Corporate Social Responsibility and Firm’s Financial Performance: Evidence from the Banking Industry of Pakistan

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Abstract
The present work examines the effects of corporate social responsibility on profitability (CSR) of banking sector of Pakistan. The existing literature mainly focused on manufacturing industry of developed countries, while this study investigating the impact of CSR on financial sector of Pakistan. Secondary data were collected from 15 different banks from their annual reports for the period 2007-2016. Furthermore, study used summary statistics and two step system GMM to analyse the impact of corporate social responsibility on the financial performance of banks and found significant positive impact of CSR on financial sector performance. Moreover, the present work also observe that banks with good history of CSR spends less at present as they have established good reputation in society. Our study provides important empirical insights for regulators and other key stakeholders especially State Bank of Pakistan and banking industry of Pakistan for improvement in firm performance and profitability.

Keywords: CSR, Banks’ Financial Performance, Lag CSR, Banking sector of Pakistan, Dynamic Panel GMM

1 Introduction
Business managers consider CSR as important strategy to reach steady state growth rate. It implies those strategies that are ethical, environment friendly and advantageous for society at large (Bowen, 1953). In addition to profit oriented objective, organization also undertake social activities that aimed to improve living standard of employees and public in general. Society provides infrastructure to firms for smooth functioning (Zheng, 2006). In return, business organizations undertake social activities for development of society. Those organization which meet the expectations of the stakeholders enjoy higher profits as they prefer to buy products of socially responsible firms (Sayekti, 2015; Kolb, 2018; Landi & Rapone, 2018).

Nevertheless, CSR remained a bone of contention among stakeholders and managers since 1950. As explained by Bowen (1953) in his book “Responsibilities of the Businessman, CSR is a commitment to pursue strategies which could deal with the choices or lines attractive or beneficial for society. Friedman (2007) argued that managers are agents of shareholder and...
thus the maximization of their profit is their sole responsibility as they invest their resources for higher return instead of society welfare. It is the responsibility of the government and not private firms to perform social work (Brammer & Millington, 2007). However, business and social interests came closer and firms become more responsive to their stakeholders in 1980s. This started a debate whether firms can boost profit by working on social projects or not. In 1984, Freeman (1984) argued that manager must address the needs of different stakeholders such as employees, customers, investors and shareholder which would help in increasing profit of firms (Selcuk & Kiymaz, 2017).

Before 20th century, the main focus of the business was to maximize profit for shareholders. As more and more firms entered into the market to maximize their market share, this led to the competition to execute social activities for attracting customers. According to Johansson, Karlsson, and Hagberg (2015), the primary objective of organization is to maximize profits while compliance with legal obligations and ethical practices are secondary motives for firms. Many studies found that firms remain engage in CSR activities have high financial performance. Studies also finds that firms connected with environmental practices enjoy increase in their share price and reputation (Lu & Liu, 2019). On contrary, some studies also found a negative relationship between CSR and financial performance (FP).

In nutshell, the prior limited literature regarding the relationship between CSR and FP is not only scarce but also incongruent. Moreover, most of these studies focused on the manufacturing or non-financial sectors of the developed economies. Therefore, this study fills this gap by investigating the relationship between CSR and financial performance of banking industry of Pakistan where the subject has recently gained attention (Selcuk & Kiymaz, 2017).

Additionally, the study also investigated whether banks’ previous CSR and lag profitability has any impact on their current profitability which has rarely been investigated in the past. The most significant contribution of this study is that it found significant positive impact of interaction effects of current CSR and past CSR which is previously ignored. The study selected the provisions of scholarships, philanthropic donations for health, social and environmental issues etc. as proxies of CSR (Rana, 2018) and ROA and ROE as proxies of financial performance of the 15 banks operating in Pakistan from 2007 to 2016. The nexus between CSR activities and firm performance might has dynamic implications while the available studies considered the static effects only for the relationship. Therefore, this study is unique in that to investigate the impact of CSR on financial performance by using Panel dynamic GMM to tackle the issues of endogeneity.

