

Journal of Economics and Business

Asiedu, Michael Amoh, Yalley, Emma, Boakye, Kwame Owusu, Oduro, Richard, and Adu, Isaac Nyarko. (2020), Corporate Social Responsibility and Financial Performance Amongst Rural and Community Banks in Ghana. In: *Journal of Economics and Business*, Vol.3, No.3, 1073-1094.

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.03.264

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Journal of Economics and Business* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide



Corporate Social Responsibility and Financial Performance Amongst Rural and Community Banks in Ghana

Michael Amoh Asiedu¹, Emma Yalley², Kwame Owusu Boakye³, Richard Oduro⁴, Isaac Nyarko Adu⁵

¹ Department of Accounting, University of Education Winneba, maasiedu@uew.edu.gh

² Directorate of Internal Audit, University of Cape Coast, pabene3@icloud.com

³ Department of Management Sciences, University of Education Winneba, koboakye@uew.edu.gh

⁴ Department of Banking and Finance, University of Education Winneba, pabene221@yahoo.com

⁵ Department of Management Sciences, University of Education Winneba, inadu@uew.edu.gh

Correspondence: Michael Amoh Asiedu. Email: maasiedu@uew.edu.gh

Abstract

This study examines the connection between corporate social responsibility and firms' financial performance through competitive advantage and access to finance as mediating variables and the role of corporate governance as a moderating variable in such relationship using rural banks as study case. A sample of 126 banks were selected and data from these banks were analysed using structural equation modeling and hierarchical regression with moderation. It was found that embarking on corporate social responsibility leads to improvement in competitive advantage and gaining access to capital. These are both related to increase in corporate financial performance. The study found that business organisations that practise CSR activities turn to gain a defensible competitive position in their industry. The practice of CSR tends to create access to finance for business strategies, resulting in positive impact on financial performance depending on the efficiency of their corporate governance practices. The study recommends that activities of CSR should be integrated into firms' corporate and business level strategies. It also recommends that rural banks and the banking industry at large should adopt proper corporate governance structures to ensure judicious use of firm resources in order to enjoy improved financial performance.

Keywords: Access to Capital, Competitive Advantage, Corporate Financial Performance, Corporate Governance, Corporate Social Responsibility, Structural Equation Modelling

Introduction and motivation

In recent years, it has become increasingly apparent for corporate entities in various industries to continually search for new strategies to gain a competitive advantage to be able to increase their market share and enhance their financial performance. One of such strategies is the use of corporate social responsibility (CSR). A typical instance can be cited in the case of Vodafone Ghana CSR initiatives, where the company in 2009 established the Vodafone Ghana Foundation which has supported and sponsored impactful projects to improve the standards living of

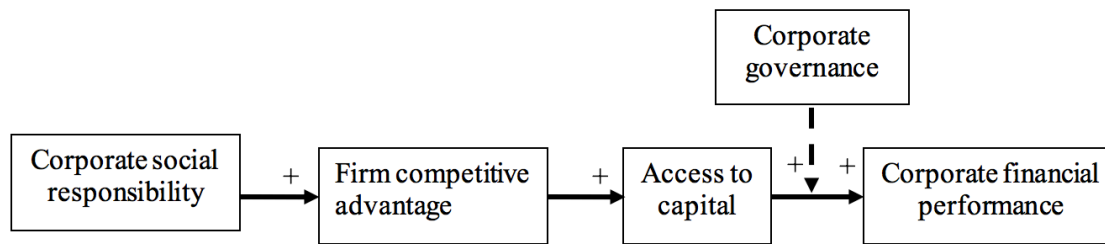
Ghanaians in various deprived communities. Similarly, MTN Ghana in 2007 established a foundation in which annually, the company set aside one percent of its profit for social responsibility programmes in the area of health, education, sanitation, among others (Danso, Poku & Agyapong, 2017). In the rural banking industry, Amanfeman Rural Bank has consistently supported the educational and health needs of their environment to the tune of over GHS2 million. All these entities are profit-oriented, and embarking on CSR activities brings out the need to inquire what motivates these profit-seeking firms to set aside resources to finance their CSR agenda. Contrary to the classical economic theory of a firm (which postulate that a firm is socially responsible if it maximises its profits while operating within the required legal framework), contemporary view of CSR has attempted to link ethical behaviour of a firm to its performance both in the short term and long term, in that, a firm would be able to survive in its environment not based on what it could do for itself to be sustained in the environment but also how it would satisfy the varying need of its stakeholders in terms of its ethical behaviour. This ethical perspective of CSR has raised eyebrow among investors, and currently, the consensus is that; CSR demands organisations to manage the economic, social and environmental impacts of operations to maximise the benefits and minimise losses to stakeholders (CSR Network, 2011).

The previous discussion seems not to necessarily suggest that firms should commit to CSR just because it is ethical to do so; rather, CSR has its commercial implications. Quoting from Friedman (1970); "social responsibility of businesses is meant to increase its profit". The concept of CSR is societal and ethically oriented. At the same time, financial performance is firm-focused, thus linking the two concepts raised a fundamental issue as to whether or not CSR enhances corporate financial performance, and if so, through what means and on what basis? Some studies identified significant positive relationship between firms CSR activities and financial performance (Tsoutsoura, 2004; Lin, Yang & Liou, 2009; Saeidi, Sofian, Saeidi, Saeidi, & Saaeidi, 2015; Guo, He & Zhong 2018; and Choi, Jo, Kim, & Kim, 2018), while others which are mainly underpinned by neoclassical economics have argued that CSR has a negative impact on corporate financial performance (Saxena & Kohli, 2012; Aggarwal 2013; Nollet, Filis, & Mitrokostas, 2016). They argue that CSR unnecessarily increases the firm's costs and as a result, positions the firm in a disadvantageous competitive stage against its competitors who do not embark on CSR activities. The inconclusive outcome of these studies has been attributed to empirical and theoretical drawbacks associated with these studies (McWilliams and Siegel, 2000).

Despite the numerous studies linking corporate social responsibility to firms' financial performance which have yielded inconclusive results (Nejati & Ghasemi, 2013; Scholtens & Kang, 2013; Özçelik, Öztürk, & Gürsakal, 2015; Sulemana, 2016; Abukari & Abdul-Hamid, 2018), the mechanisms and processes that mediate the relationship between them (corporate social responsibility and firms' financial performance) is one area that has been grappled with over the past three decades by researchers. Agyemang and Ansong (2017) contented that the conflicting outcome amongst these constructs could be resulting from the disregard of the mediating roles of some pertinent variables such as access to capital and corporate reputation. This study adds to the argument that, the inconclusiveness of the CSR and firms' financial performance nexus is not only due to the neglect of the mediating roles of some relevant variables but also the moderating roles of other influencing variables. While extant literature has suggested a positive or inverse relationship between CSR and corporate financial performance, an inquiry to make is whether the relationship is direct or otherwise.

Also, previous research in this area has examined a firm's competitive advantage, access to capital financing and corporate governance as independent predictors of corporate financial performance (Kyereboa-Coleman & Biekpe, 2006; Ofori, 2010; Mobarak & Albahussain, 2014). Nevertheless, it is rarely seen in the literature how substantial competitive advantage, access to capital financing and corporate governance interact with each other to influence financial performance among listed firms in Ghana. The present study argues that there is an interactive effect between corporate governance and firm's access to capital on corporate financial performance. In this direction, the study is premised on the following objectives; (a) to examine how firms' competitive advantage and access to capital mediate the relationship between corporate social responsibility and financial performance and (b) to investigate the moderating role of corporate governance in the relationship between access to finance and financial performance. The achievement of the stated objective is built on the hypothesised model as stated in Figure 1

Figure 1: Hypothesised model



Source: Adapted from Jensen, M. C. (1993)

Corporate social responsibility and competitive advantage

Review of the extant literature on CSR seems to reveal two contrasting drivers for CSR (Branco & Rodrigues, 2006); the normative drivers, which are of the view that firms embark on CSR activities only because it is ethical and moral to do so. The second driver is the business case which is of the view that firms view CSR activities as a means of furthering their economic aspirations. The business case for CSR and its capacity for improving competitive performance appears to take centre stage of the debate from the late 1990s to date (Battaglia et al., 2014). Quoting from the European Commission's report in 2005, "CSR has the potential of playing a key role in contributing to sustainable development while enhancing Europe's innovative potential and competitiveness" (European Commissions, 2005). Despite this declaration, several studies linking CSR activities to CA have come out with mixed results with unclear relationships between the two variables (Mackey & Mackey, 2007; Morsing, Schultz, & Nielson, 2008; Carroll and Shebana, 2010; Battaglia et al., 2014).

Based on the trend of results of prior studies reviewed, the current study hypothesised that;

H1: there is a positive relationship between corporate social responsibility and firm's competitive advantage among rural banks in Ghana.

Competitive advantage and access to capital

Competitive Advantage (CA) involves making choices in respect to the markets in which a firm compete, defending its market share in clearly defined segments using the attributes of price and product performance and responding quickly to the changing needs of the market (Stalk, Evans & Shulman, 1992; Day 1994). CA arise from the formation of superior competencies by firms that are in a position to achieve cost and or differentiated advantages and to create value for customers, resulting in market share and profitability performance (Barney, 1991).

The extant literature has sought to provide theoretical and empirical nexus between gaining competitive advantage and firms having access to capital financing with mixed results (Lipton & Lorsch, 1992; Yermack, 1996; Rais and Goedegebuure, 2009; Oppong, 2014; Nyuur *et al.*, 2014;).

