EFFECT OF CORPORATE SOCIAL INVESTMENTS ON FINANCIAL PERFORMANCE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

Signed:  Date: **09/10/2021**

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D63/6398/2017

This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This research project is dedicated to Natasha Ndegwa

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
BAT	British American Tobacco
CMA	Capital Markets Authority
CSI	Corporate Social Investments
CSI	Corporate Social Responsibility
CSID	Corporate Social Responsibility Disclosure
EABL	East African Breweries Limited
KCB	Kenya Commercial Bank
KENGEN	Kenya Electricity Generating Company
NSE	Nairobi Security Exchange
ROA	Return on Assets
ROE	Return on Equity
ROS	Return on Sales
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factors

ABSTRACT

Businesses have a significant deal of power to influence society and have a positive or negative impact. Besides business organizations have a duty to their stockholders to be profitable and remain competitive. The goal is to figure out how corporations can improve their competitiveness while still having a positive impact on society. CSI is one of the ways that has emerged as a means of meeting these targets. The intention of the research was to see how CSI affected the performance of NSE-listed companies. The study's population included all 63 NSE-listed companies. CSI, defined as cost of CSI to total assets in a particular year, was used as a predictor variable in this study. The control variables were liquidity assessed by the current ratio, total assets natural log measuring company size, and leverage measured by the ratio of total debt to total assets per year. Return on assets served as the response variable representing financial performance. Secondary data was collected on a yearly basis for five years (January 2016 to December 2020). The research variables were analyzed using a descriptive design. The results yielded a 0.294 R-square value, indicating that variations in the chosen independent variables account for 29.4 percent of changes in financial performance amongst firms, whereas other factors accounting for 70.6% of variance in financial performance amongst NSE listed firms. Independent variables had a strong relationship with company performance (R=0.542) in this study. The F statistic at 5% was significant with $p<0.05$, according to the ANOVA results. This demonstrated that the overall model was effective in determining the variables' relationships. CSI had a positive as well as statistically significant impact on financial performance. Liquidity also had a positive as well as statistically significant impact on the performance of the NSE listed companies while leverage exhibited a negative and significant influence. In this research, the size of the firm had no statistical significance. This suggestion is that NSE-listed companies should continue offering CSI, improve liquidity positions, and have a target leverage level, as the three factors has a substantial influence on their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Corporate social investments (CSI) enable the firms to have philanthropic obligations that endear them to the community and society. The benefits from this can be increased sales or increased investors all of which translate to enhanced stock performance. Additionally, through environmental responsibility which is another form of corporate social responsibility, firms can ensure that they have played a part in ensuring the environment is less polluted (Kao, Yeh, Wang & Fung, 2018). This could translate to efficiency in business operation and also endear the firm to the consumers (Cho & Lee, 2019). Firms that have a strong CSI have better employee satisfaction, who in turn works at their optimum best to deliver quality which translates to improved financial performance by the firms (Księżak, 2016). However, CSI reduces the profit margins of an establishment because they increase the overall expenses of the firm and this can possess a negative impact on financial performance.

The major theories guiding effective corporate social responsibility includes the Carroll theory of CSR, stakeholder theory as well as the triple bottom line theory. Carroll's (1991) theory remains of the core theories in the realms of CSR. This theory recommended four forms or domains of responsibility, that is, ethical, legal, philanthropic/ discretionary, and economic which enhance various overall performance of the firm (Khurshid, Al-Aali, Soliman & Amin, 2014). Stakeholder theory by Freeman and Reed (2010) argued that a corporation has stakeholders who are a group of individuals who benefit from the organization. Therefore, firms are charged with the duty of safeguarding and balancing various parties' interests by implementation of

activities as well as processes which meet the presented stakeholder interests. Triple bottom line by Elkington and Rowlands (1999) states that corporates do not only have profit maximization as their sole objective but also on three spheres namely: environmental sustainability, economic sustainability and social sustainability.

Nairobi Securities Exchange (NSE) listed corporations was the focus of this study. This choice arises because a firms listed at the NSE have embraced CSI as well as have involved in a numerous responsive activity. They include Safaricom's financially inclusive MPESA product and Equity Bank's financial innovative products that cater to historically underserved areas of society, such as wings to fly models for bright but needy who are not able to pay their school fees (Society initially ignored these groups). This research sought to find the effect of these CSI activities on financial performance.

1.1.1 Corporate Social Investment

Corporate social investment is a wider business term that describes a firm's commitment to execute their business in an ethical manner (Sarkar & Searcy, 2016). According to Kloppers and Kloppers (2018) CSI, which can also be referred to as corporate citizenship, is a business model that is self-regulating and assists the firm to be socially answerable to the public, the stakeholders, and to itself. Another comprehensive definition of CSI was offered by Carroll (2016) who opined that CSI is the manner in which firms manage their enterprise activities to have a positive effect on community. Carroll (2016) added that CSI should stretch beyond mere acts of philanthropy to the core of the business.

There are many advantages that a firm can draw from CSI regardless of its size. However, Kao et al. (2018) argued that most of the advantages can be drawn from the four main advantages that touch on employees, customers, and the image of the firm.

Regarding employees, Kao et al. (2018) viewed that companies that practice CSI have increased or high rates of employee satisfaction. The productivity of those employees who feel appreciated by the firms is always higher than the contrary. High employee satisfaction has positive impacts on the performance of the firm and even in terms of retention of employees. Additionally, CSI allows the firm to be part and parcel of the society and community through its philanthropic and environmental responsibilities which endears the firm to the customers and promotes customer loyalty (Kao et al., 2018).

As per McGuire et al., (2008) operationalization of CSI has long been a point of contention. To evaluate CSI, investigators utilized a variety of proxy measures. Afterward the development of the stakeholder theory (Freeman, 1984), the reconfiguring of CSI from the standpoint of interested parties has facilitated the evaluation of CSI a new orientation (Clarkson, 2005). Multi-dimensional CSI measurements that incorporate multiple stakeholder issues have superseded single-dimensional CSI measures. However, research which studies the correlation between CSI and corporate performance frequently combine the characteristics of CSI toward diverse stakeholders into a single composite indicator (Cochran & Wood, 2004; Waddock & Graves, 2007). The current study used the ratio of annual cost on CSI to total assets as a measure of CSI.

1.1.2 Financial Performance

Almajali, Alamro, and Al-Soub (2012) describe financial performance as a company's capacity to meet a set of financial objectives, like profitability. The notch a company's financial standards have been fulfilled is referred to as financial performance. It displays how well financial goals have been met (Nzuve, 2016). Financial performance,

as per Baba and Nasieku (2016), indicates in what manner a company utilizes assets in revenue generation and hence helps in stakeholders' decision-making. Financial position is defined in the current research as a firm's income earning capacity from its assets.

Financial performance is vital to shareholders, investors, and, by extension, the entire economy. The return on investment is completely worthwhile to investors, and having a good firm can provide greater and long-term revenue to individuals who invest (Fatihudin & Mochklas, 2018). A company's financial performance is critical to its health as well as existence. As per Karajeh and Ibrahim, (2017), a company's excellent performance demonstrates its efficiency and effectiveness in managing its assets while operating, investments, and financial transactions (Karajeh & Ibrahim, 2017).

Different ways of measuring financial performance are employed, and they should be unified. Return on Assets (ROA), business size, ROE, as well as ROS are financial performance variables identified by Ngatia (2012). Carter (2010) used Tobin's Q and ROA to gauge financial success, but Wang and Clift (2009) employed ROA and ROE. The most recognized ways of measuring financing performance are ROA as well as ROE. The ROA is a metric of evaluating company's profitability relative to its total assets whereas ROE measures the net income achieved as shareholders equity proportion (Mwangi & Murigu, 2015). Baba and Nasieku (2016) posit that market based metrics like earnings per share, dividend yield, market to equity book value and market capitalization can too be employed in financial performance measure. The current research used ROA as a metric of financial performance as it is the most recognized measure (Fatihudin & Mochklas, 2018).

1.1.3 Corporate Social Responsibility and Financial Performance

Besides producing profits, firms have a responsibility to give back to the community as well as follow business ethics, according to the triple bottom line approach to business (Donaldson & Fafaliou, 2012). Critics, on the other hand, say that businesses exist just to make profit. Organizations should assess CSI projects based on their potential to provide not just social but also economic benefits to the society, providing value for stakeholders. Suppliers, business associates, as well as clients would have more faith in the firm if it took on social duties, which would result in increased revenue and maximize profit (Jenkins & Yakovleva, 2006).

Firms with strong CSI have always been reported to have a positive financial performance. According to Cho et al. (2019), a strong CSI means that the firm has high levels of satisfaction to clients and staff all of which translate to increased sales thereby increasing revenue for the firm. Moreover, CSI ensures that the company has a good image among the public and therefore making it easier for it to gain investors if need be. An increased number of investors may improve the company's stock performance.

Lee and Jung (2016) stated that it is particularly hard or almost impossible to pinpoint with accuracy the gains from the CSI activities. However, this notwithstanding, most executives believe automatically that CSI ultimately improves profits. Subsequently, almost 100% of large companies in either developed or developing economies do not want to be seen as unengaged in CSI (Dias et al., 2019). The revelation by Dias et al. (2019) points out that indeed, there exists a positive link between CSI and profitability even though CSI on itself is an expense.

1.1.4 Firms Listed at the Nairobi Securities Exchange

The Nairobi Securities Exchange is the company that has the power to list Kenyan companies on the stock exchange. The institution was established in 1954 and is now East and Central Africa's largest exchange. The most commonly traded instruments are Equities (shares) as well as bonds (loan/leverage instruments), which are financial instruments known as securities. By allowing borrowers and lenders to connect, the institution promotes investment as well as savings. At the moment, a total of sixty-three firms have obtained a listing with the firm spread among different market segments (NSE, 2020).

