people or society. It is in the form of cash, offering of services, new or old goods like clothes, foods, shelters etc. (Iqbal et al., 2013).

Workers Welfare Fund

This ministry was founded under workers welfare ordinance (WWO). It main objective is to provide different schemes to government employees of the country. These schemes include residential schemes, health care grants, promote education to provide scholarships, marriage grants and death grants etc. the purpose of this body is to promote living standard of the government employees in the country (Khan et al., 2013).

Salaries and Wages

Kayode, Adeyinka, and Abiodun (2019) stated that salary is paid to employees at regular interval usually at the end of the month on the basis of their work and position in the organization. Salaried person are skillful and well-educated. On the other hand wages are paid on daily basis or in hourly base. Waged person are not educated, skillful.

Financial Distress

Financial Distress is a general phenomenon but it is widely used in the research society. Different definition emerged about this concept. Most common corporate financial distress include bankruptcy, insolvency, default and failure (E. Altman & Hotchkiss, 2006). Several definition defined by researchers on the basis of these factors.

Platt and Platt (2002) describe FD condition arises due to weak credit rating and cause business failure and damaging results in last phase. According to Zmijewski (1984) distress firms are simply those firms which fill a petition for bankruptcy. McKee(2007) further suggested that various events can happen before business failure. It may include insufficient income which cannot cover cost, unsatisfactory liquid assets, reduction in sale, risky investments by the managers and mostly cash flow problems of the company. These factors categories the firms to go into distress situation.

FD situation of the firms arises due to different conditions. It may include capital cost growth, low credit ratings and depletion in accesses in external funding sources. In common when business mangers undertake riskier investments and projects, it reveals the business failure and distress situation of the business (Edwards, Owusu-Manu, Baiden, Badu, & Love, 2017; Khan, M. N., Alam, A., Shah, S. A. A., Ilyas, M., & Ali, M. D, 2018).

Corporate Social Responsibility and Financial Distress

Amaral (2020) examined the association between CSR and FD between 2007 and 2017 in a Southern European context. To determine this association, ESG (Environmental, Social and Governance) Scores are used as proxies for CSR performance, while three different measures are employed in representation of FD levels, including Altman-Z Score model. In this study they selected 115 listed European companies. They used correlation and regression analysis to evaluate this relationship. After analysis the data they found that those firms who have high investments in CSR activities are less likely to goes into bankruptcy situation.

Dumitrescu, El Hefnawy, and Zakriya (2020) studied the effects of CSR practices on FD risk in US listed companies for the period of 1991 to 2015. In his study they used different model to obtain the desired results. They used firstly OLS regression to get the primary objective of the study and then apply firm FEM to control for any indistinct time in different firm characteristics. The outcomes showed that high investment in CSR practices can significantly reduce FD risk of European listed companies.

Al-Hadi et al., (2019) examined the linkage between CSR and FD of Australian listed firms from the period of 2007 to 2013. They used Firms life cycle stages as moderating factors to evaluate this association. In his study they used OLS simple regression model. Results of the analysis indicate that investment in positive CSR practices can reduced FD risk of the Australian publically listed firms.

Samet, Mouakhar, and Jarboui (2018) investigated the connection between CSR activities and FD in European countries listed in the STOXX Europe 600 during 2009 to 2014 using panel co-integration and Granger causality approach. The result of this approach showed that the firms performing CSR activities showed lower degree of financial constraints.

Adinata (2019) found the experimental evidence of the association between CSR expenditure and financially distressed of Indonesian's manufacturing public company listed on BEI during 2014 to 2016. For analyzing the data, they used linearity test, normality test and test for autocorrelation. After analyzing the data, they found that S.D of CSR expense increases the financial performance of a firm to be a FD by 1.2%. However, it is proven that from the value of 45.1% that CSR expenses and firm reputation have positive association.

