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Corporate Social Responsibility Moderates the Nexus between Financial Inclusion and Islamic Financial Stability

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ABSTRACT

This research work checks the influence of the financial inclusion index (FI) and corporate social responsibility index (CSRI) on financial stability, profitability, and return on equity of the Islamic banks of Pakistan. Further, research works to check whether the corporate social responsibility index plays a moderating role in the association between the financial inclusion and financial stability of Islamic banks and windows of Islamic conventional banks of Pakistan. The corporate social responsibility index was measured through the contribution of social activity to society. Financial inclusion was measured through financial access to the entire society without any discrimination against society. In this paper, samples of the Islamic banks including the Islamic window of the conventional banks for 2005 to 2020 are investigated. Further, the data is selected of the variables from the financial statement and balance sheet of the banks. The fixed effects and generalized moments of the method are employed to check the affiliation between the FI and CSR on the stability and profitability of Islamic banks. The generalized moment of method (GMM) has been employed on the panel data set to control the endogeneity from the model. The empirical results of this research study have the following conclusion: Firstly, FI has a constructive and significant impact on the financial stability and profitability of the banks. Secondly, corporate social responsibility has a positive and significant impact on stability and profitability. Finally, the interaction term corporate social responsibility has a positive and significantly moderating effect on the relationship with the financial inclusion on the stability (FS) and profitability on the Islamic banks.

Keywords: Financial stability, Profitability, Financial inclusion, CSRI, and Islamic banks

1. INTRODUCTION

This research study has a few purposes, firstly, it attempts to examine the direct

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influence of financial inclusion (FI) on the Islamic banks' financial stability and profitability. Secondly, this study also explores the interaction effect of corporate social responsibility (CSR) on the Islamic banks' financial stability and profitability. FI defined is as the financial access to the whole region without any obstacle, easily and affordable 1(Olaniyi, 2017). Other research studies also define that FI is the service where the whole population takes benefits from the financial service (Arora, 2010; Ozili, 2018; Bhaskar, 2013).

In the near past, social activities gained a huge Momentum in the research field as well as the international corporation to meet the shareholder expectation. In terms of research works, CSR stated the long-term strategic commitment of the corporation to repay and solve the Societal and environmental issues (Ness, 1992). However, other research studies reveal that organizations must engage and participate in philanthropic and social activities (Carroll, 1979).

Indeed, due to corporate social responsibility organization achieves a competitive edge as well financial stability (Freeman, 1988). Stakeholder theory explained the connection between the management of the firm and stakeholders (Hammann et al. 2009). However, the research study reveals that the corporate social responsibility activities of the organization should be an asset instead of a cost (Wibisono, 2007). CSR has had countless considerations from the last few decades due to global social and environmental issues (Turker, 2016). It has been defined variously in the research study conducted in the past that corporate social responsibility is the humanitarian approach to a strategic business for gaining the competitive edge (Latif and Sajjad, 2018).

Moreover, the research study also said that engagement in the corporate social responsibility Programs Corporation enhances the firm performance and reduces the information asymmetric (Gul et al. 2017). Indeed, a specific other research study said that Islamic banking is playing a positive role in moral values which directly affect the business (William and Zinkin 2010). A growing body of research studies finds dual findings among the access to finance (FI) and banks FS and return of the banking institution. A number of the research works used different proxies to check the impact of financial access and financial stability such as (Khan, 2011; Morgan and Pontines, 2014;

Han and Melecky, 2013; Mehrotra and Yetman, 2015). The research study concluded that the increase in ATM will enhance the return of the Nigerian banks (Alfonse and Florence, 2012; Mohseni, 2017; Ditta and Saputra, 2020; Le et al. 2019; Shihadeh et al. 2018; Ikram and Lohdi, 2015).

Panel data regression estimation took from the time frame of 2011 to 2016 the research study reveals that financial inclusion boosts the financial efficiency of the bank (Muthia et al. 2020) to check the effect of financial inclusion on financial stability collected the data from the 3071 from the period of 2008—2017 of the Asian region. The study noted that higher levels of financial inclusion enhance the stability of the financial institution and in turn lead to bank resilience of the bank. Secondly, the financial inclusions reduce the transaction cost and poverty and enhance the value of the share.

