

## EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON FIRMS' ECONOMIC PERFORMANCE: IMPLICATIONS FOR BANKING SECTOR IN TANZANIA

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Japhet Zephyr Mtaturu,  
College of Business Education (CBE), P.O. Box 1968, Dar es Salaam, Tanzania.  
E-mail: [j.mtaturu@cbe.ac.tz](mailto:j.mtaturu@cbe.ac.tz)/[japhetmtaturu@yahoo.com](mailto:japhetmtaturu@yahoo.com)

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Mwamvuwa Mika Muloli,  
College of Business Education (CBE), P.O. Box 1968, Dar es Salaam, Tanzania.  
E-mail: [mwamvuwa@gmail.com](mailto:mwamvuwa@gmail.com)/[mika@africahealthcarenetwork.com](mailto:mika@africahealthcarenetwork.com)

### ABSTRACT

*For decades, commercial firms have been providing aids in the form of Corporate Social Responsibility (CSR) and such aids have been used as one of the key determinants to firms' economic performance. At different moments, these firms believed that such aids contributed heavily to positive returns of such firms. However, there is a great debate among scholars on the influence of CSR on firms' performance. The existing strand of literature provides inconclusive findings and thus, little is known on the matter in Tanzanian context especially in the banking sector. The objective of this study was to examine the influence of CSR on the performance of registered banks in Tanzania. The study employed the Probit and Fixed Effects econometric techniques to establish empirical evidence on the influence of banking sector's CSR on firms' economic performance. A total of 20 registered banks by BOT were analyzed based on unbalanced panel data spanning from 2008 to 2019. The key findings revealed that, the likelihood of banks performance decreases with support offered by the banks to the society through CSR. The finding was consistent both in CSR offered to education and health sectors from both analytical methods. Such findings imply that managers need to review and develop appropriate marketing strategies of their firms in order to achieve a better firms' economic performance. The study recommends firms to manage their CSR schemes by reviewing related policies based on cost benefit analysis to establish consistent and win-win CSR strategies.*

**Keywords:** *Corporate social responsibility, firms' performance, banking sector.*

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### INTRODUCTION

#### Background Information

Corporate Social Responsibility (CSR) has been viewed from different perspectives and angles and has largely been centred on three themes: corporate relations to economic, societal, and environmental sustainability (Wissink, 2012). As such, several terms such as corporate conscience, good corporate citizenship, business responsibility, business citizenship, social performance, sustainable responsible business, community relations, and responsible business are used to connote CSR. For this reason, the concept of CSR is therefore intricately linked to the principle of sustainability. The principle of sustainability argues that organizations should make decisions based not only on financial factors such as profits and dividends, but also based on the immediate and long term social and environmental consequences of their activities (Tilt, 2009).

Since the 1950s the concept of CSR has evolved enormously from time to time in relation to its meaning and practice (Anwar, 2007). Economists, academicians, researchers, and different scholars have been debating on the issue of CSR in different point of views for instance as the philanthropy, environmental protection, and social relation within the corporation context. Globally it is now virtually impossible to establish any kind of business without considering measures to be taken by the firm to become more socially responsible (Browne & Nuttall, 2013). CSR has become part and parcel of firms in promoting the social well-being in education, socio-economy, and health. An ever-increasing number of the firms seek to brand themselves as social and economic conscious by supporting the community through

education and health programs. As a result, they invest much in professional management in the firm to ensure that they are sustainable (Tai & Chuang, 2014). Therefore, firms within their social corporate program have a commitment to think about the interests of clients, workers, shareholders, and community in health point of view. This helps in the implementation of CSR by both financial and non-financial institutions for the interests of their clients.

According to Tai & Chuang (2014), firms' performance measures entail a number of things. Accounting and market-based measures are applied when defining firms' performance. For instance, all firms measure revenue and profit as well as projected growth target. These numbers are only a measure of firms' performance. To obtain a closer measure of performance of a company one does not only need to depend on the efficiency of the company itself but also on the market where it operates. In the financial sectors, this is also known as financial stability or financial health. Alternatively, various financial measures are in place to evaluate the performance of a company. These include revenue, return on equity, and return on assets. Other measures are profit margin, sales growth, capital adequacy, liquidity ratio, and stock prices. Some financial ratios will be more meaningful than others depending on the industry on which the company operates (Tai & Chuang, 2014).

There are two main categories of Corporate Financial Performance measures. While the first category of measures is accounting-based and includes return on assets (ROA), return on equity (ROE), return on sales (ROS) and earnings per share (EPS), the second category of measures is market-based. The category suggests that financial performance is unfair to consider without reference to shareholders. It includes price per share, earnings per share, and market value-added. Various researchers (Peters & Bagshaw, 2014; Wan & Arkan, 2014; Wuncharoen, 2013; Ofori & S-Darko, 2014) have used financially measured firms' performance on the basis of Return on Asset (ROA) and Return on Equity (ROE). On the other hand scholars like Mujahid and Abdullah (2014) have measured performance of the firm by considering shareholders wealth measures like EPS and stock price, Tobins Q ratio and Return on Capital Equity (ROCE).