Prior studies have found some mixed results on the relationship between competitive advantage (CA) and secure access to capital financing (Waddock & Graves, 1997; Mallin *et al.* 2013; García-Sánchez *et al.* 2015; Flammer 2015; Turnbull 2015; Zingales *et al.* 2016;). The first strand of empirical studies report that CA impacts negatively on firms' access to capital finance. Barnea and Rubin (2010) also explored the relationship between CA and access to capital of 68 US Bank over the period 2005-2007, they found a adverse relationship between the two variables. They attributed these finding to the fact that, increase in market share and associated competitive advantage comes with diseconomies of scale which when not well managed would lead to the firm experiencing some inherent disadvantages which include limited access to capital financing. Similarly, using a data sample 243 US commercial banks over the period 2007-2010, Marin *et al.* (2012) found a negative but statistically immaterial relationship between competitive advantage and access to capital financing.

Notwithstanding the reported inverse relationship between competitive advantage and firm's access to capital financing, there are other strands of empirical studies that have found a positive relationship between competitive advantage and access to capital financing (Koufteros, Vonderembse & Doll, 1997; Zhang, 2001; Ven & Jeurissen, 2005; El-Garaihy, Mobarak & Albahussain, 2014). Based on the preceding argument on the competitive advantage and access to capital financing nexus, the current study hypothesised that;

H2: competitive advantage is positively related to access to capital financing among rural banks in Ghana.

The influence of competitive advantage and access to capital

The discussion in the preceding section suggests that gaining competitive advantage is likely to play a mediation role in the relationship between corporate social responsibility (CSR) and secure access to capital. Dube *et al.* (2011) emphasised that competitive advantage is gained naturally when firms embark on CSR activities which focused on the welfare of the environment. Also, Usman and Amran (2015) argued that by responding to the environmental demands through CSR and showing concern about the stakeholder needs, a firm could win the 'sympathy' of the environment and thus, experience increase in their market share through expansion in the market base which is in line with the stakeholder theory, which asserts that a satisfied stakeholder is willing to invest in the interest of the entity. Recent studies on CSR and firm performance have shown that gaining competitive advantage within the industry of operation has a significant role to play in the positive relationship between CSR and performance of the firm in terms of raising capital financing. (Kashyap *et al.*, 1996; Kasekende & Opondo, 2003; Abor & Adjasi, 2007; Nakiyingi, 2012; Oppong, 2014). Iwu-Egwuonwu, (2011) found a significant positive relationship among the various dimensions of competitive advantage even though, among the various dimensions considered, product differentiation was found to be a strong predictor of the firm's access to capital financing. Furthermore, in a related study by Agyemang and Ansong (2017) on the role of firm reputation on the relationship between CSR and firm performance among small and medium scale enterprises (SMEs) in Ghana. The result was that good reputation is derived through competitive advantage which has the tendency of mediating between CSR and performance. Extending this stream of studies, we expect competitive advantage to serve as a mediator, linking corporate social responsibility to firm access to financial capital. It can therefore be concluded that a concern for the environment by the firm implies a concern for the activities of the firm by the environment leading to the gaining of advantage over peers who do not embark on similar activities. Consistent with the preceding arguments, the current study proposes the following hypothesis:

H3. Competitive advantage mediates the positive relationship between corporate social responsibility and firms' access to capital.

Considering competitive advantage (Porter and Kramer, 2002; Nyuur *et al.*, 2014), and access to capital as mediating constructs, the study seeks to explore the indirect effect of access to capital on corporate financial performance among rural banks in Ghana. It is argued that entities that embark on strategic competitive advantage policy are more likely to attract capital financing opportunities at the least cost which may improve financial performance. Consistent with the assertion of Marin *et al.* (2012), entities with higher market share and thus enjoying a definite competitive advantage are bound to win stakeholder selection when it decides where to invest.

Recent empirical findings support the positive relationship between access to capital and financial performance, even though, governance has a vital role to play (Gangi and Trotta, 2015; Turnbull, 2015; Shahzad *et al.* 2016). Albareda *et al.* (2008) defend the idea that the adoption of the firm having access to capital financing with efficient financing policies leads to the implementation of regulations and standards which would improve the firm's financial performance. Ntim and Soobaroyen (2013) confirm the results presented by Aguilera *et al.* (2012) using a meta-analytic study to find whether access to capital financing had a robust positive relationship with corporate financial performance. In a parallel study, Surroca *et al.* (2010), found that among the various determinants of the financial performance of listed entities, having access to capital financing plays a very significant role as lack of financing and high cost of financing can adversely affect the firm's financial performance. Furthermore, it has also been specified that there exists a positive relationship between firm's competitive advantage and access to capital

financing. (Russo and Fouts, 1997; Brammer and Millington, 2005; Nakao et al., 2007; Scholtens, 2008; Okamoto, 2009; and Yang et al., 2010). The preceding discussions can then be summarised in the hypothesis below:

H4. Access to capital mediates the positive relationship between firm's competitive advantage and financial performance.

Previous research has generally indicated the linkage between CSR and corporate financial performance, only that the linkage is indirect, implying that, CSR is indirectly related to corporate financial performance. For instance, Agyemang and Ansong (2017), Stanaland *et al.*, (2011) and Lai *et al.*, (2010) were able to link CSR and corporate financial performance through access to capital and also through firm's reputation. In the same way, Gramlich and Finster (2013) cited in Jean-Michel *et al.* (2019), studied the relationship between CSR and financial performance outcome with governance playing a mediating role. They found that useful and structured governance mediated the relationship between CSR of manufacturing and mining firms and their financial performance in both long term and short term. Although empirical findings support an indirect relationship between CSR activities and financial performance, most of these studies have used single mediator variables (Lai *et al.*, 2010; Stanaland *et al.*, 2011; Agyemang and Ansong, 2017). The current study however examines multiple mediators in the CSR and financial performance nexus with data drawn from rural banks in Ghana.

Adopting Walumbwa and Hartnell (2011) approach, we anticipated in H3 that firm's competitive advantage would facilitate the relationship between CSR and firm access to capital. Also, H4 suggested that the relationship between firms' competitive advantage and firms' financial performance will be mediated by access to capital financing. By connecting firms' competitive advantage, CSR activities presumably become an indirect antecedent to firms' access to capital financing, which then affects their financial performance. The study, therefore, proposes as a last mediation hypothesis from these two predictions as follows:

H5. Firms' CSR activities are indirectly related to financial performance through the mediating influence of competitive advantage and access to capital financing.

The influence of corporate governance

Researchers have emphasised the influence of corporate governance variables such as board size, board composition, board committees, company ownership structure, independence of directors, on company performance.

On-Board size: The extant literature has sought to provide a theoretical and empirical nexus between corporate board size and firm financial performance with mixed results (Kent & Stewart, 2008; Lipton & Lorsch, 1992; Yermack, 1996). On theoretical grounds, the agency theory proposes that larger boards are sub-optimal, while smaller boards are excellent and effective at improving financial performance (e.g. Lipton & Lorsch, 1992; Sonnenfeld, 2002) with the following justification; first, smaller boards can plan, organise, direct and control the entity, and besides, the large-size board has financial cost implications. Secondly, Jensen (1993) argues that the large-size board is difficult to coordinate, less likely to function effectively and may create a diminished sense of individual responsibility.

More specifically, Lipton and Lorsch (1992) suggested that corporate board size must preferably fall between eight (8) and nine (9) directors. They argue that as corporate board size goes beyond a maximum number of ten (10) directors; additional costs of having larger boards typically associated with slow decision making are higher than any marginal gains from intense monitoring of management's activities. Again, Yawson (2006) argued that larger boards suffer from more serious agency problems and are far less effective than smaller boards. Thus, limiting corporate board size may improve efficiency. Conversely, another strand of theoretical literature emanating from the resource dependence perspective suggests that boards are chosen to maximise the provision of essential resources to the firm (Pfeffer and Salanick, 1978; Klein, 1998; Hillman and Dalziel, 2003). Thus, larger boards may be better for corporate financial performance (John & Senbet, 1998; Yawson, 2006) and may link the organisations to its external environment and secure critical resources. It is argued that larger boards are associated

with a diversity of skills, business contacts and experience that smaller boards may not have, which offer more significant opportunity to secure critical resources (Haniffa and Hudaib, 2006).

On-Board composition: Having a significant percentage of outside directors on board could be considered as a management innovation as one of the mechanisms to lessen agency costs between management and shareholders (Chizema and Kim, 2010). According to the agency theory, the non-executive directors are assumed to be essential monitors that supervise and control the executives.

There are volumes of empirical literature that argue that boards dominated by outside directors or non-executive directors impact positively on firm performance (Cho and Kim, 2007; Bino and Tomar, 2007; Laun and Tang, 2007; Trabelssi, 2010; Yesser et al., 2011; Al-Hawary 2011; Al-Sahafi et al., 2015;)

On-Board committees: There is empirical literature which suggests a positive relationship between board committees and financial performance (see Wild, 1994; Liang & Weir, 1999; Vefaes, 1999b; Young & Bucholtz, 2010; Black & Kim, 2012; Bussoli, 2013; Puni, 2015). From the preceding discussions, it is apparent that corporate governance influences firms' ability to deploy available capital to achieve financial performance. Thus, the current study expects corporate governance to interact with access to capital to influence corporate financial performance. On this basis, the following hypothesis is stated:

H6: Corporate governance will moderate the positive relationship between access to capital and corporate financial performance.

