DOES OWNERSHIP CONCENTRATION MODERATES CORPORATE SOCIAL RESPONSIBILITY-FIRM PERFORMANCE RELATIONSHIP?

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Abstract. *CSR is basically a commitment demanded from companies to protect stakeholder interests, enhance societal conditions, and contribute to sustainable development. This study investigated the relationship between corporate social responsibility and firm financial performance with a particular focus on measuring the moderating impact of ownership concentration on the CSR-performance relationship. The data is collected from the companies' annual reports, State Bank of Pakistan database and the Pakistan Stock Exchange for the period 2014-2020. The fixed effect regression model is used to measure the impact of CSR on firm financial performance. The results of the study revealed that CSR has a significant negative impact on firm financial performance. Furthermore, ownership concentration also negatively moderates the relationship between CSR and firm financial performance.*

Keywords: Ownership concentration, CSR, Firm financial performance

Introduction

Due to an increase in awareness and concern about environmental impact of firm's operations, there is an increased expectation from businesses to address environmental concerns arising from their operations and act in a more socially responsible manner apart from its traditional role of maximizing shareholder wealth and provision of goods and services (Cho, Chung & Young, 2019; Fernández-Guadaño & Sarria-Pedroza, 2018). Addressing these concerns, we have seen in the academic literature that there has been a considerable increase in studies focusing on corporate social responsibility (CSR). Particularly, CSR's relationship with firm performance has noteworthy attention from the researchers (Mcguire, Sundgren & Schneeweis, 1988). But the findings of these studies are mixed which further provides justification for examining CSR-Firm performance relationship in different contexts with different proxies for better understanding (Lee & Lee, 2019; McWilliams & Siegel, 2001). From the theoretical perspective, the neo-classical theory suggests that CSR negatively influences firm performance due to additional cost incurred as a result of CSR activities thus diverting funds from opportunities that could have been more profitable (Bird, Hall, Momente & Reggiani, 2007). Many empirical studies have confirmed this negative relationship (Akben-Selcuk, 2019; Barnea & Rubin, 2010; Li, Li, & Minor, 2016). Stakeholder theory, on the other hand, suggests that financial performance of the firm can improve through indirect benefits associated with firm engagement in CSR activities. Therefore, firms should try to maintain good relationship with all its stakeholders to exploit these benefits (Yoon & Chung, 2018). Lastly, the resource-based theory suggests that CSR positively impacts firm performance. The reason being investment in CSR may lead to the development of new internal resources like corporate culture, increased in know-how as well as external benefits can be exploited due to improvement in corporate reputation (Branco & Rodgers, 2006). Empirically, a number of studies confirmed positive association between CSR and firm performance (Cho et al., 2019; Famiyeh, 2017; Lenssen et al., 2011).

Examining the impact of CSR activities is particularly important in the context of developing countries. It is widely agreed that since CSR impact is context-dependent, therefore, the differences in the way businesses operate and differences in institutional structures observed particularly in emerging economies may lead to a divergent expression of CSR activities in these economies (Jamali & Neville, 2011). Moreover, in developing countries, institutions providing social goods is comparatively much less than developed countries thus increasing the expectations from companies to fill this gap and provide social goods through CSR initiatives (Dobers & Minna, 2009). Considering the differences discussed above it could be that the observed impact of CSR on firm financial performance may be different in developing countries as compared to developed countries. Additionally, the moderating effect of ownership concentration needs further examination because of agency problem caused by conflict of interest between controlling shareholders and minority shareholders which is a major issue of concern in developing economies (Claessens & Djankov, 2002).

In this study, our focus is on Pakistan which a developing country with weak institutional structures, lack of transparency leading to corporate governance problems, weak shareholder protection laws and ownership structures that are highly concentrated (Ararat & Ugar, 2003). In Pakistan traditionally, most owners tend to keep majority ownership within the families for various reasons like lack of trust on members outside family, smooth succession and transition of business from one family member to another in case of death. Although, based on common law we have witness some structural reforms in last few years but most of the companies still have highly concentrated ownership (Hussain & Safdar, 2018). As a result, most of the corporate decisions are dominated by large shareholders including decisions related to engagement in CSR initiatives. Accordingly, Pakistan provides an ideal setting to examine the moderating effect of ownership concentration in CSR-firm performance relationship.