In regards to CSI, firms listed at the NSE including EABL, BAT, Bamburi cement, Safaricom, Standard Chartered bank, KCB, Equity, Trans century has been actively involved in CSI programs for a variety of reasons, including normative (giving back to society), instrumental (for public relations and commercial reasons and strategic (integration into a corporation's goal and vision). Other companies try to trail some criteria, like the UN Global Compact, but are not dedicated to audited CSI disclosure (Kamau & Were, 2013).

Firms listed at the NSE have posted differing performance. While some firms such as Safaricom, KENGEN, EABL, BAT, Centum and most listed banks have reported increased financial performance over the years. Some such as Uchumi, Kenya Airways, Mumias Sugar, Eveready, Home Afrika and Unga Group have been posting either losses or declining financial performance (CMA, 2020). It is important to establish whether CSI activities can be used to explain financial performance of firms and listed firms at the NSE offers a good context to evaluate this hypothesis.

1.2 Research Problem

Businesses have a significant deal of power to influence society and have a positive or negative impact. Besides business organizations have a duty to their stockholders to be profitable and remain competitive. The goal is to figure out how corporations can improve their competitiveness while still having a positive impact on society. CSI is one of the ways that has emerged as a means of meeting these targets. Scholars like Kailis (2004) contend, though, that CSI risks becoming just another trendy idea that fails to produce long-term benefits while diverting firms' attention away from their legitimate and crucial economic role. This makes it appear as if CSI is doomed to fail. Despite these inconsistencies, CSI continues to play a larger role, particularly in developing countries.

Certain businesses in Kenya are paving the way for a more sustainable CSI practice. They are Safaricom's financially inclusive MPESA product and Equity Bank's financial product innovations that cater to historically underserved areas of society, such as wings to fly models for bright but needy kids who are not able to afford their school fees (Society primarily overlooked these groups). Despite the increased CSI activities among listed firms, some firms such as Uchumi, Kenya Airways, Mumias, Eveready, Home Afrika and Unga group are still struggling and therefore need to establish if the CSI activities among listed firms influences their financial performance.

Various empirical researches on the impact of CSI on performance being done, but the results have been varied. This can be explained by the different methodologies used as well as conceptualizing of the study variables. Different contextual backgrounds can also explain the differences in previous findings. Babalola (2012) examined the impact of CSI on profitability of firms in Nigeria. The results from the analysis revealed a

strong negative correlation between corporate social responsibility and profitability. Awan and Akhtar (2014) sought to explore the bearing of CSI on profitability of Fertilizer and Cement Industry in Southern Punjab, Pakistan. The outcome of the analysis designated a positive link between the variables. Lee and Jung (2016) sought to assess how CSI influence profitability of establishments in the Korean manufacturing industry. The outcomes of the investigation indicated that there exists a positive link between CSI and profitability. These researches were however conducted in diverse contexts and due to social an economic difference, thus the outcomes fail generalization among NSE listed firms.

Locally, Mbithi (2015) researched on the influence of CSI on performance of the banks registered on NSE. The study findings show that CSI has a positive link with profitability. Ndinda, Namusonge, and Kihoro (2015) used regression analysis on a sample of 37 NSE-listed companies to show that company performance has a positive and substantial relationship with the degree of CSR reporting, confirming the theory that company performance is a substantial driver of firm social responsibility reporting among the compaines. Ng'ang'a (2018) researched on bearing of CSI on performance of banks in Kenya. The findings revealed that banks enhance their performance by engaging in CSI activities. From the preceding thus, it is apparent numerous studies have been done on CSI in general. The previous studies have however used various operationalization and methodologies to achieve their objectives and this might explain the differences in findings. Different contextual backgrounds might also explain the differences. This study leveraged on these research gaps by providing answer to the research question: What is the effect of corporate social responsibility on financial performance of firms listed at the Nairobi Securities Exchange?

1.3 Research Objective

To establish the effect of corporate social responsibility on financial performance of firms listed at the Nairobi Securities Exchange.

1.4 Value of the Study

This research will be of great implication to corporate social responsibility theories such as Carroll's theory of CSI, stakeholder's theory and triple bottom line theory by adding to their development. Academicians, researchers, and students who intend to do research in this or similar fields will utilize the research findings as a guide. The study will aid them in identifying other subjects for future research.

The findings are expected to be useful to firm managers who are responsible for managing investors' assets, approving investment decisions, and, most importantly, obtaining financing for these investments, as this research offers valuable information as well as recommendations to aid them in informed decisions formations that lead to optimal financial performance.

This research will be helpful to government and regulators in the creation and execution of laws and guidelines governing CSI, in order to provide stability in company financial performance and prevent the economy's spiral effects. This will aid in the progress of businesses and the improvement of the economy as a whole.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter clarifies the theories on which CSI and financial performance is based. It further discusses the previous empirical studies; knowledge gaps identified and summarizes with a conceptual framework and hypotheses displaying the expected study variable relationship.

2.2 Theoretical Framework

This segment examines theories which underpin the research of capital structure and financial performance. Carroll's theory of CSR, stakeholder's theory and triple bottom line theory are all dealt with in theoretical reviews.

2.2.1 Carroll's Theory of Corporate Social Responsibility

This is the anchor theory and it was propounded by Caroll (1991). This theory presents the infrastructure of CSI which encompasses; ethical, legal, economic and philanthropic. Carroll regards CSI to be framed in such a manner that the whole forms of enterprise responsibilities are adopted. Carroll proposes that CSI consists of four social responsibilities; legal, economic, philanthropic and ethical responsibility. A pyramid may be used to illustrate these four responsibilities (Carroll, 2016). Pertaining to the legal perspective, establishments are expected by the society in complying with the rules and principles. A responsible firm should adhere to regulations since it has a belief that fair corporate practices are positively replicated on economy and society.

The economic perspective is pertaining to the responsibility to generate revenues and profit and this responsibility is a vital obligation to the survival of the business. Profits

are a necessity to stakeholders, investors and owners (Carroll, 2016). Generated profits and the process of money circulation will be enhanced and an establishment will effectively realize its CSI of economic responsibility.

Ethical responsibilities are pertaining to the manner in which the community expects the establishment to adopt norms and practices even if the norms and practices involve a higher performance standard than legally required. This is doing the right thing and not to harm stakeholders (Nalband & Kelabi, 2014). Philanthropic responsibilities are such undertakings that community expect for an establishment to be a good corporate citizen. In this case, it is expected to provide the community with financial and human resources and to improve the standards of living (Jamali & Karam, 2016).

2.2.2 Stakeholder Theory

This paradigm was originated by Freeman (1984) who argued that a corporation has stakeholders who are a group of individuals who benefit from the organization. Therefore, firms are charged with the duty of safeguarding and balancing various parties' interests by implementing activities as well as processes which meet the presented interest of stakeholder. According to the theory, the development of the adopted operational processes in organizations is based on the production of value tailored to fulfill the needs of specified stakeholders (Brenner & Cochran, 1991). According to the theory, the adoption of procedures designed to fulfill stakeholder interests develops the foundation of the organization's operational processes. Businesses that want to deliver value to all stakeholders face a problem since there are so many of them (Harjoto & Jo, 2012).

Traditional stakeholder theory places a greater emphasis on the implementation of policies that promote company profitability and expansion. The evolving nature of the

stakeholders, on the other hand, mandates the deployment of strategies that are adapted to fulfill the interests of all stakeholders (Borster, 2013). Consumers are the most important stakeholders since they buy the company's goods as well as services on the market. In the present era, CSI engagement has been regarded as a vital element of the stakeholder theory. Brenner and Cochran (1991) CSI programs, according to this argument, are adapted to satisfy the society's current demands. The major theory, on the other hand, is based on shareholders, and the profit-making component is viewed as the company's principal aim.

The theory has been criticized by academics for emphasising procedure over theory, which asserts that the system delimits the performance of an effective investigation about the impact of environmental factors on company operations and policies (Borster, 2013). The stakeholder theory identifies the public and community as significant stakeholders in the company, implying that banks will remain engaged in CSI activities that are designed to fulfill the requirements of society. The incorporation of CSI presented businesses with a way to cater to the community, that is identified as one of the company's stakeholders.

2.2.3 Triple Bottom Line Theory

Elkington and Rowlands (1999) developed triple bottom line theory which states that corporates do not only have profit maximization as their sole objective but also on three spheres of sustainability namely: environmental, economic and social. Environmental sustainability is concerned with the manner in which physical resources are managed in order to conserve them for the future. Precisely, actions ought to be taken for the facilitation of our natural world’s regeneration. All such actions that establishments must support, not for the reason that they are legally bound to do that, but for the reason

that the preservation of a livable planet is a direct responsibility in this paradigm of CSI (Enquist & Hay, 2004).

Conversely, economic sustainability is pertaining to the establishment's economic performance itself. Additionally, the wider economic sustainability concept comprises the establishment's bearing on the economic model in which it is subject to. Though, because of competition as well as inspiring business situations, the social perspective development has not happened as swiftly as the economic and environmental perspectives. The major concern in social sustainability perspective is that of social justice. Despite the popularity of this paradigm, there are similarly those giving criticism. Norman and MacDonald (2013) term triple bottom line as a smokescreen in which establishments may prevent accurately effective environmental and social reporting and performance. They term the paradigm as a good old-fashioned single bottom line alongside vague commitments to environmental and social issues (Enquist & Hay, 2004).