Methodology

A cross-sectional survey was applied during the study. A sample of 126 rural banks was selected from the 144 rural banks (Bank of Ghana, 2020) distributed over the sixteen regions¹ Of Ghana. The sample of 126 was purposely chosen based on the banks being classified as at least 'satisfactory' during the Bank of Ghana clean-up exercise in 2019. From this exercise, 21 banks were rated strong, implying such banks were sound in all indicators, 105 banks were classified as satisfactory, implying that they were fundamentally sound with modest collectable weakness. Four (4) banks were so profoundly distressed that they were considered to be at high risk of failure, and 11 banks were not classified because they failed to submit their financial data for audit (Apex, 2020). Even though the study aimed at including all the banks in the study, based on this classification, the study considered banks that were classified as at least satisfactory. Also, the selected banks ensured a regional balance among the 144 licensed rural banks. The regional distribution of the selected banks is indicated in Table 1.

Data on directly observed variables (such as corporate performance) were collected from the 2019 financial statement, and unobserved variables (such as competitive advantage) were collected through the use of a questionnaire. For unobserved variables, the questions were developed based on previous research and scale developing procedures. The research instrument was applied with the help of Google form sent to the targeted banks and contacts with the targeted person to complete the questionnaire and supplied us with the required data for the study.

Table 1: Regional distribution of rural banks in Ghana and sample selected for the study

| Region | Number of rural banks | RB Selected for the study |
|---------------|------------------------------|----------------------------------|
| Upper East | 5 | 4 |
| Upper West | 4 | 2 |
| Northern | 4 | 2 |
| Savannah | 1 | 1 |
| North East | 2 | 1 |
| Bono | 10 | 9 |

¹ Ashanti, Bono, Bono East, Ahafo, Central, Eastern, Greater Accra, Northern, Savannah, North East, Upper East, Upper West, Volta, Oti, Western and Western North.

| | | |
|---------------|------------|------------|
| Bono East | 7 | 6 |
| Ahafo | 5 | 4 |
| Ashanti | 27 | 25 |
| Eastern | 25 | 23 |
| Western | 8 | 7 |
| Western North | 6 | 4 |
| Volta | 8 | 8 |
| Oti | 5 | 4 |
| Central | 20 | 19 |
| Greater Accra | 7 | 7 |
| Total | 144 | 126 |

Source: Bank of Ghana, December 2019

Measurement of variables

The latent variables used for the study were measured using a questionnaire with Likert scale type of items as the main instrument based on previous research and scale developing procedures. The constructs concerning the scales were measured with multiple item-scales based on the related literature, and some were adopted from literature and modified to suit the domain of the study.

Corporate social responsibility was measured using a four-level construct, following the measuring procedure similar to that adopted by Sweeney (2009), Hinson et al. (2010) and Sulemana (2016). The details of the measuring indicators are shown in Table 2 below.

Competitive advantage was measured by adapting the scale introduced by Zhang (2001). The scale initially consists of 16 items rated on a 5-point Likert-type scale with anchors ranging from 1 (strongly disagree) to 5 (strongly agree) and organised into five dimensions (price and cost, quality, delivery dependability, time to market, and product innovation). However, after carrying out factor analysis, 13 items were retained and have been organised into four dimensions (price and cost, quality of service delivery and customer, time to market, and product innovation) the detail of which is shown on Table 2.

In measuring access to capital as a construct, the study concentrated on formal sources of ascertaining capital, as the regulator is strict on the sources of raising capital to finance the activities of these banks. The details of the indicators of this construct is shown in Table 2

Corporate governance was measured as a construct following the procedure adopted by Hillman & Dalziel (2003), Leng (2004), and Adams & Mehran (2012). The construct was measured using three indicators; board size, board composition and several committees operated by the board. The details of the indicators are described in Table 2.

In addition to the substantive measures presented above, the study included three control variables in the hypothesised model as these might account for some variations in the financial performance of the banks (Ranti, 2011; Al-Manaseer et al., 2012; Al-Sahafi et al., 2015). In this direction, we controlled for bank size, interest income and bank age. Measurement of these variables is shown in Table 2.

Since self-report measures were applied in collecting the data for the construct, the possibility of standard method variance (CMV) in the constructs was anticipated. As a result, most of the recommendations by Podsakoff et al. (2003) were applied in the quest to remedy the prospect of the method bias.

Table 2: Measurement of constructs

| Second-order | First-order | Indicator | Statement on the questionnaire |
|---------------------------------------|-----------------------|---|---|
| Corporate social responsibility (CSR) | Environment (SREn) | Concern for Environment (SREn1) | Conduct business while maintaining the integrity of the environment |
| | | Energy conservation (SREn2) | Use alternative renewable sources of energy in business operations. |
| | | Conservation of natural resources (SREn3) | Conserve water, protecting flora & fauna etc. |
| | | Recycling and e-waste management (SREn4) | Policy to re-use, recycle paper, recycling electronics waste & other materials used in production |
| | | Support environmentally oriented business (SREn5) | Concessional arrangement for granting a loan to a business that has concern for the environment |
| | Human Resource (SRHr) | Employee Health and Safety (SRHr1) | Protects employees against work hazards |
| | | Employee training and development (SRHr2) | Organise training, refresher training and other educational opportunities |
| | | Employee discrimination (SRHr4) | The policy of anti-discrimination in terms of recruitment, remuneration and promotion |
| | | Fair employee evaluation process (SRHr4) | Fair performance appraisal system |
| | Community (SRCm) | Support for education (SRCm1) | Commitment to promoting education in terms of assistance in the areas of classroom infrastructure, textbooks, computer donations, teaching & learning materials, building the capacity of teachers, schools internet connectivity & other educational scholarships. |
| | | Support for health (SRCm2) | Assistance in health infrastructure, refurbishment, donating hospital equipment, training for health Professional |
| | | Employment of local residence (SRCm3) | The policy of recruiting qualified local residence. |
| | | Support youth entrepreneurship (SRCm4) | Assistance aimed at training the youth to be entrepreneurial to create their jobs and be self-reliant. |
| | | Employee volunteerism (SRCm5) | Company employees are getting out of their comfort zone and doing community work. Contributing cash or kind to the community |
| | Ethical (SREt) | Integrity (SCEt1) | Be honest & upright in corporate dealings. |
| Professional conduct (SCEt2) | | Allowing sound, good moral judgment in the conduct of business. | |
| Transparency (SCEt3) | | corporate actions and decisions are open to employees, stakeholders, shareholders and the general public. | |
| Customer confidentiality (SCEt4) | | Keep legitimate and legal dealings with customers in confidence. | |

Table 2: Measurement of constructs (continuation)

| Second-order | First-order | Indicator | Statement on the questionnaire |
|-----------------------|----------------|--------------------------------|--|
| Competitive Advantage | Price and Cost | Equality and diversity (SCEt5) | Treating people fairly and equitably without prejudice and allowing cultural differences to fester |
| | | Pricing | Prices of products/services are competitive relative to other competitors. |
| | | Industry average price | Price of product/service below the average industry price |

| | | | |
|----------------------------------|--|---|----------------------------------|
| | Price flexibility | Prices are adjustable to suit customer expectations. | |
| | Operational cost | Operational cost is kept as minimal as possible. | |
| Quality of service and customers | Customer view of product/service quality | Sought for customer view on the quality of our product or service | |
| | Customer complains | Provides avenues and platform to deal with customer complains. | |
| | New customers | There is a detailed policy for attracting and retaining new customers. | |
| Product Innovation | Flexible product development | Products/services are developed to meet customer requirements. | |
| | Continual product development | Respond to customer demand for changes in product features | |
| | Unique products | Products/services are uniquely designed to distinguish themselves from the industry. | |
| Time-to-market | Response to market changes | Respond to changes in the market conditions | |
| | Time to response | Time to respond to changes is shorter than the average time of the industry. | |
| | Lead time | The time between customer demand for a product and actual product development is kept minimal as possible | |
| Access to capital | Equity financing | Obtain finance from investors in the form of shares | |
| | Debt financing | Obtain finance from banks and other financial institution in the form of loan | |
| Corporate governance | Board size | Number of members on the board of the bank | |
| | Board composition | No. of Non-executive directors / no. of directors | |
| | Board committees | No. of committees the board have | |
| Financial performance | Return on asset | Profit after tax/capital employed. | |
| | Return on equity | Profit after tax / shareholder's fund | |
| | Sales growth | % change in interest income between 2018 and 2019 | |
| | Liquidity | Current ratio | Current asset /current liability |
| | | Capital adequacy ratio | ? |
| Control variables | Liquid asset ratio | Liquid asset / total liability | |
| | Bank size | Natural logarithm of total asset | |
| | Cost income ratio | Operating cost/ net income | |
| | Bank age | Years of incorporation | |

Results and discussion

The data collected from the field was analysed using SmartPLS version 3.2.6 (Ringle *et al.*, 2015) and IBM SPSS version 20 (Micros).

Model fitness test

The fitness of the data to the hypothesised model was estimated using the Standardised Root Mean Square Residual (SRMR), Squared Euclidean Distance (d_ ULS), Geodesic distance (d_ G) and Root Mean Squared Theta (RMS θ) as recommended by Bagozzi and Yi (2012). The multiple fitness indices have been utilised to ensure the robustness of the results. The chi-square goodness-of-fit index (commonly used fitness index) was excluded due to its sensitiveness to larger sample size (above 100 cases).