According to Amini & Bianco (2017), the price per share is the market price that a public company's share is selling on the stock market. It reflects the relative worth of each share or unit of ownership in the company. EPS is a measure of the portion of a company's profits that is allocated to each outstanding share of common stock. Market value-added (MVA) is another means of assessing the value created for shareholders. MVA represents the success of organizations at maximizing shareholder wealth through efficiency allocating and managing of the available scarce resources. This measure is calculated as the difference between a company's market value and invested capital. This paper used ROE because it is a strong measure of how well the management of the firm creates value for firms' performance and investment evaluation (Amini & Bianco, 2017).

Firms through CSR programs have been striving to be equally responsible to the community by supporting education and health programmes among others. In one way, firms take responsibilities on the welfare of their customers, stakeholders and communities through provision of education materials, supporting construction of buildings, complete set of hospital beds, delivery beds, and child and mother neonatal kits (NMB, 2019). On the other hand through CSR initiatives, they harvest a great deal in branding and advertising their items. The intent of such firms particularly in the banking sector is to win a large market share that would positively boost their economic performance. However, if the aids offered to the community are not well established in a thorough cost benefit analysis, anticipated return might not be realized.

There is a long strand of empirical literature on the relationship between CSR and firms' performance. Such literature has inconclusive debating findings on such relationship. Some studies reveal a positive suggestive evidence on CSR's effect on firms' performance (Ekatah, Samy, & Bampton, 2011; Almsafir & Wan, 2014; Abdulrazaq, 2016; Lee, 2013; Juliana & Xu, 2016; Tsourtsoura, 2004; Olatunji Oyerinde, & Ayobolawole, 2018; Abdulrahman, 2014; Muhammad & Muhammad, 2014; Rabi'u et al., 2016; Karagiorgos, 2010; Wuncharoen, 2013; Zahoor, 2018; Mujahid & Abdullah, 2014; Vintila & Elena, 2015; Iqbal, 2014; Ofori & S-Darko, 2014; Kanwal et al., 2013; Mishra & Demodar, 2010; Sial, Zheng, Khoung & Khan, 2018; Choongo, 2017; El Ghoul et al., 2011). In contrast negative responses were revealed by other scholars (Mba, 2006; Borham, 2018). With other scholars (Browne & Nuttall, 2013; Isabel, 2017; Singh, 2014; Peters & Bagshaw 2014; Jayachandran, 2013; Kang, Lee, & Huh, 2010; Laura, 2015) retaining a neutral strand on the relationship between CSR and firms' performance.

With such inconclusive results from the aforesaid studies, it is confirmed that, little has been explored in the Tanzanian context under this thematic area. With a single study by Juliana & Xu (2016) who focused on 101 random firms operating in Tanzania and revealed a positive effect of CSR on firms' performance, their findings cannot be generalized to all sectors. Therefore, it is imperative to establish a conclusive evidence in the banking sector which has inadequately been explored. This necessitate the need to carry out this study in order to establish a consensus in the banking sector. This study contributes to the existing body of knowledge on the effect of CSR on the banking sectors performance. The exposition is based on a robust and reliable findings from the application of a novel and innovative appropriate econometric strategies on both nonlinear and linear models. In order to achieve empirical evidence, the following null hypotheses were tested;  $H_{01}$ : There is no significant effect of the banking sector's CSR on firms' economic performance;  $H_{02}$ : There is no significant effect of the banking sector's educational CSR to firms' economic performance;  $H_{03}$ : There is no significant effect of the banking sector's health CSR to firms' economic performance. The remainder of this paper is presented as follows; part two is about the literature review, part three is on methodology including data used. Part four presents discussion of the findings and the last, part five is on concluding remarks and recommendations.