2 Literature Review

Many theories provide underpinnings for the CSR. For instance, Legitimacy Theory is explains the behaviour of organizations in conducting and reporting voluntary social and environmental disclosures to fulfil their social contract (Preston & O’Bannon, 1997). The theory assumes firms’ to change or influence the concept of society about them by conducting their operations in manner to meet the needs of the society Dhingra & Mittal (1997). Likewise, shareholder theory assumes that corporation has a primary responsibility to protect the interests of shareholders along with all other stakeholders which improve the image of the firm’s (Maignan et al., 2005; Sajjad et al., 2018). The stakeholder theory assumes
a positive relationship between firm’s CSR and economic performance (Bosch-badia et al., 2013; Isanzu & Fengju, 2016; Saeidi & Sofian, 2014).

Similarly, Resources based view theory assumes that organizations perform their business activities and operations with the help of needed resources acquired from external environment (Turyakira, Venter, & Smith, 2017). The theory posits that firms’ social activities improve their competitive advantage through segmentation, and long-term cost saving reputation (Berete, 2011; Preston & O’Bannon, 1997; Tsang, 1998). The theory also shows that the firms with sustainable profitability are more committed than their competitors towards social responsibility as they can allocate more funds for such activities (Goss & Roberts, 2011). On contrary, the Shareholders’ primacy theory assumes that firms have a sole responsibility to make as much money as possible for their shareholders (Husted & De Jesus Salazar, 2006). As per the theory, it is logical as investors invest with an intent to receive maximum benefits (Nathan & Scobell, 2012) rather to maximize welfare of the society. If a firm does not maximize shareholders’ returns, the investors either divert their investment or change firms’ management.

Boodoo (2017) documented that CSR is a duty of firms to minimize unethical behaviour such as reducing waste and to maximize efficiency and protect environment for future generations. Ashraf, Khan and Tariq (2017) examined respondents’ perceptions of socially responsible companies and their purchasing decisions. Approximately, 79% of 2,594 survey respondents were of the view that corporate citizenship affects their purchasing decisions. Bae et al (2016) found that CSR has a significant positive in relation with firm’s performance. They added that CSR actually improves firms’ reputation and loyalty of employees’ which positively affect firms’ financial performance. Isanzu & Fengju (2016) in a study of randomly selected 101 firms from Tanzania found that CSR has a significant positive impact on financial performance. They recommended that firms’ should undertake corporate social responsibility for increasing their brand awareness and tax relief as CSR expenditure is deducted from the income before taxes. Niresh and Silva (2018) found that there is a significant positive association between corporate social responsibility disclosures and future financial performance of the selected listed banks, finance and insurance companies in Sri Lanka. Oba (2011) examined the difference between the firms which invest in a socially responsible manner and those which do not on the Johannesburg stock exchange. The findings revealed a positive link of CSR with firms’ financial performance. The findings provide evidences that Corporate Social Responsibility is rewarded by the stock market as reflected by increase in price of the shares (Lins et al., 2017; Wan Ahamed et al., 2014).

On contrary, Friedman (1970) opposed firms’ commitment towards the protection of society’s interests as it negatively affect their financial performance. Social activities decrease financial benefits due to increasing cost on energy saving, waste reduction, and buying recycling or carbon capturing technologies that hurt the underlying principle of shareholder’s wealth maximization (Vlachos et al., 2009). CSR increases operating cost and thereby reducing firms’ profitability (Arshad et al., 2015; Ashraf et al., 2017) Many studies endorsed significant negative relationship between CSR and firm’s financial performance (Aga et al., 2012; Hirigoyen & Poulain-Rehm, 2014; Man, 2015; Selcuk & Kiymaz, 2017) From an economic perspective, a company dedicated to social responsibility is supposed to waste resources and reduce profits (Mwangi & Oyenje, 2013). The findings endorsed in the banking

2.1 Hypotheses development

From a theoretical perception, the conflict resolution hypothesis explains using stakeholders’ management theory (Freeman & Hasnaoui, 2011) that better relation with stakeholders increases firm’s profitability. If the conflict resolution motivation is acceptable, firm will utilize complementary CSR practices for the betterment of the stakeholders. Firms with more cash inflows would in better position to finance voluntary activities (Ilyas Sindhu & Arif, 2017; Khurshid, Shaheer, Nazir, Wqas, & Kashif, 2017). The findings of previous literature are mixed as some studies found positive, while others found no or negative correlation between CSR and firm profitability (Babalola, 2012; Buldybayeva, 2014; Gao et al., 2016; Hirigoyen & Poulain-Rehm, 2014; Kesto, 2017; Man, 2015; Paul & Siegel, 2006). In view of these incongruent findings, there is a space for further research and thus, this study explores the rarely focused relationship between the extent of CSR disclosures and firms’ financial performance in Pakistan.

