A STUDY ON CORPORATE SOCIAL RESPONSIBILITY AND PORTFOLIO PERFORMANCE, AT THE NAIROBI STOCK EXCHANGE

BY: OBUSUBIRI MOSES MITIGOA
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SUPERVISOR: LISIOLO LISHENGA

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AUGUST, 2006
DECLARATION

This research paper is my original work and to the best of my knowledge has not been presented for the award of any degree in any university.

NAME: OBUSUBIRI MOSES MITIGOA

SIGNED...

DATE 17/8/2006

REG NO: D/61/P/9111/01

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

NAME: MR. LISIOLO LISHENG A

LECTURER, UNIVERSITY OF NAIROBI

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

SIGNED...

DATE 17-8-06
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DEDICATION

To my loving wife Jesca Obusubiri and children Nehema and Baraka for their perseverance and patience throughout the duration of the project when I was not available for them.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>CHAPTER ONE</td>
<td>1</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>1.1 Background of the Study</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td>1.3 Objectives of the Study</td>
<td>8</td>
</tr>
<tr>
<td>1.4 Importance of the Study</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER TWO</td>
<td>10</td>
</tr>
<tr>
<td><strong>LITERATURE REVIEW</strong></td>
<td>10</td>
</tr>
<tr>
<td>2.1 Empirical Literature</td>
<td>10</td>
</tr>
<tr>
<td>2.2 Link between Corporate Social Responsibility and Portfolio Performance</td>
<td>11</td>
</tr>
<tr>
<td>2.3 Theories of Corporate Social Responsibility</td>
<td>13</td>
</tr>
<tr>
<td>2.5 Evolution of portfolio Measurement</td>
<td>16</td>
</tr>
<tr>
<td>2.6 Corporate Social Responsibility and Share Value</td>
<td>17</td>
</tr>
<tr>
<td>2.7 CSR Performance of Companies in Portfolio</td>
<td>19</td>
</tr>
<tr>
<td>2.8 CSR Performance of Investment Portfolio</td>
<td>21</td>
</tr>
<tr>
<td>2.9 Measure of Portfolio Performance</td>
<td>21</td>
</tr>
<tr>
<td>2.9.1 Measures of Corporate Social Responsibility</td>
<td>26</td>
</tr>
<tr>
<td>2.9.2 Operation of Nairobi Stock Exchange</td>
<td>28</td>
</tr>
<tr>
<td>2.9.3 Portfolio return characteristics of different market sectors at NSE</td>
<td>31</td>
</tr>
<tr>
<td>CHAPTER THREE</td>
<td>34</td>
</tr>
<tr>
<td><strong>RESEARCH METHODOLOGY</strong></td>
<td>34</td>
</tr>
<tr>
<td>3.0 Introduction</td>
<td>34</td>
</tr>
<tr>
<td>3.1 Research design</td>
<td>34</td>
</tr>
<tr>
<td>3.2 Population</td>
<td>35</td>
</tr>
<tr>
<td>3.3 Independent and Dependent Variables</td>
<td>35</td>
</tr>
<tr>
<td>3.4 Data Collection</td>
<td>36</td>
</tr>
<tr>
<td>3.5 Data Analysis Method</td>
<td>38</td>
</tr>
<tr>
<td>CHAPTER FOUR</td>
<td>43</td>
</tr>
<tr>
<td><strong>DATA ANALYSIS AND INTERPRETATION</strong></td>
<td>43</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>43</td>
</tr>
<tr>
<td>4.2 Profile of Respondents</td>
<td>44</td>
</tr>
<tr>
<td>4.3 Data Findings</td>
<td>45</td>
</tr>
</tbody>
</table>
4.4 Regression Results .......................................................... 47
4.5 Results of Significance Tests ............................................. 47
CHAPTER FIVE ...................................................................... 49
SUMMARY OF FINDINGS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH ................................................................. 49
5.1 Summary of Findings and Conclusions ............................... 49
5.2 Recommendations .......................................................... 50
5.3 Problems and Limitations .................................................. 51
5.4 Suggestion for Further Research ......................................... 51
REFERENCES ........................................................................ 52
APPENDIX I .......................................................................... 55
Questionnaire ........................................................................ 55
APPENDIX II .......................................................................... 61
Companies that constitute the calculation of NSE 20 share index ....... 61
APPENDIX III ......................................................................... 62
Listed Companies on the NSE 62
This research paper examined the relationship between Corporate Social Responsibility (CSR) and portfolio performance and determined the extent of CSR among listed companies on the Nairobi Stock Exchange (NSE). The period of the research was 2001 – 2005. The research was carried out using a questionnaire to determine the extent of CSR. A questionnaire was sent to all the 46 listed companies on NSE and only 31 responded to the questionnaire. The results showed that majority of the companies listed on NSE thus about 55% of this companies had a score above average on corporate social responsibility.

Also using information from the questionnaire and publicly available data from the annual reports. Portfolios were constructed based on CSR score from the questionnaire. Correlation analysis was done to determine whether there is any relationship between CSR and portfolio performance. The results indicated that there was a relationship between CSR and portfolio performance and that those portfolio ranked high on basis of CSR performed better than low ranked portfolios. High ranked portfolios had a Sharpe ratio of 0.854 and low ranked portfolios had a Sharpe ration of 0.671. All the portfolios performed better than the market proxy.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Corporate social responsibility (CSR) is about values and standards by which business operate. It’s about the commitment of business to behave ethically, operate legally and contribute to economic development while improving the quality of life of its employees and their families as well as the local community and society at large. It affects every aspects of business from the source of raw materials and how they are produced to happen to products and services. To be exposed as greedy, incentive or uncaring is disastrous in the short term but even more in the long term. The good reason as to why companies get involved in some kind of CSR activity is the publicity potential, as publicly is a good way to draw attention to a new brand before advertisement is done. This is because publicity creates discussion or controversy, but keeps one memorable enough for the product or service to be sampled, compared and hopefully endorsed. CRS activity also gives people who might not need to actually buy one’s product a chance to see one in action and think well without actually being a customer. (Griffin 1999).
Archie Carroll (1998) defined CSR as the economic, legal, ethical and Philanthropic expectations placed on corporations by society. CSR in this definition means that companies are required to meet their economic and legal requirements at the same time are expected to operate in ethical and avoid social injuries even in the corporation may not benefit in the short term.

Weiser and Zadek (2000): Classified Firms’ Social Activities into Corporate community involvement, corporate citizenship, corporate involvement in community, community economic development and environmental participation which they describe as “corporate social responsibility”. CSR has been defined by business and social responsibility (BSR, 2000) as “operating in a manner that meets or exceeds the ethical, legal, commercial and public expectation that society has for business. This study will adopt this definition.

In Kenya, Corporate Social Responsibility concept has been embraced by several companies like Nation Media group which offered to publish CSR activities of the firms at zero cost in their daily paper (Ngonyi, 2003). Kenya Breweries Ltd, which sponsored the government hospital bed replenishment and rehabilitation in the tune of KShs. 4 million, plus their KShs.8 million annual Guinness Strathmore University scholarship award which add up to 0.4 percent of the annual turnover. The East Africa Portland Cement Company plans to set up a Corporate Social Responsibility
foundation for more effective distribution of resources allocated for community assistance. The company built a dormitory at the Kibibini primary school in Sultan Hamud. The 100-bed-facility was built by the company as part of a Sh 30 million project to promote education for girls in Kajiado district (Kago 2006).

Tim Smith (2005) president of the Social Investment Forum and senior vice president at Walden Asset Management said: “over the past decade, CSR has become a major force in the U.S financial marketplace. Socially and environmentally screened mutual funds have experienced substantial growth in their number and diversity of products as well as the social issues they consider. Mainstream money managers are increasingly incorporating social, environmental and governance factors into their investing. A growing number of institutional investors are embracing the philosophy of CSR in the active ownership of the companies in their portfolio.”