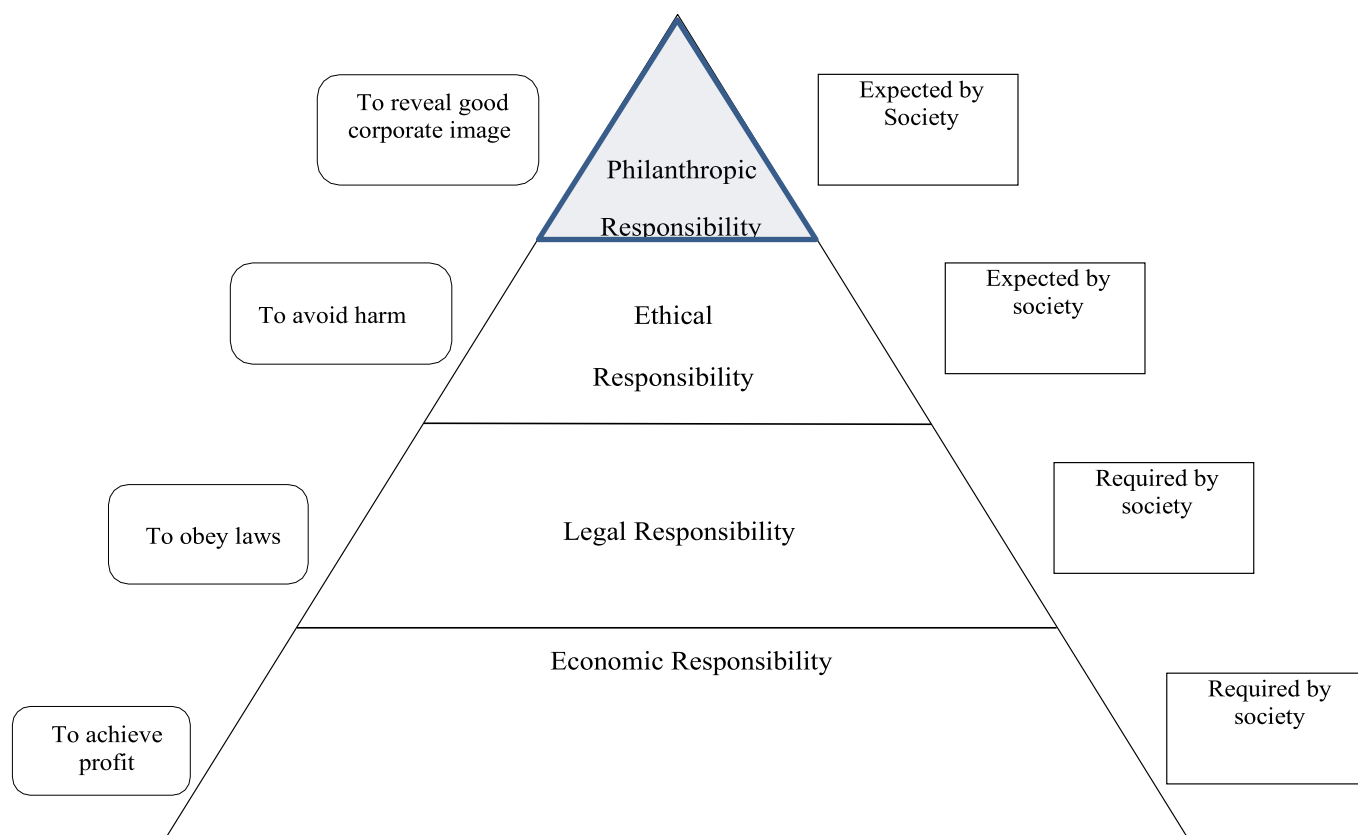
## **LITERATURE REVIEW**

### **Theoretical Review**


There are numerous theories that explain CSR. Theories of CSR aim at explaining the approach of CSR for business corporations, the theories also underline the benefits for both the community and organizations. According to Pavlo & Mohamad (2019), the CSR theory is best explained using Carrol CSR Pyramid Model, triple bottom line theory and the stakeholder theory. The study adopts the CSR model by Carroll (2016).

### **Philanthropic Responsibility Model of the Caroll's CSR Pyramid Theory**

Philanthropic Responsibility is placed the fourth on Carroll CSR pyramid as it is a voluntary activity guided by the organization's desire to participate in social activities that are not mandated nor required by law and not generally accepted in business as ethical sense (Safar zad, 2017). Hence philanthropic responsibility is considered as a pure act of giving back to the society. To fulfil their philanthropic responsibility, organizations engage in various giving forms such as sponsoring sports activities, making donations to hospitals and sponsoring education to students. The aim of philanthropic responsibility is to demonstrate the organization in the image of a good citizen and to increase its reputation (Pavlo & Mohamad, 2019). Ultimately, the CSR offered should result into a positive social impact to the community. The theory has been included in the study to underpin the thematic idea of the study, which calls for banking sector's corporates performance effect caused by CSR supports offered by banks to the Tanzanian society. The theory explicitly provides the two way effect of corporate's responsibility to the society to demonstrate a good image which in turn would positively reciprocate back to the corporate's economic performance, which necessitates its application to the study. Figure 1.1 is the Carroll's CSR Pyramid which depicts the logical flow of theoretical linkage on types of CSR supports offered by organizations to the society through a pyramid structured pattern.