Safieddine (2017) analyzed the association between CSR policies and CFD of Bangladesh listed firms for the period of 2010 to 2015. They used different annual reports of financial firms for collection of data. In this study CFP and change in financial performance level is used as mediating factors to find the relationship of these variables. Different statistical techniques and tools are used for analysis of the data. The outcomes of the study showed that CSR significantly reduced the distress risk in the organization.

Banerjee, Gupta, and Mudalige (2020) carried out a study in order to investigate the CSR strategies on financial distress level in Kenyan manufacturing companies for the session of 2000 to 2015. They argued that CSR practices could significantly mitigate FD level of manufacturing companies. The outcomes of the study indicated that both moral and social components of CSR dimension can effectively reduce distress level Kenyan manufacturing companies.

E. I. Altman et al., (2017) evaluate the z-score model and their classification in the business. Their goal is to evaluate the usefulness of z-score model in predicting bankruptcy and distress level in different firms especially in banks. They used Z-score model adopted by Altman in 1968. Using this model they predict the distress firms and gave direction to investors to avoid from manufacturing distress firm in terms of investments. On the other hand z-score model of prediction default of business is not efficient to predict bankruptcy of business. For this purpose time hazard model and market-based ratio are used to predict bankruptcy. Few literatures suggest that Z-Score models are very structured to predict failure of any business. These studies suggest that Z-score model is very accurate and to predict bankruptcy in different firms in the world.

Ally and Bwana (2019) tested the FD situation of different financial firms listed with DSE for the period of 2010 to 2014. For this purpose they used Altman Z-score model to evaluate the FD level of financial firms listed with DSE. After analysis of the data they found that some of the firms of DSE is facing FD situation while some firms are in healthy position while some firms are in gray area means that in the next time these firms may face FD situation. They also found that the business manager should keep in mind those factors which bring FD situation (Jan, Ali & Khan, 2019).

Study conducted by Tristiarini, Setiawanta, and Ririh (2017) to determine the effect of CSR practices on the possibility of FD position of Indonesian companies that include in SRI-KEHTI index in 2009 to 2015. For testing the proposed hypothesis this study used structural equation modeling (SEM) with Warp PLS programmed version 3.00 for analysis in his study. The outcomes of study showed that companies that issued high cost for CSR can positively enhance the company financial distress.

On the basis of studied literature, the following hypotheses are developed.