The central question arising is whether CSR activities are associated with portfolio performance. A large board has investigated the relationship between CSR and portfolio performance of mutual funds with those of convectional funds. The results point to a positive relationship. The results from mutual funds may be biased because of non quantifiable aspects, such as management skills, unknown portfolio holdings, and screening methods (Carhart 1997). Furthermore mutual funds cannot establish whether a social or environmental responsibility premium exists because holding of social funds and conventional funds are mutually exclusive.
One of Innovest's online research publications (Blank and Daniel 2002) discussed the potential usefulness of CSR in making investment decision. Blank and Daniel reported that portfolios rank high on CSR scores produce the high sharp ratio than those that were ranked has low. Finally (Guerard1997) used the social performance database of Kinder, Lydenberg, Domini & Company and concluded that portfolio derived from a socially screened investment did not perform differently from obtained from an unscreened set during the 1987-96 period. These results further showed that there is no relationship between CSR and portfolio performance.

Porter and Van der Linde (1995) argued that active policies to improve CSR activities can create a competitive advantages because of more cost-efficient use of resources. If this argument is true the benefits of CSR initiatives outweigh their cost then those portfolios that embrace the concept of CSR should be able to produce higher portfolio performance than less responsible portfolio.

This study will attempt to find out whether those portfolio built on the base of corporate responsibility perform better than others which may be ranked as low, high and medium based on CSR and also find out if there is any relationship between CSR and Portfolio performances.
1.2 Statement of the Problem

According to Mumo Kivuitu (2005), CSR is merely a buzz-word that companies are using to out do each other in awards such as Company of the Year (COYA) and Financial Reporting (FIRE). He says;

"One senses a tinge of propaganda, possibly even a disconnect, between company CSR activities and general management disposition. How is it that a company that publicly supports a children's home catering for HIV/AIDS orphans, some infect with the virus. Does not have a HIV/AIDS policy for employees?"


Previous studies in this area of social responsibility have come up with different findings. Kweyu (1993) in a survey of managerial attitudes towards CSR in 31 commercial banks in Kenya which engages in social activities; found that managers were aware of CSR, however the pursuance of high profits remained the most important objectives of banks.

Ufadhili, a trust commissioned to work with private sector to make CSR an integral part of business, conducted an explanatory study on CSR in Kenya in 2003. An important insight was that the level of awareness of CSR did not go beyond corporate philanthropy (Laura Corporate Concern, 2003).
According to Kiarie (1997) in a survey of awareness and attitudes of executives of medium scale manufacturing firms in Nairobi found that executives were aware of the need for social responsibility and also engaged in social activities.

According to Mutuku (2004), in a survey of the relationships between CSR and financial performance a case of publicly quoted companies in Kenya found that there is no relationship between CSR and financial performance of all the companies listed at Nairobi Stock Exchange, These results support the study done by Mc Williams and Siegel (2001) who argued that CSR in only away to attain differentiation and does not directly affect profit rate. The explanation for this neutral relationship was that there were so many dominant variables between social and financial performance that the relationship cannot exist.

According to Okeyo (2004) in a survey of Rational and Determinants of levels of CSR among firms in Kenya found out that above average levels of CSR involvement enlisted among commercial firms in Kenya and the study established average profitability, industry sector and management styles as factors that determine levels of CSR involvement in Kenya.

Although large numbers of companies have embraced the concept of CSR the extent to which CSR policies contribute investment returns depends on the financial markets' ability to factor the financial consequences of CSR activities into portfolio
performance (Derwall, 2005). The belief is widespread at the investment level. Since incorporating comes at the cost of portfolio performance. It is therefore not surprising that although conventional investment theory predicts that investors should be cautious about adopting CSR, empirical evidence suggests that stock portfolio of high ranked companies on the basis of CSR outperformed those ranked as low on the base of CSR over the 1995-2003 period (Derwall, 2005).

Asset-pricing theory that relies on the efficient market hypothesis posits that, Investment portfolios delivers returns proportional to associated risk and that The optimal investment portfolio is a well-diversified one. Therefore any empirical evidence of anomalous risk-adjusted investment performance on the part of stocks grouped by company-specific characteristics, such as size, book to market ratio and CSR are attributable to deficiency in the portfolio evaluation model are attempt to explain them.

Research conducted by association of British insurers (2004) show that incorporating CSR can reduce portfolio volatility and increase returns. The evidences is not conclusive, but rejects the view that screening (excluding certain companies from investment portfolios because of the specific nature of some or the activities ) will damage the risk/return performance by narrowing the available investment universe. SRI is seen increasingly as an investment style but one which can add value to other styles such as value or growth. Most SRI activity “engages” with companies on
corporate responsibility, rather than screening for companies which meet or fail specific criteria. Evidence suggests that this kind of approach, which integrates analysis of social and portfolio performance, can yield the best results for equity portfolios.

The issue of CSR and portfolio performance is paramount to fund managers in Kenya today especially in this era of increased competition and escalating investors expectations. From the studies done in Kenya no one has made an attempt to have a look at portfolio performance and CSR. This study will attempt to find out whether CSR can lead to superior or inferior portfolio performance. It would go a step further and find out whether any relationship exists between CSR and portfolio performances.

1.3 Objectives of the Study

This study seeks to

1) To determine the extent of corporate social responsibility among listed companies on the Nairobi stock exchange.

2) To establish the relationship between Corporate Social Responsible and portfolio performance.
1.4 Importance of the Study

This study was of importance to the following:

- **Investment Community**

  It will increase the awareness of business community on the importance of corporate social responsibility endeavors and why they pursue social welfare concerns.

- **Academics**

  The study was important as an additional to knowledge base and is hoped that it will stimulate further research on other aspects of social responsibility.

- **Fund Investment Managers**

  The study will provide guidance on how to tackle social responsibility matters.
CHAPTER TWO

LITERATURE REVIEW

2.1 Empirical Literature

A large body of literature has investigated the relationship between CSR and portfolio performance. Unfortunately the empirical evidence to date is inconsistent. As pointed out by Ullman (1985) and by Graffin and Mahon (1997), the conflicting results in prior research are mainly attributable to differences in methodology and in the choice of portfolio and CSR measures.

For instance, Diltz (1995) studied daily returns for a variety of portfolio constructed on the basis of CSR performance indicators. Diltz found that, although many CSR activities did not improve portfolio performance significantly as measured by their sharpe ratio. Cohen, Fenn, and Konar (1997) constructed industry-balanced portfolios with different CSR characteristics to investigate the portfolio performance between portfolios ranked as low and high on the base of CSR in the united state. Contrary to the Diltz study, their findings suggest that there is neither a premium nor a penalty for investing portfolio that are leaders in CSR activities. A comparison by Yamashita, Sen and Roberts (1999) of 10 years risk-adjusted returns showed however, that portfolio ranked high on CSR performed significantly better than those that were ranked low.
White (1996) further examined portfolio performance of ranked as "high" "medium" and "low" on the base of CSR and demonstrated that high rank portfolio on the base of CSR provided a significance high Sharpe's ratio indicating that their portfolio performance was better than those of low and medium rank.

### 2.2 Link between Corporate Social Responsibility and Portfolio Performance

Another category of literature has used primary regression or correlation analysis to determine whether long time relationship exists between CSR and portfolio performance. The most pronounce evidence of a link between CSR and portfolio performance is found in event studies. Shane and Spicer (1983) documented that companies experienced abnormal declines in stock prices two days prior to their CSR figures being reported by the council on economic priorities in the United States. Moreover, on the day of publication, negative returns were significantly larger for companies with relatively poor scores of CSR than those with better scores. Hamilton (1995) reported a significantly negative abnormal return for publicly traded companies following the first release of their CSR figures. Consistence with previous results, Klassem and McLaughlin (1996) found evidence that positive corporate events, measured by CSR awards given to companies by third parties, are associated with positive subsequent abnormal returns. This is also experienced in the Kenyan situation especially after COYA Awards whereby companies which are given awards
on the basis of CSR their stocks also experience abnormal returns. Similarly, Rao (1996) reported that the performances of companies following pollution reports by the wall street journal between 1989 and 1993 were significantly below the companies’ expected market - adjusted returns. Only Yamashita et al., studying scores of environmental contentiousness published in July 1993’s fortune magazine, did not find significant stock market responses to the scores.