**Figure 1. 1:** Carroll's CSR Pyramid

**Legend:**  Part of Carroll's CSR Pyramid Theory used in the study

**Source:** Pavlo & Mohamad (2019)

### Empirical Review

A good number of scholars have carried out various studies on the effect of CSR on firms' performance. Some studies support the positive effect of CSR on firms' performance including Ekatah et al., (2011) and Almsafir & Wan (2014) who explored the relationship between firms' performance and CSR and revealed that there is a positive relationship between CSR on firms' profitability. Abdulrazaq (2016) examined the impact of CSR on banks' financial performance. He used a sample of fifteen banks out of twenty-one banks listed on the Nigerian stock exchange. The findings showed that CSR significantly affects financial performance positively. Lee (2013) conducted a study in the American airline industry to determine the effect of operational and non-operational CSR activities. He found that, in general, these activities had a positive effect on financial performance. A similar case was with Juliana and Xu (2016), who carried out a study in Tanzania to examine the effect of CSR on firms' performance on 101 randomly selected firms operating from different sectors. They found a positive effect of CSR on firms' performance. Tsourtsoura (2004) employed two measures: the KLD rating data for the companies in the S&P 500 and the Domini 400 Social Index as a proxy. The firms' performance was measured using accounting variables. Other studies (Olatunji et al., 2018; Abdulrahman, 2014; Muhammad & Muhammad, 2014) examined the effect of CSR on financial performance of Quoted Pharmaceutical Firms. The findings concluded that there was a positive relationship between CSR and firms' performance. Rabi'u et al., (2016) conducted another study to investigate the relationship between CSR on firms' performance. The findings from the study illustrated a positive significant relationship between CSR and firms' performance. Karagiorgos (2010) studied on the same thematic theme, there was a positive and significant effect of CSR and firms' performance. Wuncharoen (2013) using ROE and ROA revealed a positive correlation between CSR and firms' performance. Such findings were supported by other scholars Zahoor 2018 and Mujahid & Abdullah (2014) who also observed a similar trend.

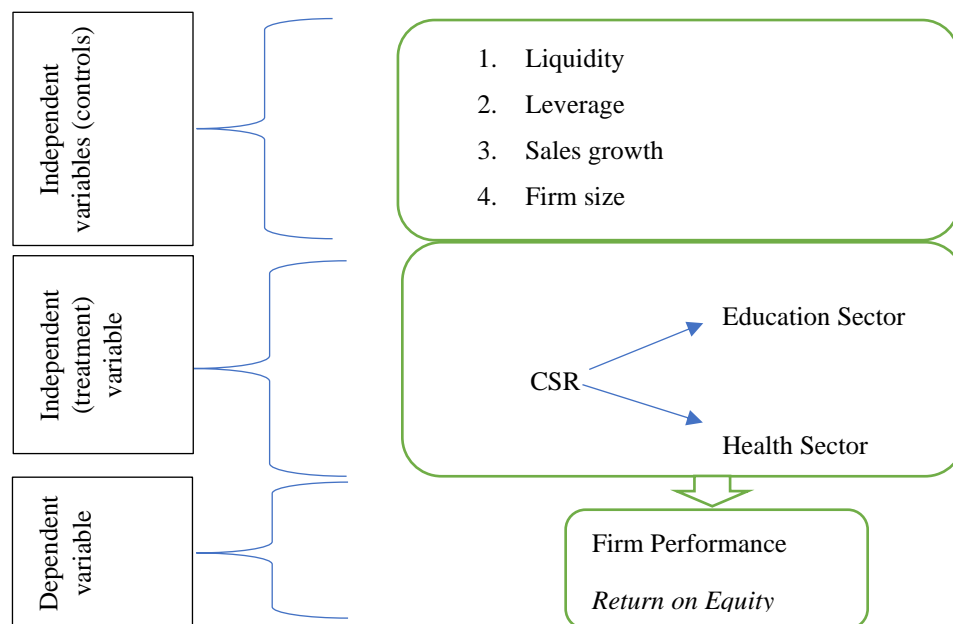
In contrast to these prepositions Tai and Chuang (2014) studied the relationship between CSR and firms' overall performance and discovered blur relationship. In the similar view, Browne and Nuttall (2013) suggested a neutral relationship between CSR and monetary overall performance primarily based on a firm-based view. Similarly, Isabel (2017) studied the link between CSR and firms' performance and found that CSR has a no effect on firms' performance. This was also supported by Singh (2014) whose study examined three industries of crude petroleum extraction and natural gas, industry of mining of metal ores and preparations and industry of manufacture of basic pharmaceutical products and pharmaceutical preparations. In this study, there was no significant effect of CSR activities on firms' performance. In the same vein, Peters & Bagshaw (2014) found no significant effect of CSR on firms' performance between firms with low corporate governance quotient and those with higher corporate governance in terms of their financial performance. As for Laura (2015) who examined the link between a firms' corporate social responsibility actions and its financial performance, found no impact on financial performance. Jayachandran (2013), studied different aspects of CSR relating to the product and the environment and compared these aspects of CSR on the firms' financial performance. He found a neutral relationship between CSR and firms' performance.

On the other hand, Mba (2006) undertook a similar study and found out the negative correlation between CSR and financial performance of quoted pharmaceutical companies. Borham, (2018) conducted a study to compare the internal and external stakeholder effect of CSR on a restaurant firms' financial performance. He found that external CSR enhances a firms' market value but is negatively related to firms' performance.

Considering the reviewed literature, which depict overlapping and conflicting findings ranging from positive, neutral and negative relationship between CSR and firms' performance, there is a gap to be bridged in a particular case of Tanzania. With an exception of a single study by Juliana and Xu (2016) that was not sufficient for generalization, other reviewed studies were carried out in other economies with different contexts from that of Tanzania. Thus, there is a need to establish a consensus in banking sector's experience especially in Tanzania where the sector provides significant development support through CSR to health and education sectors. The consensus is necessary to give insights to bank managers how to improve their firms' performance.

### Conceptual Framework

The conceptual model presented in Figure 1.2, provides the relationship between the variables used in the study, it is based on the theory by Carroll (2016).