2.3 Determinants of Financial Performance

Components both inside and outside the company can have an impact on the firm's performance. Corporate social responsibility, liquidity, leverage, dividend decisions, firm size, and organizational culture are just a few of the internal aspects. Management has no influence on external forces. They are variables that are beyond the control of the company, but they must be addressed with appropriate tactics (Athanasoglou, Brissimis & Delis, 2005).

2.3.1 Corporate Social Investment

According to Klein and Dawar (2004), CSI performance adds significant value to a company by serving as an insurance policy against financial scandals and a loss of

investor trust. Firms' strategic management practices and CSI performance are linked, yet most companies spend little attention on implementing an adequate strategy to boost CSI performance (Sasaka, Namusonge & Sakwa, 2014).

Because a company's operations possess a direct effect on the communities with whom it works, Porter and Kramer (2006) examined the presence of interdependence between corporations and society. This might have either positive or negative implications. When considering goodwill or society services, strategists and executives should consider societal expectations as well as decisions, as there may be some appealing alternatives. Decisions made throughout the strategy creation process should consider both good and negative consequences, not just for the firm but also for stakeholders and society as a whole.

2.3.2 Firm Liquidity

Cheluget, Gekara, Orwa, and Keraro (2014) argued that a link exist between companies' financial performance and their liquidity and found that performance is substantially determined by liquidity. Liquidity and solvency indicators had a substantial influence on increasing cost efficiency; businesses with higher bought input expenditures comparable to capital have less chance to become efficient when solvency and liquidity are taken into account (Arif, 2012).

When liquidity and solvency indicators are taken into account, businesses with higher spending on bought inputs compared to capital are less likely to increase efficiency (Levi, Russell, & Langemeier, 2013). According to Liang Fu (2016), liquidity is another term for company liquidity which refers to amount of liquid assets held in the books of accounting. When dealing with companies with liquidity risk, the corporate investment

behavior of family firms has a reduced financial distress risk tolerance, as shown by their much greater degree of corporate liquidity (Liang Fu, 2016).

2.3.3 Firm Size

The economies of scale amount a company earns is proportional to its size. The larger the company, the lesser production scale and the higher the operational activities efficiency due to substantial economies of scale. Regardless of their size, huge corporations might lose control of their strategic as well as operational activities, resulting in a decrease in efficiency (Burca & Batrinca, 2015).

Large corporations have more market power, besides can diversify their portfolios more. They're also more prone to suffer from organizational wastage if the company grows rapidly. The size of the company has a substantial impact on the quantity of cash flow that can be invested. The number of employees, property owned, and sales volume are all important factors to consider when defining the firm's size (Almajali et al., 2012).

2.3.4 Financial Leverage

This intuition makes it quite easy to determine the presence of an optimum capital structure. Inadequate debt capacity exists because companies take into consideration both the benefits received in the form of reduced taxes as well as the overall expenses that would be paid in the case of bankruptcy (Kraus & Litzenberger, 1973). If corporate bankruptcy was expensive, Senbet (2012) said, then it fulfilled a key gap between the Modigliani-Miller tax-adjusted model and the known fact that financial debt financing is only used a small percentage of the time (Senbet et al., 2012). Using debt offers tax advantages for a company, which is part of the trade-off hypothesis. This is one of two sets of findings, with findings from other research demonstrating that greater leverage results in increased volatility in share prices with regard to private information; a

company's final destiny relies on problems that remain undisclosed to the broader public (Nyamboga, Omwario & Muriuki, 2014).

Financial leverage can be advantageous or can lead to financial distress depending on the type of debt and how the finances are utilized by the finance managers. Prudent allocation and use of the borrowed funds lead to improved financial performance (Salazar, Soto & Mosqueda, 2012). Theoretically, debt funding is expected to impact the working capital levels of such a company which in effect influences the level of financial performance (Eckbo, 2008).

2.4 Empirical Review

Local as well as global researches have determined the relation between liquidity and financial performance, the objectives, methodology and prior research results have been discussed in this segment.

2.4.1 Global Studies

Awan and Akhtar (2014) sought to assess corporate social responsibility and profitability of Fertilizer and Cement Industry in Southern Punjab, Pakistan. The study focused on the following objectives: What are the conditions of CSI; and the effect of implementing CSI on profitability. The research design adopted was mixed method. Secondary was gathered and analyzed through multiple linear regression method and Delphi method. The results pointed out a positive association between the variables ($r = 0.681$) with a significance level of 0.00.

Nwaneri (2015) wanted to examine CSI effect on Nigerian firm profitability. The investigation aimed to evaluate CSI's role in creating a competitive advantage and the association between CSI and firm profitability. The research assumed a quantitative research design. Target population comprising Nigerian Breweries Plc and Lafarge

Africa Plc. The study further relied on secondary data retrieved from annual reports from the selected firms. The dependent variable, profitability, being assessed through profit after tax, while independent variable CSI was measured using annual CSI cost. The information gathered was analyzed through a simple linear regression. The analysis results showed a positive association between CSI and profitability (R= 0.35). The regression output also revealed a significant relationship between the variables. Therefore, management should consider implementing CSI undertakings to boost profitability.

Lee and Jung (2016) sought to assess how CSI influence profitability of establishments in the Korean manufacturing industry. Mixed method design was adopted for the investigation. The investigation relied on secondary data that encompassed a period of 10 years, that is, 2006 to 2015. The data gathered was analyzed via linear regression where CSI represented the independent variable while return on assets represented the dependent variable. The effect of CSI was established by F test. The study outcome exhibited existence of a positive/direct link between CSI and profitability. There was also a significant positive link between the variables (sig =0.037).

Pallathadka and Pallathadka (2020) aimed at investigating the impact of corporate social responsibility in India as a source of media coverage via stakeholder involvement in the economic success of small and medium-sized businesses. The primary data was acquired by a number of practitioners. For the data analysis, a partial sampling strategy was used. According to the research, CSI has a positive impact on a company's financial performance. CSI initiatives are adequate for direct engagement with customers, thereby assisting in the improvement of economic productivity. This research aims to demonstrate the financial success of CSI initiatives in developed nations.

From the context of European multinational corporations, Singh and Misra (2021) empirically examine the connection between CSI and organizational performance. The study also looked at the role of company reputation as a moderator in CSI-organizational performance links. The final data included 340 responses from top executives/managers in European multinational corporations. To study the relationship, a two-stage technique was used: stage 1 featured theoretical model development utilizing the strategic perspective of literature, and stage 2 featured hierarchical regression analysis to examine the meaningful connections. The findings suggest that CSI has an impact on organizational performance when it is applied to external stakeholders. Furthermore, this influence appears to differ between well-established, respected businesses and businesses with a shakier reputation.

2.4.2 Local Studies

Chemwile (2017) sought to assess the correlation between strategic CSI practices and performance of organizations listed at the NSE in Kenya. The research's target population was entire 62 businesses listed on the Nairobi Securities Exchange as of December 2014, from which data were gathered via questionnaires distributed to human resource as well as finance managers, as well as secondary data on performance via a data collecting sheet. With the help of descriptive and inferential statistics, the acquired data was coded and analyzed using both quantitative and qualitative methodologies. There are average positive associations between employee relations practices and organizational performance, environmental relations practices and organizational performance, community relations practices and organizational performance, and customer relations practices and organizational performance, according to the report's results.

Ng’ang’a (2018) researched on CSI effects on profitability of Kenyan commercial banks. The investigation aimed to analyze the effect of CSI on profitability of Kenyan CBs. The study used a descriptive research design. The study population comprised of Operational commercial banks between 2013 to 2017 served as the study population. Secondary data was utilized in the investigation. Descriptive statistics were used to analyze the data. The results depicted commercial banks enhance their profitability by engaging in CSI activities.

Muchiri, Okumu and Kiflemariam (2019) sought to scrutinize CSI effects on Kenyan state corporations’ organizational performance. This researcher utilized survey research design to determine the relationships between CSI and organizational performance, with an emphasis on the ICDC. The report's target group included all ICDC employees as well as thirteen managers from the company's investee clients. Self-administered questionnaires were used by the surveyor to collect primary data from participants. Environmental conservation, philanthropic CSI, and ethical CSI all have a positive as well as substantial impact on organizational performance, according to the research. The study also found that reducing packaging waste and utilizing environmentally friendly packaging materials are both beneficial in improving environmental sustainability.

King’wara (2020) examined CSID potential influence on corporate financial performance. CSID data was obtained for the years 2007-2015 using quantitative content analysis from annual reports, whereas financial performance information was obtained for the period 2008-2016, a year behind CSID data. Firm size, industry type, and leverage were all used as control variables. The influence of CSID on financial performance was determined to be statistically insignificant. Because the correlation's

neutrality has been empirically demonstrated, the inference is that CSID has little or no impact on financial performance, implying that effective financial reporting for NSE listed firms does not require reporting on CSI initiatives.

Ojuando and Kihara (2021) aimed at establishing the strategic CSI adoption on Kenyan performance of firms manufacturing plastic. The research used a descriptive survey research design and focused on plastic manufacturing companies that are members of the Kenya Association of Manufactures. Data was collected using a 5-point Likert scale questionnaire with closed-ended questions. Both inferential analysis as well as descriptive statistics were used to analyze the data. The results as well as analysis outcomes were obtainable in tabular form as well as figures. Environmental conservation programs, ethical labor standards, and business operator engagement all have a positive as well as significant impact on the performance of plastic manufacturing enterprises in Kenya, according to the research.