Another category of literature has used primary regression or correlation analysis to examine whether long time relationship exists between CSR and portfolio performance. Taken as a whole, these studies provide only limited support for such relationship. Spicer (1978) documented that companies in the U.S pulp and paper industry with the better pollution control records and high CSR scores had lower stock betas. Chen and Metcalf (1990), however, in replicating Spice study but controlling for the impact of company size on CSR cast doubt of his findings. Using a similar method Mahaptra (1984) also found no evidence that CSR initiatives are rewarded with improved portfolio performance.

More than 100 empirical studies published between 1972 and 2000 have examined the relationship between CSR and portfolio performance. In these studies, the majority of results (68%) point to a positive relationship between CSR and portfolio performance. The London Business School confirms these findings and has identified 80 studies on CSR, of which 42 demonstrated a positive impact, 19 found no link, and 15 produced mixed results and only 4 showed a negative impact (Smith, 2001).
An example of these studies is a study of "CSR superstars" (including Coca Cola, Procter and Gamble, Johnson & Johnson) showed that companies who consistently try to take into account its CSR outperformed the S&P 500 by more than twice the average over the past 15 years.

Research conducted by professor Hristin Fridgedrsdottir (2004) of London business school on the relationship between CSR and portfolio performance which used a multi-factor statistical analysis and other company information and to assess the correlations with CSR and Portfolio performance found that the investor who invest in a portfolio is constructed using corporate responsibility index can expect to earn on average an excess of his adjusted return by 1% per month. A significant excess return compared with the expected market rate for the portfolio companies.

2.3 Theories of Corporate Social Responsibility

The Stakeholder Theory

This theory was developed by Professor R. Edward Freeman (1994). According to this theory, it states that instead of serving only the interests of shareholders or stockholders, corporations are or ought to be operated for the benefit of all those who have a stake in the enterprise, including employees, customers, suppliers and the local community.
Although the relation of the shareholders, as the owners of corporations, is different from that of employees, consumers and so on, all of these constituencies are integral to the operation of corporation, and their role must be taken into account by managers. Corporation interacts continually with its stakeholder groups and much of the success of a firm depends on how well all these stakeholders relations are managed. Because the stakeholder theory does not specify more detail the right and responsibility that each stakeholder group has and to suggest how conflicting responsibility can be resolved. This theory will produce a mix reaction between CSR and portfolio performance.

The Classical Theory
This theory which prevailed in the nineteenth century, is still very influential today, especially among economists. It was developed by Friedman (1970) and can be summarized in the following ways.

- Economic behaviour is separate and distinct from other types of behaviour and business organizations are distinct from other organizations. Even though the same individuals may be involved in business and non-business affairs.
- The primary criteria of business performance are economic efficiency and growth in production of goods and services including improvements in technology and innovations in goods and services.
- The primary and motivating force for business is profit. The firm attempts to make as large profits as it can, thereby maintaining its efficiency and taking advantage of available opportunities to innovate and contribute to growth.
According to the classical theory, corporations should engage in purely economic activities and be judged in purely economic terms. Social concerns are not unimportant, but they should be left to other institutions in society. From this theory it will imply that there is no relationship between CSR and Portfolio performance since the scores of CSR according to the classical theory was zero.

**CSR and Portfolio Theory**

Markowitz's (1995) portfolio theory advises investors to reduce the risk in their investment through the diversification. Diversification requires investing in a portfolio of uncorrelated assets whose returns move in different direction. CSR impact on return and risk characteristics of an investor portfolio therefore needs to be known.

Barnett and Solomon (2002) cited Collin are more(2000) to have found that at portfolio level the decrease in the choice set due to exclusion of non-ethical companies, may not be substantial enough to cause diversification of socially responsible investment (SRI) funds. Unsystematic risk may be offset by a fewer as ten stocks.

Through strict social standards may prevent SRI funds from investing in some firms, there may well be ample other firms that do not meet the social criteria while still allowing the firms to diversify away unsystematic risk.
2.5 Evolution of portfolio Measurement.

Cohen et al. (1987) states that prior to development of modern portfolio theory most observers tended to measure portfolio managers performance on a simple rate of return basis, usually comparing the portfolio return with some broad yard stick such as the index. Little or no adjustment was made for risk borne by the portfolio and no attempt was made to measure sources of performance which includes asset allocation, security valuation and market timing.

Reilly and Brown (2000) also notes that at one time, investors were quiet aware of the concept of risk but did not know how to quantify and measure it. Portfolio performance was measured almost entirely on the basis of rate return. It was only on the development of portfolio theory in 1960's that showed investors and investment managers how to quantify and measure risk in terms of variability or returns. There was no single measure that combined both risk and return but the researches grouped portfolios into similar risk classes based on variance of return and then a comparison with the rate of return for alternative portfolios was directly done within the risk classes developed.

Portfolio measurement according to Elton and Grubber (1995) has evolved dramatically over the last two decades. The acceptance of modern portfolio theory has change the measurement process from crude return calculation to rather detailed explorations of risk and return and the source of each.
2.6 Corporate Social Responsibility and Share Value

Corporate reputation has become progressively broader and more complex. It extends beyond the quality of products and services, treatment of employees, and brand values, to encompass ideas of corporate social responsibility and Citizenship.

For many companies there is a growing divergence between brand values, which are, by their nature, emotional and product based, and reputation values, which are more about character and ethics of conduct. The difficulty comes when marketers, who are often used to focusing resources behind brand promises, are also doing it for reputation values, when transparency and honesty are the key attributes.

Companies must stay on top of this complex new environment. They need to understand and track a wide range of reputation issues, from corporate governance to environmental impact all of which can all have an impact on share value.

Investors see corporate social responsibility as a major indicator for a firm's exposure to non-financial risk. Investor relations officers are playing a pivotal role in helping investors appreciate the business case for social responsibility and its practical effect on firms' performance, Dr Kai Hockerts, (2005) Research Programme Manager at INSEAD's Centre for the Management of Environmental Resources.
In August 2005, the National Association of Pension Funds (NAPF), whose members control a sixth of the UK Stock Market, put the onus on pension fund trustees to ensure the companies in which they invest are meeting their duties to society. The NAPF issued guidelines urging pension scheme trustees to ask the investment managers who oversee their pension fund's assets to consider corporate social responsibility when investing on their behalf.

NAPF recognized that companies which focus on good corporate citizenship as a key value of their business and communicate it with their stakeholders, generate superior stock market valuations and economic performance. This shifting attitude has been created by improved access to public information and awareness of these issues amongst stakeholders.

These examples highlight the importance of effectively participating in and communicating about corporate citizenship programmes and measuring the impact by continuously monitoring how consumers and the media are talking about the company. They demonstrate that the outcome of corporate communications will impact share value.

Research done with graduate students at London Business School (2004) which looked at an investment analysis, defined and tracked a simple 'corporate citizenship' index for companies based on news volume and favourability, and tested the
relationship with portfolio performance. The initial findings showed some intriguing results and indeed suggest that investors do implicitly or explicitly value and react to corporate citizenship from news about companies, Philip Lambert (2004) from Investor Dynamics.

When they constructed a simple long-short portfolio comprising FTSE100 companies, buying the citizenship strong performers and selling the under performers, the results suggested that a portfolio manager who used this approach would have delivered an average 1% per month excess return to his or her investors over the period; a significant out-performance.