**Figure: 1.2: Conceptual Model**

**Source:** Researchers' Own Construction



The framework proposes that CSR aids affect firms’ performance as well as the society through education and health sector’s initiatives. The independent variables which are; treatment variable (CSR) and controls (liquidity, leverage, sales growth and firm size) establish the causal effect relationship to firm performance. It is expected that CSR supports to exert a positive or negative effect on firm performance depending on the approach used to offer CSR aids and the expenses of issuing such CSR supports.

## METHODOLOGY

### Econometric Model and Identification Strategy

The study employed probit model to infer the baseline empirical evidence on the likelihood effect of bank’s CSR offered to Tanzanian society on firms’ performance. The second model employed for robustness checks was Fixed Effects model. The probit model was opted due to its accuracy in giving probability of an event to happen. The Fixed Effects model provides consistence estimates due to its advantage to account for unobservable omitted variable bias. Thus, the two methods were opted to provide both non-linear and linear based findings because of the nature of dependent variables which are in both limited dependent dummy variable and numeric continuous dependent variable. The probabilistic non-linear regression model and variables used for baseline analysis are specified below:

$$Pr_i(Y_i/X/Z) = \beta_o + \beta_1X_i + \beta_2Z_i + \varepsilon_i.....(1.1)$$

where; *Pr* is the probability of firm *i* to improve its economic performance. *X* is CSR treatment variable dummy assigned 1 if product firm has offered CSR, 0 otherwise. *Z* is the set of control variables including ratios on liquidity, leverage, sales growth and firm size in TZS.  $\varepsilon_i$  is an error term assumed to be white noise. Similarly, a linear regression followed the following Fixed Effects model:

$$Y_{it} = \beta_0 + \beta_1X_{it} + \beta_2Z_{it} + \mu_i + \alpha_t + \varepsilon_{it}.....(1.2)$$

where; *Y* is return on equity (ROE),  $\beta_0$  is constant,  $\beta_1$  and  $\beta_2$  are coefficients to be estimated, *X* is a treatment variable, *Z* is a vector of control variables (firm size and firm age),  $\mu$  is firm dummy capturing time invariant firm’s specific effect,  $\alpha_t$  is time dummy capturing time variant specific effect,  $\varepsilon$  is error term assumed to be white noise, *i* and *t* are firm and time units respectively.

### Sample and Sampling procedure

A total of 20 banks were randomly selected out of 59 banks in Tanzania, these banks were drawn from the total population list issued by the Central Bank of Tanzania (BOT). The sample was established using simple random sampling based on banks strata. Every third bank in the list was drawn and included in the sample which generated a total of 20 banks. Table 1.1 shows the names of the banks randomly selected and used in the sample.

**Table 1.1 List of Banks Used in the Sample**

S.N	List of Banks	S.N	List of Banks
1	Akiba Commercial Bank Plc.	11	I & M Bank (Tanzania) Limited
2	Amana Bank Limited	12	KCB Bank (Tanzania) Limited
3	Azania Bank Limited	13	Letshego Bank (T) Limited
4	Bank of Africa (Tanzania) Limited	14	Maendeleo Bank Limited (MBP)
5	Citibank (Tanzania) Limited	15	Mkombozi Commercia Bank (MKCB
6	CRDB Bank PLC (CRDB)	16	MUCOBA Bank Plc.
7	DCB Commercial Bank PLC	17	National Bank of Commerce Limited
8	Diamond Trust Bank (Tanzania) Limited	18	National Microfinance Bank PLC (NMB)
9	Exim Bank (Tanzania) Limited	19	NIC Bank (Tanzania) Limited
10	Guaranty Trust Bank (Tanzania) Limited	20	United Bank for Africa (Tanzania) Limited

Source: BoT, 2020.

### Data collection methods

The study employed secondary panel data which had a cross-section unit and time element. Variables such as ROE, liquidity, leverage, sales growth, and firm size were obtained from audited annual reports of the listed firms in BOT for each reference period. The audited annual reports obtained for data, comprised of the statement of comprehensive income (statement of profit and loss), statement of asset and liabilities (statement of financial position) and key notes to the accounts. Return on Equity (ROE) was used as a dependent variable for this study to measure the firms’ performance where ROE was computed as Profit before interest and tax divided by shareholder’s fund times 100.

Therefore, the study used ROE as the accurate and best measure of firms' performance to investors since benefiting shareholders is the ultimate goal for every business. Other scholars such as Ahmed & Usman (2011) and Batchimeg (2017) used ROE to measure firms' performance in their studies.

In this study, the treatment variable was CSR which was regressed against the dependent variable throughout all analyses. A set of other independent variables were also included in the model as controls. These include liquidity, leverage, sales growth and firm size. These variables were adopted from previous studies (Dioha, Mohammed, & Okpanachi, 2018; Khan, Nouman, & Imran, 2015; Hunjra et al., 2014). For robust findings, the study investigated two dependent variables; the first one is a dichotomous dummy variable (ROE) which helps to show the likelihood effect of CSR effect offered by banks to Tanzanian society on firms' economic performance. The second one is a continuous nonlinear variable (ROE) suitable for linear regression. The details of variables descriptions are indicated in Table 1.2.

