Effects of Corporate Social Responsibility on Financial Performance of Islamic Banks in Pakistan

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Abstract

This study intended to evaluate association between corporate social responsibility (CSR) and financial performance of Islamic banks using accounting measures such as ROA, ROE and market-based performance measure, Tobin's Q. Carroll's Pyramid was used to measure the CSR. Secondary data were collected from the annual reports of 4 full-fledged Islamic banks of Pakistan for a period of five years i.e. 2013-2017. Data were analyzed through Stata software applying GLS to assess the requisite dependence of financial performance on the diverse dimensions of CSR. Results indicate a significantly positive relationship between economic responsibilities and financial performance whereas philanthropic and legal responsibilities have a negative relationship with financial performance. Consequently, it is concluded that CSR has a somewhat mixed (favourable as well as unfavourable) effect on the financial performance of Islamic banks. The nature of mixed results may be attributed to the diverse nature of dimensions of CSR. Therefore, the management of banks is recommended to relocate their resources to increase the financial performance of their banks.

Keywords: *CSR, ROA, ROE, Tobin's Q, Islamic Banks.*

Introduction

The definition of CSR incorporates a set of wholesome obligations for a business firm including economic, legal, ethical, and philanthropic responsibilities that the community expect from business organizations. Businesses are not only meant for economic activities, they must also fulfil their ethical, legal and philanthropic responsibilities (Carroll, 1991). Conversely, Neoclassicals say that fulfilling CSR related activities involves cost that deteriorates the financial performance of a business firm (Friedman, 1970; Baird, Geylani & Roberts, 2012; Peng & Yang, 2014). Some researchers (Baird et al., 2012; Chetty, Naidoo & Seetharam, 2014) consider CSR as an unnecessary activity and a cost to a company. However, some other researchers (Simpson, Kohers & Link, 2002; Johansson et al., 2015; Lopez, Garcia & Rodriguez, 2007) support CSR positively influencing the financial performance of business organizations.

Recently, CSR has become an essential part of corporates' activities of all major business organizations including banking organizations. Banks as financiers of almost all the economic activities have got the status of "responsible corporate citizen" in the society. So, their business activities are supposed to echo their apprehensions for the society (Chaudhury et al., 2011; Yen, 2014). However, Islamic banks are required to undertake activities according to the Islamic principles that are expected to fulfill not only economic responsibilities but also fulfill social responsibilities. According to Islamic principles, business objectives should be socioeconomic incorporating both economic and social benefits as expected by the customers and society (Haniffa & Hudaib, 2007). Therefore, Islamic banks are anticipated to show a higher discharge of CSR related obligations that may be disclosed in their annual reports (Zubairu et al., 2011). In fact, all banks, whether conventional or Islamic, are important for the society (Faizulayev, 2011). Nevertheless, Islamic banks are anticipated to be more accountable towards society than conventional banks owing to their submission to the principles of *Shari'ah* (Zubairu et al., 2011). However, as CSR also involves cost, therefore, such activities may affect the financial performance of Islamic banks. Thus, it is very imperative to assess the possible association between CSR and financial performance of Islamic banks. Therefore, this study intends to discover the likely effects of CSR on financial performance of Islamic banks in Pakistan.

Previous studies (Sila & Cek, 2017) are mainly focused on developed countries and little research have been conducted in developing countries (Weshah et al., 2012). Researchers (Chaudhury et al., 2011; Jizi et al., 2014; Yen, 2014) have also examined CSR activities in banking sectors in various countries. However, in Pakistan, many firms are unaware and do not practice full-fledged CSR activities due to lack of knowledge about the significance of CSR (Khan et al., 2017; Waheed, 2006). Therefore, the current study measures the outcome of CSR with reference to financial performance of Islamic banks in Pakistan that may help them to identify the significance of CSR in relation to financial performance. This study may prove helpful to the top management of Islamic banks, *Shari'ah* board and operational managers in decision making about resource allocation to CSR.

Literature Review

A universally applicable definition of CSR does not exist (Aras & Crowther, 2008). Carroll (1991) conceives "CSR consists of economic, legal, ethical, and philanthropic responsibilities that society" expects "from organization at a given point in time." The CSR notion says that the businesses are not meant only for earning profits but they also have to fulfill the social responsibilities because CSR directly or indirectly increase the brand value of a business firm that affects the profit of a firm (Jusubova, 2015). According to Ashraf, Khan and Tariq (2017), CSR means to sustain with economic development as well as to develop the society as a whole for enhancing their quality of life and to work with community, employees and their families. Thus, CSR means a framework through which companies accommodate their social and economic operations together and maintain their good relationships with all the stakeholders. In other words, CSR activities are the obligations of a company to be responsible to all the stakeholders equally while doing business (The European Union, 2002).