2.6 Summary of the Literature Review and Research Gaps

This chapter critically reviewed the documented relationships between CSI and financial performance. There is a clear indication from the studies and conclusions evaluated those financial scholars do not concur on how CSI impacted financial performance. The study shows some of the different researchers' conceptual arguments on the relationship between the factors that have been established. In this critical review of literature, three key theories underpinning the relationships between CSI and financial performance have been highlighted. These are Carroll’s theory of CSI, stakeholder’s theory and triple bottom line theory.

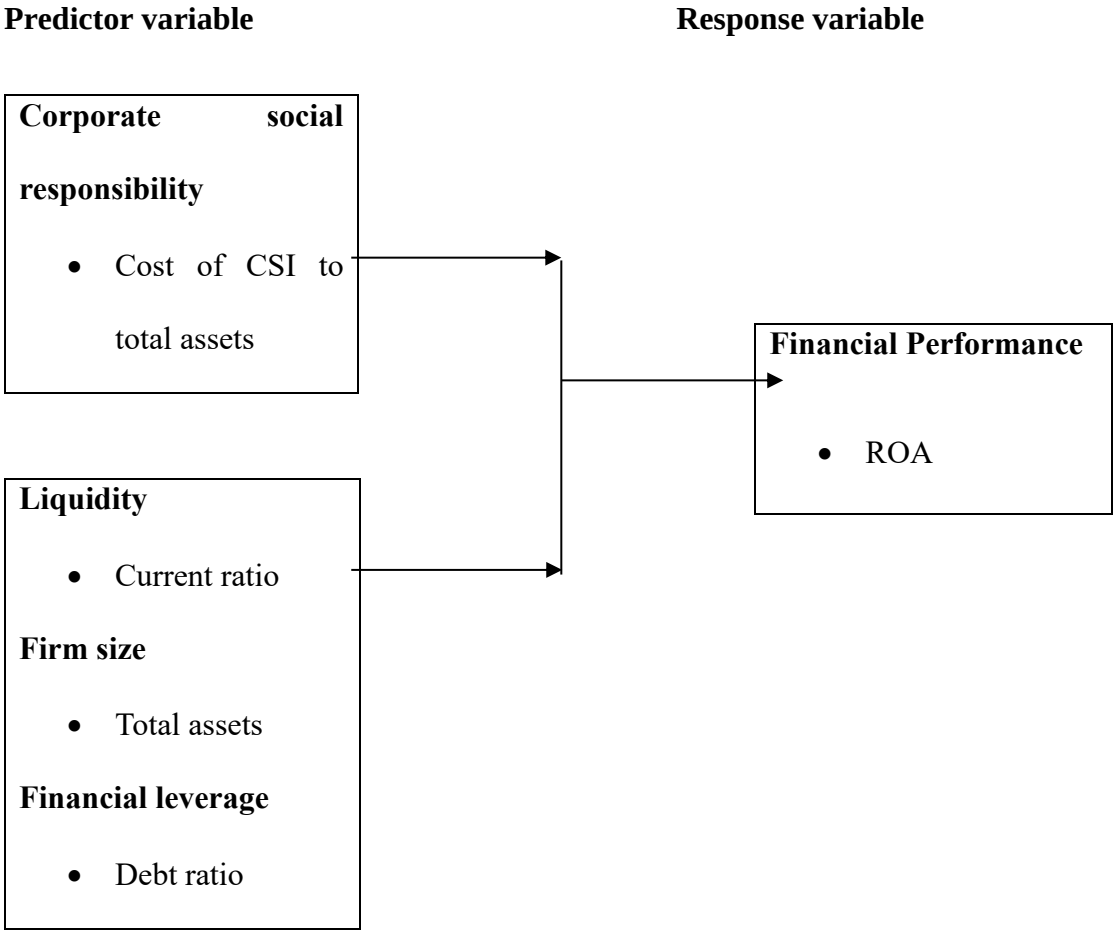
Numerous relevant publications on the study variables were analyzed as part of the empirical review to identify research gaps and analysis approaches. Corporate social

responsibility has an impact on financial performance, according to the studies evaluated. However, the results were mixed, with some research concluding that there is a strong beneficial association and others concluding that there is none. Nevertheless, the investigations were all conducted using various approaches and data was collected over different time periods, which could explain the disparities in the outcomes. The study contexts were also different with some studies focusing on a single sector and other focusing on several sectors. The operationalization of the study variables has also been varied and this can also explain the differences in previous studies. This study leveraged on these research gaps.

2.6 Conceptual Framework

The correlation between the variables is depicted in the model below. Corporate social responsibility, as measured by the ratio of CSI cost to total assets was the predictor variable. Firm liquidity, size and leverage were the control variables. The dependent variable was financial performance as assessed by ROA.

Figure 2.1: The Conceptual Model



Source: Researcher (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the ways in which research was carried out to fulfill the objective which was to determine how corporate social responsibility affects financial performance. In particular, the study highlights the; the design, diagnostic tests, data collection and analysis.

3.2 Research Design

To determine how firm's CSI and performance are related, a descriptive approach will be used. A descriptive design was adopted to determine how CSI and performance of NSE listed firms relate. This design was appropriate since the nature of the phenomena is of key interest to the researcher (Khan, 2008). It was also sufficient in defining the interrelationships of the phenomena. This design also validly and accurately represented the variables thereby giving sufficient responses to the study queries.

3.3 Population

A population is all of the observed elements from a collection of events, which include things like research inquiries (Burns & Burns, 2008). All the 63 NSE listed firms as of December 2020 formed current study's population (see appendix I).

3.4 Data Collection

In this inquiry, secondary sources were used, which were retrieved from annual published financials of the listed firms from 2016 to 2020 and recorded in a secondary data collection schedule. The publications were drawn from CMA publications reports of the specific sampled listed companies. Total assets, net income, current liabilities,

and current assets were among the specific information gathered.

3.5 Diagnostic Tests

To ascertain the model feasibility, a number of diagnostic tests were done, like normality, stationarity, multicollinearity, homogeneity and autocorrelation. Shapiro-Francia test was used to verify if a distribution of Gaussian type is normal. This is suitable in cases when the required variance and mean are both important. If something is linear, then the link between the dependent and independent variables must follow a proportionate relationship (Khan, 2008). The Breusch-Pagan Cook-Weisberg Test for Homoscedacity was used to identify homoscedacity and this allowed for the Linearity Test to be performed.

Variance Inflation Factors (VIF) was applied in testing for multicollinearity and it showed whether the predictor variables have a significant correlation on each other. Burns and Burns (2008) notes that the primary reason for existence of multicollinearity is having small sample sizes, low measure reliability and low explained variables in the independent variables. Breusch-Godfrey statistic tested for existence of autocorrelation.

3.6 Data Analysis

Version 24 of the SPSS software was utilized for data analysis. Quantitatively, the tables present the results. In calculating central tendency and dispersion measurements, including a standard deviation and mean for each variable, descriptive statistics were utilized. Regression as well as correlation were the basis of inferential statistics. Correlation determined the scope of the affiliation between the study variables and the cause and effect of the variables was determined by regression. The correlation between independent as well as dependent variables was established linearly by a multivariate

regression.

3.6.1 Analytical Model

The following equation was applicable:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \varepsilon$$

Where: Y = Financial performance as given by net income to total assets ratio.

β_0 = the slope of the regression equation's y intercept.

$\beta_1 \ldots \beta_4$ = coefficients of regression

X_{1t} = Corporate social responsibility calculated by dividing cost of CSI by total assets on an annual basis

X_{4t} = Firm size as given by logarithmic expression of annual total assets

X_{3t} = Liquidity calculated by dividing current assets by current liabilities annually

X_{4t} = Financial leverage calculated by dividing total debt by total assets annually.

ε =error term

3.6.2 Tests of Significance

Parametric tests were used to establish the general model's relevance as well as the significance of specific coefficients. The F-test established the overall model meaning and this was done with ANOVA. A t-test assessed the importance of each variable.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter looks into CMA data to see how CSI affects the financial performance of listed firms at the NSE. Correlation and regression data were represented in tables utilizing descriptive statistics, as indicated in the segments below.

4.2 Descriptive Analysis

This study presents the average, maximum, minimum, and standard variables. Table 4.1 displays the variable statistics. For all the 55 firms whose data was gathered, SPSS was utilized in the analysis from 2016 to 2020. The figures are listed below. For financial firms, leverage was the ratio of total deposits to total loans

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA (Ratio)	275	-.5700	.3900	.038376	.1067155
CSI (Ratio)	275	.0002	.0995	.024817	.0259829
Firm size (Log)	275	6.8455	11.5766	9.280967	1.1529618
Liquidity (Ratio)	275	.3431	11.6481	2.233636	1.8088672
Leverage (Ratio)	275	.0246	1.4193	.502143	.2486335
Valid N (listwise)	275				

Source: Research Findings (2021)

4.3 Diagnostic Tests

On the data gathered, diagnostic tests were run. The research utilized a 95% confidence interval or a 5% significance threshold to obtain variable information. Diagnostic tests were helpful in determining if the data was false or true. As a result, the closer the confidence interval is to 100 percent, the more correct the data utilized is assumed to

be. The tests performed in this example were normality, multicollinearity, heteroskedasticity, as well as autocorrelation.

4.3.1 Normality Test

This study included the Shapiro-Wilk and Kolmogorov-Smirnov tests. This criteria stated that data was considered normal if the probability was higher than 0.05.

Table 4.2: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ROA	.161	275	.455	.869	275	.853
CSI	.173	275	.455	.918	275	.822
Firm size	.178	275	.455	.881	275	.723
Liquidity	.175	275	.455	.874	275	.812
Leverage	.179	275	.455	.882	275	.724

a. Lilliefors Significance Correction

Source: Research Findings (2021)

Since the p values are above 0.05, the aforementioned findings indicate that the data was regularly distributed. As a result, the normal distribution null hypothesis was accepted, indicating that the researcher fails to reject the null hypotheses.