**Table 1. 2: Variables Description**

Variables	Full Name	Measure/Description	Authors
<b>Dependent</b>			
<b>ROE</b>	Return on equity	Profit before interest and tax divided by shareholder's fund* 100.	Ahmed & Usman (2011); Batchimeg (2017)
<b>Treatment</b>			
<b>CSR</b>	Corporate Social responsibility	Dummy variable 1 if a firm offers CSR, 0 otherwise	Rabi'u et al, (2016)
<b>Control</b>			
<b>LQ</b>	Liquidity	Current Assets/Current Liabilities	Khan, Nouman, & Imran (2015)
<b>LEV</b>	Leverage	Total liabilities/Total Assets	Dioha et al., (2018)
<b>SG</b>	Sales growth	Current year's sales minus previous year's sales dividing previous year's sales	Hunjra et al., (2014); Chandrapala and Knápková, (2013)
<b>FSIZE</b>	Firm size	Measured by taking the natural logarithm of the total assets	Dioha et al., (2018)

Note \*indicates multiplication

### Empirical estimation

This part presents the estimation procedure emanating from the application of the methodology. First, it established the non-linear baseline analysis by regressing Return on Equity (ROE), a dichotomous limited dependent variable which is as a proxy for firms' economic performance on aggregate CSR offered by firms. The exposition is based on aggregate CSR from the banking sector offered to the Tanzanian society. To effectively capture the sole CSR effect on firms' economic performance, the study controlled for several factors including liquidity, leverage, sales growth, and firm size. Second, it analysed the effect of educational sector specific CSR offered by banks to the community on firms' economic performance. The regression was based on similar arrangements to the previous detailed model, however in this part the treatment variable was educational CSR offered by banks while the same controls were included. Lastly, a subsequent analysis carried out was on the effect of health sector specific CSR offered by firms from the banking sector to the community on firms' economic performance. Similarly, the same controls were included in the model.

The robustness checks of the findings emanating from the above non-linear regressions were carried out by redefining the dichotomous limited dependent variable into linear format to verify the consistency of the findings from the regressions. To this end, a Fixed Effects model was employed throughout all aforesaid regressions. First, it verified the baseline findings by regressing the continuous log linearized ROE variable as a proxy for firms' economic performance on the aggregate CSR offered by firms from the banking sector. Likewise, it controlled for liquidity, leverage, sales growth, and firm size. Second, it checked consistency of the above mentioned findings on the established likelihood effect of educational CSR offered by firms from the banking sector to the community on firms' economic performance. All regressions were based on similar arrangement to the above non-linear regressions. Lastly, the findings on the likelihood effect of health CSR offered by firms from the banking sector to the community on firms' economic performance were verified based on continuous ROE dependent variable.

## RESULTS AND DISCUSSION

### The Likelihood Effect of CSR on Firms' Economic Performance

**Hypothesis 1:** There is no significant effect of banking sector's CSR on firms' economic performance. The study tested this null hypothesis based on probit econometric technique. The findings show how much of the variance in the dependent variable is explained by the model in the coefficient of the treatment variable which is CSR. The findings presented in Table 1.3 indicate that there is a negative and statistically significant value of CSR likelihood effect on improving firms' performance in the Tanzanian banking industry at one percent significance level. Therefore, the null hypothesis (H0) was rejected, and the alternative hypothesis (H1) accepted.

The negative relationship could be due to the firms' extra expenses associated with CSR activities. If the cost and benefit analysis is not well assessed prior to execution of CSR activities, the expenses associated with CSR may supersede the anticipated immediate return from the community when other factors are held constant. Ultimately, it may end up with firm realizing adverse performance in a short run. The costs emanate from the primary objective of the firm to publicise their businesses through offering CSR supports to the community. The investments made by firms in the consumers and community tend to require initial cash outlays with no immediate and direct outcome on firms' operations. In view on the above, customer and community-based CSR practices could not affect firms' short-term profitability. It is relatively common for banks to hold events when carrying out the CSR activities to the society, these activities can however generate greater costs to the banks than expected immediate return from the society, which may end up with banks realizing unexpected relatively less return. The findings substantiate to the previous findings by Mba (2006).

**Table 1. 3: Baseline Model on the Likelihood Effect of CSR on Firm Performance**

Variables	(1)	(2)	(3)	(4)
CSR	-1.1971*** (0.465)	-1.2018*** (0.449)	-1.2105*** (0.447)	-1.1542*** (0.438)
Liquidity	-0.1059 (0.064)			
Leverage	-0.0885 (0.194)	-0.2251 (0.154)	-0.2167 (0.144)	
Sales growth	0.3422 (0.524)	0.4654 (0.520)	0.4400 (0.497)	0.4170 (0.503)
Firm size	-0.0082 (0.042)	-0.0069 (0.041)		
Time Dummy	Yes	Yes	Yes	Yes
Firm Dummy	Yes	Yes	Yes	Yes
Constant	0.1207 (1.040)	0.1176 (1.006)	0.0240 (0.833)	0.0217 (0.799)
Observations	123	123	123	123

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### The Likelihood Effect of Educational CSR on Firms' Economic Performance

**Hypothesis 2:** There is no significant effect of banking sector's educational CSR on firms' economic performance. The study tested this null hypothesis based on probit econometric technique. The findings presented in Table 1.4 indicate that there is a negative and statistically significant relationship of educational CSR likelihood effect on improving firms' performance in the Tanzanian banking industry at ten percent significance level. Therefore, the null hypothesis (H0) was rejected, and the alternative hypothesis (H1) accepted.