Moreover, while examining CSR engagement, it is also important to understand and take into consideration the country-specific conditions. In Pakistan till now the focus of government policies was mostly on economic development with little emphasis on social and environmental impacts of such policies. Pakistan is one of the few countries that is significantly affected by climate change. Although companies are encouraged to disclose their CSR activities in their annual report but due to lack of necessary regulation in this regard allows firms to not strictly follow their CSR commitments. In addition to economic fundamentals, poverty, unemployment, cultural characteristics, there is lack of awareness about CSR among the general population.

The study will contribute to the empirical literature in a number of ways. First, we add to available literature by providing additional evidence CSR's impact on firm performance. Additionally, Grewatsch and Kleindienst (2017) emphasize that there is need for further studies on the role of moderators and mediators of CSR-firm performance relationship. Taking their recommendation forward, our study is one of the very few studies that examined ownership concentration, an important corporate governance characteristic, for the CSR-firm performance relationship in the context of a developing country. Lastly, we believe that findings of our study will provide invaluable practical implications for policy makers, managers and academicians particularly in developing countries.

1. Literature Review

2.1 CSR- Firm Performance relationship

Many studies have explored the CSR and FP relationship and revealed mixed results (Alexander & Buchholz, 1978). Rehman et al. (2020) examined the CSR and FP relationship and found that CSR has a significant negative influence on firm performance thus supporting the argument that additional cost incurred on CSR activities decreases firm profitability. Moreover, studies from Crisóstomo, de Souza Freire, and de Vasconcellos (2011), Sekhon and Kathuria (2019) found negative influence of CSR on firm performance. The negative association between CSR and firm performance supports the Neo-Classical theory which assumes that the involvement of firms in CSR activities increases the direct cost of the firm thus decreases the profitability of the firm and shareholder value.

Moore (2001) while conducting a study on U.K supermarket industry found negative affect of CSR on firm performance. He further argued that pursing the strategy, that good social performance will lead to good financial performance distract the focus of the management from the core of their business thus leading towards poor financial results.

On the other hand, many studies (e.g., Anser, Zhang & Kanwal, 2018; Famiyeh, 2017; Rehman, Khan & Rahman, 2020; Saleh et al., 2011; Sharabati, 2018; Sun, 2012;) found positive effect of CSR on firm performance. The findings of these studies support the Stakeholder theory argument which states that involvement in CSR activities builds a strong relationship with stakeholders which can lead to higher returns in the long-run for the firm. Moreover, involvement in CSR activities improves corporate image and reputation which positively affects firm performance in the long run (Sharabati, 2018). Also, firms get rewarded for their CSR initiatives either directly or indirectly which not only enhances the goodwill of the firm but also improves its profitability. Stakeholders apart from the financial performance are more concerned about the social performance of an organization and active involvement in social activities help in this regard (Famiyeh, 2017).

Sun (2012) while finding positive affect of CSR on firm performance argued that large sized firms tend to perform better CSR activities than small sized firms. The reason being large firms have better internal operations, greater access to the resources, more market share and more earning ability as compared to the smaller firms.

Lenssen et al. (2011) also found positive effect of CSR on firm performance and argued that by acting in a socially responsible way, companies cannot only improve the performance of current year but it can also benefit the company in the future. The reason is that when companies are committing more resources for the benefit of all stakeholders then the internal stakeholders will contribute more, and the companies will develop good relationships with the external stakeholders thus leading to enhance in goodwill, brand image and profitability.

2.2 Ownership concentration's moderating impact on CSR/Firm performance relationship

Akben-Selcuk (2019) found positive link between the CSR and FP in Turkish listed firms and suggested that CSR is a value maximizing strategy as firms can build internal and external resources through it. Moreover, the association between the CSR and firm performance was negatively moderated by ownership concentration and suggested that CSR related actions are beneficial for those firms who have diverse ownership concentration. Firms with high level of ownership concentration may lead them to information asymmetry because controlling shareholders may have the incentive to control the corporate policies of the firm by obtaining information.