4.3.2 Multicollinearity Test

Multicollinearity exists when a perfect or near perfect linear relation exist between a number of independent variables. Variance Inflation Factors (VIF) as well as tolerance levels were utilized.

Table 4.3: Multicollinearity Test

Variable	**VIF**	**1/VIF**
CSI	2.435	0.411
Firm size	2.866	0.349
Liquidity	2.111	0.474
Leverage	3.024	0.331

Source: Research Findings (2021)

In statistics, the general principle is that the VIF values ought to be more than 1 and less than 10. According to this study findings, the VIF values for all the independent variables applied are greater than 1 and less than 10. This suggests that the independent variables applied in the study do not have multicollinearity.

4.3.3 Heteroskedasticity Test

The error process in cross-sectional units may be homoscedastic, yet vary across units called groupwise Heteroskedasticity. Breuch Pagan is calculated for each group using the hettest program. Heteroskedasticity is a term used to describe the heteroskedasticity of residuals. According to the null hypothesis; $\sigma^2_i = \sigma^2$ for i =1...Ng, where Ng is the cross-sectional units.

Table 4.4: Heteroskedasticity Test

Modified Wald test for group wise heteroskedasticity in regression model
H0: sigma(i)^2 = sigma^2 for all i
chi2 (275) = 372.48
Prob>chi2 = 0.4427

Source: Research Findings (2021)

The null hypothesis of Homoskedastic error terms is not rejected, according to the results in Table 4.4, which are supported by a 0.4427 p-value

4.3.4 Autocorrelation Test

The Breusch-Godfrey autocorrelations test was employed to detect serial correlations in a model's idiosyncratic term since typical serial correlation biases make the results more efficient.

Table 4.5: Autocorrelation Test

Wooldridge test for autocorrelation in panel data **H0: no first-order autocorrelation**
F(1, 275) = 0.623
Prob> F = 0.4221

Source: Research Findings (2021)

Table 4.5 shows that the null hypothesis of no serial connection is not rejected since the p-value of 0.4221 is significant.

4.4 Correlation Analysis

In identifying the connection between variables, correlation analysis is employed. The Pearson correlation was utilized to investigate the connection between performance and variables (CSI, firm size, liquidity, and leverage).

Table 4.7: Correlation Analysis

		ROA	CSI	Firm size	Liquidity	Leverage
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
CSI	Pearson Correlation	.124	1			
	Sig. (2-tailed)	.040				
Firm size	Pearson Correlation	.075*	.060	1		
	Sig. (2-tailed)	.214	.385			
Liquidity	Pearson Correlation	.642**	.107	.028	1	
	Sig. (2-tailed)	.000	.123	.689		
Leverage	Pearson Correlation	-.423**	.096	.000	.205**	1
	Sig. (2-tailed)	.001	.164	.995	.003	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=275

Source: Research Findings (2021)

The correlation results reveal that firm size possess positive but not significant link with ROA (r =.075, p =.214). CSI and liquidity showed positive and significant relationship

with company financial success (r =.124, p =.040; r =.642, p =.000) according to the findings. Financial leverage showed negative and statistically significant influence on ROA (r =-.423, p =.001).

4.5 Regression Analysis

CSI, liquidity, firm size, and financial leverage were the variables upon which performance was modeled. The significance level for the analysis was set at 5%. The regression result was contrasted to the crucial value from the F – table. The results are listed below.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542[a]	.294	.280	.1033864

a. Predictors: (Constant), Leverage, Firm size, CSI, Liquidity

Source: Research Findings (2021)

The R square depicts the variables of the response variable because of the predictor variables changes. R square was 0.294, showing that differing CSI, liquidity, size and leverage represent 29.4% of the variability in companies' financial performance. 70.6% of the financial performance variation may be ascribed to factors outside the model. Furthermore, as demonstrated by a 0.542 correlation coefficient(R), the independent factors had a high link with financial performance.

Table 4.9: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.615	4	.154	16.565	.000[b]
	Residual	2.506	270	.009		
	Total	3.120	274			

a. Dependent Variable: ROA

b. Predictors: (Constant), Leverage, Liquidity, CSI, Firm size

Source: Research Findings (2021)

The significance level is set at 0.000, which is below p=0.05. This means that the model was satisfactory to assess the CSI, liquidity, firm size and leverage of NSE-listed businesses.

The R-square indicated the way the variables were connected. The significance of the link between responder and predictor factors was shown by the p-value of the sig. column. The confidence interval of 95% indicates a p-value of below 0.05. As a consequence, a p-value above 0.05 indicates that the predictor and response variable are unrelated. The results are listed below.

Table 4.10: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.133	.078		-4.704	.000
	CSI	.095	.041	.166	2.309	.022
	Firm size	.002	.004	.036	.598	.551
	Liquidity	.132	.008	.239	3.996	.000
	Leverage	-.258	.029	-.527	-8.780	.000

a. Dependent Variable: ROA

Source: Research Findings (2020)

All other factors, except for firm size, have generated significant findings (high t-value, $p < 0.05$). Because a p value above 0.05 is displayed, firm size generated a positive but not significant result.

The following equation was generated:

$Y = -0.133 + 0.095X_1 + 0.132X_2 - 0.258X_3$

Where,

Y = Financial performance

X_1= CSI

X_2= Liquidity

X_3= Leverage

The constant = -0.133 in the model indicates that performance would be -0.133 if the variables (CSI, liquidity, company size, as well as leverage) were all zero. While firm size was insignificant, a unit rise in CSI resulted in a 0.095 rise in performance, whereas a unit rise in liquidity resulted in 0.132 increases in financial performance. A unit rise in leverage would yield a 0.258 decline in ROA.

4.7 Discussion of Research Findings

The research examined how CSI impacts NSE firms' performance. The independent variable was the CSI operationalized as the ratio of CSI cost to total assets. The control variables were liquidity measured by current ratio, firm size as natural log of total assets and leverage measured by total debt to the overall assets. ROA was utilized in assessing financial performance which was the response variable.

The correlation coefficient of Pearson demonstrated firm size has a positive but not significant association with ROA. CSI and liquidity showed positive and significant relationship with company financial success according to the findings. Financial leverage on contrary showed negative statistical significant relationship with ROA.

The result shows that 29.4% of changes in the response variable according to R^2, which implies other factors other than the model explain 70.6% of performance changes. The predictor variables of CSI, liquidity, size of a business and efficiency explained 29.4% of changes in ROA. With an F-value of 16.565, the model was significant at 95% confidence interval. This shows that the connections between the variables were represented by a sufficient model.

The findings are consistent with Ng’ang’a (2018) who researched on CSI effects on

profitability of commercial banks in Kenya. The investigation aimed at analyzing the CSI effect on profitability of Kenyan CBs. The study used a descriptive research design. The study population comprised of Operational commercial banks between 2013 to 2017 served as the research population. Secondary data was utilized in the investigation. Descriptive statistics were used to analyze the data. The conclusions demonstrated that commercial banks enhance their profitability by engaging in CSI activities.

The study also concurs with Muchiri, Okumu and Kiflemariam (2019) who sought to scrutinize CSI effects on Kenyan state corporations' organizational performance. This researcher utilized survey research design to determine the relationships between CSI and organizational performance, with an emphasis on the ICDC. The report's target group included all ICDC employees as well as thirteen managers from the company's investee clients. Self-administered questionnaires were used by the surveyor to collect primary data from participants. Environmental conservation, philanthropic CSI, as well as ethical CSI all have a positive as well as substantial impact on organizational performance, according to the research. The research too found that reducing packaging waste and utilizing environmentally friendly packaging materials are both beneficial in improving environmental sustainability.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The results, conclusions, as well as limitations discovered during the research are summarized in this chapter. It also makes policy recommendations that will help policymakers raise the expectations of publicly listed companies in attempt to attain better results. The findings of the research too include future research suggestions.

5.2 Summary of Findings

The research's goal was to see how NSE's financial performance is affected by CSI. CSI, liquidity, business size, and leverage were among the variables studied. This was accomplished using a descriptive cross-section design. SPSS has been used to analyze secondary CMA data. Annual data for 55 corporations has been obtained during a 5-year period from their annual reports.

The correlation coefficient of Pearson showed that CSI has a significant positive association with performance measured by ROA. NSE businesses' performance demonstrated a positive though not substantial connection to firm size. The research too depicted that the correlation between liquidity with the success of NSE companies has been positive and substantial. The correlation between leverage and ROA was found to be negative and substantial.

As depicted by 0.294 R square, indicating that changes in CSI, liquidity, business size, and leverage account for 29.4% of the variance in NSE listed enterprises performance. 70.6% of financial performance variation is attributable to variables outside the model. The results showed that the predictor parameters selected were significantly linked with

the business results of companies (R=0.542). The F value was calculated as 5% above the crucial value whereas the p value was 0.000 and showed that the model included data on the effects of the four independent variables on NSE power and animals.

The regression outcomes suggest that performance would be -0.133 if the variables (CSI, liquidity, company size, as well as leverage) were all zero. While firm size was insignificant, a unit rise in CSI resulted in a 0.095 rise in performance, whereas a unit rise in liquidity resulted in 0.132 increases in financial performance. A unit rise in leverage would yield to a decline in ROA by 0.258.

5.3 Conclusion

The financial performance of publicly traded businesses is affected significantly by CSI. The conclusions designate that a one-unit increase in that variable has a substantial positive effect on business performance. Company liquidity has a strong positive performance connection and therefore greatly improves liquidity performance. The survey also showed a statistically significant impact on leverage on financial performance and suggested that leverage is significantly affecting the performance of the companies examined. Furthermore, business size has a favorable but modest financial impact, meaning that corporate size is not a substantial predictor of ROA.

