

Corporate Social Responsibility and financial performance: the Johannesburg Stock Exchange top 100

by

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Declaration

Declaration Regarding Plagiarism

I, Sibusiso Nkomani, declare that this mini dissertation is my own, original work and that all the sources that I have used have been indicated and acknowledged by means of complete references. This mini dissertation has not previously been submitted for any degree or examination at this or any other university.

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I want to thank God for giving me the strength to keep going, especially during the hard times.

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ABSTRACT

Corporate Social Responsibility (CSR) is a much debated and ever changing topic. From a South African context, one of the most recent means of measuring CSR has been through the use of the Johannesburg Stock Exchange (JSE) socially responsible investment index (SRII). The JSE SRII was first introduced in 2004 and has grown in popularity and effectiveness since. Included amongst the criteria for inclusion in this index is compliance with black economic empowerment (BEE). The index measures companies against the triple bottom line (environment, society & economy). Companies included in the index are deemed to have good CSR practices. This study evaluates the effects of CSR on the corporate financial performance (CFP) of the top 100 listed companies on the JSE over a 10 year period (2002-2011). The findings of the study suggest that companies not included in the SRII, on average, perform better than SRII companies. The basis of this conclusion is on the analysis of the results of the total return index (TRI), return on assets ratio (ROA) and the net profit margin percentage (NPM).

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DEFINITION OF KEY TERMS

Abbreviation	Meaning
ANOVA	Analysis of variance
BEE	Black Economic Empowerment
CFP	Corporate Financial Performance
CSR	Corporate Social Responsibility
DS 400	Domini Social 400 index
EIRIS	Ethical Investment Research Service
JSE	Johannesburg Stock Exchange
KLD	Kinder Lydenberg Domini
MB	Market to book value
NPM	Net profit margin
PE	Price Earnings ratio
ROA	Return on Assets
ROE	Return on Equity
SRII	Socially Responsible Investment index
TRI	Total Return Index

CHAPTER 1

INTRODUCTION

1.1 Background

The debate around corporate social responsibility (CSR) is as relevant in modern times as it was at the inception of the CSR concept. The idea behind CSR first started gaining momentum in the 1970's. Moskowitz (1972: 71) identified the need to conduct a study to determine if social issues do indeed affect investment decisions. At the time, there was an increasing awareness of the impact of social issues on businesses. The author highlights that there was no evidence to support social performance affecting capital markets prior to the study. By the late 1990's the idea of CSR had evolved into its current form and is now endorsed by all stakeholders, including society, Governments, non-governmental organisations and corporations (Lee 2008: 53).

Since Moskowitz's study, there have been numerous papers published that are dedicated to demystifying and comprehending this subject area (Coldwell 2001: 49; Ofori 2006: 11; Banerjee 2008: 55). Numerous definitions for CSR have been generated over the years as explained by Dahlsrud (2008: 1). In particular Gossling and Vocht (2007: 363) described it as, the obligation of organisations to be accountable for their environment and for their stakeholders in a manner that goes beyond mere financial aspects. This definition highlights the need for continuous evaluation of CSR, as the variables involved are also constantly changing. Two such variables, the environment and stakeholder attitudes, have changed considerably over the last 40 years (Peloza and Papania 2008: 178). Figure 1 illustrates some of the changes that CSR research has undergone over the years.

	50s & 60s	90s
Level of Analysis	Macro-social	Organizational
Theoretical Orientation	Ethical/Obligation	Managerial
Ethical Orientation	Explicit	Implicit
Relationship between CSR & CFP	Exclusive/No discussion	Tight coupling

Figure 1- Trends in CSR research. Source Lee (2008: 56)

Despite the numerous definitions surrounding CSR, there has been a suggestion that CSR differs from country to country. CSR is influenced by a number of factors which include the different cultures, religions, demographics, income levels, education levels and geographic settings of a country or region (Turker 2009: 412). It is evident that to achieve a truly representational definition or understanding of CSR, researchers in each country must conduct an assessment based on the particular needs of that country. For instance, South Africa only achieved independence in 1994; whereas a country like the United States of America achieved this feat in 1776. This would suggest that there will be a discrepancy in the views of what constitutes good CSR practices.