Orazalin (2019) explored the corporate governance and CSR association by taking the sample of 38 banks of Kazakhstan for the time period 2010-2016. The findings of the study revealed that board gender diversity had a positive impact on CSR disclosures whereas board independence and board diversity was found to have no effect on the CSR disclosures. Moreover, the size and age of the bank were found to have significant relationship on the level of CSR disclosures. It was also found that the banks with foreign ownership are expected to publish more transparent and extensive reporting's of CSR than the banks who are state-owned or owned by local investors.

Feng, Chen, and Tang (2018) examined the relationship between CSR and sustainable financial development with moderating impact of ownership structure. They found that highly concentrated ownership negatively moderates the association between CSR and economic performance because it leads to the decisions that are not in the favor of all stakeholders and do not satisfy them which in turn decrease the positive impact of CSR and firm economic performance.

Furthermore, Peng and Yang (2014) directly investigated the CSR and FP association with the moderation of ownership concentration by taking the sample of listed Taiwanese companies. The study incorporated data collected on pollution for the measurement of CSP and revealed that the divergence between control rights of controlling owners and cash flow rights negatively moderated the relationship between CSP and FP.

2.3 Theoretical Model

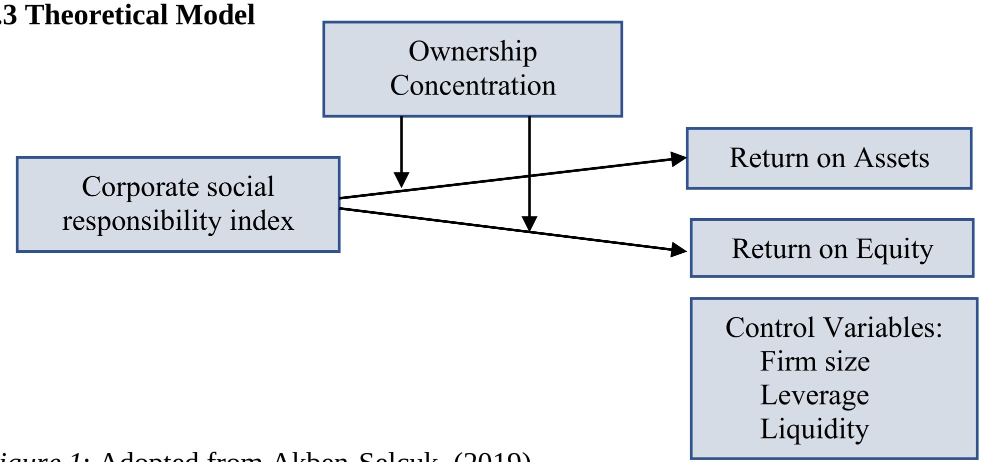

Figure 1: Adopted from Akben-Selcuk, (2019)

2.4 Hypothesis

From the literature discussed above, the following hypotheses are proposed.

- H_1 There is a relationship between CSR and return on asset.
- H_2 There is a relationship between CSR and return on equity.
- H_3 Ownership concentration moderates CSR-firm performance relationship.

3. Methodology

3.1 Data and Sample

Since the study aims to measure the moderating effect of ownership concentration on CSR/Firm performance relationship, secondary data is used from 2014-2020 with 414 firm year observations. The data of 7 years i.e., from 2014 to 2020 is used for the purpose of analysis. Data is collected from State Bank of Pakistan Database which provides comprehensive data about the financial statements of listed firms. For the measurement of dependent variable i.e. performance and control variables the data of all listed non-financial manufacturing firms was collected from State Bank of Pakistan database. Moreover, data pertaining to CSR and ownership concentration is collected firm's annual reports, sustainability reports and CSR disclosures available on their webpages. Furthermore, the minor missing values in the data were filled up by using the mean imputation method.

The sample comprised of all listed manufacturing firms of Pakistan. From the manufacturing sector only, those firms were selected for which data was available for all aspects being considered in this study. There are 349 listed manufacturing firms divided into 11 broad industrial sectors. During the sample selection process those companies that do not disclose CSR-related activities in their annual reports or companies for which the data is not available or missing are excluded from the sample. The final sample comprised of 69 firms.