Business is a vital part of the society and CSR helps the business organizations to analyze the social issues and make socially beneficial decisions to tackle/resolve such issues (Ward, 2008). All domestic and internationally operating organizations at times face social, legal and ethical issues. For example, Nike and Gap Inc. suffered the issues of violating the labor laws and exploiting the resources of developing countries (Slot, 2017). In order to face such issues, CSR framework was developed to provide the minimum requirements to be met by a business firm. Moreover, World Business Council for Sustainable Development put emphasis on making CSR mandatory instead of voluntary (Waheed, 2006). CSR supported the triple bottom line that included "economic, social and environmental" scales. The three scales, also known as profit, people and earth, were considered as the pillars of sustainability (Elkington, 2013). Sustainability was defined as fulfilling the needs of existing people without damaging the "needs of future generations" (Hart & Milsten, 2003). The organizations need to generate profits to run the businesses successfully and to maintain their social relationships for building a positive image. Organizations should maintain a balance between profit and social needs for their progressive growth and long term survival and CSR helps organizations in this regard (Savitz & Weber, 2006).

Sheldon (1924) introduced the business world with the concept of CSR in 1924 for the first time. CSR plays an important role creating equal concern of society and environment. CSR has become very attractive and competitive field among researchers and regulators (Waheed, 2006). This concept gained a considerable attention especially after 1980s. Actually, the multinational corporations (MNCs) brought the concept of CSR to Asian and African countries, although MNCs practiced CSR differently in different countries. Yunis, Durrani, and Khan (2017) observed that Pakistani organizations were mostly practicing CSR as a reactive, short-term and charitable activity without engaging the stakeholders. Furthermore, different aspects of CSR including environmental and social aspects such as air and water pollution, industrial waste management, energy conservation, green business, product quality, training and development, human rights, etc, were yet to be practiced by both local and MNCs in developing countries. According to Weshah et al. (2012), companies in developing countries were not much aware of the importance of CSR, hence paying less attention towards the CSR activities. Conversely, Chappel and Moon (2005) observed MNCs more involved in CSR than local companies.

The environmental, social and governance practices improve the CSR performance and CSR performance, consequently, improves the economic performance of a company. For instance, if a company uses CSR as a marketing tool then it can increase its sales and customer loyalty (Waheed, 2006). According to Sila and Cek (2017), social practices consistently lead to positive economic performance. Organizations need to know that social and economic aspects of CSR are important to gain the confidence of society. CSR is not only linked with positive reputation of a company but may also improve the financial performance of an organization (Ashraf et al., 2017; Matin et al., 2011). Regarding the possible rapport between CSR and financial performance, neoclassicals observed a negative relationship between the two. They were of the opinion that businesses were established just to earn money, it was governments' job to fulfill the social responsibilities (Friedman, 1970). Various researchers (Baird et al., 2012; Preston & O'Bannon, 1997; Peng & Yang, 2014) observed negative association between CSR and financial performance strengthening the view of Friedman (1970) that CSR used to increase costs that resulted in reduced profitability. However, many managers thought it was necessary to be a good citizen (Moser & Martin, 2012). Moreover shareholders also appreciated CSR in spite of financial deterioration (Mackey et al., 2007).

Stakeholder theory, conversely, delineated a positive connection between CSR and financial performance (Freeman, 1983). It stated that businesses must fulfill not only economic activities but also the social responsibility being part of the society. CSR was found very important to protect the bottom line i.e. profit (Epstein & Buhovac, 2014), as dissatisfaction of stakeholders used to affect the economic benefits and company future (Clarkson, 1995). According to stakeholder theory, businesses should take care of not just the shareholders but of all the stakeholders of the company including all the individuals and groups (Ruf et al., 2001). According to Aver and Cadez (2009), proper application of CSR would enhance the confidence of shareholders and lead to economic benefits. Simpson, Kohers and Link (2002) observed a positive affiliation between CSR and financial performance.

Traditionally, businesses conceived themselves as self-centered existing for the ultimate objective of profit maximization with no obligations towards the society. However, in order to survive, organizations are required to protect the interests of all the key stakeholders including government, customers, employees and community in addition to the shareholders. Business firms can improve their financial performances through practicing CSR activities.