The context of CSR from a South African point of view has often been centred on black economic empowerment (BEE). The idea behind BEE is not a uniquely South African concept, but one that has been adapted from similar programmes in other countries (Sartorius and Botha 2008: 438). In an attempt to provide a more holistic view towards CSR in South Africa, the Johannesburg Stock Exchange (JSE) established the socially responsible investment index (SRII) in May 2004. This index incorporates both BEE and good CSR practices in relation to the triple bottom line. The establishment of this index was influenced by the greater role that the King reports played in the field of corporate governance (Painter-Morland 2006: 355). The King reports have evolved over the years and now place a greater emphasis on not only corporate governance issues, but also sustainability issues. For a company to be listed on the local bourse, it must comply with the King reports thus inadvertently complying with some of the requirements of the SRII.

The advantage of the SRII is that it goes beyond just the King reports and attempts to define a CSR culture for South African businesses (Sonnenberg & Hamann 2006: 316).

The JSE used an independent research organisation to undertake an assessment of the companies listed on the exchange and determine if they satisfy the criteria required to be included in the SRII. The research organisation used was the Ethical Investment Research Service (EIRIS). This is a global organisation that specialises in the research of environmental, social, governance and ethical performance of companies (EIRIS 2011). The criteria used to establish the SRII is based on three categories, namely (JSE SRI Index 2011: 4):

- Environment
- Society
- Governance and related sustainability concerns.

1.2 Problem statement

The measurement of the relationship between CSR and corporate financial performance (CFP) is perpetually changing, hence the need for an up-to-date study that evaluates this phenomenon. Previous studies have produced varying results (Brammer & Millington 2008: 1325). There are limited up-to-date studies that have attempted to measure this relationship based on the JSE's top 100 listed companies and their inclusion in the JSE's SRII and thus more research is required in this field. The question still remains: what is currently the nature of the relationship between CSR and CFP within the South African context?

1.3 Purpose statement

The main goal of this study is to address the aforementioned question by employing a mixture of accounting and market based measures to identify the nature of the relationship between CSR and CFP in the given context.

1.4 Research Objectives

- To investigate the relationship between CSR and CFP within the top 100 JSE listed companies and their inclusion in the JSE SRII
- To investigate the nature of this relationship through the use of accounting and market based measures

1.5 Importance and benefits of the study

This study aims to provide answers to an existing grey area regarding the present finance field from a South African perspective. It is the intention of this study to provide insight into whether or not relevant stakeholders do in fact look beyond how companies behave in a business sense; when deciding on which companies to interact with. This is mainly based on the marketing measures used in the study and as such applies to shareholders and investors. CSR will be examined in a broader sense as opposed to merely focusing on BEE. The study helps to determine if being socially conscious actually does have any financial implications and what those implications are.

1.6 Delimitations

The study is limited to the top 100 listed companies trading on the JSE. The study also utilises a set number of ratios based on appropriateness and practicality. The study does not analyse the effects of BEE separately as BEE is included in the set criteria for inclusion into the SRII.

1.7 Assumptions

One main assumption is that good CSR practices are based on inclusion in the JSE's SRII. Since its inception in 2004, the SRII has grown in participants and attitudes towards inclusion in the index have been increasingly positive. It is on this basis that the assumption that all the listed companies on the JSE desire to be included on the SRII. Another assumption is that the results of the market based measures provide a fair reflection of the attitudes of shareholders and investors towards CSR practices.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

Studies have attempted to determine if there is indeed a relationship between CSR and CFP and the literature for this subject area continues to increase. Most of the research undertaken in this regard has, “resulted in numerous studies that have sought to measure the empirical relationship between corporate social responsibility and financial performance” (Ramchander, Schwebach & Staking 2012: 303). In essence this relationship between CSR and CFP can be viewed from two points of view. The first view point can best be described as determining whether CFP, in itself, affects CSR. The second view, presented by Perrini, Russo, Tencati & Vurro (2011: 59), suggests that it may be good CSR practices that affect the CFP of a company.