H1: CSR has a significant positive impact on banks’ financial performance (ROA and ROE).

It is also expected that CSR is a long term investment. It implies that banks which spend more on CSR activities in previous years are expected to enjoy higher profit current period in terms of profitability Kesto (2017).

H2: Lag CSR has a significant positive impact on banks’ financial performance (ROA and ROE).

Firms with higher profit are expected to earn higher profit in future as they would be able to finance CSR activities which improve reputation of the firms that push profit horizon of the firms. Earlier studies find that higher earning firms expected to earn more in future because they finance research and development activities which improve chance of higher profit (Stierwald, 2009).

H3: Lag profitability has a significant positive impact on banks’ current financial performance.

Business organization maximize their profit by reducing cost of production and increase in sale level. Literature shows that CSR activities increase customer’s loyalty towards organization and consequently increases sale volume of organization. It is hypothesized that business organization which undertake CSR activities in present would also finance CSR activities in future.

H4: Banks CSR activities are consistent and sustainable.

3 Data and Methodology

The study selected a sample of 15 banks using purposive sample technique. The study collected data on dependent (ROE and ROA), independent (CSR) and control variables (total assets) from annual reports published by these banks from 2007 to 2016.
3.1 Operationalization of Variables

Prior literature identified and used different measures to gauge corporate social responsibilities such as questionnaire surveys, content analysis of disclosed CSR information in corporate publications, spending measures, uni-dimensional, and multidimensional ratings based on some observable social responsibility indicators (Gbadamosi, 2016). Other studies measured CSR with KLD ratings; EIRIS index and SGP index (Lioui & Sharma, 2012; Pan, Sha, Zhang, & Ke, 2014, Bijmolt, Tribo, & Verhoef, 2012). However, as the data for above mentioned indexes was not available in case of Pakistan, therefore, this study used the spending measures of CSR which included banks’ expenditure on education, health, workers’ welfare and environment as indicators of CSR. Likewise, the outcome variable of financial performance is measured by ROA and ROE respectively.

3.2 Control variables

Many authors suggested that the relationship between CSR and firms’ financial performance might be affected by some other factors like age and size of the firm (Azizul Islam, 2017; Lencioni, 2005; Paul & Siegel, 2006). Banks’ age influences firms’ CSR (Preston & O’Bannon, 1997) as younger firms usually do not participate in CSR activities and focus on the profitability (Garai, 2017). Firms’ age is measured by the natural logarithm of the number of years since the first listing of the bank. Likewise, small size banks have less available resource to adopt or sustain with a more socially responsible behaviour (Abdullah & Mujahid, 2014; Husted & De Jesus Salazar, 2006; Iqbal et al., 2013; Isanzu & Fengju, 2016; Niresh & Silva, 2018; Raza et al., 2014; Salah & Salama, 2017). In the past, firm size has measured with different proxies such as sale volume, total revenue, number of employees and total assets. In this study, firm size is measured by log of the total assets.

Lag profitability is supposed to affect the current performance of the firm as found by Rodriguez-Fernandez, (2016) which suggests the application of dynamic panel system GMM model. This study uses the following dynamic panel GMM model.

\[
FP_{it} = FP_{it-1} + CSR_{it} + CSR_{it-1} + CSR_{it} \times CSR_{it-1} + \phi X_{it} + \eta_i + \nu_{it} \ldots \ldots \ldots (Model1)
\]

Where "i" refers to bank while "t" to time. \(FP_{it}\) is used to measure financial performance of “ith” bank in period “t”. \(\eta_i\) is used to measure bank -specific fixed effects and \(\nu_{it}\) is the error term. \(X_{it}\) denotes control variables such as age and size of the bank.