The finance and insurance companies are excluded from the sample due to their unique structure and these sectors maintain their financial statement mechanism in a different and unique manner that will further lead to inconsistency in the data (Cho et al., 2019). The reason for the selection of manufacturing sector is that manufacturing sector is more involved in CSR-related activities as compared to other sectors. Furthermore, the manufacturing sector of Pakistan holds the highest market capitalization in the PSX (Pakistan Stock Exchange), having higher CSR disclosures and also have the resources to indulge in CSR activities. As manufacturing sector is engaged in exporting products, therefore it is imperative to improve its brand image and act in a socially responsible way to attract customers and compete in international markets (Ehsan et al., 2018).

3.2 Measurement of variables

The independent variable (CSR) is measured using the content analysis technique. It is the most convenient, less expensive and widely used method as compared to other methods (Rehman et al., 2020). This technique involves the recording of scores and codifying the text of a piece of writing manually for the various selected categories (Sekhon & Kathuria, 2019). It further includes the analysis of secondary data sources which contains official websites, annual reports and other CSR publications of the companies related to CSR activities. The data collected through this method is used to make an index of CSR disclosures by converting the gathered information into quantitative form. The main drawback of this method is that it does emphasize on the quantity rather than focusing the quality of data (Szegedi et al., 2020). The variety of measures used in the literature for the analysis of CSR is due the fact that CSR has various dimensions and its measurement is a still problem which create lack of uniformity in the prior literature (Sekhon & Kathuria, 2019). In this paper, we followed the checklist used by Muttakin and Khan (2014) to measure explanatory variable (CSR) which contains four categories namely, employee information, environmental information, Community involvement and value-added statements and product and service information. These four categories contain 20 CSR disclosure items in the checklist. The concerned CSR-related information was obtained from the respective annual reports. Empirically, many studies have measured CSR in this way (Orazalin, 2019; Saleh et al., 2008). The dichotomous procedure of 0 and 1 is applied to measure CSR index i.e., if a company disclose the particular sub-item in the annual reports, it will be assigned the value of 1 and 0 otherwise. Then "the total rating of the firm is calculated as follows:

$$CSRI = \sum di20/n_j$$

Where,

CSRI = Corporate Social Responsibility index
n_j = Total items for j_{th} firm, n= 20
d_{ij} =1 if the firm disclose the i_{th} item and 0 otherwise.

The total score of each item is added and divided by the total items rate and then multiplied by 100 to get the value in percentage. In this study the total number of CSR disclosure items is 20" (Muttakin & Khan, 2014).

The dependent variable used in the study is firm financial performance which is measured using the proxy return on assets (ROA) and return on equity (ROE). ROA is defined as "operating income divided by total assets" (Kabir & Thai, 2017). ROA has been used most frequently and is a leading indicator of profitability in previous studies that studied the relationship between CSR and FP (Cho et al., 2019). ROA shows the management performance and efficiency of production procedures and the reason for using ROA as an indicator of financial performance is that it is most commonly used as a proxy to measure firm's performance and it less likely to be manipulated (Saleh et al., 2008). ROE is calculated as the net profit to the owners' equity (Al-Malkawi & Javaid, 2018).

Ownership concentration (OWN) is used as a moderating variable. It is calculated as shares percentage held by top five shareholders of the firm (Artikis, Harada, & Nguyen, 2011). Liquidity (LIQ), firm size (FS) and leverage (LEV) are taken as a control variable in this study. Leverage is measured through total debt divided total assets and liquidity is measured through current assets divided by current liabilities. Highly liquid firms invest more in CSR undertakings because they want to differentiate themselves from the firms with low liquidity (Akben-Selcuk, 2019). Firm size is considered as an important variable because it may influence the capacity of the firm to be involved in the social actions and is measured through natural log of sales. Larger firms have more ability to undertake the social actions due to high infrastructure and as well as higher cash flows comparatively to the smaller firms which may have lower capacity to be involved in social actions (Crisóstomo et al., 2011). Furthermore, Akben-Selcuk (2019) argued that companies with low leverage are tend to be actively involved in CSR undertakings rather than the companies with high leverage.