Studies concerning the relationship between CSR and CFP have produced varied results over the last few decades (Orlitzky, Schmidt & Rynes 2003: 404; Brammer & Millington 2008: 1325; Ramchander *et al.* 2012: 303). Whilst it may well have been an interesting prospect to speculate over the reasons for these varying results in the past; more recent studies have shown that some of the main reasons behind the varying results achieved have been caused by the different methodologies used by the researchers (Orlitzky *et al.* 2003: 404; Van Beurden & Gossling 2008: 409). The difference in these methodologies is represented by the different accounting or market measures used to determine the CFP aspect in the relationship between CSR and CFP (Brammer & Millington 2008: 1333).

Both accounting and market based measures have their particular advantages and disadvantages. McGuire, Sundgren and Schneewies (1988: 859) suggest that accounting measures are widely employed due to their ease of calculation and understanding. There are certain disadvantages relating to accounting measures as they are based on historical figures of performance, and they are also subject to bias through managerial influence and certain differences in accounting procedures. Market based measures have the advantage

of being less susceptible to managerial influences and differing accounting procedures. Another advantage of market based measures is their use in the evaluation of the perceptions of a company's future performance as opposed to historical events. This is done by analysing investor evaluations and actions. This particular advantage could also be considered a disadvantage as too much emphasis is placed on investor attitudes and not on a complete evaluation of a company's CFP.

BEE comprises part of the literature from a South African perspective. BEE assumes great importance due to the history of the country and the current efforts being made to redress the past wrongs (Iheduru 2004: 2; Hinson & Ndhlovu 2011: 335). Such is the importance of BEE that a BEE balanced scorecard was developed to help assess the effectiveness of BEE programmes (Kruger 2011: 209). It is with this in mind, that BEE is briefly mentioned as a market based measure but further explored as separate discussion point.

2.2 Accounting measures of financial performance

An important section of the literature focuses on the accounting measures of CFP employed. There is no prescribed principle identified in this regard and as such the accounting measures used in previous studies vary according to the researcher. Since the first studies were conducted in the 1970's right through to modern times there has been an attempt to identify good accounting measures of CFP (Margolis & Walsh 2003: 273). One common accounting measure that has been used in the past is an analysis based on the Return on Assets (ROA). Tang, Hull and Rothenberg (2012: 1287) chose to employ this financial ratio as the means of measurement for their study. This decision was based on the desire to be able to conduct a comparison between the researchers' findings with prior findings in the same field. Their findings indicated a positive relationship between CSR and CFP through the use of ROA. Van der Laan, Van Ees and Van Witteloostuijn (2008: 304) sought an efficiency ratio and as such chose to apply the ROA financial ratio as the basis of the results of their empirical study. These results found that larger CSR firms generally perform better than smaller CSR firms.

The use of ROA as an accounting measure has not been limited to foreign studies only. ROA has been adopted in studies that are based on South African data and this measure

has proved to be very effective in determining the relationship between CSR and CFP. The study by Eccles, Pillay and De Jongh (2009: 28) is testament to the appropriateness of ROA as an accounting measure. In this particular study, no significant relationship between company accountability and CFP was established.

The literature also provides other accounting measures of performance that have been employed. These measures include (Wu 2006: 164):

- Return on equity (ROE)
- Return on sales (ROS)
- Return on investment (ROI)
- Profit margin

These ratios were used to measure the profitability of different companies in the author's study of the relationship between CSR, CFP and firm size. The results obtained showed a positive relationship between CSR and CFP. It has been suggested that these measures help to provide a reflection of the internal efficiency of a company (Van Beurden & Gossling 2008: 411).

In spite of the numerous studies that have been undertaken with the use of accounting measures as a means of determining the relationship between CSR and CFP; there are other factors that accounting measures neglect to address. Eccles *et al.* (2009: 22) suggest that market based measures could also be a useful measure of CSR and CFP. This argument is premised on the fact that other stakeholders in the broader society also affect a company's operations. The effect of the influence exerted by the broader society is often best measured through the use of market based measures.