There is a need for further research to determine exactly how managers factor this information into their investment decisions but nevertheless the results were clear – strong citizenship can measurably drive stock value.

2.7 CSR Performance of Companies in Portfolio

Research carried out by Globe Scan Inc. (2003) in Canada on shareholder attitude towards CSR where Canadian shareholders were asked how interested they are in learning more about the social and environmental performance of companies that are part of their current investment portfolios.

Eight in ten shareholders say that they are "Very" (23%) or "somewhat" (57%) interested in learning more about the CSR performance of companies they currently invest in. In contrast, two in ten are "somewhat uninterested" (11%) or "not at all
interested" (9%). There are several regional and demographic audiences among Canadian shareholders that are more interested than others in learning about the CSR performance of companies in their portfolio, including: shareholders in Alberta, urban residents, women, and people between 25 and 44 years of age.

Also Canadian shareholders were asked if they had discussed the social and environmental performance of companies in their investment portfolio with their financial advisor or fund manager in the past year.

Two in three shareholders (66%) say they have not had any discussions about the social or environmental performance of the companies in the investment portfolios with their investment advisors over the past year. Over one in five, however, either raised this with their advisors (13%) or their advisor raised it with them (8%). Another one in ten (11%) said they considered discussing the CSR performance of companies they invest in with their advisor or fund manager.

Older baby boomers between 55 and 64 years of age are the most likely shareholders to have discussed the CSR performance of companies in their investment portfolios with a financial advisor. Slightly younger investors between 45 and 54 years of age are among the least likely to have had these discussions with their advisors.
2.8 CSR Performance of Investment Portfolio

Research carried out by Globe Scan Inc (2003) in Canada on shareholder attitudes towards CSR where Shareholders were asked if their investment portfolio, mutual fund or pension plan includes shares of companies that they consider to be responsible or irresponsible when it comes to social and environmental performance. Nearly four in ten investors (37%) believe that their portfolio is made up of both responsible and irresponsible companies. Another one in three (32%) say that their investment portfolio includes responsible companies, while only 1 percent say that their portfolio has irresponsible companies in it. Three in ten shareholders either say that their portfolio does not have responsible nor irresponsible companies in it (7%) or they do not know (23%).

Men and women differ significantly in their views of their investment portfolios. Male shareholders are much more likely than female shareholders to think that their portfolio is made up of both responsible and irresponsible companies. In addition, women tend to be more optimistic about their portfolios than men, as they are more likely to believe that their investments are made up principally of responsible companies.

2.9 Measure of Portfolio Performance

Portfolio performance is viewed as a feedback and control mechanism that can make the investment process more effective (Sharpe 2001). It helps the investment manager identify sources of strength and weaknesses while to the client
performance evaluation empowers them to forcibly communicate his or her interest to the investment and affect the way his or her portfolio is managed now and in future.

The identified tasks in portfolio performance is to determine whether past performance was superior or inferior and thereafter determine whether such performance was due to skill or luck. The essential idea behind performance evaluation is to compare returns obtained vis a vis what could have been obtained if one or more appropriate alternatives portfolios had been chosen for investment on the basis of their CSR range which could be high, medium or low.

According to Gitman (1999), investors always are interested in evaluating the performance of their portfolios. Sharpe (2001) documents that it is both expensive and time consuming to analyze and select securities for a portfolio, so as an individual company or institutions must determine whether the efforts is worth the time and money invested in its.

It is therefore not surprising that investors managing their own portfolios evaluate their performance as well as those who pay one or several professional fund managers (Frank and Rally, 2000).
The subject of evaluation of portfolio performance involves answering the questions:

How good is the actual performance? A large body of literature exists on methods of measuring portfolios performance. As pointed out by Gitman (1999) some of these methods include:

**Jensen measure**

Jensen's measure is also called Jensen's alpha. It is based on the capital assets pricing mode (CAPM). It calculates the portfolio's excess return, the amount by which the portfolio's actual return deviates from its required return, which is determined using beta and CAPM. The value of the excess return may be positive, zero or negative. Positive values are preferred, they indicate the portfolio earned a return in excess of its risk adjusted required return. A value of zero indicates the portfolio earned exactly its required return. Negative values indicate the portfolio failed to earn its required return.

Jensen's measure is calculated as shown below:

\[
\text{Jensen} = \alpha_p = R_p - [R_f + \beta_p (R_m - R_f)]
\]

Where:

- \(R_p\) = average return on the portfolio
- \(R_f\) = risk free rate
- \(\beta_p\) = Beta of the portfolio
- \(R_m\) = return on the market

The higher the Jensen's value the better the portfolio performance.
**Treynor’s measure**

This measure is similar to Sharpe’s measure. Like Sharpe’s, treynor’s measure, measures the risk premium per unit of risk, but it differs in its portfolio risk measure. Treynor’s measure uses the portfolio beta to measure risk. Sharpe’s uses the portfolio standard deviation.

Treynor’s measure is given by:

\[
\text{Treynor's measure} = \frac{\text{arp} - \text{arf}}{Bp}
\]

Where \( \text{arp} \) = average portfolio return

\( \text{arf} \) = average risk free rate

\( Bp \) = Beta of the portfolio

Generally the higher the treynor’s measure the higher the better the portfolio performance.

**Sharpe’s ratio**

This measure was developed by William F. Sharpe, compares the risk premium for portfolio to the portfolio’s standard deviation of return. The risk premiums on a portfolio return minus the risk free rate.
Sharpe’s ratio is expressed as:

$$\text{SR}_p = \frac{\text{ar}_p - \text{ar}_f}{\sigma_p}$$

Where $\sigma_p = \text{portfolio standard deviation}$.

Generally the higher the Sharpe’s ratio the better the portfolio performance.

According to Zhiwu Chen and Peter J. Knez (1996) of Ohio State University stated that any admissible portfolio performance measure should satisfy minimal conditions: it assigns zero performance to each reference portfolio and its is linear, continuous, and nontrivial. Such an admissible measure exists if and only if the securities market obeys the law of one price. A positive admissible measure exists if and only if there is no arbitrage.

Since the early formal measures of Jensen (1968), Sharpe (1966), and Treynor (1965), numerous new performance measures have been proposed. There are the APT-based measures of Connor and Korajczyk (1986) and Lehmann and Modest (1987), the period weighting measures of Grinblatt and Titman (1989), and the intertemporal marginal rates of substitution-based measures of Glišten and Jagannathan (1994). From a performance evaluation’s perspective, this array of measures offers a rich choice set but at the same time makes the selection of a
method difficult (if possible at all). To make matters worse, there is no general theoretical framework that allows the evaluator to examine these and many other proposed measures, Copeland and Mayers (1987).

### 2.9.1 Measures of Corporate Social Responsibility

The first measures of CSR content analysis. Content analysis includes any statement of social responsibility or any major litigation, which a firm has been involved in which affects stakeholders. Ovitzwy & Benjamin (2001) observed that these social measures are analysed on how the company influences customers, employees, community, environment, and minority groups and includes among others firms profit, philanthropy and direct involvement in community programmes.

This social index consists of 400 companies are excluding if they derive over 2% of

The second measure of CSR is use of managerial CSR principle and values. These assess the values and principal inherent in a firm's culture like economic, legal, ethical and discretionary responsibility by using triple bottom line. The triple bottom line (TBL) reports are quantitative summaries of economic, environmental and social performance of the company during the preceding year.

The third measure is through the use of repetition indices such as the fortune magazine rating of corporations responsibility to the community or environmental.
According to Griffin and Mahum (1997), the fortunes surveys are generated based on the opinions of financial analysts, senior executives and outside managers and rate the ten biggest companies in their own industry on eight attributes of reputation. These eight fortune attributes are, quality of management, quality of product and services innovations, long term investment value, financial soundness, employees talent use of corporate assets and responsibility to the environment. These rating are combined in order to general corporate reputation index. The fortune index has limitations in that the controlling attributes are the general perception and image of the company and the actual social responsibility. Waddock and graves (1997) drew up the kinder, Lynderberg Domini 400 rating system where each company in the standard and poor were rated on multiple attributes considered relevant to CSR.