The results indicate that the selected factors, such as CSI, liquidity, size, and leverage, significantly affected businesses' success. These factors influence significantly on companies' financial performance, since ANOVA's p value is below 0.05. The finding that the chosen variables account for 29.4% of variance in performance indicates that other non-model factors account for 70.6% of variance in companies' financial performance.

This study concurs with Singh and Misra (2021) who empirically examine the connection between CSI and organizational performance. The study also looked at the role of company reputation as a moderator in CSI-organizational performance links. The final data included 340 responses from top executives/administrators in European multinational corporations. To investigate the correlation, a two-stage technique was made use of: stage 1 featured theoretical model development making use of strategic perspective of literature, and stage 2 featured hierarchical regression analysis to investigate the meaningful connections. The findings suggest that CSI has an impact on organizational performance whenever applied to external interested parties. Furthermore, the effect appears to differ between well-established, esteemed businesses and businesses with a shakier status.

This study also agrees with Pallathadka and Pallathadka (2020) who aimed at investigating corporate social responsibility impact in India as a source of media coverage via stakeholder involvement in the economic success of small and medium-sized businesses. The primary data was acquired by a number of practitioners. For the data analysis, a partial sampling strategy was used. According to the research, CSI has a positive impact on a company's financial performance. CSI initiatives are adequate for direct engagement with customers, thereby assisting in the improvement of economic productivity.

5.4 Recommendations for Policy and Practice

The research results revealed that CSI has a positive impact on financial performance. Policy reforms include: companies listed in NSE should continue offering CSI as this enhances their performance. This will also assist in achieving the objective of enhancing shareholder value. Although many businesses have a primary responsibility

to their stakeholders it is increasing coming to light that a business ability to respond to social and community needs of the location it operates in is important as well.

Financial performance and liquidity were found to have a positive relationship in the research. The suggestion is that a detailed examination of the liquidity condition of publicly traded firms be performed to guarantee the firms are functioning at satisfactory liquidity levels, consequently boosting financial performance. The rationale for this is that liquidness is extremely vital since it has an impact on how a company operates.

The study results revealed that leverage has a negative impact on financial performance. Policy reforms include: companies listed in NSE shall assess fiscal advantages and bankruptcy costs connected with loan funding. Levels of debt should be kept at appropriate levels because a high debt level has been shown to decrease financial performance. This will assist in achieving the objective of enhancing shareholder value.

5.5 Limitations of the Study

The study looked at some of the elements thought to affect the NSE-listed companies' performance. The research focused on four explanatory variables in particular. Nevertheless, additional factors, some of which are internal, like the firm's age and corporate governance, though others which lack management's regulation, like rate of exchange, economic growth, balance of trade, as well as rate of unemployment, are influential in determining firm's financial performance.

The research used quantitative secondary data. The research also overlooked qualitative data that may explain additional variables influencing the connection between CSI and company performance. Qualitative techniques like focus groups, open surveys and interviews may help to provide more definitive results.

The research focused on a span of 5 years (2016 to 2020). It is not clear whether the outcomes will last longer. It is also uncertain if same results can be expected beyond 2020. A multivariate linear regression model for data analysis was used. The investigator cannot correctly extrapolate results due to the model's shortcomings, such as misleading conclusions from a change in variable financial performance. When data is added into the model, conflicting outcomes may occur.

5.6 Suggestions for Further Research

The research uses secondary data to survey CSI impact on NSE firms' performance. In efforts to complement this research, a similar study can be conducted utilizing primary sources of data collected either through questionnaires, focus group discussions or interview guides to capture the qualitative aspects that were not covered in this study.

Further research on variables such as growth prospects, industrial practices, business age, political stability, and other macroeconomic variables is required since the study did not cover all of the elements that affect the financial performance of NSE companies. Policymakers may use a tool that evaluates the influence of different factors on performance to help them make decisions.

The research was restricted to NSE-listed businesses. Other corporations operational in Kenya should be investigated further, according to the study's recommendations. Future research should look into how CSI affects characteristics other than financial performance, such as business value, operational efficiency, and dividend payment, to name a few.

The focus of this research was drawn to the last five years. Future studies may span a lengthy period of time, such as thirty or twenty years, and may have a major effect on this study by confirming or refuting its findings. A longer research has the benefit of

allowing the researcher to catch the effects of business cycles like booms as well as recessions.

Lastly, this research relied on model of multiple linear regression, that has its own set of drawbacks, including the possibility of erroneous and misleading conclusions due to changes in variable financial performance. To explore the many connections to financial success, future research should use alternative models, such as the Vector Error Correction Model.

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APPENDICES

Appendix I: Firms Listed at the NSE

	COMPANY	SECTOR	YEAR OF LISTING
1	Deacons (East Africa)	Consumer Services	2016
2	Nairobi Business Ventures	Consumer Services	2016
3	Stanlib Fahari I-REIT	Financials	2015
4	Atlas African Industries	Industrials	2014
5	Flame Tree Group Holdings	Basic Materials	2014
6	Kurwitu Ventures	Financials	2014
7	Nairobi Securities Exchange	Financials	2014
8	Home Afrika	Financials	2013
9	I&M Holdings	Financials	2013
10	CIC Insurance Group	Financials	2012
11	Umeme	Utilities	2012
12	Britam (Kenya)	Financials	2011
13	TransCentury	Industrials	2011
14	Co-operative Bank of Kenya	Financials	2008
15	Safaricom	Telecommunications	2008
16	Kenya Re-Insurance Corporation	Financials	2007
17	Liberty Kenya Holdings	Financials	2007
18	Equity Group Holdings	Financials	2006
19	Eveready East Africa	Consumer Goods	2006

	COMPANY	SECTOR	YEAR OF LISTING
20	KenGen Company	Utilities	2006
21	WPP Scangroup	Consumer Services	2006
22	Mumias Sugar Co	Consumer Goods	2001
23	ARM Cement	Industrials	1997
24	TPS Eastern Africa	Consumer Services	1997
25	Kenya Airways	Consumer Services	1996
26	National Bank of Kenya	Financials	1994
27	Sameer Africa	Consumer Goods	1994
28	Longhorn Publishers	Consumer Services	1993
29	Crown Paints Kenya	Basic Materials	1992
30	HF Group	Financials	1992
31	Uchumi Supermarkets	Consumer Services	1992
32	KCB Group	Financials	1989
33	Standard Chartered Bank Kenya	Financials	1988
34	Total Kenya	Oil & Gas	1988
35	Barclays Bank of Kenya	Financials	1986
36	Jubilee Holdings	Financials	1984
37	Express Kenya	Consumer Services	1978
38	Olympia Capital Holdings	Industrials	1974
39	East African Cables	Industrials	1973
40	Nation Media Group	Consumer Services	1973
41	Carbacid Investments	Basic Materials	1972

	COMPANY	SECTOR	YEAR OF LISTING
42	Diamond Trust Bank Kenya	Financials	1972
43	Eaagads	Consumer Goods	1972
44	East African Breweries	Consumer Goods	1972
45	East African Portland Cement	Industrials	1972
46	Kapchorua Tea Kenya	Consumer Goods	1972
47	Kenya Power & Lighting	Utilities	1972
48	Williamson Tea Kenya	Consumer Goods	1972
49	NIC Group	Financials	1971
50	Unga Group	Consumer Goods	1971
51	Bamburi Cement	Industrials	1970
52	Stanbic Holdings	Financials	1970
53	B O C Kenya	Basic Materials	1969
54	BAT Kenya	Consumer Goods	1969
55	Centum Investment	Financials	1967
56	Limuru Tea	Consumer Goods	1967
57	Sasini	Consumer Goods	1965
58	Sanlam Kenya	Financials	1963
59	KenolKobil	Oil & Gas	1959
60	Kenya Orchards	Consumer Goods	1959
61	Standard Group	Consumer Services	1954
62	Kakuzi	Consumer Goods	1951
63	Car & General (K)	Consumer Services	1940

Source: NSE (2020)

Appendix II: Research Data

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
1	2016	-0.1600	0.0022	0.5125	1.7659	10.6304
1	2017	-0.0600	0.0020	0.4556	2.9085	10.7081
1	2018	0.1500	0.0021	0.6756	5.9581	10.7155
1	2019	0.0400	0.0012	0.7448	11.6481	10.5672
1	2020	0.0500	0.0016	0.7232	7.5035	10.4728
2	2016	0.1400	0.0004	0.2742	2.1231	10.6604
2	2017	0.1500	0.0006	0.3254	3.2366	10.5285
2	2018	0.1200	0.0004	0.2887	1.0823	10.6222
2	2019	0.0900	0.0007	0.2953	2.2792	10.6033
2	2020	0.1100	0.0008	0.2754	1.3029	10.6336
3	2016	0.0100	0.0030	0.6428	1.5945	9.9731
3	2017	0.0200	0.0045	0.6662	1.4376	9.9870
3	2018	0.0200	0.0046	0.6639	1.0129	9.9537
3	2019	0.0400	0.0029	0.6526	0.9113	9.9113
3	2020	0.0600	0.0187	0.6372	2.3548	9.8389
4	2016	0.1300	0.0077	0.1158	3.0471	9.5194
4	2017	0.1200	0.0069	0.1323	3.0008	9.4888
4	2018	0.1300	0.0051	0.1656	2.8067	9.4726
4	2019	0.1700	0.0049	0.1472	2.9726	9.4037
4	2020	0.2200	0.0049	0.1270	2.8340	9.3433
5	2016	0.0400	0.0557	0.7007	3.2485	9.7688
5	2017	0.0500	0.0639	0.6912	6.2517	9.7041
5	2018	0.0100	0.0770	0.7020	2.0761	9.6570
5	2019	0.0100	0.0683	0.6503	2.0507	9.5858
5	2020	0.0700	0.0837	0.5377	2.6737	9.4691
6	2016	-0.1000	0.0040	0.7331	1.9401	9.8475
6	2017	-0.0800	0.0061	0.6613	1.0225	9.8779