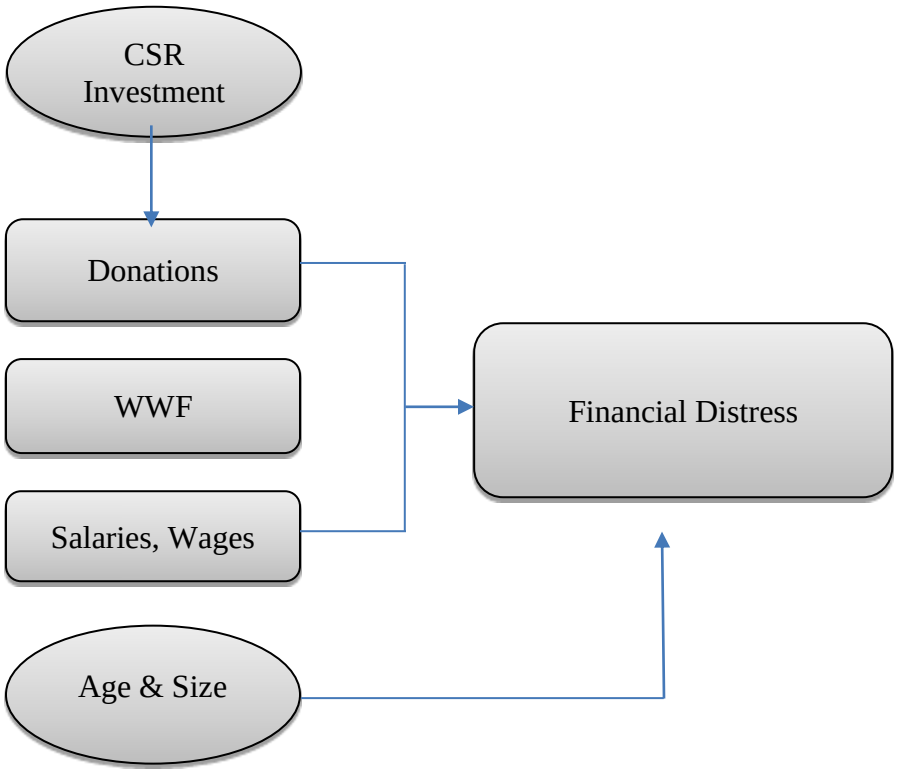
Hypotheses of the Study

Main hypotheses of the study are as follow

H_0: CSR practices do not affect financial distress.

H_1: CSR practices affect financial distress.

Framework of the Study



Research Methodology

Data Sources and sample Selection

This study considered all non-financial and financial firms of Pakistan listed with Pakistan stock exchange as population. The sample consists of 100 randomly selected non-financial firms from different sectors. Due to their dissimilar capital structure, time constraints, less resources and missing of financial data of different firms in industry, this study excluded financial and some non-financial firms. So, our final sample contains 500 firm-year observations from 100 non-financial firms listed with PSX.

The sampling of this study is different from all those studies conducted in Pakistan. Different combination of variables is setup for to study the effect of CSR on FD in the non-financial sectors. Different sampling techniques are used by different researchers. Many researchers used KLD index to measure CSR practices. (Al-Hadi et al., 2019) used Altman Z-score model for FD.

Data Analysis Techniques

This research study adopted various data analysis model in order to boost the accuracy of the desired result. This study adopted uni-variate analysis (descriptive statistics), multivariate analysis (Panel regression analysis) and bi-variate analysis (Correlation analysis) to explore the influences of CSR practices on FD and using size and age of the firm as control variables.

Multivariate Regression Analysis

This study evaluates the impact of CSR on FD of non-financial firms in Pakistan. Respective model are as under.

$$FD = \alpha + \beta_1 (CSR) + \beta 2 \text{ (firm size)} + \beta 3 \text{ (firm age)} + \mu i \ldots\ldots\ldots\ldots\ldots (1)$$

Where FD is represent financial distress which is dependent variables. To draw the desired result FD is measured through Altman Z-score model. These proxies are adopted by (Al-Hadi et al., 2019) & (M. S. Malik & Nadeem, 2014) respectively who carried out this study for short period, but this study developed for long period of time such as for 2015-2019. On the other hand CSR is independent variable of this study. CSR investment is used in terms of Donation, WWF, salaries and other employee's benefits as a proxy to measure CSR performance. Furthermore, firm size and firm age are control variable which is measured by taken log of total assets of the year.

Variables Measurement and Description

Dependent Variables

Variables	Definition	Calculation	Authors
FD	Financial distress	Altman Z-score model	(Al-Hadi et al., 2019)

Independent Variables

CSR	Corporate Social Responsibility	Donation, Workers welfare funds, Salaries & wages	(M. S. Malik & Nadeem,2014) (Bagh, 2017)

Control variable

Firm size in assets	Log of total assets	(Mahoney & Roberts, 2007)
Firm age	Number of year after Incorporation to Date	(Al-Hadi et al., 2019)

Description of Z-score model

No.	Range of Z-score	Interpretation
1	Above 2.99	Means that financial position of the business in safe zone.
2	Between 2.99 and 1.81	It means that there is a chance of bankruptcy.
3	Less than 1.81	The economic position is most likely going towards business failure and necessary action to be taken to avoid from bankruptcy. (Altman, 1968)

This research study used linear equation model. The linear equation of the Altman Z-Score is as follows:
Z = 0.012X1 + 0.014X2 + 0.033 X3 + 0.006X4 + 0.999X5

Where:

X1 – working capital/total assets

Calculate liquid assets in terms of total assets

X2 – retained earnings/total assets

Calculate financial performance that reflect the age earning power

X3 – earnings before interest and taxes/total assets

Measures operation efficiency

X4 – market value of equity/total liabilities

Show up security price fluctuation as a possible

X5 – sales/total assets

For sales turnover

Z – Overall index

Lower the company Z-score, higher will be the distress situation

Results and Conclusion

Descriptive Analyses of the Study

This study has selected randomly 100 non-financial firms of different sectors in Pakistan as sample for the period of 2015-2019. The total observations used in the study are 500 firm-years. The descriptive statistics of dependent and independent variable which used in the study are showed in the below table. The literature suggested various measurement indicators for FD of the firms. Here, this study used Altman Z-score model to measure FD of the non-financial firms in Pakistan. This result shows that all the values of CSR and FD are in centrally placed. Let's explain each value of FD in descriptive statistics. Value of FD mean is 3.082 and the value of median is 3.050 which are close to each other. The Z-score model suggests that when the value of z-score higher than 2.67, it shows us that the firms are in safe zone and financial health of the firm is strong.

Table 1: Descriptive Statistics

	FD	SALARIES	WWF	DONATIONS	AGE	SIZE
Mean	3.082	0.410	0.433	21.7126	37.33434	7.546357
Median	3.050	0.732	0.392	25.6223	35.00000	7.598551
Maximum	4.460	0.980	0.993	40.9800	90.00000	8.469601
Minimum	1.670	0.101	0.000	0.000000	4.000000	7.003417
Std. Dev.	0.580	0.521	0.269	20.15541	20.03169	0.323631
Skewness	-0.275	0.891	0.413	1.405579	0.395168	0.061797
Kurtosis	2.718	2.958	2.026	2.105513	2.758269	2.329108
Observations	500	500	500	500	500	500

The results of the skewness and kurtosis suggest that all variables used in this study are normally distributed. The variables values are between in the given range and it is show that all variables are normally distributed and clustered in the center. Moreover, this show that the companies performing CSR

activities gain reputation in the market from their profitability increase. The efficiency of the variables values show that that these value is 75% efficient of efficiency 1 (100%). These results show that non-financial firms which are taken as sample are efficient in their operation.

This table represents the descriptive statistics for the 500 firm-year observations between 2015 and 2019. This table represents the number of observations, the standard deviation, the minimum and the maximum of CSR and FD.

CSR is independent variable in this study. The score of CSR is measured in term of CSR investment i.e. salaries, WWF and donation of non-financial firms. Sample of maximum salary range is range 0.980 and minimum range is 0.101 with mean value is 0.410, median value is 0.732 and value of S.D is 0.521, meaning that dispersion in the data is maximum. Furthermore, the mean and median of salaries are lies in the range, so they are normally distributed. Now, mean and median of WWF are 0.433 and 0.392 respectively with range maximum 0.993 and minimum 0.000. Standard deviation is 0.269 which mean that they have high dispersion. Donation mean is 21.7126, median is 25.6223 and standard deviation is 20.15541 with range maximum 40.9800 and minimum 0.000. It means that that mean and standard deviation of the data are close to each and it show low dispersion. From skewness and kurtosis, it is confirmed that all the variables are in acceptable range and show the normality of the variables. The control variables descriptive statistics show that all the variables are centrally placed. It can be checked in the above table from the mean, median, standard deviation, skewness and kurtosis. In this study size and age of the firms is used as control variables. Now, let explain size and age in the above table. In below table, size of the firm mean value is 7.546357 and the value of median is 7.598551, S.D value is 0.323631. The maximum value range of firm size is 8.469601 and minimum range of size is 7.003417. The mean and median of the firm's size are in the given range and this show that these values close to each other and centrally paced. This shows that there is minimum dispersion in the data. Now, let explain age of the firm in below table. Mean value of the age is 37.33434, median value of age is 35.00000, and S.D value is 20.03169 respectively. The maximum range value of firm's age in the table is 90.00000 and minimum range value is 4.000000. From S.D of the data it shows that there is low dispersion in the data and mean and median of the data are close to each other and are centrally placed. Its standard deviation show that data is low dispersed and mean median are closer to each other. In last, skewness and kurtosis of control variables are normally distributes and are in acceptable range.