Hu and Bentler (1999) recommended that SRMR of value less than 0.08 is considered a good fit, and also, the hypothesised model is not misspecified (Henseler *et al.*, 2014). d_ ULS is based on bootstrapping iteration result of the exact model fit. The d_ ULS fit indices, which measure the difference between the correlation matrix implied by the hypothesised model and the empirical correlation matrix. Such difference should not be significant ($p > 0.05$) to indicate the fitness of the measurement model (Dijkstra *et al.*, 2015). Bentler and Bonett (1980) stated that, the NFI result in value is between 0 and 1, and that, the closer the NFI to 1, the better the fit. NFI value above 0.9 represents an acceptable fit. RMS θ value below 0.12 is, therefore, an indication of a well-fitting model, whereas higher values indicate lack of fit (Henseler *et al.*, 2014).

Based on the data from the sample of 126 rural banks, the model fitness test exhibited that the five-factor hypothesised model (with items loading onto the corresponding factors of corporate financial performance predicted by corporate social responsibility, competitive advantage, access to capital financing, and corporate governance) had an excellent fit to the data as indicated in Table 3.

Table 3: Fit indices for the measurement model

| Model Fit index Acceptable level | SRMR (≤ 0.08) ² | d_ ULS ($p > 0.05$) ³ | d_ G ($p > 0.05$) ⁴ | NFI (≥ 0.90) ⁵ | RMS θ (< 0.12) ⁶ |
|--|--------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|---|
| Five-factor hypothesized model (CSR, CA, AC, CG, CFP) | 0.069 | 0.214 | 0.248 | 0.985 | 0.012 |
| Four-factor hypothesized model (CSR, CA+AC, CG, CFP) | 0.072 | 0.103 | 0.001 | 0.832 | 0.102 |
| Three-factor hypothesized model (CSR, CA+AC+ CG, CFP) | 0.083 | 0.003 | 0.005 | 0.617 | 0.152 |
| Two-factor hypothesized model (CSR+CA+AC+ CG, CFP) | 0.079 | 0.000 | 0.000 | 0.662 | 0.031 |
| Single-factor hypothesized model (CSR+CA+AC+ CG+CFP) | 0.109 | 0.000 | 0.003 | 0.815 | 0.110 |

Note: $n = 126$. CSR, Corporate social responsibility; CA, Competitive advantage; AC, Access to capital; Corporate governance; CFP, corporate financial performance.

This model showed SRMR = 0.069, NFI = 0.985 and RMS θ = 0.012. Bootstrap result for d_ ULS and d_ G disclosed a probability of acceptance of the null hypothesis of no difference at 21.4% and 24.8% respectively, showing an insignificant difference between the correlation matrix implied by the hypothesised model and the empirical correlation matrix. All the indices show a superior model fit for the five-factor model to the alternative models, as indicated in Table 3.

Validity and reliability

Validity and reliability test were carried out as part of the CFA to ascertain the validity and reliability of the hypothesised model shown in Figure 1. In testing the validity of the constructs, the study focused on the degree to which the data exhibit both convergent and discriminant validity.

By convergent validity, the study seeks to explore whether all statements posed for a particular construct are collected just under a single factor. Convergent validity evidence for a hypothesised model exist if all observable

² Hu & Bentler (1999)

³ Dijkstra & Henseler (2015)

⁴ Dijkstra & Henseler (2015)

⁵ Bentler and Bonett (1980), Lohmoller (1989)

⁶ Henseler *et al.* (2014), Lohmoller (1989)

indicators load significantly onto their respective latent factors (Anderson et al., 1988). Four indices which were used in assessing convergent validity are standard factor loading (SFL) with bootstrapping, composite reliability (CR), the Rho_A and average variance extracted (AVE). Table 4 below shows the result of the convergent validity test.

Table 4: Measurement scale and indicators of the hypothesised model

| Measurement scale and indicators | Standard factor loading | | | CR | AVE | α | Rho_A |
|--|-------------------------|-----------|---------|-------|-------|----------|-------|
| | loading | t - value | p-value | | | | |
| <i>Corporate Social Responsibility (CSR)</i> | | | | 0.918 | 0.672 | 0.906 | 0.907 |
| Indicator 1 | 0.831 | 15.331 | *** | | | | |
| Indicator 2 | 0.804 | 11.435 | *** | | | | |
| Indicator 3 | 0.889 | 16.400 | *** | | | | |
| Indicator 4 | 0.788 | 11.078 | *** | | | | |
| Indicator 5 | 0.779 | 12.181 | *** | | | | |
| Indicator 6 | 0.811 | 12.383 | *** | | | | |
| Indicator 7 | 0.866 | 14.423 | *** | | | | |
| Indicator 8 | 0.805 | 11.349 | *** | | | | |
| Indicator 9 | 0.730 | 10.348 | *** | | | | |
| Indicator 10 | 0.784 | 11.471 | *** | | | | |
| Indicator 11 | 0.796 | 12.086 | *** | | | | |
| Indicator 12 | 0.767 | 10.513 | *** | | | | |
| Indicator 13 | 0.891 | 16.175 | *** | | | | |
| Indicator 14 | 0.804 | 11.885 | *** | | | | |
| Indicator 15 | 0.825 | 13.179 | *** | | | | |
| Indicator 16 | 0.791 | 12.161 | *** | | | | |
| Indicator 17 | 0.824 | 13.199 | *** | | | | |
| Indicator 18 | 0.776 | 11.489 | *** | | | | |
| Indicator 19 | 0.807 | 12.213 | *** | | | | |
| <i>Competitive Advantage (CA)</i> | | | | 0.900 | 0.511 | 0.880 | 0.882 |
| Indicator 1 | 0.827 | 13.123 | *** | | | | |
| Indicator 2 | 0.907 | 17.963 | *** | | | | |
| Indicator 3 | 0.876 | 14.992 | *** | | | | |
| Indicator 4 | 0.825 | 13.536 | *** | | | | |
| Indicator 5 | 0.865 | 15.091 | *** | | | | |
| Indicator 6 | 0.736 | 9.383 | *** | | | | |
| Indicator 7 | 0.832 | 12.754 | *** | | | | |
| <i>Access to Capital (AC)</i> | | | | 0.823 | 0.699 | 0.769 | 0.569 |
| Indicator 1 | 0.873 | 12.071 | *** | | | | |
| Indicator 2 | 0.834 | 10.776 | *** | | | | |
| <i>Corporate Governance (CG)</i> | | | | 0.897 | 0.743 | 0.827 | 0.830 |
| Indicator 1 | 0.824 | 10.217 | *** | | | | |
| Indicator 2 | 0.843 | 11.738 | *** | | | | |
| Indicator 3 | 0.813 | 10.873 | *** | | | | |
| <i>Corporate Financial Performance (CFP)</i> | | | | 0.924 | 0.669 | 0.901 | 0.902 |

| | | | |
|-------------|-------|--------|-----|
| Indicator 1 | 0.786 | 12.379 | *** |
| Indicator 2 | 0.839 | 14.097 | *** |
| Indicator 3 | 0.819 | 12.050 | *** |
| Indicator 4 | 0.790 | 10.174 | *** |
| Indicator 5 | 0.810 | 11.789 | *** |
| Indicator 6 | 0.859 | 14.762 | *** |

In Table 4, all the indicators load significantly on their respective construct with a loading coefficient ranging 0.730 to 0.907 for the various factors in the hypothesised model exceeding the suggested ratio of 0.7 (Bagozzi and Yi, 2012; Hair *et al.*, 2014), which is an indication of a tolerable item convergence on the proposed constructs. The bootstrapping results indicate that the loading obtained are significant at 1%. Also, the reported AVE for the five scales were greater than the tolerable level of 0.5 (Fornell & Larcker, 1981). Also, composite reliability (CR) values of all the five scales were well above the cut-off point of 0.7 as recommended by Nunnally and Bernstein (1994). Again, a more robust measure, Rho_A showed a result above the cut of 0.75 as recommended by Dijkstra and Henseler (2015). The results indicate an acceptable convergent validity for all constructs in the measurement model.

In assessing discriminant validity, the study aimed at testing whether the scale measures that are not expected to relate are actually unrelated. In this direction, the study applies the Heterotrait-monotrait (HTMT) ratio of correlations which indicate an establishment of discriminant validity for HTMT value below 0.80 (Henseler *et al.* 2015) and the Fornell–Larcker criterion. Table 5 shows the HTMT ratios which meet the threshold of below 0.80 and are significant at 5% after conducting the bootstrapping of 300 samples from the 126 sampled banks demonstrating that, the scale measures that are not expected to relate are not relating. Also, applying the Fornell–Larcker criterion as indicated in Table 5, the square root of the AVE (shown on the leading diagonal of the correlation matrix) in each row and column is higher than the figures in that row or column indicating the appropriateness of discriminant validity.