3.3 Empirical models

$$ROA_{it} = \beta_0+\beta_1 CSRI_{it}+\beta_2 FS_{it}+\beta_3 \, LEV_{it} + \beta_4 LIQ_{it}+\epsilon_{it} \qquad (1)$$

$$ROA_{it}=\beta_0+\beta_1 CSRI_{it}+\beta_2 CSRI_{it} * OWN_{it}+\beta_3 FS_{it}+\beta_4 LEV_{it}+\beta_5 LIQ_{it}+ \beta_6 OWN_{it}+\epsilon_{it} \qquad (2)$$

$$ROE_{it} = \beta_0+\beta_1 CSRI_{it}+\beta_2 FS_{it}+\beta_3 \, LEV_{it} + \beta_4 LIQ_{it}+\epsilon_{it} \qquad (3)$$

$$ROE_{it}=\beta_0+\beta_1 CSRI_{it}+\beta_2 CSRI_{it} * OWN_{it}+\beta_3 FS_{it}+\beta_4 LEV_{it}+\beta_5 LIQ_{it}+ \beta_6 OWN_{it}+\epsilon_{it} \qquad (4)$$

Whereas, β_o represents the slope intercept, β_1 *to* β_5 represents regression coefficients, "*i*" is the *i*th firm at time "*t*" in subscript represents the firm year observations at time, ϵ_{it} represents the error term and '*' represents the interaction terms of the corporate social responsibility with the ownership concentration variable.

Since the objective of the study is to measure ownership concentration's moderating impact on CSR/Firm performance relationship, panel regression model is used. Panel data is useful because it reduces the collinearity between the independent variable, improves the efficiency of statistical estimates and also provide a large number data point (Saleh et al., 2008). Moreover, the panel data models include fixed effect model (FEL) and random effect model (REL). FEL assumes that, "the intercept in the regression model is allowed to differ among individuals to reflect the unique feature of individual units" whereas REL assumes that "the intercept value of an individual unit is a random drawing from a much larger population with a constant mean" (Gujarati, 2012).

To determine an unbiased estimated as to which model will be more appropriate for this study, Hausman test is applied. Hausman test is a specification test that gives an unbiased estimated regarding the selection of appropriate model. The results of Hausman tests given in Table 1 indicate that fixed effects model is more appropriate for this study. Moreover, Breusch Pagan test, Durbin Watson test are used to check the heteroscedasticity and autocorrelation in data.

Table 1: *Hausman Test Results*

	Model 1	Model 2	Model 3	Model 4
Chi-Sq. Statistic	11.963	21.904	12.967	39.534
Prob.	0.017	0.000	0.011	0.000

Table 2: *Breusch-Pagan Test Results*

	Model 1	Model 2	Model 3	Model 4
Obs*R-squared	16.384	55.071	20.915	58.062
Prob.Chi square (2)	0.002	0.000	0.001	0.000

Breusch-Pagan test is used to check the heteroscedasticity in the panel data. Heteroscedasticity involves the unequal variance between the disturbance terms. The p-value of Breusch-Pagan test is significant which indicates the rejection of null hypothesis of homoscedasticity in all models as shown in table 2. Thus, the results indicate the presence of heteroscedasticity. For resolving the issue of heteroscedasticity the white's correction for standard errors is applied. Log transformation is also applied for the normalization of the data.

4. Results

4.1 Descriptive Analysis

Table 3 presents the descriptive statistics of the variables. The mean value of return on asset shows that on average the return on asset is 10.20 percent with standard deviation of 8.60. The return on equity for manufacturing firms on average is 19.43% with standard deviation of 21.80. The mean value of CSRI is 51.35 with the standard deviation value of 11.00. Leverage is measured by total debt divided by total assets and its mean value indicate on average manufacturing firms are leveraging by 48.34% with standard deviation of 19.44. The liquidity ratio indicate that the mean liquidity of manufacturing firms is 1.65 times as compared to 1 time of current liability. Firm size is measured as natural logarithm of sales and its mean value is 16.74 with the standard deviation value of 1.29. The mean and the standard deviation values of ownership concentration are 64.36 and 19.75. In terms of volatility, which is determined through standard deviation, ROE is highly volatile followed by ownership concentration and leverage whereas liquidity is the least volatile among the variables.