This social index consist of 400 companies are excluding if they derive over 2% of their sales form military weapons, derive any revenue from gaming products or services, qualitative screens include the companies record in areas such as the environment, diversity and employee relations, Simpson’s and Kohers 2002) identified the major disadvantages of the kinder Lynderberg Dominion(KLD) as the weighting given to different components in KLD, component can be potentially strength as well as a weakness at the same time.
The fourth approach is social audits consist of systematic third party to assess a firm objective CSR behaviour such as community service, environmental programs and corporate philanthropy. The indices used in social audits are the Toxics Release Inventory (TRI) and corporate philanthropy. These measures are based on hard data. Corporate philanthropy assesses the charitable activities of large companies and compares companies against one another. The indices use in social audits is the Toxics Release Inventory (TRI) and corporate philanthropy. These measures are based on hard data.

The structure of the Nairobi stock exchange has witnessed tremendous transformation during the last 10 years that has seen its operating environment and TBL trends reveal the shifts towards standardization of social responsibility reporting when a company reports on triple bottom, it demonstrates that it has nothing to hide which contributes positively to its public image and companies can be better understand the impacts of their responsibility on the society (Papmenl, 2000). It also helps employees to realize the perspectives of the company in the long term.

2.9.2 Operation of Nairobi Stock Exchange

The Nairobi stock exchange was established in 1954. It operated as an association of stockbrokers with no trading floor until October 1991. The introduction of the trading floor has led to a substantial increase in trading volumes and upward movement in the various indexes. The Nairobi Stock Exchange has been instrumental in enabling the public and private sectors in Kenya to raise large amounts of capital for expansion of new businesses (NSE Manual 2002).
The NSE thus represents the financial markets in Kenya. It has 51 registered brokers and has about 52 firms listed on the exchange. It deals in ordinary shares and fixed income securities such as preference shares and most recently treasury bounds. The NSE also has some of its shares cross-listed with other stock exchanges in South Africa, Uganda and Tanzania. Both operational and informational efficiencies are key to ensuring that the NSE fulfills its mandate as the capital markets intermediary for Kenya and the word over (NSE Handbook, 2002)

The structure of the Nairobi stock exchange has witnessed tremendous transformation during the last 10 years that has seen its operating environment and trading systems improve as part of measures aimed at improving market transparency and efficiency. Fundamental reforms of the market structure were undertaken in year 2000. This saw the market recognized into four independent market classes namely:-

**The main Investment Market Segment (MIMS)**

This is the main quotation market with more stringent listing requirements. The main investment market segment is further divided into four market namely;

(i) Agricultural market segment
(ii) Commercial and services market segment
(iii) Finance and investment segment
(iv) Industrial and Allied market segment
The Alternative Investments Market Segment (AIMS)

AIMS is aimed at providing access to the capital markets for small and medium sized companies with high growth potential. This provides an alternative method of raising capital to those companies that it difficult to meet the more stringent listing requirements of the MI MS. This is particularly necessary in order to respond to changing needs of issuers bond to provide access to the capital markets to younger innovative companies with high growth potential.

AIMS facilitate liquidity to companies with large shareholder base through the process of introduction". This is the process by which existing shares are listed for the purpose of marketability and not for the purpose of raising capital.

AIMS offers investment opportunities to institutional investors and high net worth individuals to diversity their portfolios and access high growth sectors of the economy. This market segment has its own eligibility and listing requirements.

Fixed Income Securities Market Segment (FISMS)

This is a special trading window for fixed income securities. It is aimed at providing a separate independent market for fixed income securities such as treasury bonds, corporate bonds, preference shares and debenture stocks. The segment also lists other short-term financial instruments such as treasury bills and commercial papers. The money market presents wide opportunities that are yet to be taken up by specialist money market players. Investment advisors have a real challenge to
design solutions to the problems currently facing Kenya's financial markets regarding the need to structure and arrange securities customized to meet the specific needs of the Kenyan economy.

**Futures and options market segment (FOMS)**

FOMS will provide a mechanism to market participants to hedge against the risk associated with market volatility. The market segment is currently under development and will be implemented after further research on the necessary operational systems.

2.9.3 Portfolio return characteristics of different market sectors at Nairobi Stock Exchange

A review of empirical studies done in Kenya on portfolio return characteristics and portfolio theory indicate that very little work has been done in this area.

Risk is seen as a problem but investors still choose to invest in risky projects (Nyariji 2001). The justification is that the most risky projects, if successful, offer the greatest reward. Investors therefore usually have to make a selection decision as to which particular assets from the available alternatives to put their money in and how much to allocate to each of the selected securities.
Kamande (2001) set out to determine and evaluate quoted equity portfolios of insurance companies. He did this by examining the risk return characteristics of the equity portfolios held by individual insurance companies. His major finding was that quoted equity portfolios held by insurance companies, were poorly diversified as they had performed worse than the market portfolio.

Kangethe (1999) set out to investigate the effect of Government ownership on share price volatility of companies quoted at Nairobi Stock Exchange for the period 1997 to 1998. The specific objective of the study was to establish whatever Government ownership influences the share price volatility of the companies quoted at the Nairobi Stock Exchange. He found that there was a significant difference in the share stock volatility between the companies in which the government had shareholding and the market index.

The Efficient Market Hypothesis (EMH) explains how security prices should behave under the conditions of perfect market characterized by free availability of information homogenous.

Investor expectations and zero transaction costs. These conditions sufficiently ensure that prices “fully reflect” what is knowable obviously when relevant information to the value of a security is reflected in its current price, the same is unbiased estimate
of its intrinsic value. Every time new information is released the price adjust towards a new value (Kiweu 1991).

Nyariji (2001) did a study to evaluate the risk reduction benefits of portfolio diversification at the NSE. His analysis (using the mean variance model) indicates that there is significant risk reduction at the NSE as a portfolio grows in size. This continuous until a portfolio size of 13 securities is held, beyond this size, the reduction becomes insignificant. At this optimal portfolio size the proportion of total risk eliminated is 34%. He concludes by saying that, the current size of the NSE does not fully diversity specific risk and therefore the need to widen the market to enhance further diversification.

Empirical evidence suggests that stock return across market sectors is not uniform. According to Fama and French (1992, 1996) much of the cross section at variation in equity returns can be explained by firm characteristics such as market capitalization, price-to earnings ratios, and change in operating earnings and book – to – market ratios. They examine many of these factors simultaneously and conclude that size and book – to – market, explain the majority of the cross sectional variation in stock returns.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter is concerned with the various steps that will facilitate execution of the study to satisfy the study objectives. These include; research design, population of interest, data collection instruments and procedures and data analysis.

3.1 Research design

The research was carried out through descriptive survey method. Mugenda and Mugenda (1999) notes that a descriptive research attempts to correct data from members of a population. Helps the researcher to get the descriptive existing phenomena by asking individuals about their perceptions, attitudes, behaviour or values. Moreover, it explores the existing status of two or more variables at a given position time; hence most suited in analyzing the general conditions of corporate social responsibility practice and its relation to portfolio performance in Kenya companies in the Nairobi stock exchange.
3.2 Population

The population of the research consisted of all the companies quoted at the Nairobi Stock Exchange over the period of the study from 2001 – 2005 this period was considered suitable because it is the most current and the data is easily available. Choice of all companies listed in NSE gave this study a chance to look at all sectors of economy that is Agricultural, Industrial, Financial and Investment and Service Sectors. A list of companies in the Nairobi Stock Exchange as at 31st Dec 2005 was obtained from the Bourse. A census of all the companies quoted at the NSE during the period understudy was carried out. This census study ensured that each company was given an equal opportunity of being interviewed and as such a highly representative of Kenyan companies was studied.