Table 5: Fornell–Larcker criterion analysis and Heterotrait-monotrait (HTMT) ratio of correlations

| | CSR | CA | AC | CG | CFP |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| <i>Fornell–Larcker criterion</i> | | | | | |
| CSR | <i>0.820</i> | | | | |
| CA | 0.605 | <i>0.715</i> | | | |
| AC | 0.733 | 0.706 | <i>0.836</i> | | |
| CG | 0.795 | 0.691 | 0.536 | <i>0.862</i> | |
| CFP | 0.639 | 0.629 | 0.577 | 0.867 | <i>0.818</i> |
| <i>Heterotrait-Monotrait ratio</i> | | | | | |
| CA | 0.311 | | | | |
| AC | 0.224 | 0.398 | | | |
| CG | 0.109 | 0.298 | 0.378 | | |
| CFP | 0.221 | 0.226 | 0.204 | 0.402 | |

Note: $n = 126$. CSR, Corporate social responsibility; CA, Competitive advantage; AC, Access to capital; Corporate governance; CFP, corporate financial performance. *Italic figures in the diagonal of the correlation matrix in the Fornell–Larcker criterion denotes the square root of the AVE. For appropriate discriminant validity, the italic figures in each row and column should be greater than the figures in that row or column.*

Reliability of the constructs was assessed using the Cronbach's alphas (α) and AVE values. The results of reliability analyses showed Cronbach's alphas of the constructs ranging from 0.769 to 0.906, which is considered high and above the suggested value of 0.70 (DeVellis, 2012).

In conclusion, the results obtained show that the measurement model utilised in this study has the right internal consistency, reliability, convergent validity and discriminant validity. In other words, these results on validity and reliability provide evidence for the instruments used in this study.

Inter-correlations and descriptive statistics

The object of this section is to describe the responses about the study variables using basic descriptive statistics and to assess the appropriateness of the study hypotheses as well as examining whether there is the presence of multicollinearity or not. Table 6 presents the descriptive statistics of the study variables and the correlation between them. The variance inflation factor of the study construct is presented, as well.

From Table 6, all the unobserved variables (CSR, CA, AC, CG and CFP) appears to be approximately normally distributed judging from their skewness coefficient and their kurtosis. The responses to the questionnaire items seem to be fairly answered with most of the responses agreeing to the statement posed to them. On their relationship, it can be observed that all the variables relate positively with the dependent variable; corporate financial performance, which is an indication that improvement in all the variables considered is capable of improving the financial performance. For instance, corporate social responsibility and competitive advantage individually, showed a positive correlation of ($r = 0.426, p < 0.1$) and ($r = 0.312, p < 0.1$) respectively even though the correlation coefficient is not significant at 5%.

Table 6: Descriptive statistics and Inter-correlation coefficients

| | Descriptive | | | | Inter-correlation coefficients | | | | | | |
|-----|-------------|-------|--------|--------|--------------------------------|---------|---------|--------------|--------------|-------|-------|
| | Mean | SD | Skew. | Kurt. | CSR | CA | AC | CG | CFP | BS | CIR |
| CSR | 2.905 | 1.342 | 0.116 | -1.114 | (1.408) | | | | | | |
| CA | 3.063 | 1.424 | -0.063 | -1.282 | 0.315** | (1.711) | | | | | |
| AC | 3.016 | 1.297 | 0.081 | -1.023 | 0.375 | 0.274** | (2.024) | | | | |
| CG | 3.04 | 1.137 | 0.085 | -0.684 | 0.307 | 0.356 | 0.306 | (2.197) | | | |
| CFP | 3.151 | 1.322 | -0.198 | -1.029 | 0.426* | 0.312* | 0.623** | 0.544 | (1.729) | | |
| BS | 18.249 | 1.281 | 0.095 | -1.023 | 0.205 | 0.301 | 0.398 | 0.233 | 0.321 | | |
| CIR | 0.618 | 5.359 | -0.04 | -1.162 | 0.414 | 0.272 | 0.418 | 0.239 | 0.275 | 0.317 | |
| BA | 15.135 | 9.316 | 0.091 | -1.017 | 0.324 | 0.316 | 0.359 | 0.161 | 0.225 | 0.338 | 0.367 |

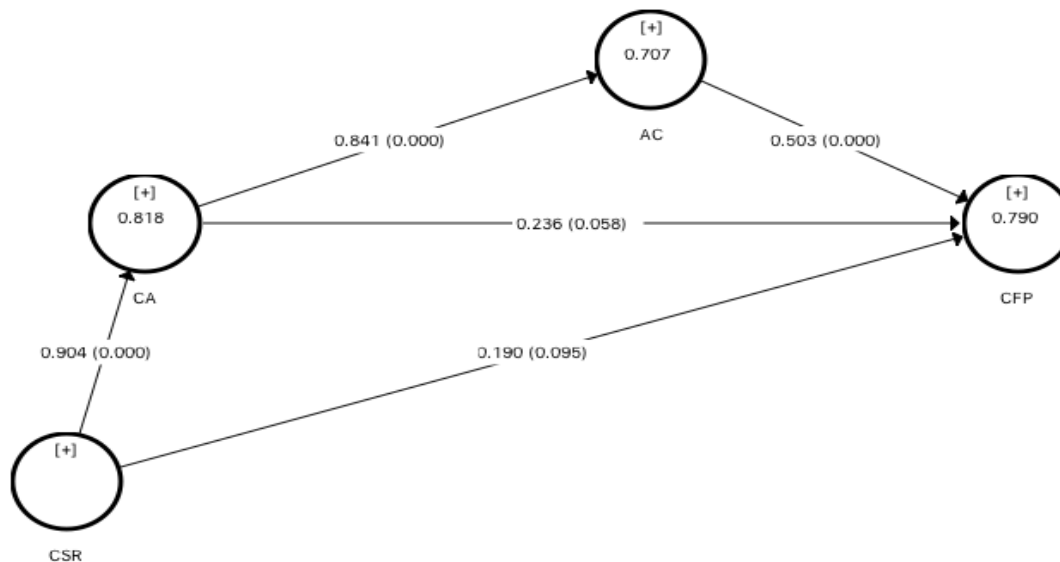
Note: $n = 126$. CSR, Corporate social responsibility; CA, Competitive advantage; AC, Access to capital; Corporate governance; CFP, corporate financial performance; BS, Bank size; CIR, cost income ratio; BA, bank age. Figures on the leading diagonal of the correlation matrix put in parenthesis are the variance inflated factors (VIF). * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$;

There is a strong positive significant correlation between access to capital and corporate financial performance with a correlation coefficient of ($r = 0.623, p < 0.05$) which is an indication that proper use of capital available to the banks will lead to improved financial performance. Examining the critical constructs for multicollinearity, which occurs when there is a strong correlation between two or more predictor variables in a regression model (Field, 2009), Hair et al. (2014) recommended two approaches. First, it involves an examination of the correlation matrix among the predictor variables. A correlations coefficient greater than or equal 0.90 is an indication of significant collinearity. The results of the study (see Table 6), reported the highest correlation coefficient among the predictor variables to be 0.418, indicating the absence of collinearity. Secondly, to avoid collinearity as a result of the combined effect of two or more predictors as recommended by Hair et al. (2014), the VIF of the predictor variables were assessed. Applying the threshold of VIF values of 10 as recommended by Gaur and Kumar (2009) and Hair et al. (2014), the VIF values (ranging from 1.408 to 2.197), as indicated in parentheses in Table 6 shows there is no challenge of multicollinearity among the predictor variables. Consequently, the hypothesis of the study could be tested.

Structural model

The hypothesised CSR model (see Figure 1) was empirically tested using structural equation modelling (SEM), which allows all paths to be evaluated simultaneously. The result of the path analysis is presented in the form of a path diagram, as shown in Figure 2. Hypotheses (H1 to H5) were tested by conducting a bootstrap analysis with bias-corrected 95% confidence interval using the Smart PLS, where 5000 sub-samples were created with observations randomly drawn (with replacement) from the original set of data.

Figure 2: Path diagram for the hypothesised Model (Excluding moderating effect)



Hypothesis testing

H1-H2. H1 predicted that corporate social responsibility would be positively related to firm's competitive advantage, whereas H2 hypothesised that firm's competitive advantage would be positively related to firm's access to capital financing. From Table 6, corporate social responsibility is positively related to firm's competitive advantage ($r = 0.315$, $p < 0.01$) and also firm's competitive advantage is positively related to firm's access to capital finance ($r = 0.274$, $p < 0.01$). From Figure 2 and Table 7, the outcome of the direct effect of corporate social responsibility on a firm's competitive advantage is positive. It is significant at 1% ($\beta = 0.904$, $|t| = 55.069$, $p < 0.01$). Hence, hypothesis 1 is reinforced by the CSR model.