Table 3: *Descriptive Statistics*

	ROA	ROE	CSRI	LEV	LIQ	FS	OWN
Mean	10.20	19.43	51.35	48.34	1.65	16.74	64.36
Maximum	57.33	140.28	75.00	86.13	6.39	20.90	98.90
Minimum	-14.96	-52.40	20.00	9.62	0.11	13.92	21.74
Std. Dev.	8.60	21.80	11.00	19.44	1.03	1.29	19.75

Table 4 represents the results of Pearson's correlation analysis which states the association between two or more variables. CSRI is negatively related with ROA, ROE, leverage and liquidity whereas it is positively related with ownership concentration and firm size. ROA is positively related with liquidity, firm size, ownership concentration and ROE and negatively related with leverage. ROE is positively related with all variables except CSRI. Leverage is negatively associated with liquidity. Firm size and ownership concentration are positively associated with leverage. Liquidity is found to have negative association with FS. While the ownership concentration is positively associated with liquidity. Furthermore, firm size is positively associated with ownership concentration. Correlation matrix does not report the higher association between the variables which indicate that the issue of multicollinearity does not exist in the data.

Table 4: *Correlation Matrix*

	ROA	ROE	CSRI	LEV	LIQ	FS	OWN
ROA	1.00						
ROE	0.759	1.00					
CSRI	- 0.159	- 0.095	1.00				
LEV	-0.288	0.031	-0.025	1.00			
LIQ	0.327	0.073	-0.045	-0.687	1.00		
FS	0.135	0.237	0.271	0.226	-0.073	1.00	
OWN	0.229	0.195	0.060	0.125	-0.055	0.127	1.00

4.2 Discussion

Panel data regression is used to measure the moderating effect of ownership concentration on CSR/Firm performance relationship. The results of Model 1 are shown in table 5. In this model the independent variables are CSRI, firm size, liquidity and leverage and the dependent variable is ROA. While the leverage, liquidity and firm size are the control variables. Results from table 5 indicate that there is a significant negative association between CSRI and ROA. These results are lines with the predictions of agency theory which suggest that managers would mostly make investments in CSR for their personal interest on the expense of other shareholders causing agency conflict which leads to lower profits (Li et al., 2016). Moreover, neo-classical theory also supports this negative association and suggests that investment in CSR cause additional cost and divert the investments of the firm from more profitable and potential projects (Usman & Arman, 2015). Similarly, these results are also consistent with the findings of Crisóstomo, de Souza Freire, and de Vasconcellos (2011), Sekhon and Kathuria (2019) who also reported a significant but negative relationship of CSR with firm performance and supported the view that those firms that are actively involved in the CSR activities tend to have low financial performance because CSR activities cause additional cost which in turn decrease the financial performance of the firm. This also supports the view that greater the CSR practices, lesser would be the financial performance of the firm. The results are also consistent with the study of Barnea and Rubin (2010) who argued that when managers of the company invest more in CSR related activities to seek their own benefits and careers, it increases the agency cost and become the reason for the reduction in firm's value. Moreover, Moore (2001) also confirmed this negative association between CSR and FP and argued that good financial performance leading to the good social performance distract the corporations from their business which in turn lead towards the poor financial results.

Table 5: *Regression Results: CSR Impact on ROA (Model-1)*

ROA	Coefficient	t-Statistic	Prob.
C	-0.507	-1.363	0.173
CSRI	-0.133	-2.372	0.018
LEV	-0.221	-4.022	0.000
LIQ	0.026	1.876	0.061
FS	0.119	5.245	0.000
Adjusted R-squared	0.853	**Durbin-Watson**	1.986
F-statistic	28.812	**Prob (F-statistic)**	0.000

Furthermore, leverage has a strong negative effect on ROA whereas liquidity and firm size positively affects ROA and the relationship of firm size with ROA is significant also. These findings are in line with the findings of Muttakin and Khan (2014) who supports the view that large sized firms are more prone to the public scrutiny and receives much attention from various stakeholders due to which they are obligatory to make their social actions known to the public for the purpose of legitimization.