2.3 Market based measures of financial performance

One common market based measure that has been used to determine the relationship between CSR and CFP is based on share performance. Becchetti and Ciciretti (2009: 1284) evaluate this relationship through the use of stock market performance. In their study, the authors evaluated the stock market performance of socially responsible firms by considering a combination of aggregate buy-and-hold portfolios and individual stocks. The

overall findings indicate no significant advantage is obtained from CSR in relation to CFP. Ramchander *et al.* (2012: 304) also look at comparisons between movements in the share price of socially responsible firms and non-socially responsible firms. The researchers specifically focus on the share price movement based on the impact of announcements on CSR. The results of the study indicate that positive share price movements, in relation to CSR announcements, are associated with companies that employ effective and credible stakeholder management.

BEE deals with market related factors relating to company stakeholders such as employees, investors and the community and thus cannot be classified as an accounting based measurement. BEE can be considered as form of CSR in a South African context. Wolmarans and Sartorius (2009: 181) employed South African data in identifying the relationship between CSR and CFP. The study focuses on whether BEE announcements affect a firm's shareholders value creation. The findings indicate a positive relationship between shareholder wealth creation and BEE announcements. Further research in the same vein has been undertaken since. Chipeta and Vokwana (2011: 71) adopt a shorter time frame as they assess the effects of BEE announcements on the short term shareholder wealth of companies listed on the JSE. Their findings show cumulative abnormal returns are negative for the entire period of their assessment. The implication is that BEE announcements do not enhance shareholder wealth in the short term.

One variation of market based measures that has been employed is the Feltham-Ohlson (1995) valuation model. This model is different to traditional valuation models as it attempts to simplify the traditional valuation models and by doing so; increase the understanding of which factors affect the changes in the different models (Bernard 1995: 745). This valuation model was adopted in the study conducted by De Klerk and De Villiers (2012: 27). The study uses the model to evaluate if there is an increase in the value of corporate responsibility reporting to shareholders. Furthermore the study aims to investigate if market attributes are better understood by the combined effect of financial information and corporate responsibility reporting as opposed to merely employing financial information as the basis of measurement. To achieve this, the market value of equity is treated as a function of regular accounting earnings, book value and non-accounting value relevant information.

An analysis of the stock performance is a market based measure that is often used to determine the relationship between CSR and CFP. Stock performance is a clear indication of how investors view the operations of a company. Brammer and Millington (2008: 1333) adopted a measure of market performance based on share price growth and dividends paid during the exacting year. It is evident that market based measures have been employed extensively in previous studies conducted. However there are many other studies that have employed measures that cannot be categorised as purely market based or accounting based. These other measures have been based on other factors that influence corporate social responsibility and financial performance.

2.4 Other measures

Research undertaken by Van Beurden and Gossling (2008: 412) is a good example of how research on CSR and CFP has evolved to beyond using just market based and accounting measures. The study has a third element, in the fact that, it analyses the factors that could influence the relationship between CFP and CSR. The study found an overly positive relationship between CSR and CFP. Nelling and Webb (2009: 199) also adopt the strategy of employing both market and accounting based measures. However in their study, the researchers compute their own form of corporate social responsibility based on a number of factors that they considered relevant. These factors were then weighted to provide a weighted score for corporate social responsibility. Overall the researchers found no significant relationship between CSR and CFP.

It could be suggested that perhaps the existing methods of measuring the relationship between CSR and CFP are not as effective as previously thought. If this were the case, then new methods would have to be implemented. Turker (2009: 417) employs a self-administered questionnaire to determine the CFP related to good CSR. This method of analysis is a deviation from the conventional measures used to analyse CSR and CFP. Two possible scenarios arise from the adoption of this method. It can be argued that this method has limitations, with regards to the fact that; no common standard was used as the basis for the measurement. Conversely, the fact that no standard was employed could also make this analysis more effective as every detail involved in the study is selected on

merit, therefore guaranteeing that only the most relevant aspects of CSR and CFP are considered. This method could prove to be more effective on a global scale as the attributes of good CSR practices vary globally. Different cultures, religions, income levels and environmental aspects all have an effect on what is deemed as good CSR. Table 1 shows some elements of the questionnaire created by the author.

Table 1- Sample Questionnaire Source: Turker 2009: 418.