3.3 Independent and Dependent Variables

The independent variable corporate social responsibility was measured using the managerial Perspective and content analysis. Because this method prove popular among researchers Beresford (1973, 1975, and 1976) was cited by Cochran Wood (1994) to have used management Perspective and content analysis method where by he simply noted either a qualitative or a quantitative report, mention or existence of a CSR activity say pollution in the companies’ bulletin or the annual report. Richardson et al (1999) to have used a combination of content analysis and existence of designated CSR items in the food processing industry and developed their own index based on the number of lines in the annual report devoted to CSR.
activities subsequently several other researchers (e.g. Abort and Monsen, 1979) and (Anderson and Frankle 1980) have used similar method to measure CSR involvement level. Managerial perspective was captured through the use of questionnaire as shown on appendix 1.

The dependent variable of interest was portfolio performance which was measured using Sharpe’s ratio. This is because Sharpe’s ratio uses a measure of portfolio total risk of variability as estimated over the evaluation period and hence can be used for comparing portfolios in different risk classes based on CSR score and also its because Gardner et al. (2000) notes that Sharpe’s measure is based on capital asset pricing model (CAPM) which assumes that investors can achieve any level of risk by investing in the portfolio with the highest Sharpe ratio regardless of the investors particular degree of risk a version. The Sharpe’s measure is particularly universally accepted to institutional investors and academics Gardener et al. (2000).

3.4 Data Collection

Both primary and secondary data was used. Primary data was collected using a “drop and pick later” structured questionnaire. In the questionnaire both open ended and closed question were asked. Follow ups was made to ensure collection of the questionnaire in time, as well as assist respondent in any difficult encountered in completion of questionnaires. In each company, senior management staff in charge of corporate social responsibility was required to fill the questionnaire. A structural
A questionnaire was used since it is easier to administer, analyse and economical in terms of money and time. Mugenda and Mugenda (1999) notes that a questionnaire is one of the best tools of collecting primary data. Secondary data was used to compute portfolio performance and also extract the annual financial reports was a statement of social responsibility to the society.

A score of one was awarded to a mark against not clear at all, a score of two against To a less extent, a score of three to a moderate extent, a score of four to a great extent a score of five to a very great extent. The total value of the firm so obtained was adjusted by expressing it as a percentage of a highest possible value for all the companies.

Illustration

Let $x_t =$ total CSR Score for one company and

$X_h =$ potential highest value of CSR for the company

Then the adjusted score for CSR for the company was given by

$$X_A = \left( \frac{100X_t}{X_h} \right) \%$$

Richard et al (1999) used this method to determine the scores for financial disclosure of CSR activities or behaviours when examining the relationship between CSR and financial disclosure. They found out that the level of voluntary financial disclosure was significantly related to the proportion of net income given to charities.
The score of each category was then be summed up to set the final CSR score for firm. Descriptive statistics was used to represent this data. Public available information was obtained from annual financial reports. Number of points were awarded depending to the numbers of lines dedicated to corporate social responsibility in the annual reports. The final score of CSR was classified into ranges to create portfolios of company which lie within that range.

3.5 Data Analysis Method

Regression and correlation analysis was done using Microsoft Excel to find the correlation coefficient. The result of the correlation analysis was represented in the tabular format. In the regression analysis the coefficient of the determination ($r^2$), Pearson correlation coefficient ($r$), p-value ($p$) and the number. The interpretation of the correlation, where $r$ is close to +1, the better the positive correlation an when $r$ is close to -1 the negative correlation. For the purpose of this study, a positive correlation will mean that the higher the corporate social responsibility, the better the portfolio performance. The negative correlation meant that the higher the level of corporate social responsibility the worse the portfolio performance. The p value gave an indication of how significant the correlation is. It measures the probability of identifying a correlation coefficient.
From the collected from the NSE and company’s annual reports the following parameters were computed to assist, in the computation in portfolio performance using sharps ratio. The return on the investor’s portfolio designated by \( r_{pt} \) was given by:

\[
\begin{align*}
\frac{r_{pt}}{V0} &= \frac{V_f - V_0 + D}{V_0} \\
\end{align*}
\]

Where

- \( V_1 \) = the portfolio market value at the end of interval
- \( V_0 \) = the portfolio market value at the beginning of the interval
- \( D \) = the cash distribution to the investor during the interval

This calculation assumes that any interest or dividend income received on the portfolio of the securities and not distribution occur at end of the interval or are held in form of cash until the end of the interval.

The average return on the portfolio denoted by arp was given by

\[
\text{arp} = \frac{\sum_{t=1}^{T} r_{pt}}{T}
\]

Where period \( T \) = time period

Once arp, had been calculated, the standard deviation of the portfolio was calculated.
The average risk free rate and market return was given by

\[ \text{ar}_r = \frac{\sum_{t=1}^{T} r_{ft}}{T}, \quad \text{ar}_m = \frac{\sum_{t=1}^{T} r_{mt}}{T} \]

Once \( \text{ar}_p \), had been calculated, the standard deviation of the portfolio was calculated as

\[ \text{dp} = \left( \frac{1}{T-1} \sum_{t=1}^{T} (r_{pt} - \text{ar}_p)^2 \right)^{1/2} \]

The estimate of the portfolio standard deviation indicates the amount of total risk that the portfolio had during the time interval. The return of the portfolio was compared with substitute for the market portfolio, in this study the market portfolio comprised of the stocks that make up of NSE 20 share index.

To determine the portfolio beta during the time interval. With the excess return on the portfolio during period \( t \) denoted as \( e_{rpt} = r_{pt} - r_{ft} \) and the excess return on the market portfolio of the stock that comprise of the stocks that make up of NSE 20 share index.
During the period $t$ denoted by

$$ermt = rmt - rft$$

This estimate of the portfolio's beta indicates the amount of market that the portfolio had during the time interval. The data collected was analyzed using simple linear regression analysis. The problem of non-normality was dealt with by using the approach outlined by Frecka and Hopwood (1983). This method entails removal of outliers from the data and to improve the validity of the result the items in the population was grouped according to the CSR score ranges. The researcher used Sharpe's ratio to gauge performance of portfolio of equity stocks under study.
The above measure was further investigated by the use of regression model suggested below:

\[ Y = B_0 + B_1 X + E_i \]

Where: \( y \) = portfolio performance as measured using Sharps measure,

\( X \) = corporate social responsibility scores,

\( E_i \) = is a measure of error term contained in the model.

This measure the goodness of model fit or the explanatory power of the model.

Bo and B1 are the parameters of the model. Then the following hypothesis were tested:

- \( H_0: \mu = 0 \): There a positive relationship between corporate social responsibility and portfolio performance.

The researcher believes this hypothesis to be true because active policies to improve CSR involvement can create a competitive advantage because of the more cost-efficient use of Resources and hence lead to an improvement portfolio performance, Porter and Van der Linde (1995).

This hypothesis was tested using regression analysis. The data that was used for the independent (x) variable was corporate social responsibility scores. The dependent (Y) variable was the portfolio performance computed using Sharps measure.

The conclusion was drawn by examining key statistics such as the R Square, the t-statistic and the P-Value.

- \( H_1: \mu \neq 0 \): There is no relationship between corporate social responsibility scores and portfolio performance.
CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This study relies on Microsoft (MS) Excel statistical package for data analysis. The package is used to compute the rate of return for each company selected in the sample for each of the five years. Also, it was used to compute the mean, standard deviation, beta, and the Sharpe ratio, for the high ranked companies, middle ranked companies, low ranked companies, and the market proxy portfolios. This package was used for regression analysis between portfolio performance as the dependent variable and corporate social responsibility score as the independent variable. Correlation tests are carried out between the dependent variable and the independent variable.