It has been defined variously in the research study that financial inclusion define, is a process where an individual and firm-level access to formal financial product and service such as formal payment, credit saving, formal payment, insurance, and pension- saving without any discrimination at low cost (Umar et al. 2020). The research study also examines those Islamic financial institutions that are much engaged in the financial inclusion service in both Pakistan and Bangladesh (Nawaz, 2018). However, this research works to distinguish how and whether FI is equal for the Pakistan Islamic banks. Still not found research that examines the influence of FI and Islamic banks returns and with the interaction term effect in the Pakistan environment.

H_1: *Financial inclusion has a positive and significant impact on financial stability and Profitability*

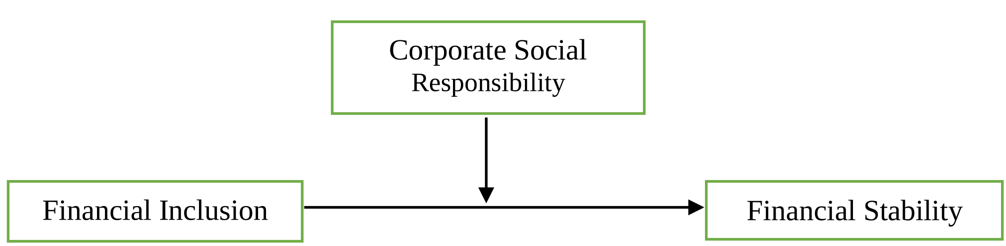
A growing body of research studies found different results on the connotation among the social responsibility on FS and profitability. The research shows that good corporate social response can provide substantial benefits increasing innovation and capacity (Russo & Fouts 1997). Many research studies investigate whether CSR performance (Activities) matters for stock market investors. Galema et al (2008) find from the research study that when corporations do social activities in the market leads to enhancing the performance of the firm. The study was conducted on a sample of the 26 top listed corporations of Jordan, the study results reveal that there is an insignificant relationship of CSR in FP (Omar and Zallom, 2016).

CSR illustrates that it is the social responsibility of a company towards the population. A number of the researchers define that in CSR the firm has a responsibility to utilize the society and maximize the profit (Lantos,. 2001). Several research studies have scrutinized the influence of CSR on banking stability and profitability and found mixed results. For example, Gong and Ho, 2018) collected the data of the Chinese firm from the period of 2009—2015 and found that this type of firm who are engaged in corporate social responsibility activities is more stable.

Moreover, the study also reveals that CSP attracts many social responsibilities then they improve the financial performance. Moreover, the researchers examined the data from 2004 to 2010 there is relation asymmetric information (Lopatta et al. (2016). The research study measures information asymmetry differently compared to the last study of the research. The research examines the information asymmetry from abnormal returns that occur when trade inside in the firm. The data was taken over the time frame 1992-2007 using a sample study of 12920 US firms that investigate that when firms are doing CSR the cost of equity is low in the industry (El Ghoul et al. 2011). The firms which are involved in tobacco and nuclear power are those types of firm financing their finance from equity financing costs. The firms are less risky and have low asymmetry information, as a result, leads to a decrease in the cost of equity financing. The latest study research finds that corporate social responsibility is negatively associated with the firm cost of equity (Ng and Rezaee 2015).

H$_2$: *Corporate social responsibility has a positive and significant impact on financial stability and Profitability.*

Theoretical Framework



2. Research Methodology

The research study used the unbalanced panel data of Pakistan for 2005 to 2020 listed banks of Islamic banks and conventional banks Islamic branches. The research study uses the generalized moment of method (GMM) to cover and control the endogeneity problem in the model. Generalized moment of the method was proposed by Arellano and Bond 1998. The model empirically checks and explores the influence of access to finance (FI) and CSR on the financial stability and profitability of Islamic banks of Pakistan. The main dependent variables of this research study are Islamic banks' financial stability and profitability. The explanatory variable of the research study is financial inclusion. The moderating variable of this research study is corporate social responsibility. This research uses the two-step system (SYS) estimation GMM method which was developed by Blundell and Bond (1998) and Arellano and Bover (1995) to estimate the relationship among the models of the research. GMM model is to take the lagged value of the outcome variables.

Measurements and Definition of Variables

2.1. Independent and Moderating Variables

These research works were to bring minor changes to make it suitable for the Pakistani environment. The research works measure financial inclusion through financial access such as no of atm, no of the card, deposited SME, and ATMs. The principal component technique (PCA) is used to construct FI dimensions to normalized variables for the Pakistan Islamic banks. The prior research studies measure corporate social responsibility index through the different techniques such as few kinds of research taken the log to Donation. This research works follow the prior research works by (Gul et al. 2017).