Palmer (2012) observed a positive association between corporate social performance and financial performance and explained that corporate social performance had an affirmative effect on gross profit margin but negative on sales. Many other researchers (Russo & Fouts, 1997; Simpson et al., 2002;

Waddock & Graves, 1997) also found affirmative association between corporate social performance and financial performance. However, numerous studies (Lopez, Garcia & Rodriguez, 2007; Aupperle et al., 1985) opposed the existence of an affirmative association between the two. Johansson et al. (2015) investigated the relationship of CSR with ROA and Tobin's Q, taking industry type and firm size as control variables and observed negative relation between CSR and all the four variables. However, Windsor (2006) suggested that in order to achieve financial goals companies should invest in CSR activities as they would simultaneously impact each other. Good reputation that can be achieved through CSR activities also plays positive role in improving corporates' financial performance. Social reputation used to play a vital role encouraging companies to continuously work for the wellbeing of society (Roberts & Dowling, 2002). However, good reputations could not be achieved over night, rather it would take time long enough and then organizations would need to struggle for maintaining and further improving their image by disclosing more CSR related activities (Waheed, 2006). Jusubova (2015) also found a significant positive connection between company reputation and CSR activities. Conversely, Ullmann (1985) observed a neutral relation between CSR and financial performance and pointed out that whether a company spend too much or too less resources on CSR activities, overall such spending had no effects on FP of the company. Mcwilliams and Siegel (2000) also confirmed the same opinion and found no relationship between CSR and financial performance. However, they proposed that a good reputation did improve FP that could be enhanced through spending in research and development programs or in environment friendly products and processes. Nevertheless, some researchers (Aras & Crowther, 2008; El Mosaid & Boutti, 2012) found no connection between CSR and financial performance.

Islamic Banks and CSR

For social responsibilities, Islam imposed the *Zakat* and charity on wealthy people and businesses in order to create the mechanism for sharing of wealth between the rich and the poor (Lewis, 2006). Socio-economic responsibility was found very important for Islamic banking industry because Islam emphasized on the socio-economic responsibility (Ebrahim & Joo, 2001). Therefore, according to Islam CSR is not only a business activity but also a religious obligation for any business, particularly Islamic banks because they are formed in the name of Islam. Islam, Ahmed and Hasan (2012) using financial ratios analysis observed an association between CSR and financial performances of business firms. Mallin, Farag and Ow-Yong (2014) also observed an affiliation between CSR and financial performance of Islamic banks. Rahman Belal (2004) concluded that ethical activities affect Islamic banks' financial performance.

After reviewing the literature, it is observed that little research has been conducted analyzing CSR in Pakistan. Moreover, businesses in Pakistan have lack of sufficient knowledge about the CSR (Khan et al, 2017; Waheed, 2006). Further, existing studies show contrasting results (Preston & O'Bannon (1997; Waddock & Graves, 1997; Aras & Crowther, 2008; Kansal, Joshi & Batra, 2014; Peng & Yang, 2014). Moreover, few studies have focused on the banking industry (Weshah et al., 2012; Islam et al., 2012) but with minimal focus on Islamic banks. Therefore, this study intends to investigate the dependence of Islamic banks' financial performance on the diverse aspect of CSR in Pakistan.

Conceptual Framework and Hypotheses

After discussing and reviewing the literature, the following model has been developed for this study. On the left side, different parts of CSR translated into four variable, Economic Responsibility, Legal Responsibility, Ethical Responsibility and Philanthropic Responsibility (Caroll, 1991) are given. On the right-hand side of the figure, financial performance is mentioned in form of ROA, ROE and Tobin's Q.