To measure the impact of current CSR on the financial performance of the banks (ROA, ROE), it is expected that current financial perspective of the bank is likely to be affected by both the observable and unobservable heterogeneity which also determine CSR activities. Also, there could be a simultaneity problem in the model as CSR also depends on firms’ financial position. One solution is to estimate the effect of CSR on firms’ financial performance using System of Equations which requires strict exogenous instrument. Dynamic system GMM can solve the problem as it uses internal instruments i.e. use lags of explanatory variables as instruments. This paper uses dynamic two step system GMM.
4 Results and Discussion
4.1 Descriptive Statistics

Descriptive statistics provide the summary of selected banks in term of return on assets (ROA), return of equity (ROE), Current CSR, lag CSR, interaction and bank size. Table 1 shows that ROA in selected banks are minimum of -4.22 and maximum of 3.71. While the average ROA and ROE for each banks, 1.14 and 4.99 respectively. Furthermore, we observe that each banks deviation from average ROA and ROE are 0.96 and 123.66 respectively. Moreover, results shows that ROE is more deviated from its average as compared to the deviation of ROA from its average. In addition the Current CSR is a minimum of 0.8 while maximum of 7.35 exact value is found in the case for Lag CSR. The average current CSR is reported 5.078 while the Lag CSR is the average of 5.009. Furthermore, minimum deviation from it averages were found in both current CSR and Lag CSR which implies that banks CSR activities are consistent. The average value of interaction term CSR*ROA is greater than average CSR*ROE which implies that CSR significantly affects ROA as compared to ROE.

Similarly the correlation coefficient is consider moderate uphill (positive) if 60 or below 60 and consider strong if strong uphill (positive) if the correlation is 80 or below 80. In last the correlation is consider perfect uphill if 90 are below 90. In table 2 statistics of Pair wise Correlation are reported. The results shows that mostly variables are strong uphill correlation mean that the increase in one variable my increase other variable. While the case of current CSR and lag CSR, current CSR and interaction and lag CSR and interaction have perfect uphill (positive) which shows that the increase in one variables will almost 90 percent increase in other variable. Furthermore the in the case of ROE and Lag CSR, ROE and bank size have weak uphill (positive) correlation.

The 2nd column of table No.2 shows the partial correlation coefficient between return on equity, current CSR, lag CSR, interaction term and bank size. Correlation coefficient of current CSR and return on equity is higher as compared to correlation coefficient of current CSR with return on assets. The partial coefficient of current CSR and lag CSR is 90.8 percent which implies that banks with higher past CSR also undertake more CSR at present. The correlation coefficient of bank size and current CSR is 73 percent which implies that banks with sustainable assets spend more on current CSR. Similarly, the correlation coefficient between bank size and interaction term indicate that consistency in CSR activities is highly correlated with size of the bank.

4.2 Robustness Test

Before proceeding to estimate the impact of CSR on firm’s profitability, this paper use different estimation method to know which technique can applied to provide efficient estimate.

According to Caselli et al. (2002), dynamic system GMM is better than other panel techniques because control cross sections unobservable heterogeneity, omitted variable bias, measurement error and endogeneity issues. When data series are persistent, difference GMM suffers from weak exogeneity problems and system GMM is better option in such cases. Table No.3 shows the result of pooled, fixed effect model, one step and two steps system GMM, and
one and two steps difference GMM results. From column (1,2 &3), it is clear that the coefficient of lag return on assets in column (1) is greater than column (3) and the value of the coefficient in column (3) is greater than the value in column (2) i.e; Pooled OLS(0.494***) > One step system GMM(0.352***) > Fixed Effect(0.209*). The result support finding of Nickel (1991) and Bond (2000) which find using simulation study that in such case the system GMM is preferred method of estimations. Moreover table No.3 also shows standard error of the coefficient of two step GMM is minimum among all the estimation techniques. In addition, one step system GMM AR(2) Sargen P-values coefficient indicate that autocorrelation and instrument exogeneity issues still exist. Two-step system results indicate that there is no autocorrelation problem at second difference and Sargen p-value test statistics also shows that instruments are exogenous. The same types of steps are followed using return on equity as dependent variable and gives same of types of recommendations.