4.2.1 Ownership concentration's moderating impact on CSR/ROA relationship

The results of Model 2 are presented in table 6. In this model, the main independent variable is corporate social responsibility index along with control variables and the dependent variable is return on asset. While the liquidity, leverage, and firm size are the control variables. This study used the ownership concentration as a moderating variable which is generated as an interaction term with CSRI to measure the moderating influence on CSR and financial performance relationship. Results from table 6 indicate that ownership concentration moderates CSR/Firm performance relationship negatively and significantly.

Table 6: *Ownership Concentration's Moderating Effect on CSR/ROA (Model-2)*

ROA	Coefficient	t-Statistic	Prob.
C	-103.322	-3.855	0.000
CSRI	0.223	2.625	0.009
CSROW	-0.003	-2.297	0.022
LEV	-0.057	-0.799	0.425
LIQ	1.478	2.015	0.045
FS	6.696	3.862	0.000
OWN	0.021	0.218	0.828
Adjusted R-squared	0.711	**Durbin-Watson**	1.767
F-statistic	12.412	**Prob(F-statistic)**	0.000

Ownership concentration's negative impact on CSR/financial performance relationship is consistent with the study of Akben-Selcuk (2019) who suggested that CSR related actions are beneficial for the firms having dispersed ownership concentration, as firms with high level of ownership concentration may lead to information asymmetry because controlling shareholders may have the incentive to obtain information to control corporate policies.

4.3 Robustness check

This study used return on equity as another performance indicator to measure the robustness of the results. The results of Model 3 are shown in table 7. Results from table 7 show that there is a significant but negative effect of CSRI on ROE. These results are consistent with the study of Sekhon and Kathuria (2019) who argued that the firms with poor financial performance disclose more CSR activities in their annual reports in order to hide their poor performance as compared to the firms with good financial performance. Furthermore, his argument supports the view of neo-classical theory which suggests that when firms are involved in more CSR activities, they incur direct cost which leads them towards the competitive disadvantage and hence causing value destruction for their shareholders. Similarly, Crisóstomo et al. (2011) also confirmed this negative relationship and suggested that firms that are actively participating in CSR related activities tend to have low financial performance because CSR is a value decreasing and it has no relationship with firm performance.

Table 7: *Regression Results: CSRI Impact on ROE (Model-3)*

ROE	Coefficient	t-statistic	Prob.
C	-155.602	-4.403	0.000
CSRI	-0.115	-2.829	0.005
LEV	0.099	1.455	0.147
LIQ	14.794	6.746	0.000
FS	10397	4.921	0.000
Adj R-squared	0.798	**Durbin-Watson**	1.807
F-statistic	19.911	**Prob (F-statistic)**	0.000

Moreover, leverage, liquidity and firm size are positively related with ROE and liquidity and firm size have a significant positive effect on ROE. Positive relationship between firm size and ROE is consistent with results of Sun (2012) who argued that larger firms have better internal operations, can have higher visibility, greater access to the resources due to which they perform better as compared to the smaller firms.

4.3.1 Ownership concentration's moderating impact on CSR/ROE relationship

The results of Model 4 are shown in table 8. In this model the independent variables are corporate social responsibility index and control variables and the dependent variable is return on equity. This study used the ownership concentration as a moderating variable which is generated as an interaction term with CSRI to measure its moderating effect on CSR/Firm performance linkage. Results from the table indicate that ownership concentration has a strong negative moderating effect on CSR/Firm performance relationship.