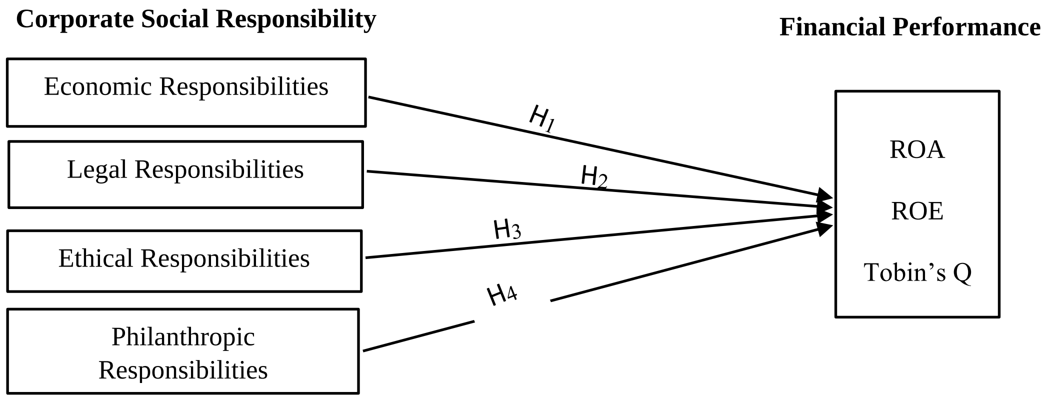

Figure 1: Theoretical Framework

The relationships given in the above model are explained below and translated into the respective hypotheses. For instance, if a business fulfills economic responsibilities efficiently and effectively, then the financial performance increases (Matin et al., 2011). Hence it is proposed that:

H_{1a}: Economic responsibility significantly affects the ROA.
H_{1b}: Economic responsibility significantly affects the ROE.
H_{1c}: Economic responsibility significantly affects the Tobin's Q.

Similarly, if a firm follows laws with respect to product safety, quality and health standards, it increases sales of the firm and reduce costs (Waddock & Graves, 1997). Therefore, it is proposed that:

H_{2a}: Legal responsibility significantly affects the ROA.
H_{2b}: Legal responsibility significantly affects the ROE.
H_{2c}: Legal responsibility significantly affects the Tobin's Q.

Ethics can contribute significantly to the financial performance of the firm by getting positive comments from employees and their families. Ethical practices of the firm enhance the moral of employees and increase their work efficiency. Being ethical, enhances the image of the firm in the eyes of the customers that may increase the financial performance of the firm. Thus, it is assumed that:

H_{3a}: Ethical responsibility significantly affects the ROA.
H_{3b}: Ethical responsibility significantly affects the ROE.
H_{3c}: Ethical responsibility significantly affects the Tobin's Q.

A socially irresponsible firm has low market value. However, spending money on CSR related activities can produce palpable benefits including "customer loyalty, employee commitment, supplier support/partnership, and corporate reputation" (Berman et al., 1999; Maignan, Ferrell, & Ferrell, 2005) that increases corporate financial performance (Wang & Qian, 2011). Nevertheless, no direct connection between community relations and financial performance of a firm could be observed (Berman et al., 1999). Therefore, it is proposed that:

H_{4a}: Philanthropic responsibility significantly affects the ROA.
H_{4b}: Philanthropic responsibility significantly affects the ROE.
H_{4c}: Philanthropic responsibility significantly affects the Tobin's Q.

Material and Methods

This research intended to evaluate the effect of various dimensions CSR on the financial performance of Islamic banks in Pakistan on the basis of descriptive statistics and hypothesis testing. Descriptive statistics were used to describe the fundamental attributes of the variables and summarize the data (Matin et al., 2011). Hypothesis testing was used to identify the type of relationships between the respective variables (Sekaran, 2006, p. 141). Previous research (El Mosaid & Boutti, 2012; Babatunde & Olaitan, 2013; Mallin et al., 2014) also used descriptive statistics and hypothesis testing. Thus, this study applied descriptive statistics to define the data and test the hypotheses in order to discover the association of CSR and financial performance, following a deductive approach.

In order to measure CSR, it was divided into four dimensions including economic responsibilities, legal responsibilities, ethical responsibilities and philanthropic responsibilities (Caroll, 1991). Similarly, financial performance was computed involving accounting ratios (ROA and ROE) as well as market-based measure i.e. Tobin's Q.

Economic responsibilities indicate profit earning for the survival and growth of business (Carroll, 2015). This is the main objective of a business because every business is running for the purpose of earning profit. A firm should price its products or services according to the expectation of society in order to earn adequate profit for the survival of business and to reward its shareholder (Matin et al., 2011; Ngari, 2014). Legal responsibilities reflect obeying the laws and fulfilling the rules and regulations for the betterment of business and society (Matin et al., 2011). Businesses have to fulfill the laws for doing any legal activity and also for the betterment of society (Smith, 2011).

Society has devised the minimum rules that are required to be followed by businesses to operate in the society. These minimum rules in fact present the society's view of "codified ethics" in the sense that they consider fundamental notion of fair practices as recognized by lawmakers (Carroll, 2015). This definition of legal responsibilities was also applied in earlier studies (Ngari, 2014; Smith, 2011; Matin et al., 2011). Ethical responsibilities mean businesses should do the right things. Ethical responsibilities include all the activities of businesses which are expected or prohibited by the society but not codified by laws (Carroll, 1991, 2015; Matin et al., 2011; Smith, 2011). Philanthropic responsibilities mean all those activities that give back to the society like charitable donations, addressing different social evils and promoting and funding different educational programs (Carroll, 2015; Ngari, 2014).