CSR activities in education sector involve sponsoring of various career fairs where the banks through CSR, incur investment costs for such programs. Donations offered include; sponsorship for graduation ceremonies, grant funding to improve teaching and learning infrastructure and awarding best students. These investment costs are once off and do not attract direct revenue to the bank. If the cost and benefit analysis is not well assessed prior to execution of CSR activities, in a short run the investment costs associated with CSR may supersede the anticipated return from the community when other factors are held constant. Ultimately, it may end up with firm realizing adverse performance.



**Table 1. 4: Likelihood Effect of Educational CSR on Firms' Performance**

Variables	(1)	(2)	(3)	(4)
CSR-Education	-0.8819* (0.466)	-0.8128* (0.446)	-0.8074* (0.445)	-0.8073* (0.439)
Liquidity	-0.1220* (0.066)			
Leverage	-0.0640 (0.196)	-0.2088 (0.152)	-0.1880 (0.143)	
Sales growth	0.6315 (0.527)	0.7153 (0.526)	0.6429 (0.504)	0.5983 (0.507)
Firm size	-0.0221 (0.041)	-0.0193 (0.039)		
Time Dummy	Yes	Yes	Yes	Yes
Firm Dummy	Yes	Yes	Yes	Yes
Constant	0.9507 (1.089)	0.8584 (1.032)	0.6082 (0.884)	0.5606 (0.842)
Observations	123	123	123	123

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### The Likelihood Effect of Health CSR on Firms' Economic Performance

**Hypothesis 3:** There is no significant effect of banking sector's health CSR on firms' economic performance. The probit econometric technique was used in the study to test this null hypothesis. The results presented in Table 1.5 indicate that, there is a negative and statistically significant health CSR likelihood effect at one and five percent significance level. Therefore, the null hypothesis (H0) was rejected and the alternative hypothesis (H1) accepted. It implies that CSR negatively affects firms' performance in the Tanzanian banking industry.

The negative effect could be a result of investment costs incurred by a firm when carrying out the CSR activities. The associated costs offered to the health sector arise when a bank partakes in a sponsorship programs such as launching of a new hospital, provision of health aids like life support equipment or luncheons for hospital staff and patients from the hospital. Although the event is only organized once, it comes with great capital and operational investment costs. If the cost and benefit analysis is not well assessed prior to execution of CSR activities, in a short run the expenses associated with CSR may supersede the anticipated return from the community when other factors are held constant

**Table 1. 5: Likelihood Effect of Health CSR on Firms' Performance**

Variables	(1)	(2)	(3)	(4)
CSR-Health	-0.7956* (0.414)	-0.8750** (0.410)	-0.8762** (0.402)	-0.8016** (0.389)
Liquidity	-0.0946 (0.062)			
Leverage	-0.0988 (0.188)	-0.2213 (0.152)	-0.2206 (0.145)	
Sales growth	0.3578 (0.526)	0.4583 (0.526)	0.4559 (0.501)	0.4156 (0.505)
Firm size	-0.0035 (0.042)	-0.0006 (0.041)		
Time Dummy	Yes	Yes	Yes	Yes
Firm Dummy	Yes	Yes	Yes	Yes
Constant	0.1491 (1.010)	0.1223 (0.983)	0.1142 (0.820)	0.1287 (0.784)
Observations	123	123	123	123

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Robustness Checks

### Effect of CSR on Firms' Economic Performance, Baseline Model

**Hypothesis 1:** There is no significant effect of banking sector's CSR on firm performance.

The study tested this null hypothesis based Fixed Effects econometric technique. The findings presented in Table 1.6 indicate that there is a negative and statistically significant CSR effect on improving firms' performance in the Tanzanian banking industry at one percent significance level. Therefore, the null hypothesis (H0) was rejected and the alternative hypothesis (H1) accepted. This negative relationship could be due to the firms' extra expenses associated with CSR activities that cannot be immediately recouped from the community receiving the support.

**Table 1. 6: Robustness Checks on Baseline Findings on the Effect of CSR on Firms' Economic Performance**

	(1)	(2)	(3)	(4)
CSR	-0.4323*** (0.134)	-0.4627*** (0.133)	-0.4538*** (0.132)	-0.4542*** (0.132)
Liquidity	-0.0123 (0.008)			
Leverage	-0.0118 (0.048)	-0.0452 (0.042)	-0.0375 (0.040)	
Sales growth	-0.1083 (0.171)	-0.1194 (0.171)	-0.1444 (0.168)	-0.1599 (0.167)
Firm size	-0.0081 (0.012)	-0.0092 (0.012)		
Time FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Constant	3.2472*** (0.221)	3.2674*** (0.221)	3.1759*** (0.183)	3.1404*** (0.179)
Observations	182	182	182	182

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The costs emanate from the primary objective of the firm to publicise their businesses through offering CSR supports to the community. If a thorough cost benefit analysis is not well evaluated the firm may end up with negative effect when the cost supersedes expected returns from the community.