The analysis carries out tests of significance on the independent variable to fulfill the major objective of the study, namely finding out whether there is any relationship between corporate social responsibility and portfolio performance. Primary data was used. The data was collected using semi-structured questionnaires with both open and close-ended questions. A drop and pick method was adopted. The target respondents were the companies listed on the NSE under all the five markets segment namely Agriculture commercial and service finance and investment sectors.
4.2 Profile of Respondents

Both primary and secondary data was used in this study. The secondary data was obtained from balance sheet, profit and loss account and from NSE. A Semi-structured questionnaire was used to collect primary data. Companies listed at the Nairobi stock exchange fall into five main categories as summarized in the table below.

Table 1: SELECTION OF SAMPLE COMPANIES

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number Of Questionnaire Sent</th>
<th>No. Of Response</th>
<th>Response Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial &amp; services</td>
<td>7</td>
<td>6</td>
<td>85.71%</td>
</tr>
<tr>
<td>Finances &amp; investment</td>
<td>11</td>
<td>11</td>
<td>100%</td>
</tr>
<tr>
<td>Industrial &amp; allied</td>
<td>16</td>
<td>9</td>
<td>56.25%</td>
</tr>
<tr>
<td>Alternative investment</td>
<td>9</td>
<td>1</td>
<td>11.11%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46</td>
<td>31</td>
<td>67.39%</td>
</tr>
</tbody>
</table>

Source: Research Data
From the table above, out of 46 questionnaires sent only 31 were returned representing a response rate of 67.39% which was considered appropriate for the purpose of the study.

4.3 Data Findings

Based on the CSR scores companies were classified into 3 categories high ranked companies, middle ranked companies, and low ranked companies as shown below. The middle-ranked companies portfolio had a mean return of 47.74%, with a standard deviation of 49.3%, the beta coefficient for this category was 0.374 which implies that the portfolio return is less riskier than the market proxy. The Sharpe's ratio for this category was 0.819.


<table>
<thead>
<tr>
<th>PORTFOLIO</th>
<th>MEAN</th>
<th>STD.DEV.</th>
<th>Beta</th>
<th>Sharpe’s ratio</th>
<th>No. of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-ranked companies</td>
<td>56.84</td>
<td>57.92</td>
<td>1.128</td>
<td>0.854</td>
<td>9</td>
</tr>
<tr>
<td>Middle ranked companies</td>
<td>47.74</td>
<td>49.3</td>
<td>0.574</td>
<td>0.819</td>
<td>12</td>
</tr>
<tr>
<td>Low-ranked companies</td>
<td>50.5</td>
<td>64.3</td>
<td>0.883</td>
<td>0.671</td>
<td>10</td>
</tr>
<tr>
<td>Market proxy</td>
<td>38.46</td>
<td>51.46</td>
<td>1.00</td>
<td>0.605</td>
<td>20</td>
</tr>
</tbody>
</table>

*Source: Research Data.*
The table gives a summary of the descriptive statistics (mean, standard deviation & Beta and Sharpe Ratio) of the 5 year period on the portfolio categories. The high ranked companies portfolio had a mean return of 56.84%, with a standard deviation of 57.92%. In terms of the portfolio returns variability in relation to the market proxy measured using beta coefficient this portfolio return was riskier than the market proxy ($\beta = 1.128$). The Sharpe’s ratio for this category was 0.854.

The middle-ranked companies portfolio had a mean return of 47.74%, with a standard deviation of 49.3%. The beta coefficient for this category was 0.574 which implies that the portfolio returns is less riskier than the market proxy.

The low-ranked companies portfolio had an average return of 50.5% standard deviation of 64.3% standard a beta coefficient of 0.883 with a Sharpe’s ratio of 0.671. These basic statistics suggest that high ranked portfolios on the basis of CSR performed better than the low ranked portfolio. The low ranked portfolios also have substantially lower Sharpe ratio than the high ranked portfolios.

The coefficient of determination ($R^2$) was 39.8%. This showed that only 39.0% of total variation of portfolio performance could be explained by CSR while the remaining 60.2% by other factors which are not determined by mere random chance. Pearson’s product correlation coefficient calculated was 0.63075 which showed that as corporate social responsibility increased portfolio performance also
increased and vice versa. This was a strong relationship. These results are consistent with the results by White (1996) which demonstrated the high ranked portfolio on the basis of corporate social responsibility provided a significant high Sharpe’s ratio.

4.4 Regression Results

The model below shows the results obtained from running ordinary least squares simple regression.

\[ Y = 0.0803 + 1.231X + 0.17493 \]

The parameter 0.0803 represents the component of portfolio performance that is autonomous that is that part that is not affected by the independent variable used in this study. 0.17493 is a measure of the error term containing in the model. While 1.231 represents the degree of change in corporate social responsibility as a result of a change in portfolio performance.

4.5 Results of Significance Tests

The table below shows significance tests for parameter \( B_0 \) and \( B_1 \) conducted at a significance of 95%. These conclusions are based on a one-tailed \( t \)-test.
### TABLE 3: HYPOTHESIS TESTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std.error</th>
<th>t-statistic</th>
<th>p.value</th>
<th>H.o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept(Y)</td>
<td>0.0803</td>
<td>0.03061</td>
<td>1.671</td>
<td>0.3025</td>
<td>Accept</td>
</tr>
<tr>
<td>CSR</td>
<td>1.2313</td>
<td>0.03061</td>
<td>1.8175</td>
<td>0.63075</td>
<td>Accept</td>
</tr>
</tbody>
</table>

*Source: research data*

Testing the null hypothesis (Ho) at a significance level of 5%, $r = 0.63075$ hence the researcher accepted $H_o$, since the computed $t = 1.8175$ is less than the $t$ value from the table which was 2.015 at 5% significant level.

Regression analysis yielding the above results in (Table 3)

The $Y$ - intercept was 0.0803.

The independent variable (Corporate social responsible) significantly affect portfolio performance. The computed correlation coefficient was positive 0.63065 which indicates that there’s positive correlation between corporate social responsibility (CSR) and portfolio performance hence acceptance of the null hypothesis.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH.

5.1 Summary of Findings and Conclusions

This study was conducted with the aim of determining whether there exists any relationship between corporate social responsibility (CSR) and portfolio performance for the period 2001 – 2005. A linear model was applied to explain this relationship. The model was found to be statistically significant at 5% level of significance.

The study found out the following:

That there is a positive correlation between corporate social responsibility and portfolio performance. This implies that those firms who pursue corporate social responsibility exhibit better portfolio performance. These findings are consistent with empirical evidence.

The findings above confirmed by the hypothesis test (Table 3) for the portfolio performance and corporate social responsibility (CSR).

The CSR for the period of study were positively correlated to portfolio performance as measured using Sharpe's ratio a correlation of 0.63075.
The results of this study are consistent with what is generally known about corporate social responsibilities of firms and portfolio performance (Diltz 1995, Wagner (2001) and Griffin and Mahan (1997).

The positive relationship exhibited in this study confirms that by pursuing CSR, a company reduces risk. That is operating in a way which maximizes the benefits to the real community minimizes the risks of losses or disruption from social unrest.

5.2 Recommendations

The study sought to establish whether there exists any relationship between CSR and portfolio performance we may conclude that there is a relationship since the correlation coefficient between CSR and portfolio performance was found to be positive. The implication of this relationship to investors is that they can benefit by consistently investing in those companies which are socially responsible.

The investor's dilemma is at two levels. First choosing securities to include in a portfolio, and in choosing the assets to include in the portfolio, the risk-return trade off features prominently. Secondly is choosing the best portfolio. In this case it makes sense for an investor to perform security analysis which may involve looking at those companies which exhibit corporate social responsibility.
5.3 Problems and Limitations.