ROA is a ratio that indicates the proportion of profit a firm earns in comparison to its assets. It is computed by dividing net income by total assets (Gitman, 2003; Babatunde & Olaitan, 2013; Ramlan & Adnan, 2016). Previous studies (Samad & Hassan, 1999; Ahmed, 2011; Khan, 2012) also used this ratio to measure the financial performance. This study also used this ratio for the same purpose. Likewise, ROE describes the specific amount of return earned by the investment of shareholders of the firm. It is computed by dividing net income by total equity (Gitman, 2003; Samad & Hassan, 1999; Usman & Khan, 2012). Previous studies (Babatunde & Olaitan, 2013; Ramlan & Adnan, 2016) also used this ratio to calculate the financial performance. Tobin's Q reflects the market-based performance of a company.

It is commonly defined as the "market value of a company's assets divided by the replacement cost of the company's assets" (Tobin & Brainard, 1977). Previous studies (Siddiqui & Shoaib, 2011; Karim & Alam, 2013) used Tobin's Q for evaluating the financial performance of Islamic banks. They also mentioned that a complete analysis should include market-based measure such a Tobin's Q. So, this study used ROA, ROE and Tobin's Q ratio for the measurement of financial performance of Islamic banks. Table 1 summarizes the measurements of variables applied in this study.

Table 1: Measurements of variables

Variables	Statistics	Sources
Economic Responsibilities	Earnings per share	Matin et al., 2011, p.41
Legal Responsibilities	Existence of health, safety, quality laws	Matin et al., 2011, p. 41; El Mosaid & Boutti, 2012, p.102
Ethical Responsibilities	Existence of code of ethics	Matin et al., 2011; El Mosaid & Boutti, 2012, p.102
Philanthropic Responsibilities	Different society uplift initiatives	El Mosaid & Boutti, 2012, p.102; Matin et al., 2011,p. 41
Return on Asset (ROA)	Net Income ÷Total Average Assets	Gitman, 2003, p. 229; Babatund, 2013,p. 33; Ramlan & Adnan, 2016, p. 361
Return on Equity (ROE)	Net Income ÷ Total Equity	Gitman, 2003, p. 229; Usman & Khan, 2012, p. 254
Tobin's Q	Total Market Value of Firm ÷ Total Asset Value of Firm	Tobin & Brainard, 1977; Karim & Alam, 2013, p. 69; Siddiqui & Shoaib, 2011, p.1874

Secondary data were collected from annual reports and websites of the respective banks. Previous research (El Mosaid & Boutti, 2012; Haniffa & Cooke 2000) used secondary data from annual reports and websites of banks. After thoroughly reviewing the annual reports and website of each bank, relevant data were extracted from annual reports for a period of five years i.e. 2013-2017, in line with the previous studies (Matin et al., 2011; Ngari, 2014).

The four full-fledged Islamic banks functioning in Pakistan constituted the target population of this study. As the population was relatively small including only four Islamic banks and it was reasonable to collect the data from the entire population, therefore census sampling was used, and data were gathered from every member of the population. The census approach eliminates both the sampling error and sampling bias (Kothari, 2004).

Five annual report of each banks were analyzed according to the CSR index (El Mosaid & Boutti, 2012) in order to study the CSR activities of Islamic banks and ultimately calculating the CSR score. Dichotomous approach was used for calculating the CSR score. It required allotting a 0 score if an item did not exist and giving 1 if an item identified in the index had been disclosed in the annual report. Previous studies also used this method for calculating CSR index (El Mosaid & Boutti, 2012; Haniffa & Cooke, 2000). Mathematically,

$$CSRIbt = \frac{\sum_{i=1}^{n} Xibt}{n}$$

Where,

$CSRI_{bt}$: Corporate Social Responsibility Index for bank b and time t (year).
xi_{bt}: equal to 1 if item is disclosed for bank b and time t (year)
n: Total number of items

The data were analyzed by using statistical software named Stata. Hategan et al. (2018) and Matin et al. (2011) also used Stata to examine the relationship between CSR and financial performance. The following multiple regression model was used to analyze the relationship between CSR and financial performance of Islamic banks. Three regression models were used.

$$ROA_{it} = \alpha + \beta_1 ER + \beta_2 LR + \beta_3 ETR + \beta_4 PR + e \quad (1)$$
$$ROE_{it} = \alpha + \beta_1 ER + \beta_2 LR + \beta_3 ETR + \beta_4 PR + e \quad (2)$$
$$Tobin's\ Q_{it} = \alpha + \beta_1 ER + \beta_2 LR + \beta_3 ETR + \beta_4 PR + e \quad (3)$$

Where,

ROA = Profit before Tax/Total Assets
ROE = Profit before Tax/Total Equity
Tobin's Q = Total Market Value of Firm / Total Asset Value of Firm.