2.2. Dependent Variables

A Dependent variable of this research works is the bank’s profitability and financial stability. The term profitability is measured through the return on asset (ROA) which was used in past research works (Shihadeh & Liu, 2019). Financial stability is measured through the Z-Score of the banks which have used numerous research studies in prior literature.

2.3. Model Specification

To explore the impact of financial inclusion on the bank's financial stability and profitability, this research works adapted the model I and II of the prior research works (Siddik et al. 2018). The research studies to check the impact of financial inclusion on the banks' financial stability and profitability use Pooled Ordinary least square method, fixed, random effect, and generalized moment of the method. Second, this research works adapted the second model 1V, V for this research study used by the earlier research studies.

FS= $\beta + \beta_1 FI_{it} + \beta 2$Banks size + $\beta 3$ banks age + ε…………………..…………I

ROA= $\beta + \beta_1 FI_{it} + \beta 2$Banks size + $\beta 3$ banks age + ε.....……………………1I

FS= $\beta + \beta_1$CSRI + $\beta 2$Banks size + $\beta 3$ banks age + ε…………………..…...I11

ROA= $\beta + \beta_1$CSRI + $\beta 2$Banks size + $\beta 3$ banks age + ε …………………...1V

Model (V, VI) below is the extension of the main model, which shows that the corporate social responsibility with the relation on the above models I.II.III.IV

FS= $\beta + \beta 1 FII_{it} + \beta 2$CSRI + $\beta 2$FII*CSRI + $\beta 2$BA + $\beta 2$BS+ ε……….……...V

ROA= $\beta + \beta 1 FII_{it} + \beta 2$CSRI + $\beta 2$FII*CSRI + $\beta 2$BA + $\beta 2$BS+ ε...………...VI

2.4. Generalized moment of method (SYS GMM)

$$ROA = \beta + \beta 1FIit + \beta 2CSRI + \beta 2\text{Banks size} + \beta 3\text{ banks age} + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 01$$

$$FS = \beta + \beta 1FIit + \beta 2CSRI + \beta 2\text{Banks size} + \beta 3\text{ banks age} + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 02$$

$$FS_{it} = \beta_0 + \beta_1 FS_{it-1} + \beta_2(FI_{it})(CSRI_{it}) + \; +\beta_3 (CSR)(FI) + \beta_4(CV_{it}) + \beta_5(\varepsilon_{it}) \ldots\ldots .05$$

$$ROA_{it} = \beta_0 + \beta_1 BP_{it-1} + \beta_2(FI_{it})(CSRI_{it}) + \; +\beta_3 (CSR)(FI) + \beta_4(CV_{it}) + \beta_5(\varepsilon_{it}) \ldots .06$$

3. Results and Analysis

3.1. Descriptive Statistic

Table 1: Summary Statistics of Islamic Banks Stability and Profitability [IB]					
Variables	Observation	Mean	Std. Deviation.	Minimum	Maximum
Financial Stability	288	2.057	0.462	-0.205	1.900

ROA	288	0.0025	0.012	-0.0251	0.0391
CSR Index	288	0.013	1.68	-1.010	2.006
Financial Inclusion index	288	0.023	1.000	-1.075	1.960
Banks Age	288	16.021	1.308	2.400	31.41
Banks Size	288	21.005	16.01	17	21.101

Tables 2. Correlation of Matrix of Islamic Banks Stability and Profitability IB

Variables	ROA	ROE	FS	FI	CSR	CGI	BA	BS
Return on asset	1							
FS	0.528***	0.457***	1					
FII	0.530***	0.345***	0.391***	1				
CSRI	0.371***	0.230***	0.478***	0.619***	1			
BA	0.596***	0.512***	0.412***	0.527***	0.670***	0.577***	1	
BS	0.491***	0.460***	0.312***	0.371***	0.621***	0.390***	0.671**	1

Note *** level at 1%, ** level at 5% and * showed at 10%

Tables 3 and 4 are consistent with may report findings of the direct/ linear regression model and moderate using the static panel data and dynamic panel data analysis with the main independent financial inclusion and the dependents variables of the research works are financial stability and profitability of the Islamic banks Pakistan. The moderating variable of this research works is corporate social responsibility. Financial inclusion and corporate social responsibility in the fixed effect significant impact at 5% level with the financial stability and profitability in Islamic banks of Pakistan. The result of the independent variables with the dependents variables is significant impact at 1% level. The results of the research study same as the prior results works that financial inclusion has a positive and significant influence on financial stability and profitability. The results of the research study examine that corporate social responsibility has a positive and substantial influence on financial stability and profitability. Prior research works have found the same research results that corporate social responsibility has a positive and noteworthy influence on the bank's financial stability and profitability.