Table 7: Direct, indirect and total effects of the hypothesised model

| | Std Estimate | Std Error | t-value | Bias Corrected 95% CI. | | p-value |
|--------------------------------------|--------------|-----------|---------|------------------------|-------|----------|
| | | | | LLCI | ULCI | |
| <i>Standardised direct effects</i> | | | | | | |
| CSR → CA | 0.904 | 0.016 | 55.069 | 0.861 | 0.928 | 0.000*** |
| CA → AC | 0.841 | 0.025 | 33.188 | 0.774 | 0.882 | 0.000*** |
| AC → CFP | 0.503 | 0.112 | 4.488 | 0.283 | 0.719 | 0.000*** |
| CSR → CFP | 0.190 | 0.108 | 1.751 | -0.054 | 0.394 | 0.096* |
| CA → CFP | 0.236 | 0.116 | 2.037 | -0.026 | 0.443 | 0.068* |
| <i>Standardised indirect effects</i> | | | | | | |
| CSR → CA → AC | 0.761 | 0.033 | 23.316 | 0.674 | 0.813 | 0.000*** |
| CA → AC → CFP | 0.423 | 0.092 | 4.595 | 0.237 | 0.602 | 0.000*** |

| | | | | | | |
|-----------------------------------|-------|-------|--------|--------|-------|----------|
| CSR →CA →CFP | 0.213 | 0.105 | 2.035 | 0.212 | 0.549 | 0.042** |
| CSR →CA →AC→CFP | 0.382 | 0.083 | 4.598 | -0.026 | 0.402 | 0.000*** |
| <i>Standardised total effects</i> | | | | | | |
| AC →CFP | 0.503 | 0.112 | 4.488 | 0.283 | 0.719 | 0.000*** |
| CA →AC | 0.841 | 0.025 | 33.188 | 0.774 | 0.882 | 0.000*** |
| CA →CFP | 0.658 | 0.098 | 6.692 | 0.461 | 0.867 | 0.000*** |
| CSR →AC | 0.761 | 0.033 | 23.316 | 0.674 | 0.813 | 0.000*** |
| CSR →CA | 0.904 | 0.016 | 55.069 | 0.861 | 0.928 | 0.000*** |
| CSR →CFP | 0.785 | 0.043 | 18.406 | 0.660 | 0.845 | 0.000*** |

Note: $n = 126$. CSR, Corporate social responsibility; CA, Competitive advantage; AC, Access to capital; Corporate governance; CFP, corporate financial performance. Standardised estimate was obtained from 5,000 sub-samples. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$;

Also, the direct effect of firm's competitive advantage on firms' access to capital showed a positive significant path coefficient at 1% significant level ($\beta = 0.841$, $|t| = 33.188$, $p < 0.01$) indicating that the CSR model supports hypothesis 2.

H3-H5. As indicated in Table 6, the correlation coefficients ($r = 0.315$, $p < 0.05$) indicates corporate social responsibility was positively and significantly related to competitive advantage. Also, competitive advantage was positively and significantly related to firm's access to capital financing with correlation coefficient ($r = 0.274$, $p < 0.05$), and firm's access to capital was also positively and significantly related to corporate financial performance ($r = 0.623$, $p < 0.05$). More importantly, from the path diagram in Figure 2 and the result from the bootstrapping analysis of the path coefficient as indicated on Table 7, the outcomes of the direct effects of corporate social responsibility on firm's competitive advantage ($\beta = 0.904$, $|t| = 55.069$, $p < 0.01$), firm's competitive advantage on access to capital financing ($\beta = 0.841$, $|t| = 33.188$, $p < 0.01$) and access to capital finance on corporate financial performance ($\beta = 0.503$, $|t| = 4.488$, $p < 0.01$) were all statistically significant at 1%. This is an indication that the basic conditions of mediation in the hypothesised model are satisfied. Consequently, the indirect effects of the hypothesised model are then examined.

To do this, the bias-corrected bootstrapping analysis at 95% confidence interval with 5,000 sub-samples was conducted. Following the recommendation by Preacher and Hayes (2008), the confidence interval of the upper and lower limit was calculated to test the significance of the indirect effects of the mediating variables (result shown in Table 7). The result of this analysis showed the existences of positive and significant mediation effect of firms' competitive advantage between corporate social responsibility and firm's access to capital ($\beta = 0.761$, $|t| = 23.316$, $p < 0.01$). Also, the results show a positive and significant mediating effect for access to capital finance between firm's competitive advantage and corporate financial performance ($\beta = 0.423$, $|t| = 4.493$, $p < 0.01$). Finally, the bootstrapping analysis showed that there is a positive and significant mediating effect for competitive advantage and access to capital finance between corporate social responsibility and corporate financial performance ($\beta = 0.382$, $|t| = 4.598$, $p < 0.01$). With the preliminary result, H3-H5 were supported by the CSR model.

It can again be observed that, the direct consequence of corporate social responsibility on corporate financial performance is not significant at 5% ($\beta = 0.190$, $|t| = 1.751$, $p < 0.1$). This is an indication that firm's competitive advantage and access to capital financing plays a full mediation between corporate social responsibility and corporate financial performance. In another dimension, firm's competitive advantage showed positive and significant mediation effect between corporate social responsibility and corporate financial performance ($\beta = 0.213$, $|t| = 2.035$, $p < 0.05$), however, the effect of the relationship is not robust as the relationship would be insignificant at 1% significant level. The relationship confirms that the relationship between corporate social responsibility and corporate financial performance is fully mediated by competitive advantage and access to capital finance.

Assessing the moderating role of corporate governance

The second objective of the study seeks to investigate how the relationship between access to finance and financial performance is moderated by corporate governance. That is if firms have access to capital financing, does corporate governance play any role in determining whether a firm will improve its financial performance or not? To test this hypothesis, hierarchical regression was carried out with three controlled variables (bank size, cost to income ratio and bank age) and two predictor variables (access to capital finance and corporate governance). Based on the predictors, the moderating variable was derived (that is, the interaction between access to capital and corporate governance). The outcome of the hierarchical regression in Table 8 indicates that corporate governance significantly moderates the relationship between access to capital finance and corporate financial performance ($\beta = 1.683$, $|t| = 1.982$, $p < 0.05$) with the interaction effect between access to capital and corporate financial performance explaining 35% of the variances in the corporate financial performance and the global regression model being significant at 5% level of significance. The results from the hierarchical regression, therefore, provides adequate support for H6.

Table 8: Result of hierarchical linear regression for corporate financial performance

| | Corporate financial performance |
|--|---------------------------------|
| <i>Step 1: Controlled</i> | |
| Bank size | 0.105* (2.160) |
| Cost to income ratio | - 0.069 (- 0.767) |
| Bank age | - 0.086 (- 0.956) |
| R^2 | 0.024** |
| ΔR^2 | 0.024** |
| $F_{(3,122)}$ | 2.979** |
| $\Delta F_{(3,122)}$ | 2.979** |
| <i>Step 2: Predictors</i> | |
| Access to capital (AC) | 0.590** (2.951) |
| Corporate Governance (CG) | 0.411*** (7.13) |
| R^2 | 0.27** |
| ΔR^2 | 0.246** |
| $F_{(3,122)}$ | 5.667** |
| $\Delta F_{(2,120)}$ | 2.18** |
| <i>Step 3: Mediators</i> | |
| AC \times CG | 1.683** (1.982) |
| R^2 | 0.35** |
| ΔR^2 | 0.08** |
| $F_{(3,122)}$ | 5.937** |
| $\Delta F_{(2,120)}$ | 5.690** |
| <i>Notes: n = 126. Reported coefficients are standardised estimates with robust t-statistics (in parenthesis). *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$</i> | |

Discussion

The first hypothesis of the study (H1) postulates a positive relationship between firm corporate social responsibility outcomes and firms' competitive advantage. The result of the study provided evidence to support the first hypothesis (H1) of the study such that, corporate social responsibility is significantly positively related to firms'

competitive advantage. This aspect of the finding is in accordance with extant literature (Marin *et al.*, 2012; Russo & Perrini, 2010) that, the perception of corporate stakeholders of firms' corporate social responsibility outcomes is positively associated with the market shares they control in the industry.

The second hypothesis (H2) of the study also proposed that a firm's competitive advantage relates positively with its access to capital financing. The result of the study confirmed that there is a significant positive relationship between firms gaining competitive advantage and firms having access to capital finance. This aspect of the result of the study is consistent with Du *et al.* (2010), Marin *et al.* (2012) and Wagner *et al.* (2009). They confirmed that competitive advantage is directly associated with liquidity, especially when firms engage in a proactive competitive strategy than a reactive one.

The third hypothesis (H3) stipulates that a firm's competitive advantage mediates the positive relationship between corporate social responsibility and the firm's access to capital. The result of the study discovered that competitive advantage significantly mediates the positive relationship between corporate social responsibility activities and the firm's access to capital finance. This finding implies that firms that engage in corporate social responsibility can win the heart of their clients and through that, increase their market share. As the market share of these firms increases, the firms can have access to varying capital avenues as investors and other stakeholders know such funds would be utilised effectively to provide returns that will be paid back to society. This, as a result, is consistent with the study of Battaglia *et al.* (2014), and Ferdous and Moniruzzaman (2013). They carried out similar studies and found that firms that have a more significant market share (used as a measure of competitive advantage) which is acquired through corporate social responsibility outcomes can access capital from different sources as they are considered as liquid firms. Thus, social responsibility outcomes may not directly expose firms to different capital sources. However, as firms gain competitive advantage through social responsibility outcomes, it gives access to the firms in obtaining capital from different sources. The result of the study further indicates that there is a positive and significant mediating effect of access to capital finance between firm's competitive advantage and corporate financial performance. There is also a positive and significant mediating effect for competitive advantage and access to capital finance between corporate social responsibility and corporate financial performance which as a result provides support for hypothesis 4 (H4) and hypothesis 5 (H5) of the study. This result provides a contradiction to the view held by Kapstein (2001) and Hillman & Keim (2001). They argue that firms with superior corporate social responsibility performance are faced with lower constraint in accessing capital. Since the rural banking setting is much related to the community than the general macro economies, stakeholders tend to be interested in firms that have a concern of the community as part of their corporate plan and thus gives back to the community. Thus, rural banks that engage in more corporate social responsibility activities tend to win more customers within the community as most of their shareholders tend to be within the community. Also, regardless of corporate social responsibility outcomes of rural banks, capital providers in developing countries characterised by poor-functioning fiscal regime tend to channel their resources to more substantial firms where they presume that returns are higher. On this basis, rural banks, due to their size and risk level encounter many difficulties in accessing capital from capital providers. The discoveries of the study, however, has reiterated that rural banks that embark on corporate social responsibility gain competitive advantage which tends to expose them to favourable and easy capital access which eventually improve their financial performance. This observation is in line with the assertion that having access to capital is relevant to the growth and survival of firms (Carter *et al.*, 2003). Thus, the ability of these rural banks to improve on their performance would be enhanced if capital is readily accessible (Kashyap *et al.*, 1996; Kasekende & Opondo, 2003; Nakiyingi, 2012) capital would be accessible based on their ability to gain much competitive advantage within the industry they operate which comes about through adopting proper corporate governance practices.