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
6	2018	0.0200	0.0035	0.5954	0.7213	9.9235
6	2019	0.3900	0.0076	0.6081	0.6988	9.8970
6	2020	0.0600	0.0056	0.5497	0.8031	9.8331
7	2016	-0.0400	0.0575	0.3826	1.0523	10.4371
7	2017	0.1500	0.0549	0.3554	2.3571	10.4447
7	2018	0.3100	0.0521	0.4025	2.2968	10.3638
7	2019	-0.0200	0.0539	0.5734	2.6813	10.1964
7	2020	0.1100	0.0109	0.5605	2.3480	10.2077
8	2016	0.3500	0.0109	0.2890	2.6204	8.8880
8	2017	-0.1800	0.0087	0.5506	1.3164	9.0346
8	2018	0.3900	0.0080	0.4309	1.1960	9.1795
8	2019	-0.1900	0.0074	0.7651	1.1739	8.9685
8	2020	0.0500	0.0132	0.5803	1.2056	8.9734
9	2016	0.1000	0.0117	0.2478	1.2276	9.7594
9	2017	0.1100	0.0995	0.2405	1.0562	9.7045
9	2018	0.1200	0.0093	0.3577	1.0962	9.4807
9	2019	0.0400	0.0087	0.2284	1.1120	9.5863
9	2020	0.0500	0.0481	0.2211	1.1601	9.5703
10	2016	0.0200	0.0850	0.5144	1.1233	11.5766
10	2017	0.0200	0.0274	0.5296	4.5106	11.5650
10	2018	0.1900	0.0303	0.5866	6.2963	11.5347
10	2019	0.0200	0.0389	0.6934	10.0893	11.3983
10	2020	0.0300	0.0264	0.6071	4.2579	11.2757
11	2016	0.0900	0.0199	0.5346	8.8431	10.3820
11	2017	0.0900	0.0302	0.5924	1.1065	10.3838
11	2018	0.1000	0.0225	0.5076	1.1464	10.2400
11	2019	0.0400	0.0082	0.6935	1.3815	10.3787
11	2020	0.0200	0.0284	0.7629	1.5359	10.4490
12	2016	0.0200	0.0858	0.7952	1.4639	11.5336
12	2017	0.0200	0.0994	0.7848	1.2832	11.4735

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
12	2018	0.0300	0.0640	0.6970	1.1679	11.4401
12	2019	0.0400	0.0236	0.6677	1.3048	11.3442
12	2020	0.0300	0.0040	0.6829	1.1971	11.2484
13	2016	-0.0600	0.0019	1.3073	1.1606	11.1648
13	2017	-0.1900	0.0407	1.2291	1.5853	11.1922
13	2018	-0.1900	0.0497	1.0328	0.9464	11.2602
13	2019	-0.0200	0.0439	0.8101	1.0851	11.1722
13	2020	-0.0400	0.0451	0.7456	1.0237	11.0888
14	2016	0.3000	0.0324	0.1556	1.4691	11.2087
14	2017	0.2400	0.0398	0.1738	0.9836	11.2019
14	2018	0.2000	0.0799	0.3356	1.3339	11.1958
14	2019	0.1700	0.0209	0.3222	1.5404	11.1290
14	2020	0.1400	0.0254	0.3771	1.2591	11.1101
15	2016	0.0000	0.0089	0.3930	1.1154	9.4727
15	2017	-0.2000	0.0300	0.4443	4.1442	9.5173
15	2018	-0.0100	0.0210	0.3845	6.6570	9.5742
15	2019	-0.0200	0.0145	0.3275	7.9538	9.5863
15	2020	0.1200	0.0195	0.2696	8.4745	9.5645
16	2016	0.0200	0.0280	0.1425	3.3451	10.1204
16	2017	0.0300	0.0038	0.1037	0.9506	10.2258
16	2018	0.1300	0.0042	0.0904	1.0966	10.2053
16	2019	0.3800	0.0039	0.1881	1.4218	10.1740
16	2020	0.0100	0.0042	0.2950	1.4858	9.9569
17	2016	-0.0500	0.0044	0.5820	1.7358	9.6493
17	2017	0.0500	0.0035	0.5287	1.2374	9.6439
17	2018	-0.0700	0.0048	0.5689	0.9502	9.6390
17	2019	0.0500	0.0052	0.4618	0.9346	9.6129
17	2020	0.0500	0.0046	0.5065	0.9684	9.6194
18	2016	0.0700	0.0063	0.4366	1.2242	10.5799
18	2017	0.0600	0.0168	0.4653	1.6434	10.5585

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
18	2018	0.0500	0.0219	0.4858	1.0320	10.5343
18	2019	0.0400	0.0231	0.4953	0.9226	10.5124
18	2020	0.0300	0.0232	0.6154	0.8973	10.6019
19	2016	-0.2100	0.0241	1.0060	1.1574	10.2728
19	2017	-0.0500	0.0095	0.7975	0.5021	10.2767
19	2018	-0.0500	0.0127	0.9662	0.4648	10.2767
19	2019	-0.0800	0.0146	0.3658	0.5627	10.3388
19	2020	0.0300	0.0163	0.4455	1.4005	10.3773
20	2016	-0.5700	0.0181	1.4193	0.6245	9.6992
20	2017	-0.5300	0.0379	0.8674	0.7402	9.8071
20	2018	0.0800	0.0365	0.5202	0.6930	9.8379
20	2019	0.0600	0.0223	0.4751	0.5634	9.7461
20	2020	0.0000	0.0211	0.4664	0.6361	10.0115
21	2016	0.0600	0.0162	0.3808	2.2050	9.9638
21	2017	0.0700	0.0175	0.3826	2.5238	9.9381
21	2018	0.0600	0.0324	0.3937	3.3740	9.9045
21	2019	0.0400	0.0594	0.4708	2.8332	9.9089
21	2020	0.1200	0.0790	0.2786	3.0200	10.0539
22	2016	0.1300	0.0419	0.2851	4.4016	10.0854
22	2017	0.1600	0.0715	0.2948	2.3280	10.1037
22	2018	0.2000	0.0981	0.2659	1.7710	10.0772
22	2019	0.2300	0.0429	0.2797	1.8952	10.0586
22	2020	0.0200	0.0762	0.2771	2.1309	9.3480
23	2016	0.0600	0.0080	0.2403	0.9554	9.3471
23	2017	0.0600	0.0097	0.2615	1.2192	9.3657
23	2018	0.1000	0.0137	0.2405	1.1561	9.3618
23	2019	0.0800	0.0492	0.2165	1.1158	9.4205
23	2020	0.1200	0.0587	0.8202	1.0780	10.8239
24	2016	0.1600	0.0521	0.8878	1.5236	10.7906
24	2017	0.1400	0.0758	0.8005	1.4882	10.8257

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
24	2018	0.1100	0.0468	0.8552	1.2774	10.7984
24	2019	0.1100	0.0069	0.8684	1.2997	10.7613
24	2020	0.1700	0.0031	0.0783	1.1003	8.9651
25	2016	0.0500	0.0055	0.0910	0.6298	8.8815
25	2017	0.0100	0.0046	0.1478	1.5950	8.6334
25	2018	-0.0900	0.0101	0.1914	1.4871	8.6491
25	2019	0.1000	0.0087	0.2388	1.2846	9.9780
25	2020	-0.0300	0.0075	0.2651	1.4099	9.9224
26	2016	0.0500	0.0116	0.2212	0.3431	9.9509
26	2017	0.0100	0.0079	0.2289	0.6717	9.9324
26	2018	0.0900	0.0068	0.2535	2.9726	9.9314
26	2019	-0.0300	0.0093	0.3028	2.8340	9.3076
26	2020	0.0500	0.0056	0.2939	3.2485	9.3313
27	2016	-0.0100	0.0485	0.2801	6.2517	9.2974
27	2017	0.0700	0.0875	0.2843	2.0761	9.2854
27	2018	0.0900	0.0594	0.3822	2.0507	9.3177
27	2019	-0.0700	0.0672	0.2833	2.6737	8.4183
27	2020	-0.0800	0.0877	0.2710	2.8280	8.4505
28	2016	0.0100	0.0346	0.2674	2.9102	8.4966
28	2017	0.0000	0.0049	0.2358	3.4630	8.5297
28	2018	0.0800	0.0028	0.2410	3.6012	8.5353
28	2019	-0.0700	0.0056	1.1388	4.3590	8.5741
28	2020	-0.2500	0.0214	0.9389	1.7659	8.5793
29	2016	-0.1400	0.0021	0.7282	2.9085	8.6453
29	2017	-0.1600	0.0018	0.6733	5.9581	8.6794
29	2018	0.0000	0.0019	0.5869	11.6481	8.6817
29	2019	0.0100	0.0020	0.4759	7.5035	10.2427
29	2020	0.0000	0.0022	0.4368	2.1231	10.2300
30	2016	-0.0300	0.0002	0.3876	3.2366	10.1991
30	2017	0.0100	0.0033	0.3467	1.0823	10.2025
30	2018	0.0300	0.0032	0.3458	2.2792	10.2078