The project was not without limitations. The first limitation of this study is that the sample chosen may not be representative of Kenyan firms. Listed firms are generally considered to be more robust than non-listed firms, this is because the NSE together with the capital markets Authority regulate the listing of firms and strive to ensure that listed firms remain safe investments for investors both current and prospective.

Secondly a project of this magnitude requires ample time and financial resources to be able achieve a wide coverage. In this project the research covered was limited to a period of 5 years i.e. from 2001 to 2005. With resources a wide coverage of say 10 - 15 years would have more ideal to give a better picture of the dynamics of the relationship between CSR and portfolio performance.

5.4 Suggestion for Further Research.

In this study, a new way of looking at portfolio performance has been introduced and illustrated. However a number of refinements and extensions can be made though. It is recommended that the project be modified later to enable;

- Construction of a model compassing more that one independent variables
- A study could be done to establish the relationship between CSR and profitability.
- In this study, the researcher used Sharpe's ratio, other more robust measures could be used such as Jensen measure and Treynor's measure.
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APPENDIX I

Questionnaire

The information in this questionnaire was treated with confidentiality and will not be used for any other purposes other than academic.

Section A

GENERAL INFORMATION

1. What is the name of your company? ............................................................ ..

2. Please indicate the ownership of your organization. Tick the appropriate box

Locally owned  □
Foreign Owned □
Joint Venture □
Others (please specify) ..............................................................

Section B

Part 1: Shareholders and Corporate Governance

This survey contains a series of statements related to corporate social responsibility. What extent do the following apply in your organization? Please tick the most appropriate option using the provided scale of
1. Not clear at all  
2. To a less extent  
3. To a moderate extent  
4. To a great extent  
5. To a very great extent

<table>
<thead>
<tr>
<th>Question 3</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you as a manager perceive corporate social responsibility as an issue to your organization?</td>
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<tr>
<td>To what extent does your company have a statement of the companies mission and values (i.e. business principles or vision of corporate responsibility)?</td>
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<tr>
<td>To what extent are share holders well informed through reports and meetings about significant and material violation of corporate policies, including codes of conduct, adverse decisions by tribunals or courts and major disposal of the company's assets, restructuring, takeovers, mergers acquisitions or reorganization.</td>
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<tr>
<td>To what extent dies your company's boards of directors comply with the capital markets authority code of corporate governance in regards to supply and disclosure of information to the shareholders?</td>
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</tbody>
</table>
Part 2: Community

To what extent do the following apply in your organization? Please tick the most appropriate option using the provided scale:

1. Not clear at all
2. To a less extent
3. To a moderate extent
4. To a great extent
5. To a very great extent

<table>
<thead>
<tr>
<th>Question 2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>To what extent does your company provide support (financial donations,</td>
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<td>staff participation and/or resources) for the community infrastructure?</td>
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<td>(Education and health for example)</td>
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<td>To what extent of last year's pre-tax profit (including equivalent</td>
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<td>value of staff time) did your company contribute for philanthropy if any?</td>
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<td>To what extent has your company been involved in any lawsuits involving</td>
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<td>business practices like unfair trading practices in the last one year?</td>
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<tr>
<td>To what extent does the value statement, policies or framework does your</td>
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<td>company have in regard to Kenyan culture and society?</td>
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</tbody>
</table>
Part 3: Consumers

To what extent do the following apply in your organization? Please tick the most appropriate option using the provided scale of

1. Not clear at all
2. To a less extent
3. To a moderate extent
4. To a great extent
5. To a very great extent

<table>
<thead>
<tr>
<th>Question 5</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>To what extent does your company have a formalized continuous product/service improvement system?</td>
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<td>To what extent does your company have a policy for protecting and vulnerable groups through inappropriately directed marketing of unsuitable products (such as Tobacco, Beer Age for example)</td>
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<tr>
<td>To what extent does your company’s products and services meet customers’ requirements and product specification</td>
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<td>To what extent does your company get involved in the education of young people (under 24 years) through the education provided or by career development?</td>
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</table>
Part 4: Environment

To what extent do the following apply in your organization? Please tick the most appropriate option using the provided scale of:

1. Not clear at all
2. To a less extent
3. To a moderate extent
4. To a great extent
5. To a very great extent

<table>
<thead>
<tr>
<th>Question 6</th>
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<tbody>
<tr>
<td>To what extent does your company have an environmental management system (EMS)?</td>
</tr>
<tr>
<td>To what extent does your company pursue cost savings and efficiency increases through tracking environment-related cost and/or material and energy flows?</td>
</tr>
<tr>
<td>To what extent does your company disclose to stakeholders information regarding its environmental risks, management strategies, performance and/or environmental preferable product if any?</td>
</tr>
<tr>
<td>To what extent has your company adopted any initiative related to reducing environmental impacts associates with the office environment?</td>
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</tbody>
</table>
**Question 7**

How significant have the following factors listed below contributed to your social responsibility. Please rank them in order of priority in scale of 1 to 5, with 1 being lowest and 5 highest.

<table>
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<th>1</th>
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<tbody>
<tr>
<td>Pressure from civil society groups and politicians</td>
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<tr>
<td>Government regulations and requirement</td>
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<tr>
<td>Social responsibility as competitive strategy</td>
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<tr>
<td>As a market tool</td>
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<td>Due to health cash flows</td>
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<tr>
<td>Due to high public visibility</td>
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APPENDIX II

Companies that constitute the calculation of NSE 20 share index

1. Brooke Bond Limited
2. Williamson Tea Kenya Limited
3. Kakuzi Ltd
4. Sasini Tea And Coffee Limited
5. Uchumi Supermarket
6. Kenya Airways Limited
7. Tps – Serena
8. National Media Group
9. Barclays Bank (K) Limited
10. Diamond Trust Bank Kenya Limited
11. Kenya Commercial Bank Limited
12. Bamburi Cement Limited
13. British American Tobacco (K) Limited
15. East Africa Breweries Limited
16. Firestone East Africa Ltd
17. Kenya Power & Lightning Company Limited
18. Total Kenya Limited
19. National Industrial Credit Bank Limited
20. Standard and Chartered Bank Limited
APPENDIX III

Listed Companies on the NSE

Agriculture

2. Kakuzi Limited.
3. Rea Vipingo Plantations Ltd
4. Sasini Tea and coffee Ltd

Commercial and Services

5. African Lakes Corporation Plc
6. Car and General (Kenya) Limited
7. CMC Holdings Limited
8. Hutching Biemer Limited
9. Kenya Airways Limited
10. Marshals (East Africa) Limited
11. Nation Media Group Limited
12. Tourism Promotion Services Limited
13. Uchumi Supermarkets Limited
Financial and investment

14. Barclays bank of Kenya Limited
15. CFC bank
16. Diamond Trust Bank (Kenya) Limited
17. Housing Finance Company Limited
18. ICDC Investment Company Limited
19. Jubilee Insurance Company Limited
20. Kenya Commercial Bank Limited
22. NIC Bank Limited
23. Pan Africa Insurance Company Limited

Industrial and Allied

25. Athi-River Mining Limited
26. Bamburi Cement Company Limited
27. British American Tobacco Kenya Limited
28. BOC Kenya Limited
29. Carbacid Investments Limited
31. Dunlop Kenya Limited
32. East Africa Portland Cement Company
33. East Africa Breweries Limited
34. East Africa Cables
35. Firestone (EA) Limited
36. Kenya Oil Company Limited
37. Mumias Sugar Company Ltd
38. Kenya Power and Lighting Company Limited
39. Total Kenya Ltd
40. Unga Group Limited

Alternative investment market segment
41. Baumann & Company Limited
42. City Trust Limited
43. Eaagads Limited
44. Express Kenya Limited
45. Kapchorua Tea Company Limited
46. Kenya Orchards Limited
47. Limuru Tea Company Limited
48. Standard Newspapers Group Limited
49. Williamson Tea Kenya Limited