Conclusion and policy recommendation

Corporate social responsibility practice can be viewed as a strategic management tool necessary to achieve competitive advantage in business settings such as the Ghanaian banking industry. The findings of this study have shown that business organisations that practice CSR activities, in turn, gain a defensible competitive position in their industry which tends to give them access to finance to fund their business strategies, hence having a positive impact on financial performance. The study has also indicated that corporate governance has a role to play as to

how the capital obtained can be translated into improved financial performance. On this basis, it can be concluded that firms that commit more to corporate governance activities tend to gain much competitive advantage in their industry. When these advantages are sustained, the firms gain access to capital financing, and with good corporate governance practices, the firms would show improvement in their financial performance.

Based on the key findings of the study, the following are recommended for implementation: The study revealed that firms that perform CSR activities do not have the intention of creating a competitive advantage, however, it comes out when such activity is well executed. It is therefore essential for organisations to plan for CSR activities to enhance their competitive advantage. The study recommends that the activities of CSR should be integrated as part of firms' corporate and business level strategies. This will, in turn, help organisations to budget for such CSR activities and also devote much time to them. From discussion with corporate managers in the selected banks consistent with extant literature, the study confirmed that rural banks in Ghana are more concerned with externally focused CSR activities (education, health need of the community etc.). This, in effect, makes them more concerned in providing for the needs of the communities in which they operate than meeting the needs of their internal stakeholders, particularly employees. Contrary to this, other studies attest to the fact that, when firms have the best interests of their internal stakeholders at heart, they are likely to gain competitive advantage. It is therefore recommended that management takes into consideration internally related CSR activities as well so as to gain more competitive advantage. These practices include transparent recruitment processes, work-force diversity and equal opportunities, fair pay or financial support satisfaction and improvement in working conditions, health and safety, human rights, work/life balance, training and staff development, employees' communication and participation in business decisions. The study also revealed that, financial performance is linked to CSR activities through competitive advantage and access to capital. It was however observed that, there is a gap between knowledge and the implementation of CSR in the Ghanaian rural banking industry. In most cases, the person in charge of CSR activities is the only one in the organisation who knows how CSR activities are implemented. This makes it difficult for the entire organisation structure to appreciate the need for CSR activities. To overcome this, the study recommends to the concept of CSR be clarified and included in the training curriculum of employees so as to educate or inform people, especially other non-management members within the organisation on CSR activities so as to get a uniform view on CSR practices. There should an organisational policy framework to set out clear-cut parameters for CSR activities so as to avoid haphazard practices of CSR. This will help ensure proper accountability on CSR activities by organisations. This can be done by spelling out the principles or rules that would provide definite direction for carrying out an organisation's CSR activities. The study reveals that, corporate governance moderates the positive relationship between access to capital and corporate financial performance. In this direction, firms would experience an improved financial performance from the capital they have acquired depending on the efficiency of its corporate governance structures. The study therefore recommends that, rural banks (and the banking industry at large) should adopt proper corporate governance structures that would ensure judicious use of firms' resources in order to enjoy the improved financial performance.

Directions for future research

The study used mediating variables such as competitive advantage and access to capital finance. Future studies could consider other mediating variables such as customer and employee satisfaction as these could be a medium through which CSR activities could be translated into financial performance. Again, this study adopted a cross-sectional research approach, where data was collected from respondents at a point in time. Thus, such responses may be influenced by pertaining conditions of the individual at that particular point in time. The utilisation of different approaches, such as longitudinal research may provide significant differences in the findings, which would be interesting to compare with the result of the current study.

References

- Abor, J. & Adjasi, C. (2007). Corporate governance and the small and medium enterprises sector: theory and implications, *Corporate Governance: International Journal of Business in Society*, 7(2) 111-122.
- Aggarwal, M. (2013). Corporate social responsibility and financial performance linkage evidence from Indian companies. *International Journal of Management and Development Studies*, 2(7), 12-24.
- Aguilera R.V., De Castro L.R.K., Lee J.H., & You J. (2012). Corporate governance in emerging markets. *Capitalisms and Capitalism in the Twenty-First Century. Corporate Governance: International Journal of Business in Society* 10(2), 196-217.
- Agyemang, O. S., & Ansong, A. (2017). Corporate social responsibility and firm performance of Ghanaian SMEs: Mediating role of access to capital and firm reputation. *Journal of Global Responsibility*, 8(1) 47-62. doi: 10.1108/JGR-03-2016-0007
- Al-Hawary, S.I. (2011). The Effect of Banks' Governance on Banking Performance of the Jordanian Commercial Banks. *International Research Journal of Finance and Economics*, 71 (5), 34-47.
- Al-Manaseer, M.F., Al-Hindawi, R.M., Al-Dahiyat, M.A., & Sartawi, I.I. (2012). The Impact of Corporate Governance on the Performance of Jordanian Banks. *European Journal of Scientific Research*, 67(3), 349-359.
- Al-Sahafi, A; Rodrigs, M.; & Barnes, L. (2015). Does Corporate governance affect financial performance in the banking sector? Evidence from Saudi Arabia. *International Journal of Economics, Commerce and Management*, 3(3) 1-26.
- Bagozzi, R.P., & Yi, Y. (2012). Specification, evaluation and interpretation of structural equation models. *Journal of Academy of Marketing Science*, 40 (1) 8-34.
- Barnea, A., Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97(1), 71–86.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Battaglia, M., Testa, F., Bianchi, L., Iraldo, F., & Frey, M (2014). Corporate Social Responsibility and Competitiveness within SMEs of the fashion industry: Evidence from Italy and France. *Sustainability*, 6, 872-893.
- Bino, A. and Tomar, S. (2007). Corporate governance and Bank performance; Evidence From Jordanian Banking Industry. Paper presented at a Conference on Regulation and Competition on 27th & 28th University of Jordan.
- Black, B. & Kim, W. (2012). The Effect of Board Structure on Firm Value: A Multiple Identification Strategies Approach Using Korean Data. *Journal of Financial Economics* 104, 203-246
- Brammer, S., & Millington, A. (2005). Corporate reputation and philanthropy: An empirical analysis. *Journal of Business Ethics* 61, 29–44.
- Branco, M. C., & Rodrigues, L. L. (2006). Communication of corporate social responsibility by Portuguese banks: A legitimacy theory perspective. *Corporate communication: An International Journal*, 11(3), 232–248.
- Bussoli, C. (2013). *Corporate Governance and Bank Performance in Italy. Financial Systems in Troubled Waters: Information, Strategies and Governance to Enhance Performances in Risky Times*. Routledge, Taylor and Francis, London.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International journal of management reviews*, 12(1), 85-105.
- Carter, D.A. & Simkins, B.J. and Simpson, W.G. (2003). Corporate Governance, Board Diversity and Firm Value. *Financial Review*, 38 (1) 33-53
- Chizema, A. & Kim, J. (2010). Outside Directors on Korean Boards: Governance and Institutions: *Journal of Management Studies*, 47, 109-129
- Choi, J. J., Jo, H., Kim, J., & Kim, M. S. (2018). Business Groups and Corporate Social Responsibility. *J Bus Ethics* 153, 931–954. <https://doi.org/10.1007/s10551-018-3916-0>
- Danso, A., Poku, K., & Agyapong, A. (2017). Mediating role of internal communications in market orientation and performance of mobile telecom firms: Evidence from Ghana. *Cogent Business & Management*, 4(1), 1403713.
- Dube, I., Dube, D., & Mishra, P. (2011). Corporate governance norm for SMEs. *Journal of Public Administration and Governance*, 1(2), 2161-7104.
- El-Garaihy, W. H., Mubarak, A. M., & Albahussain, S. A. (2014). Measuring the Impact of Corporate social responsibility practices on competitive advantage: A mediation role of reputation and customer satisfaction. *International Journal of Business and Management*, 9(5), 109-124.
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A Regression Discontinuity Approach. *Management Science*, 61(11), 2549–2568