β_1ER = Economic Responsibility
β_2LR = Legal Responsibility
β_3ETR = Ethical Responsibility
β_4PR = Philanthropic Responsibility

Regression equation 1, describes the relationship of ROA and CSR. Regression equation 2, describes the relationship of ROE and CSR, and equation 3 shows the relation of Tobin's Q and CSR.

Data Analysis and Discussion

Table 2 presents the summary of descriptive statistics.

Table 2: Summary of Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Min	Max
ROA	20	0.399	0.609	-1.34	1.31
ROE	20	8.243	8.874	-3.61	23.69
Tobin's	20	2.056	3.420	0.041	9.01
ER	20	1.600	2.122	-0.28	6.13
PR	20	0.688	0.149	0.375	0.875
ETR	20	0.610	0.294	0.2	1
LR	20	0.841	0.040	0.818	0.909

ROA = Return on Asset, ROE = Return on equity, Tobin's = Tobin's Q, ER= Economic Responsibilities, PR = Philanthropic Responsibilities, ETR = Ethical Responsibilities, LR = Legal Responsibilities

Table 2 shows the standard deviations of ROA, ROE and Tobin's Q as 0.608, 8.874 and 3.419 respectively indicating their dispersions from their respective means. The respective means of ROA, ROE and Tobin's Q are reported as 0.399, 8.247 and 2.056. The standard deviations of economic, legal, ethical and philanthropic responsibilities are 2.122, 0.149, 0.294, 0.040, indicating their dispersions from their respective means that are reported as 1.599, 0.688, 0.61 and 0.840 respectively.

Generalized Least Square (GLS) regression method was used to assess the nature and strength of dependence of the financial performance on various aspects of CSR, respectively. The GLS was preferred because it used to incorporate residuals (Kramer, 1998). Further, GLS is considered more efficient than Ordinary Least Squares (OLS) because OLS ignores the correlation of error whereas GLS incorporates correlation of error. GLS is preferred in order to address/minimize the risk of unequal variances in data (heteroscedasticity) and correlation between the observations. In such situations OLS becomes statistically inefficient and can give misleading inferences and GLS proves helpful in obtaining efficiency in estimation (Atanlogun, Edwin & Afolabi, 2014).

The results of regression analysis are shown in the respective tables produced in the following pages. Multiple regression analysis was performed on collected data to test the type and nature of relationship between independent and dependent variables. Previous study of Matin et al. (2011) Ngari (2014) and Jusubova (2015) also used multiple regression analysis. Table 3 shows the effect of CSR on the ROA. The R-squared values tell us how much of the variation in dependent variable is explained by the independent variables. The results show R-squared equal to 0.63, suggesting that about 63% of the variation in ROA can be explained by variations in the independent variables. The remaining 37% is explained by other factors accumulated in the error term. Nevertheless, if there is more than one independent variable it is better to rely on adjusted R-square that adjust the number of independent variables. Adjusted R-squared is 0.613, indicating that 61.3% of the variation in the dependent variable can be explained by independent variables.

The results show that only economic responsibilities positively and significantly affect the firm financial performance. This is also supported by Matin et al. (2011). The other three dimensions of CSR found insignificant having no significant relationship with ROA. Resultantly, only H_{1a} is accepted confirming the effect of economic responsibilities on ROA. On the other hand, $H_{2a,}$ H_{3a} and H_{4a} are rejected indicating insignificant relationship of ROA with legal, ethical and philanthropic responsibilities.