Correlation Matrix

Correlation matrix is a statistical technique which is used in research study to check the relationship between variables. The relationship between variables through this technique are showed in the below table. The multi-collinearity problem in the data is not exist because the maximum correlation coefficient 0.217 and no more than 0.72.

Table 2: Correlation Matrix

	FD	Salaries	WWF	Donations	AGE	SIZE
FD	1.000					
ROA	0.217					
ROE	0.186					
SALARIES	-0.142	1.000000				
WWF	-0.148	0.035055	1.000000			
DONATIONS	-0.085	0.069556	0.075739	1.000000		
AGE	0.311	0.130380	0.212579	0.099438	1.000000	
SIZE	0.071	0.077423	0.153699	0.04362	0.262852	1.000000

In above table salaries, WWF, and donations are significantly negative correlated with FD which indicate that firms using CSR strategies can successfully mitigate FD risk in the firm. It shows that firms have efficient CSR policies can successfully reduce distress risk in the firm. It is because firms through these strategies gain reputation and goodwill in the market and Thus FP is increases. These results are theoretically support through the study of (Al-Hadi et.al.,2019; Nabeel, Hayat & Ali). Based on regression and correlation analysis the next section will present results of the data. Furthermore, the next section will determine the best model that is to be used for data analyses and data description. In this study panel data is used and also for analyses of this type of data some diagnostic test are used. In the next section these diagnostic test are present. These tests are used for normality, heteroscedasticity and mulit-collinearity.

Model Specification Test

As stated earlier in the previous section of the thesis that panel data analyses is used when the data do not satisfied OLS assumptions. These analyses are used to find out the impact of CSR practices on FD of non-financial firms. Therefore, the study used model specification tests. This test is carried out to choose the best model among CEM, FEM and REM for testing hypothesis. Panel data techniques required some diagnostic test for selection of best suitable model for data specification. F value/Chow test is used to select best model between CEM and FEM. Similarly Hausman test used to select best model among FEM and REM. On the other hand Breusch-Pagan test is used to select best model for the study between REM and CEM (Breusch & Pagan, 1979) (D. N. Gujarati & D. C. Porter, 2003) and (Hausman, 1978). The below table concluded that CEM is the best model for the study to evaluate the influences of CSR on FD and FP of non-financial firms in Pakistan.

Table No 3: Model Specification Tests

Model Specification Tests	Prob>chi2
Model-IZ-score with CSR	
Chow test for CEM versus FEM	0.1243
if $p \leq 0.05 \rightarrow$ FE	
Decision	**CEM**

The next portion presents test results of the thesis. Durbin-Wu-Hausman test rsults for endogeneity is presented. In the next portion presents the results of investigation of the effects of CSR on FD and FP. The results of CEM are presents in the main thesis for the simplicity and convenience. However, the results of REM and FEM models are showed in Annexures in the last pages of the thesis.

Pooled OLS Model Results

Regression results of the variables are present in below table. This study use CSR is independent variable and FD is dependent variable. Regression analyses is used to find out the impact of CSR on FD of non-financial firms in Pakistan (Andersen & Olsen).

The below table presents regression analysis of dependent and independent variables which is used in the study. Let us explain each variable one by one. The value of coefficient of salaries is -0.4823 which is negatively and significantly affected FD with standard error is 0.5812. T-test is less than 2, means result between salaries and FD are statistically significant ($p < 0.05$ or better). Furthermore, WWF and donation with coefficients are -0.3201 and -0.2195 respectively, which are negatively affected FD, with t-value less than 2, also show that it is significantly negatively affected FD. These results support hypothesis H1, implying that CSR can negatively affect financial distress of non-financial firms in Pakistan.