- Fornell, C. and Larcker, D.F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research*, 18(3),
- Friedman, M. (1970), *The Social Responsibility of Business is to Increase its Profits*", *New York Times Magazine* 122-126.
- Gangi, F., & Trotta, C. (2015). The ethical finance as a response to the financial crises: An empirical survey of European SRFs performance. *Journal of Management and Governance*, 19(2), 371–394
- García-Sánchez, I.-M., Rodríguez-Dominguez, L., & Frías-Aceituno, J.-V. (2015). Board of Directors and ethics codes in different corporate governance systems. *Journal of Business Ethics*, 131, 681–698.
- Gaur, A. S., & Kumar, V. (2009). International diversification, business group affiliation and firm performance
- Gramlich, D., & Finster, N. (2013). Corporate sustainability and risk. *Journal of Business Economics*, 83, 631–664.
- Guo, M., He, L., & Zhong, L. (2018). Business groups and corporate social responsibility: Evidence from China. *Emerging Markets Review*, Forthcoming, 37, 83.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2014). *Multivariate data analysis*. Essex, England.
- Haniffa R., & Hudaib M. (2006) Corporate governance structures and performance of Malaysian listed companies. *Journal of Business Finance and Accounting* 33: 1034–1062
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Hinson, R., Boateng, R., & Madichie, N. (2010). Corporate social responsibility activity reportage on bank websites in Ghana. *International Journal of Bank Marketing*, 28(7), 498–518
- Hu L. & Bentler P. M. (1999). Cutoff criteria for fit indexes in covariances structure analysis: Covariance criteria versus new alternatives. *Structural Equation Modeling* 6: 1 – 55.
- Iwu-Egwuonwu, R.C. (2011). Corporate reputation and firm performance: empirical literature. *International Journal of Business and Management*, 6(4), 197-206
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880.
- John, K., & Senbet, L. W (1998). Corporate governance and board effectiveness. *Journal of Banking & Finance* 22, 371-403.
- Kapstein, E.B., (2001). The corporate ethics crusade. *Council on Foreign Relations*, 80 (5) 105-119
- Kasekende, L., & Opondo, H. (2003). Financing small and medium scale enterprises (SMEs): Uganda's experience, *Bank of Uganda Working Paper WP/03/01*, Kampala
- Kashyap, A.K., Stein, J.C., & Wilcox, D.W. (1996). Monetary policy and credit conditions: evidence from the composition of external finance: reply, *American Business Review*. 86, 310-314.
- Kent, P., & Stewart, J. (2008). Corporate governance and disclosures on the transition to International Financial Reporting Standards. *Accounting and Finance* 48, 649–671
- Klein, A. (1998). Firm Performance and Board Committee Structure. *The Journal of Law and Economics*, 41(1), 275-304.
- Koufteros, X. A., Vonderembse, M. A., & Doll, W. J. (1997). Competitive capabilities: measurement and relationships. *Proceedings Decision Science Institute* 3, 1067-1068.
- Lai, C.S., Chiu, C.J., Yang, C.F. & Pai, D.C. (2010), "The effects of corporate social responsibility on brand performance: the mediating effect of industrial brand equity and corporate reputation", *Journal of Business Ethics*, 95(3), 457-469.
- Lin, C. H., Yang, H. L., & Liou, D. Y. (2009). The impact of corporate social responsibility on financial performance: Evidence from business in Taiwan. *Technology in Society*, 31(1), 56–63.
- Lipton, M., & Lorsch, J. (1992). A modest proposal for improved corporate governance. *Business Lawyer*, 48(1): 59-77. *Economic Review*, 86, 310-314.
- Mallin, C., Michelon, G., & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure. *Journal of Business Ethics*, 114(1), 29–43.
- Marin, L., Rubio, A., & Maya, S. R. (2012). Competitiveness as a strategic outcome of Corporate Social Responsibility. *Corporate Social Responsibility and Environmental Management*, 19, 364–376.
- McWilliams, A. and D. Siegel (2000). Corporate Social Responsibility and Financial Performance: Correlation or Misspecification? *Strategic Management Journal*, 21(5), 603-609
- Morsing, M., Schultz, M., & Nielson, K. U. (2008). The catch 22 of communicating CSR: Findings from a Danish study. *J Mark Commun*, 14(2), 97–111.
- Nakao, Y., Amano, A., Matsumura, K., Genba, K., & Nakano, M. (2007). Relationship between environmental performance and financial performance: an empirical analysis of Japanese corporations. *Business Strategy and the Environment*, 16(2), 106–118.
- Nakiyingi, J. (2012), "Managerial competence, access to credit and business success", Unpublished Master's thesis, Makerere University.

- Nejati, M., & Ghasemi, S. (2013). Corporate social responsibility and organizational commitment empirical findings from a developing country. *Journal of Global Responsibility*, 4(2), 263-275.
- Nollet, J., Filis, G., & Mitrokostas, E. (2016). Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Economic Modelling*, 52, 400–407.
- Ntim, C.G. and Soobaroyen, T. (2013) Corporate Governance and Performance in Socially Responsible Corporations. *New Empirical Insights from a Neo-Institutional Framework. Corporate Governance: An International Review*, 21 pp468-494
- Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, NY.
- Nyuur, R., Ofori, F. D., & Debrah, Y. (2014). Corporate social responsibility in Sub-Saharan Africa: hindering and supporting factors. *African Journal of Economic and Management Studies*, 5(1), 93 – 113.
- Ofori, D. (2010). Executive and management attitudes on social responsibility and ethics in Ghana. Some initial exploratory insights. *Global Partnership Management Journal*, 1(1), 14-24.
- Okamoto, D. (2009). Social relationship of a firm and the CSP-CFP relationship in Japan: Using artificial neural networks. *Journal of Business Ethics*, 87(1), 117–132.
- Opong, S. (2014). Corporate social responsibility and corporate performance: a study of the top 100 performing firms in Ghana. *Journal of Contemporary Research in Management*, 9 (2), 23.
- Özçelik, Funda, Burcu Avcı Öztürk, & Sevda Gürsakil. (2015). Corporate sustainability: Research on firms that issue sustainability reports in turkey. *Business & Economics Research Journal*, 6, 33-49.
- Pfeffer, J. & Salancik, G.R. (1978). *The External Control of Organisation: A Resource Dependency Perspective*, New York.
- Podsakoff, P.M., MacKenzie, S.B. & Podsakoff, N.P. (2003). Common method biases in behavioural research: a critical review of the literature and recommended remedies., *Journal of Applied Psychology* 88(5), 879-903.
- Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard business review*, 80(12), 56-68.
- Puni, A. (2015). Do Board Committees Affect Corporate Financial Performance: Evidence from Listed Companies in Ghana; *International Journal of Business and Management Review*, 3 (5) 71-88
- Rais, S. and Goedegebuure, R.V. (2009), “Stakeholder orientation and financial performance: evidence from Indonesia”, *Problems and Perspectives in Management*, 7(3), 62-75.
- Ranti, U.O. (2011). Corporate governance and financial performance of banks; a study of listed banks in Nigeria. PhD thesis submitted to Covenant University in Ogun State in Nigeria
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*. Boenningstedt: SmartPLS GmbH, <http://www.smartpls.com>.
- Russo, M.V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559
- Russo, A., & Perrini, F. (2010). Investigating stakeholder theory and social capital: CSR in large firms and SMEs. *Journal of Business ethics*, 91(2), 207-221.
- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341–350.
- Scholtens, B. (2008). A note on the interaction between corporate social responsibility and financial performance. *Ecological Economics*, 68(1–2), 46–55.
- Scholtens, B., & Kang, F. C. (2013). Corporate social responsibility and earnings management: Evidence from Asian economies. *Corporate Social Responsibility & Environmental Management*, 20, 95-112. <https://doi.org/10.1002/csr.1286>
- Shahzad, A. M., Mousa, F. T., & Sharfman, M. P. (2016). The implications of slack heterogeneity for the slack-resources and corporate social performance relationship. *Journal of Business Research*, 69(12), 5964–5971.
- Stalk, G., Evans, P., & Shulman, L. E. (1992). Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review*, 70(2), 54-65.
- Stanaland, A. J., Lwin, M. O., & Murphy, P.E. (2011), “Consumer perceptions of the antecedents and consequences of corporate social responsibility”, *Journal of Business Ethics*, Vol. 102 No. 1, pp. 47-55.
- Sulemana, A. (2016). Communicating corporate social responsibility via telecommunications websites: A cross-country analysis. *Inf Dev*, 1–13.
- Surroca, J., Tribo, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5), 463–490.
- Tsoutsoura, M. (2004). Corporate social responsibility and financial performance. *Center for Responsible Business*, 4(1), 84–93.
- Turnbull, S. (2015). Defining and achieving good governance. Available at SSRN: <http://ssrn.com/abstract=2571724>.
- Usman, A.B., & Amran, N.A.B. (2015), "Corporate social responsibility practice and corporate financial performance: evidence from Nigeria companies", *Social Responsibility Journal*, 11(4), 749-763

- Ven, B., & Jeurissen, R. (2005). Competing responsibly. *Business ethics quarterly*, volume 15(2), 299-317.
- Waddock, S., & Graves, S. (1997). The corporate social performance-financial performance link. *Strategic Management Journal* 18, 303–319
- Walumbwa, F.O. and Hartnell, C.A. (2011), “Understanding transformational leadership – employee performance links: the role of relational identification and self-efficacy”, *Journal of Occupational and Organisational Psychology*, 84(1), 153-172.
- Yang, F. J., Lin, C. W., & Chang, Y. N. (2010). The linkage between corporate social performance and corporate financial performance. *African Journal of Business Management*, 4(4), 406–413.
- Yawson, A. (2006), Evaluating the Characteristics of Corporate Boards Associated with Layoff Decisions; *Corporate Governance; An International Review*, 14 (2) 75-84.
- Yermack, D. (1996). Higher market valuation for firms with a small board of directors. *Journal of Financial Economics*, 40, 185-211.
- Yesser, O. R., Entebang, H., & Mansor, S.A. (2011) Corporate Governance and Firm Performance in Pakistan. The Case of Karachi Stock Exchange. *Journal of Economics and International Finance*, 3 (8) 482-491
- Zhang, Q. Y. (2001). Technology infusion enabled value chain flexibility: A learning and capability-based perspective. Doctoral dissertation, University of Toledo, Toledo, OH.
- Zingales, L., Guiso, L., & Sapienza, P. (2016). The values of the corporate culture. *Journal of Financial Economics*, 117(1), 60–76.