### Effect of Educational CSR on Firms' Economic Performance

**Hypothesis 2:** There is no significant effect of banking sector's education CSR on firm performance. The study tested this null hypothesis based on Fixed Effects technique.

**Table 1. 7: Effect of Educational CSR on Firms' Performance**

Variables	(1)	(2)	(3)	(4)
CSREDU	-0.3015** (0.129)	-0.3054** (0.130)	-0.2968** (0.130)	-0.3041** (0.129)
Liquidity	-0.0163* (0.009)			
Leverage	0.0065 (0.048)	-0.0376 (0.043)	-0.0308 (0.041)	
Sales growth	-0.0701 (0.174)	-0.0849 (0.176)	-0.1085 (0.172)	-0.1203 (0.171)
Firm size	-0.0072 (0.012)	-0.0083 (0.013)		
Time FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Constant	3.2817*** (0.231)	3.2990*** (0.233)	3.2143*** (0.194)	3.1884*** (0.191)
Observations	182	182	182	182

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The result shows how much of the variance in the dependent variable is explained by the model in the coefficient of the treatment variable which is educational CSR. The results presented in Table 1.7 indicate that there is a negative and statistically significant educational CSR effect at five percent significance level on improving firms' performance in the Tanzanian banking industry. Therefore, the null hypothesis (H0) was rejected and the alternative hypothesis (H1) accepted. Thus, the results are consistent to the previous nonlinear regression results implying robust findings of the study.

### Effect of Health CSR on Firms' Economic Performance

**Hypothesis 3:** There is no significant effect of banking sector's health CSR on firms' performance. The study tested this null hypothesis based on Fixed Effects econometric technique. The findings presented in Table 1.8 indicate that there is a negative and statistically significant health CSR effect on improving firms' performance in the Tanzanian banking industry at five percent significance level. Therefore, the null hypothesis (H0) was rejected and the alternative hypothesis (H1) accepted. Thus, the results are consistent to the previous nonlinear regression results implying robust findings of the study.

**Table 1. 8: Effect of Health CSR on Firms' Performance**

	(1)	(2)	(3)	(4)
CSRHELTH	-0.2554** (0.125)	-0.2800** (0.125)	-0.2823** (0.124)	-0.2755** (0.124)
liquidity	-0.0145* (0.009)			
leverage	-0.0062 (0.049)	-0.0459 (0.043)	-0.0429 (0.041)	
salesgrowth	-0.1153 (0.174)	-0.1291 (0.175)	-0.1388 (0.171)	-0.1567 (0.170)
firmsize	-0.0028 (0.012)	-0.0036 (0.013)		
Time FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Constant	3.1627*** (0.223)	3.1803*** (0.224)	3.1459*** (0.187)	3.1038*** (0.183)
Observations	182	182	182	182

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## CONCLUSION AND RECOMMENDATIONS

### Conclusions

The aim of this study was to examine the effect of CSR from the banking sector offered to Tanzanian society on the performance of the banks registered in the Central Bank of Tanzania (BOT). The study adopted a quantitative method by employing the probit and fixed effects econometric models to establish empirical evidence. A total of 20 registered banks by BOT were sampled based on unbalanced panel data spanning from 2008 to 2019. The banks were randomly selected from the full list of registered banks in BOT.

The key finding revealed that, CSR negatively affects firms' performance. Both the Probit and Fixed Effects econometric models revealed consistent results. The likelihood of banks performance decreases with support offered by the banks to the society through CSR. This negative effect was consistent both in CSR offered to education and health sectors using both analytical methods. The negative effect could be a result of the associated costs incurred by the banks in offering such support which adversely affect their performance. The investments made by firms in consumers and community tend to require initial cash outlays with no immediate and direct outcome on firms' operations. In view on the above, customer and community-based CSR practices could not positively effect on firms' short-term profitability. It is relatively common for banks to hold events when carrying out the CSR activities to the society, these activities can however lead to greater costs to the banks than expected immediate return from the society which may end up with banks' adverse performance.

## Recommendations

The policy implication of these findings to bank managers is to review and develop appropriate marketing strategies of their firms' products in order to achieve a better firms' economic performance. Additionally, the study recommends firms to manage their CSR schemes by reviewing related policies based on cost benefit analysis to establish consistent and win-win CSR strategies so as to complement improvement of their performance when offering CSR to the society. The best way to do this, is by switching into internal stakeholders CSR practices to boosting their staff motivation to their duties. This may be achieved through capacity building to staff through educational sponsorship, improvement on incentive packages for insistence housing, electric, fuel telecommunication and responsibility allowances for those entitled to such allowances. Through opting to this strategy firms may improve their performance by enjoying cost savings and enhance financial profitability.

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