Table 3: Effects of Explanatory Variables on ROA of Islamic banks

No. of Observations	= 20					
R-squared	= 0.6325					
Adjusted R-squared	= 0.6137					
Random-effects GLS regression				No. of Observations = 20		
Group variable: name				Number of groups = 4		
R-sq:	within = 0.0679			Obs per group: min = 5		
	between = 0.9641			avg = 5.0		
	overall = 0.6137			max = 5		
				Wald chi 2 (4) = 23.83		
Corr (u _ i, X)	= 0 (assumed)			Prob > chi 2 = 0.0001		
ROA	Coeff.	Std. Err.	Z	P > ‖ z ‖	[95% Conf.	Interval]
ER	0.392	0.156	2.52	0.012	0.866	0.698
LR	-9.429	8.291	-1.14	0.255	-25.678	6.821
ETR	0.144	0.437	0.33	0.742	-0.713	1.000
PR	-0.794	0.719	-1.10	0.269	-2.203	0.615
Const	8.158	6.721	1.21	0.225	-5.014	21.331
sigma _ u	0					
sigma _ e	0.420					
Rho	0	(fraction of variance due to u _ i)				

Table 4 shows the effect of CSR on the ROE. In this case, the value of R-square is 0.93. It means that 93% variation in dependent variable (ROE) is explained by the independent variables (CSR). The remaining 7% is explained by other factors accumulated in the error term. Nevertheless, adjusted R-square is 0.9123, explaining 91.23% of the variation in dependent variable can be explained by independent variables.

The results show that economic responsibilities have significant positive effect on financial performance of Islamic banks. However, philanthropic responsibilities have significant negative relationship with financial performance, whereas the other two dimensions of CSR i.e. ethical and legal responsibilities do not have any significant effect on the financial performance of Islamic banks. These results are supported by Matin et al. (2011) and Ngari (2014). Consequently, H_{1b} and H_{4b} are accepted confirming significant impact of economic and philanthropic responsibilities on the ROE. However, H_{2b} and H_{3b} are rejected indicating insignificant relationship of legal and ethical responsibilities with ROE.

Table 4: Effects of Explanatory Variables on ROE of Islamic banks

No. of Observations	=	20				
R-squared	=	0.9312				
Adjusted R-squared	=	0.9123				
Random-effects GLS regression				No. of Observations	=	20
Group variable: name				Number of groups	=	4
R-sq:	within =	0.4286		Obs per group: min	=	5
	between =	0.9927		avg	=	5.0
	overall =	0.9123		max	=	5
				Wald chi 2 (4)	=	156.06
Corr (u _ i, X)	=	0 (assumed)		Prob > chi 2	=	0.0000
ROE	**Coeff.**	**Std. Err.**	**Z**	**P > ǁ z ǁ**	**[95% Conf.**	**Interval]**
ER	4.723	1.083	4.36	0.000	2.601	6.846
LR	-21.592	57.604	-0.37	0.708	-134.494	91.310
ETR	-1.717	3.035	-0.57	0.572	-7.666	4.231
PR	-10.505	4.995	-2.10	0.035	-20.295	-0.715
Const.	27.113	46.696	0.58	0.561	-64.408	118.635
sigma _ u	0					
sigma _ e	3.020					
rho	0	(fraction of variance due to u _ i)				

Table 5 presents the effect of independent variable on the Tobin's Q. The table shows the value of R-square is 0.51, it means 51% variation in dependent variable (Tobin's Q) is explained by the independent variables. The remaining 49% is explained by other factors accumulated in the error term. However, adjusted R-squared is 0.4985, explaining 49.85% of the variation in dependent variable can be explained by independent variables. The results show that economic, legal, and philanthropic responsibilities significantly affect the Tobin's value whereas ethical responsibilities have an insignificant impact on Tobin's value. Matin et al. (2011) and Ngari (2014) also found similar results. Therefore, H_{1c}, H_{2c} and H_{4c} are accepted indicating that economic, legal and philanthropic responsibilities significantly affect the Tobin's Q. On the other hand, H_{3c} is rejected because ethical responsibilities have an insignificant effect on Tobin's Q.

Table 5: Effects of Explanatory Variables on Tobin's Q of Islamic banks

No. of Observations	=	20			
R-squared	=	0.5121			
Adjusted R-squared	=	0.4985			
Random-effects GLS regression			No. of Observations	=	20
Group variable: name			Number of groups	=	4
R-sq:	within =	0.0606	Obs per group: min	=	5
	between =	0.8454	avg	=	5.0
	overall =	0.4985	max	=	5
			Wald chi 2 (4)	=	14.91

Corr (u _ i, X)	=	0 (assumed)		Prob > chi 2	=	0.0049
Tobin's	Coeff.	Std. Err.	z	P > ‖ z ‖	[95% Conf. Interval]	
ER	2.453	0.998	2.46	0.014	0.496	4.409
LR	-125.509	53.087	-2.36	0.018	-229.557	-21.461
ETR	-3.230	2.797	-1.15	0.248	-8.711	2.252
PR	-9.144	4.603	-1.99	0.047	-18.167	-0.122
Const.	111.931	43.033	2.60	0.009	27.587	196.275
sigma _ u	0					
sigma _ e	0.362					
rho	0	(fraction of variance due to u _ i)				

All the above-mentioned results are summarized in table 6 given below.