<p>Our company provides a wide range of indirect benefits to improve the quality of employees' lives.</p> <p>The employees in our company receive a reasonable salary to maintain an acceptable quality of life.</p> <p>One of the main principles of our company is to provide high-quality products to its customers.</p> <p>Our company respects consumer rights beyond the legal requirements.</p> <p>Our company emphasises the importance of its social responsibilities to the society</p> <p>Our company contributes to campaigns and projects that promote the well-being of the society</p> <p>Our company cooperates with its competitors in social responsibility projects</p> <p>Our company implements special programmes to minimise its negative impact on the natural environment.</p> <p>Our company targets sustainable growth which considers future generations</p> <p>Our company endeavours to create employment opportunities</p>

It is often thought that inclusion in a CSR database is evidence enough of good CSR practices. Despite most research being based on this premise, the effects of voluntary disclosure provide another means of analysing the CSR and CFP relationship. Dhaliwal, Li, Tsang and Yang (2011: 63) chose to measure the effects of voluntary CSR disclosure compared with the cost of equity capital. This study provides another dimension in the comparison of CSR and CFP. Most of the previous studies in this subject have used some sort of standard, such as the Kinder Lydenberg Domini (KLD) Socrates database, as a measure of which firms are considered socially responsible. The study goes a step further by analysing the companies that chose to go the extra mile with regards to CSR. This step results in a positive relationship between CSR and CFP.

The KLD Socrates database is a CSR database that measures companies on various degrees of CSR. Once measured the companies are given ratings compiled by an independent rating service. The measurement criteria used in the KLD Socrates database includes:

- Community participation
- Diversity
- Employee interests
- Environmental considerations
- Shareholder interests

Each company in the database is then evaluated based on the strengths and weaknesses of the different measurement criteria. The database focuses on a wide range of companies over a broad spectrum (Nelling & Webb 2009: 199). A number of past and present studies rely on the KLD Socrates database as a measure of good CSR (Wu 2006: 164).

2.5 Results

As stated previously, the results of past studies in this subject area have yielded varying results. Figure 2 shows a number of graphs showing the potential relationship between corporate social responsibility and financial performance.

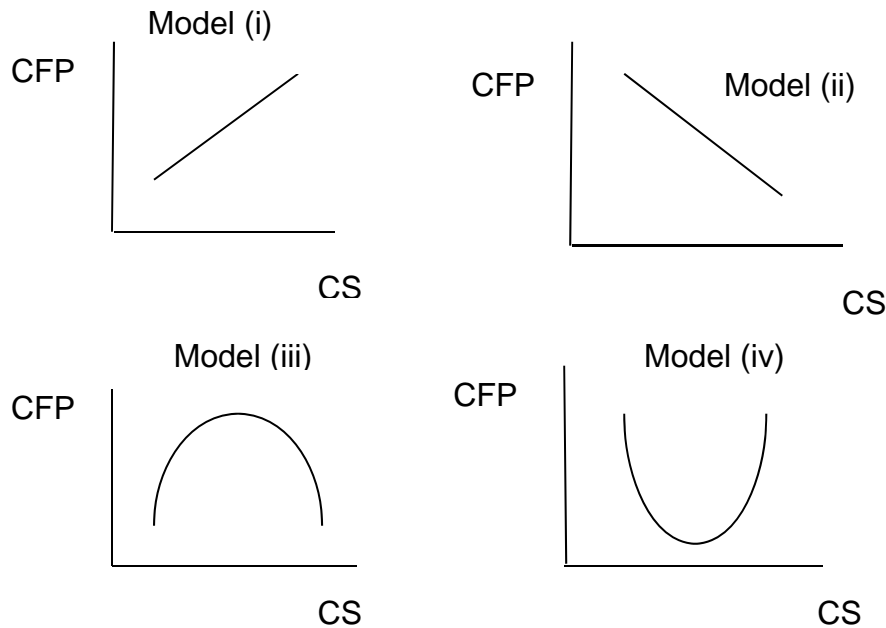


Figure 2- Alternative models of the relationship between CFP and CSR

Source: Brammer & Millington (2008: 1328)

The first model shows a positive linear association between corporate financial performance and corporate social performance. The second model shows the opposite of the first model, with a negative association between the two indicators. The third model shows that there is a positive relationship between corporate social and financial performance. These good returns are subject to diminishing and ultimately negative returns. The fourth model shows the opposite of the third model. This model shows that the returns are initially negative up to a point, before the returns become increasingly positive.