Firstly, this research effort makes a theoretical justification and contribution among the financial inclusion and social activities on the financial stability and profitability. Prior research works found mixed results in the literature such as (Khan, 2011). This research study examines that corporate social responsibility is the foremost and contingent factor and interaction relationship among the financial inclusion and with the financial stability and profitability of Islamic banks and branches. Prior research works found mixed results in the literature. This research works also found empirical support from the positive and significant impact of financial inclusion and corporate social responsibility on the bank's financial stability and profitability from the national and international studies.

Table 3. Empirical Results of Dynamic Generalized Moments of method (SYS-GMM) IB

Variables	**GMM (M1 FS)**	**GMM (M2 ROA)**	**GMM (M3 ROE)**
Lagged Financial stability	0.701*** (0.067)		
Lagged ROA		0.573*** (0.068)	
Financial Inclusion	0.416*** (0.198)	0.571*** (0.228)	0.361*** (0.223)
Corporate social Responsibility	0.389*** (0.230)	0.219*** (0.057)	0.287*** (0.235)
Banks Size	0.518*** (0.349)	0.167** (0.123)	0.469** (0.181)
Banks Age	0.491** (0.671)	0.189*** (0.782)	0.478** (0.678)

*Note: *** represents that the p-value is less than 0.01, P<0.01/1%, ** show that the P< 0.05/5%, * mean that the P<0.10/10%. The main dependent variables of the research study are financial stability which was measured through the z- score, Banks profitability were measured through the return on asset divided the total asset, financial inclusion index measure through the financial access by the prior research like (Sharam, Demirgu-Kunt, et al.), Corporate social responsibility was measure through an index of the banks' donation in the different sectors of the society.*

Diagnostic Test			
Islamic Dummy	**Yes**	**Yes**	**Yes**
No. observation	270	270	270
No. Group	18	18	18
No. instrument	18	17	17
AR2	**0.261**	**0.270**	**0.19**
Hansen- J test	**0.193**	**0.267**	**0.281**

Table 4. The moderating role of Corporate Social Responsibility Index with Financial Stability and Profitability [IB]			
NO.	**M1 GMM (FS)**	**M2 GMM (ROA)**	**M3 GMM (ROE)**
Lagged Financial Stability	0.390*** (0.059)		
Lagged ROA		0.401*** (0.345)	
Financial Inclusion	0.085*** (0.644)	0.074*** (0.285)	0.027*** (0.034)
Corporate social Responsibility	0.081*** (0.576)	0.056*** (0.687)	0.035*** (0.046)
FI *CSR	0.0561*** (0.056) ***	0.069*** (0.057)	0.045*** (0.040)
Banks size	0.036*** (0.340)	0.024*** (0.281)	0.013*** (0.457)
Banks age	0.045*** (0.309)	0.028*** (0.561)	0.034*** (0.078)

Diagnostic Test			
Islamic Dummy	**Yes**	**Yes**	**Yes**
No. observation	270	270	270
No. Group	18	18	18
No. instrument	18	17	17
AR2	**0.231**	**0.167**	**0.21**
Hansen- J test	**0.213**	**0.201**	**0.261**

4. CONCLUSION

This research works not just to check the direct influence of FI on the stability and profitability of the Islamic of Pakistan. Secondly, they also not only check the linear relationship of the CSR with FS and profitability of both Islamic banks of Pakistan. The Islamic banking system is highly engaged in corporate social responsibility practices in Pakistan. But this research works investigate whether corporate social responsibility has a moderating relationship with financial stability and profitability. The works finding suggest that financial inclusion has a progressive and noteworthy influence on the financial stability of both Islamic banks. The results also find that financial inclusion has a positive and significant impact on Islamic as will banks' profitability. The research works finding also examine that corporate social responsibility has a positive and significant impact on the financial stability and profitability of Islamic banks. The positive impact of corporate social responsibility reveals that when banks and firms are engaged in corporate social responsibility activates it creates a positive image in the society. The positive ultimately enhance the profitability of the banking sector. The results of the research work examine when the banking sector engaged and spend more CSR create a positive image and build up the relationship with the customer in the society which decreases the financial risk of the banks and enhances the financial stability and profitability of the Islamic banks. The main finding of this research works is to analyze that corporate social responsibility has positively and significantly moderated the relationship between financial inclusions and financial stability and profitability.

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