Table 6: Summary of hypotheses testing

Hypothesis	Results
H_{1a}: Economic responsibility significantly affects the ROA	Accepted
H_{1b}: Economic responsibility significantly affects the ROE	Accepted
H_{1c}: Economic responsibility significantly affects the Tobin's Q	Accepted
H_{2a}: Legal responsibility significantly affects the ROA	Rejected
H_{2b}: Legal responsibility significantly affects the ROE	Rejected
H_{2c}: Legal responsibility significantly affects the Tobin's Q	Accepted
H_{3a}: Ethical responsibility significantly affects the ROA	Rejected
H_{3b}: Ethical responsibility significantly affects the ROE	Rejected
H_{3c}: Ethical responsibility significantly affects the Tobin's Q	Rejected
H_{4a}: Philanthropic responsibility significantly affects the ROA	Rejected
H_{4b}: Philanthropic responsibility significantly affects the ROE	Accepted
H_{4c}: Philanthropic responsibility significantly affects the Tobin's Q	Accepted

Conclusion and Recommendations

The results show that economic responsibilities affect the ROA whereas, legal, ethical and philanthropic responsibilities have insignificant relationship with ROA. Similarly, the economic and philanthropic responsibilities significantly affect the ROE whereas legal and ethical responsibilities have insignificant effect on the ROE. However, three of the CSR dimensions including economic, legal and philanthropic responsibilities significantly affected the Tobin's Q whereas, ethical responsibilities had no significant impact on Tobin's Q. Summarily, findings of this study confirms that only economic responsibilities has a significantly positive link with the accounting and market based measure of financial performance. Conversely, legal and philanthropic responsibilities have negative impact on the market-based measure (Tobin's Q). Shortly, it can be concluded that CSR dimensions somehow positively or negatively affect the financial performance of Islamic banks. The mixed results may be attributed to the diverse nature of dimensions of CSR as well as the diverse nature of measures of financial performance applied. Previous studies (Baird et., 2012; Peng & Yang, 2014; El Mosaid & Boutti; 2012; Islam et al., 2012; Preston & O'Bannon, 1997; Abbasi, 2010) also supported the findings of this study.

Finally, the contributions of this study can be examined from two perspectives. First, from academic point of view, this study contributed to the body of knowledge in the area of CSR and strengthened the view of Neoclassicals. Neoclassicals are the proponents of a negative relationship between the CSR and financial performance. Baird et al. (2012), Preston and O'Bannon (1997) and Peng and Yang (2014), also pointed out negative relationship between the CSR and financial performance strengthening the view of Friedman (1970) that CSR used to incur costs resulting in reduced profitability. Second, from practical point of view, this study may help Islamic banks to reorder their priorities and streamline their agenda. The findings indicate that the managers of Islamic banks should focus on the banks' economic responsibilities in order to enhance banks' financial performance. Matin et al. (2011) also said that managers should focus on the economic responsibilities because economic responsibilities would improve banks' financial performance. This study also highlighted that the market value of company was negatively affected by the legal and philanthropic responsibilities. It indicates that customers are not willing to pay premium for services because they assume that CSR incurs cost to the company and also detour the financial performance of company (Palmer, 2012). However, these kinds of thinking are due the limited knowledge of stakeholders about CSR (Yunis et al., 2017). Therefore, banks should also educate their investors that CSR activities can enhance the financial performance in long run because CSR improves the image of the organization in the eyes of potential customers and investors (Jusubova, 2015). The policy makers of banking sector should make such type of policies that would make mandatory to practice CSR until CSR starts positively affecting the financial performance of banks.

Further, it is probably a bit unfair to estimate the performance of Islamic banks only in financial terms with respect to CSR owing to their specialized nature. Islamic banks are supposed to facilitate equitable income distributions playing role in developing the society and minimizing the poverty. Therefore, it is imperative that such non-financial measures of performance may be considered in examining the effect of CSR with respect to Islamic banks' performance. Further, the data related to CSR is extracted largely from the annual reports and websites. Hence, these results are limited to the information collected from these two sources. Further, this study is only focused on Islamic banks in Pakistan collected data only for 5 years, so findings of this can only be generalized to Islamic banks located in this country. Future researches may also collect data for longer period and from larger number of banks to enhance the generalizability of their findings.

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