2.5.1 Relationship

The analysis of the relationship between CSR and CFP can be observed from two viewpoints. The first view is the positive view. This would suggest that adopting good CSR practices will have a positive effect on the CFP of the company or companies in question (Ramchander *et al.* 2012: 310). The second interpretation is the negative viewpoint. This would suggest that CFP is negatively affected by actions that are deemed to be good CSR practices (Chipeta & Vokwana 2011: 88).

Studies such as Ramchander et al. (2012: 312) show that there is a positive relationship between corporate social responsibility and financial performance. In their study the researchers found that "... firms that engage in effective and credible stakeholder management are rewarded with a positive share price reaction surrounding the CSR announcement." In their research the researchers found positive results for companies that were added to the KLD and/or DS400 indices, whilst companies that were removed from these indices showed negative returns. The DS400 index is an index that in essence, has a list of companies that are viewed as having better CSR performance when compared to their industry and sector peers. This study is an example of a positive relationship found when using market measures of performance.

The review undertaken by Van Beurden and Gossling (2008: 420) found that the relationship between CFP and CSR is primarily a positive relationship. The reviewers based their study on a number of factors that influence CSR and CFP both individually and holistically. The study relied on a combination of both accounting and market measures to identify the relationship between CSR and CFP.

A positive relationship between CSR and CFP has also been identified in studies that do not use conventional measures when determining the possible relationship. An example of this is the positive results identified in the study conducted by Dhaliwal et al. (2011: 94). The researchers in this study found that CSR has the positive effect of lowering a company's cost of equity capital. It is clear that positive returns have been identified regardless of the measures used to determine the link between CFP and CSR.

Most of the research that shows a relationship between financial performance and social responsibility indicates that the relationship identified is of a positive nature. However a small number of studies have produced a negative relationship. The study conducted by Chipeta and Vokwana (2011: 88) found that under certain circumstances, BEE transactions had a negative effect on shareholder wealth. The study found that under certain circumstances the added cost of BEE compliance was unnecessary when contrasted to the possible benefits.

Despite these findings, there is evidence that many previous studies undertaken have found no significant relationship between corporate social responsibility and financial performance. The studies in question found neither a positive nor a negative relationship and suggest CSR has no effect on the CFP of a company.

2.5.2 Neutral

Analyses based on stock performance both individually and buy-and-hold portfolios have identified a lack of causality between CSR and CFP. Becchetti and Ciciretti (2009: 1292) initially found that there are some differences between the financial performances of CSR companies as opposed to those not deemed to have good CSR ratings. Taking into account these slight differences, the authors proceeded to further analyse the data and eventually came to the conclusion that there is no significant difference between the risk adjusted returns from socially responsible stocks as opposed to the stocks of companies not deemed as being socially responsible.

A neutral relationship has been found when both accounting and market based measures of performance have been employed. Nelling and Webb (2009: 208) identified no direct relationship between CSR and CFP. This study went beyond just looking for a link between CSR and CFP from a numeric view point. The authors also attempted to identify specific CSR factors that could affect CFP. The results from the study indicate that there is no evidence of a relationship between aspects of CSR related to the community, diversity, or environment and share performance. The results achieved by the study are further corroborated by the conclusions reached in the study conducted by Eccles et al. (2009: 28). The researchers conducted their study based on companies listed on the JSE and applied a mixture of both accounting and marketing measures. The results from this study proved that, "There is no evidence in the data of any significant relationship between company accountability and financial performance as measured by either the holding period return (market-based measure), or return on assets (accounting based measure)."

2.6 BEE

The history of South Africa is well documented and like any other country, has an important role in determining the future of the country. BEE was first introduced in the 1990's as means of correcting the injustices that occurred during the apartheid era. It is hoped that addressing BEE issues in an appropriate manner should lead to greater socially acceptable and sustainable balances within the population of the country. One method of achieving this is by redistributing the equity of listed companies to previously disadvantaged investor groups (Wolmarans 2012: 4974).