Table 4: Regression analysis: FD &CSR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.884977	0.943237	3.058591	0.0125
SALARIES	-0.482312	0.58122	-2.567645	0.0286
WWF	-0.320109	0.215109	-2.331433	0.0346
DONATIONS	-0.219508	0.134707	-2.110504	0.0422
SIZE	0.041361	0.127235	3.325070	0.0055
AGE	0.008101	0.002094	3.868031	0.0002
R-squared	0.118233			
Adjusted R-squared	0.095270			
F-statistic	5.148918			
Prob(F-statistic)	0.000186			

Dependent variable: FD

Size and age are control variables in the study which show in the above table. It show that regression results for size and age of the firm is significantly positive for FD such that ($p < 0.05$). It suggests that large firms are less likely to go into situation of financial distress. It supports the idea that larger firms hold good position in the market and enjoy financial benefits as compared to smaller firms. That is why these firms have very less chance to go into distress.

Conclusion

The aim of this study is to calculate the effects of CSR on FD of non-financial firms in Pakistan. FD is measured through Altman Z-score model. The sample of this study is 100 non-financial firms listed with Pakistan stock exchange for the period of 2015 to 2019. Hence total firm-years observations are 500. For analysis and desired results data were collected from the annual and financial reports available in the relevant website to measure the impact of CSR on FD of non-financial firms of Pakistan. Secondary data is used which is panel in nature. FD is measured through Altman Z-score model adopted by (Al-Hadi et al., 2019).. CSR is measured through CSR investment in term of donation, workers welfare funds (WWF), salaries and wages of the employees adopted by (Ehsan et al., 2018). This study is undertaken for long period of time to measure the real impact among the variables. Data were downloaded from the annual reports of non-financial firm in Pakistan for their proposed results. In this study size and age of the firms is used as control variables to avoid from biasness and misspecification.

The study used Panel data to evaluate the association between CSR, FD. The outcomes of the study reveal that there is negative association between CSR and FD level. It means that spending on CSR policies can increase financial performance of non-financial firms in Pakistan due to which FD level of the firms can be decreases. This investment is for long term. This research study suggest that CSR investment not only beneficial for the organization but also beneficial for the society. People of developed countries also have information about CSR practices that firms in developed countries adopted these policies in business operations and must act as socially responsible manners.

References

Abdulrazak, S., & Ahmad, F. S. (2014). The Basis for Corporate Social Responsibility in Malaysia. *Global Business & Management Research, 6*(3).

Adinata, G. (2019). CSR Expenditures, Financial Distress Prediction, and Firm Reputation: A Pathway Analysis. *Perspektif Akuntansi, 2*(1), 1-18.

Ajide, F. M., & Aderemi, A. A. (2014). The effects of corporate social responsibility activity disclosure on corporate profitability: Empirical evidence from Nigerian commercial banks. *IOSR Journal of Economics and Finance (IOSRJEF), 2*(6), 17-25.

Akbar, A., Imdadullah, M., Ullah, M. A., & Aslam, M. (2011). Determinants of Economic Growth in Asian Countries: A Panel Data Perspective. *Pakistan Journal of Social Sciences (PJSS), 31*(1).

Alawi, N. A. M., Rahman, A. A., Amran, A., & Nejati, M. (2016). Does family group affiliation matter in CSR reporting? Evidence from Yemen. *Afro-Asian Journal of Finance and Accounting, 6*(1), 12-30.

Al-Hadi, A., Chatterjee, B., Yaftian, A., Taylor, G., & Monzur Hasan, M. (2019). Corporate social responsibility performance, financial distress and firm life cycle: evidence from Australia. *Accounting & Finance, 59*(2), 961-989.

Ali, M. D., Haseeb, M. A., Khan, S. R., Khan, S. I., & Sahibzadi, S. (2020). Emotional Exhaustion: A Mediator between Work-overload and Job Performance among the University Faculty. *Pakistan Journal of Social and Clinical Psychology*, *18*(1), 66-69.

Ali, Shah & Khattak (2020). Networking and Collaboration for adoption of innovation and Sustainable Growth: Case Study Evidence from the Small and Medium Enterprises of Khyber Pakhtunkhwa, Pakistan. *International Review of Management and Business Research,*09(01),276-282.