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
30	2019	0.0400	0.0003	0.3484	1.3029	10.1386
30	2020	0.0300	0.0004	0.3469	1.5945	10.1299
31	2016	0.0200	0.0541	0.3099	1.4376	10.0958
31	2017	0.0400	0.0688	0.3569	1.0129	10.1233
31	2018	0.0600	0.0800	0.3686	0.9113	10.1053
31	2019	-0.2300	0.0496	0.6834	2.3548	8.1575
31	2020	0.0300	0.0638	0.6793	3.0471	8.1915
32	2016	0.0300	0.0386	0.5936	3.0008	8.0483
32	2017	0.1000	0.0169	0.7626	2.8067	7.9003
32	2018	0.0300	0.0943	0.7537	2.9726	7.6541
32	2019	-0.0400	0.0059	1.0875	2.8340	9.6511
32	2020	-0.0400	0.0087	1.0535	3.2485	9.5944
33	2016	-0.1000	0.0091	1.0108	6.2517	9.5868
33	2017	0.0000	0.0012	0.9063	2.0761	9.5704
33	2018	0.0300	0.0091	0.8892	2.0507	9.4864
33	2019	-0.0800	0.0083	0.5301	2.6737	8.1475
33	2020	-0.0300	0.0069	0.5264	2.2713	8.7080
34	2016	0.0000	0.0137	0.5370	1.8378	8.7810
34	2017	0.0000	0.0171	0.4524	2.3583	8.7119
34	2018	-0.1100	0.0094	0.4029	2.5221	8.1094
34	2019	0.1000	0.0145	0.0457	1.3097	9.3239
34	2020	0.0900	0.0254	0.0748	1.1747	9.3040
35	2016	0.1600	0.0176	0.0748	1.1699	9.2829
35	2017	0.1900	0.0323	0.0843	1.1666	9.2266
35	2018	0.2300	0.0239	0.3640	1.1380	9.0604
35	2019	0.1900	0.0522	0.5597	0.4479	10.2506
35	2020	0.2600	0.0348	0.5245	1.0423	10.2672
36	2016	0.2700	0.0697	0.5261	1.0590	10.2714
36	2017	0.2300	0.0067	0.5548	1.1121	10.2613
36	2018	0.2200	0.0546	0.0246	1.1251	10.2301
36	2019	0.0600	0.0492	0.7179	1.1587	10.4282

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
36	2020	-0.2300	0.0215	0.7097	1.1441	10.3103
37	2016	-0.1200	0.0047	0.6361	1.1447	10.3722
37	2017	-0.0500	0.0049	0.5670	1.0939	10.4359
37	2018	0.0600	0.0040	0.4912	1.0332	9.2692
37	2019	0.0500	0.0027	0.4925	1.2705	9.2711
37	2020	0.0900	0.0031	0.4482	1.2776	8.8384
38	2016	0.1300	0.0022	0.4229	1.1715	8.8765
38	2017	0.1700	0.0020	0.4367	1.1658	8.8357
38	2018	-0.1200	0.0021	0.4861	1.5582	9.3583
38	2019	0.0400	0.0012	0.3917	1.6234	9.3955
38	2020	0.0300	0.0016	0.2804	1.6385	9.2927
39	2016	-0.0400	0.0004	0.5297	1.6048	8.7413
39	2017	0.0498	0.0006	0.4680	1.5050	8.2674
39	2018	0.0389	0.0004	0.4500	1.2653	8.3160
39	2019	0.0387	0.0007	0.4420	1.2875	8.3543
39	2020	0.0360	0.0008	0.3410	1.2781	8.3823
40	2016	0.0284	0.0030	0.2830	1.2225	8.4142
40	2017	0.0498	0.0045	0.4000	1.0468	8.2674
40	2018	0.0389	0.0046	0.3180	1.1691	8.3160
40	2019	0.0387	0.0029	0.3990	1.1254	8.3543
40	2020	0.0360	0.0187	0.4000	1.0996	8.3823
41	2016	0.0284	0.0077	0.3350	1.0417	8.4142
41	2017	0.0449	0.0069	0.3260	1.2396	8.2908
41	2018	0.0446	0.0051	0.3380	1.1984	8.3432
41	2019	0.0471	0.0049	0.3760	1.1591	8.3473
41	2020	0.0278	0.0049	0.3370	1.1483	8.3692
42	2016	0.0374	0.0557	0.4600	1.0814	8.3988
42	2017	0.0417	0.0639	0.6790	2.0954	8.0348
42	2018	0.0414	0.0770	0.4140	2.3650	8.0830
42	2019	0.0427	0.0683	0.7370	2.5203	8.1637

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
42	2020	0.0386	0.0837	0.5460	2.2533	8.2195
43	2016	0.0364	0.0040	0.3900	2.3134	8.2291
43	2017	0.0140	0.0061	0.4400	2.9412	7.9661
43	2018	0.0074	0.0035	0.4200	2.3810	8.0894
43	2019	-0.0096	0.0076	0.3800	2.6316	8.0964
43	2020	0.0012	0.0056	0.2300	4.3478	8.0611
44	2016	0.0378	0.0575	0.2020	4.9505	8.4839
44	2017	0.0396	0.0549	0.3680	2.7174	8.5088
44	2018	0.0454	0.0521	0.3310	3.0211	8.5763
44	2019	0.0391	0.0539	0.3080	3.2468	8.6700
44	2020	0.0407	0.0109	0.2800	3.5714	8.7031
45	2016	0.0400	0.0109	0.2110	4.7393	7.2905
45	2017	0.0420	0.0087	0.4600	2.1739	8.0426
45	2018	0.0230	0.0080	0.3400	2.9412	8.1377
45	2019	0.0410	0.0074	0.3040	3.2895	8.1698
45	2020	0.0410	0.0132	0.2910	3.4364	8.2152
46	2016	0.0189	0.0117	0.3370	2.9674	7.6094
46	2017	0.0185	0.0995	0.3760	2.6596	7.6698
46	2018	0.0162	0.0093	0.6790	1.4728	7.7817
46	2019	0.0212	0.0087	0.4140	2.4155	7.0011
46	2020	0.0113	0.0481	0.7370	1.3569	7.0000
47	2016	0.0560	0.0850	0.5460	1.8315	8.3341
47	2017	0.0560	0.0274	0.3900	2.5641	8.3769
47	2018	0.0670	0.0303	0.3400	2.9412	8.4411
47	2019	0.0520	0.0389	0.4400	2.2727	8.5332
47	2020	0.0420	0.0264	0.6040	1.6556	8.5795
48	2016	0.0400	0.0199	0.4800	2.0833	8.3003
48	2017	0.0420	0.0302	0.4000	2.5000	8.3596
48	2018	0.0330	0.0225	0.3400	2.9412	8.4513
48	2019	0.0340	0.0082	0.2400	4.1667	8.5309

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
48	2020	0.0380	0.0284	0.2300	4.3478	8.5441
49	2016	0.0233	0.0858	0.2020	4.9505	7.6698
49	2017	0.0290	0.0994	0.3680	2.7174	7.7817
49	2018	0.0320	0.0640	0.3310	3.0211	8.2339
49	2019	0.0254	0.0236	0.3080	3.2468	8.2979
49	2020	0.0219	0.0040	0.2800	3.5714	8.3115
50	2016	0.0212	0.0019	0.7143	1.1971	6.8455
50	2017	0.0097	0.0407	0.8333	1.1606	6.8953
50	2018	0.0330	0.0497	0.8750	1.5853	7.7397
50	2019	0.0340	0.0439	0.8750	0.9464	7.8129
50	2020	0.0290	0.0451	0.8750	1.0851	7.8152
51	2016	0.0265	0.0324	0.8750	1.0237	6.9446
51	2017	0.0171	0.0398	0.7143	1.4691	6.9849
51	2018	0.0126	0.0799	0.7143	0.9836	7.0103
51	2019	0.0162	0.0209	0.7143	1.3339	7.0192
51	2020	0.0105	0.0254	0.7500	1.5404	7.0159
52	2016	0.0546	0.0089	0.8750	1.2591	7.0138
52	2017	0.0489	0.0300	0.7778	1.1154	7.1349
52	2018	0.0411	0.0210	0.7778	4.1442	7.2366
52	2019	0.0493	0.0145	0.7778	6.6570	7.3015
52	2020	0.0375	0.0195	0.7500	7.9538	7.3503
53	2016	0.0269	0.0280	0.7500	8.4745	7.2804
53	2017	0.0219	0.0038	0.7500	3.3451	7.2931
53	2018	0.0126	0.0042	0.8889	0.9506	7.3312
53	2019	0.0123	0.0039	0.7778	1.0966	7.3436
53	2020	0.0071	0.0042	0.7500	1.4218	7.3507
54	2016	0.0330	0.0044	0.9091	1.4858	7.6641
54	2017	0.0410	0.0035	0.9091	1.7358	7.7162
54	2018	0.0390	0.0048	0.8889	1.2374	7.7920
54	2019	0.0310	0.0052	0.8750	0.9502	7.8336

Company ID	Year	ROA	CSI	Leverage	Liquidity	Firm size
		Ratio	Ratio	Ratio	Ratio	Log
54	2020	0.0390	0.0046	0.8750	0.9346	7.9186
55	2016	0.0498	0.0063	0.8750	0.9684	8.2674
55	2017	0.0389	0.0168	0.8750	1.2242	8.3160
55	2018	0.0387	0.0219	0.4000	1.6434	8.3543
55	2019	0.0360	0.0231	0.5000	1.0320	8.3823
55	2020	0.0284	0.0221	0.5714	0.9226	8.4142