Based on the results of robustness test of panel data of sample data, this paper used two-step system GMM method to investigate the impact of CSR on banks profitability.

The estimated results of dynamic system two-steps GMM reported in Table 4 and Table No.5 shows that current CSR has positive effects on current profitability of banks using return on assets and return on equity as proxy of profitability. Comparing the results of both tables, the impact of current CSR on profitability is greater in magnitude using return on equity which implies that in the present case return on equity is better measure than return on asset.

The study examined the impact of past CSR on bank's profitability and found that the lag CSR have significant positive impacts on financial performance of the banks. However, the coefficient value of current CSR is smaller as compared to that of lag CSR which implies that current CSR activities are less effective than past CSR activities. This result negate the stance of Friedman (1984....) that current CSR increase cost of production and has negative effects on firm’s profitability (Friedman, 1987). The results also support the prediction of (Adamska & Gcrygiel-tomaszewksa, 2016; Clarence, 2016) which implies that lag CSR improve reputations of firms and affect profit in long run.

Using return on assets and return on equity as proxy of profitability, Table No.4 and Table No.5 shows significant positive effect of previous year profitability on current profitability. This indicates that banks which earned more profit in the past enjoy higher profits or good financial performance in the current year, as well. This might has a rationale that past profitability provides an opportunity for them to excel their CSR and earn more in the current year. The findings are also consistent with Vollono, (2010) who found that firms with higher profit are able to maintain or improve their market position or share especially position by investing in research and development. The findings also support Stierwald (2009) who found that firms profitability is determined by lag profitability, firm size and sector effects. The study used return on equity as alternative measure of profitability and the results remained unchanged as reported in Table 5.

The study also examined whether current CSR or lag CSR have significant effects on firms profitability and introduced an interaction term (Interaction=CSR*CSR (-1)) that carry significant negative coefficient in both the models i.e. in relation with return on assets and return on equity. This indicates that banks which carried out CSR activities in the past would
spend less on current CSR as compared with banks with low past expenditures on CSR which implies that CSR activities improve image and reputations of banks. This finding of the study implies that to improve image in society banks have to spend on social activities in order to increase future profitability. This is also clear from figure 1 which shows interaction between current CSR and lag CSR in relation to the profit of the banks. At low lag CSR, banks have to spend more to increase profitability while with higher lag CSR expenditures, banks spend less on CSR as current CSR is less effective in increasing firm’s profitability. The interaction graph shows that firms spend more in order to increase profitability in future.

The empirical results show satisfactory performance of diagnostic statistics. The AR (1) and AR (2) tests indicate that at first difference autocorrelation exist but not the 2nd difference. This implies that instruments were valid and two step GMM method was a consistent and an appropriate estimator. Sargent test is used to test the validity of over identify restriction under the assumption that error are homoscedastic. The result of Sargent test shows that the instruments used were exogenous.

5 Conclusion and Limitations of the Study
At present, the banking industry of Pakistan is performing well in CSR as compared to their performance in the past. However, despite a steady increase and improvement in CSR, there are many banks which do not disclose their expenses on CSR on websites. For instance, it is revealed in the data collection phase that some banks like Soneri Bank, Bank of Khyber and others banks, not selected for the current study; do not disclose their CSR activities on their website. The banks selected for the study also only public their CSR summary and not detailed information. In spite of these limitations, banks play a key role in the economic development especially in protecting the environment by arranging awareness program, plantation and using environment friendly technology. Similarly, banks also arrange health related awareness programme and sports events in Pakistan. The positive relationship between CSR and bank’s profitability suggests that most of firms in banking sector contribute towards society by providing donations, contributing to workers’ welfare fund and financing sport campaign. It implies that although CSR adds to the cost of firms, but it also improves their reputation which improves their profitability. Likewise, the findings that current CSR is more useful and fresh in minds of the customers than the previous motivate firms for consistency in their CSR activities. This study used a sample of 15 banks as most of the rest have no CSR data. As a limitation, studies in future may extend its scope to other industries and qualitative aspect of the subject.

References