Ally, O. J., & Bwana, K. M. (2019). Testing financial Distress of Manufacturing Firms in Tanzania: an Application of Altman z-score Model.

Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The journal of finance, 23*(4), 589-609.

Altman, E. I. (2013). Predicting financial distress of companies: revisiting the Z-score and ZETA® models *Handbook of research methods and applications in empirical finance*: Edward Elgar Publishing.

Altman, E. I., Iwanicz-Drozdowska, M., Laitinen, E. K., & Suvas, A. (2017). Financial distress prediction in an international context: A review and empirical analysis of Altman's Z-score model. *Journal of International Financial Management & Accounting, 28*(2), 131-171.

Altman, E., & Hotchkiss, E. (2006). Predict and avoid bankruptcy, analyze and invest in distressed debt: Hoboken: John Wiley & Sons.

Amaral, J. M. B. M. P. d. (2020). *Is doing good, good for you?: the relationship between financial distress and CSR: a study on southern europe.*

Arafat, M. Y., Warokka, A., Abdullah, H. H., & Septian, R. R. (2012). The triple bottom line effect on emerging market companies: A test of corporate social responsibility and firm value relationship. *Journal of Southeast Asian Research, 2012*(2012), 1-15.

Arnold, D. G., & Valentin, A. (2013). Corporate social responsibility at the base of the pyramid. *Journal of business research, 66*(10), 1904-1914.

Asteriou, D., & Hall, S. G. (2007). Applied Econometrics: a modern approach, revised edition. *Hampshire: Palgrave Macmillan, 46*(2), 117-155.

Asteriou, D., & Hall, S. G. (2007). Multicollinearity: Applied Econometrics. *Revised edn*, 85-99.

Babbie, E. (2010). Quantitative methods. *The Practice Of Social Research. 12th Ed. Belmont, Ca*.

Baltagi, B. H., & Kao, C. (2001). Nonstationary panels, cointegration in panels and dynamic panels: A survey *Nonstationary panels, panel cointegration, and dynamic panels*: Emerald Group Publishing Limited.

Jan, M. S., Ali, M. D., & Khan, M. T. (2019). The Impact Of Governance On Foreign Direct Investments: Evidence From Pakistan, India & Bangladesh. *International Journal of Management Research and Emerging Sciences*, *9*(1).

Khan, M. N., Alam, A., Shah, S. A. A., Ilyas, M., & Ali, M. D. (2018). Credit Risk, Liquidity Risk and Stock Return,(Evidence from Pakistan Stock Exchange). *J. Appl. Environ. Biol. Sci*, *8*(4), 95-102.

Khan, M. N., Ilyas, M., Ahmad, A., Khan, I., Tahir, M., & Ali, M. D. (2017). The Relationship between Capital Structure, Ownership Structure and Firm Efficiency: Empirical Study of Pakistan. *Journal of Managerial Sciences*, *11*(03), 85-102.

Nabeel, M., Hayat, Q. S., & Ali, M. D. (2015). National Holiday Anomaly in Pakistani Stock market: Evidence from Karachi Stock Exchange KSE 100 Index. *Journal of Business & Tourism*, *1*(1), 27-45.

Reayat, N., Shah, A. U. M., & Ali, M. D. (2020). A Qualitative Insight Into The Healthcare System of Pakistan: A Historical Perspective. *International Journal of Management Research and Emerging Sciences*, *10*(1).

Shah, S. A. A., Khan, N. U., & Ali, M. D. (2020). Testing market efficiency, predictability and profitability at Pakistan Stock Exchange using firm-level data. *Journal of Accounting and Finance in Emerging Economies*, *6*(1), 1-10.

Ullah, A., Rahim, A., Ali, M. D., Khan, S. R., & Shah, S. A. A. (2020). Impact of Terrorism on Foreign Direct Investment: An Empirical Analysis of Pakistan. *JISR management and social sciences & economics*, *18*(1), 125-136.