Table 8: *Ownership Concentration's Moderating Effect on CSR/ROA (Model-4)*

ROE	Coefficient	t-Statistic	Prob.
C	-189.007	-4.490	0.000
CSROW	-0.005	-2.341	0.019
CSRI	0.150	1.711	0.088
LEV	11.533	1.359	0.175
LIQ	3.197	6.299	0.000
FS	11.564	5.668	0.000
OWN	-0.031	-0.190	0.849
Adj R-Square	0.760	**Durbin-Watson**	1.799
F-statistic	15.722	**Prob (F-statistic)**	0.000

These results are consistent with the findings of Peng and Yang (2014) who also confirmed negative moderating effect of ownership concentration and suggests that highly concentrated ownership moderates negatively the association between CSR and economic performance because it leads to the decisions that are not in the favor of all stakeholders and do not satisfy them which in turn decrease the positive impact of CSR and economic performance of the firm.

5. Conclusion

CSR is basically a commitment demanded from the businesses to the society (Usman & Amran, 2015). The objective of the study is to measure ownership concentration's moderating impact on CSR-Firm performance relationship. In this study, our focus is on Pakistan which a developing country with weak institutional structures, lack of transparency leading to corporate governance problems, weak shareholder protection laws and ownership structures that are highly concentrated (Ararat & Ugar, 2003). In Pakistan traditionally, most owners tend to keep majority ownership within the families for various reasons like lack of trust on members outside family, smooth succession and transition of business from one family member to another in case of death. Previously researchers conducted research mostly on CSR and financial performance relationship in Pakistan, but little work has been done in regard with the moderating variables. So, this paper focuses on a single characteristic of corporate governance as a moderating variable that is ownership concentration because it is considered to be important factor of corporate governance and is a powerful characteristic in controlling the operational activities and also because of the type-2 agency problem which arise from the conflict of interest between minority and controlling shareholders.

The results showed a significant but negative association between the CSRI and ROA and this negative relationship is consistent with the study of Rehman et al. (2020) who supported the view that those firms that are actively involved in the CSR activities are tend to have low financial performance because CSR activities cause additional cost which in turn decrease the financial performance of the firm. Furthermore, ROE is used to measure the robustness of results which reported that CSRI is found to have negative relationship with ROE. This negative relationship is consistent with the study of Sekhon and Kathuria (2019) and argued that the firms with poor financial performance disclose more CSR activities in their annual reports in order to hide their poor performance as compared to the firms with good financial performance. Moreover, ownership concentration is also found to have negative moderating effect on both ROA and ROE and consistent with the study of Akben-Selcuk (2019) who suggests that CSR related actions are beneficial for the firms having dispersed ownership concentration. As firms with high level of ownership concentration may lead to information asymmetry because controlling shareholders may have the incentive to control corporate policies by obtaining information.

As for practical implications of the study, the finding of negative moderating effect of ownership concentration on CSR-firm performance relationship suggests that it is extremely important to establish good control mechanisms in order to protect the interest of minority shareholders in firms where ownership structures are highly concentrated. The reason being that it is quite possible that overinvestment in CSR activities can lead to poor financial performance (Ting & Yin, 2018). Moreover, for regulators and policy makers this finding important in determining how highly concentrated ownership structures which is quite common in developing economies like Pakistan can affect firm's CSR initiatives. Also, the effectiveness of CSR activities in firms having highly concentrated ownership structures can be investigated by regulators because in these firms CSR activities can lead to poor financial performance through the effect caused by entrenchment (Peng & Yang, 2014).

6. Limitations and Future Research

The focus of the study is to measure the impact of CSR on firm performance with the moderating impact of ownership concentration in Pakistan. Like any other empirical study, this study also certain limitations. First, it used the CSR index to measure CSR which was based on four categories namely, product and service information, value added statements, employee information and environmental information, but there are other categories as well which can be included in the CSR index like Energy consumption, human rights and water usage etc. Second, this study is conducted only on manufacturing sector because CSR related information other sectors were mostly not available. Moreover, the time period of the study is 5 years due to non-availability of the data.

CSR/Firm performance relationship continues to attract the interest of researchers but the use of moderating variables in such studies in developing countries in general and Pakistan in particular is very limited. Future studies can be conducted using other corporate governance indicators as moderating variables like family ownership, foreign ownership, board independence etc. to broader our understanding. Furthermore, this study is conducted only on manufacturing sector of Pakistan, but in future sectors can also be included in such studies.

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