In order to determine a company's BEE rating, the BEE scorecard was developed for use by the department of Trade and Industry. This scorecard was created with the assistance of Empowerdex, a rating agency that specialises in economic empowerment. The BEE scorecard has the following elements (Ferreira & De Villiers 2011: 23):

- Ownership
- Management
- Employment equity
- Skills development
- Preferential procurement
- Enterprise development
- Socioeconomic development

These seven different elements are assigned different weightings according to their perceived importance. The different elements are scored from a total of 100 points. Ownership counts 20 points, management control 10 points, employment equity 10 points, skills development 20 points, preferential procurement 20 points, enterprise development 10 points and socioeconomic development 10 points. Figure 3 provides an illustration of the weightings.

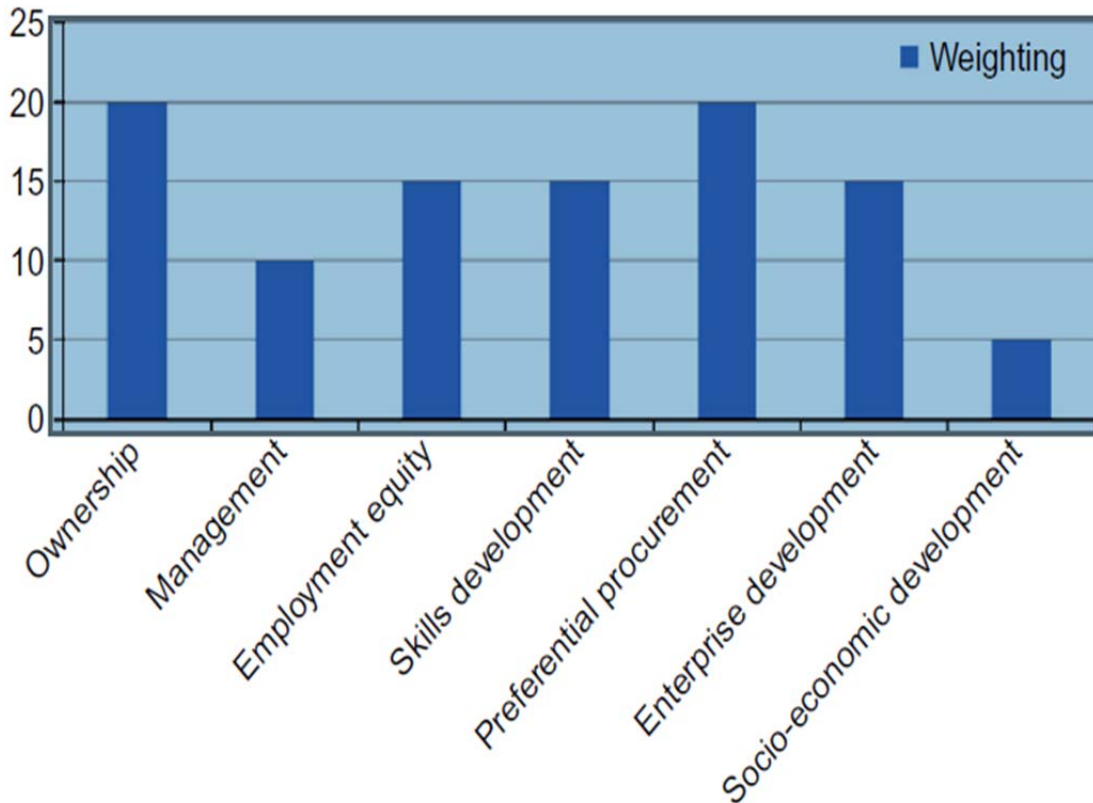


Figure 3- BEE Scorecard Weightings Source: Ferreira and De Villiers (2011: 27)

A number of the BEE related studies have chosen to focus on one particular element of the scorecard, such as the ownership element (Ferreira and De Villiers 2011: 24). The ownership element is considered one of the two most important aspects of the scorecard, hence the significant weighting it carries. All the aspects of the scorecard are of importance and complement each other, hence the decision by, Juggernath, Rampersad & Reddy (2011: 8224) to view the entire scorecard as a whole.

It has been argued that companies will only seek a better BEE score if management foresees future benefits. One method of enticing companies to increase their BEE scores is through the awarding of Government tenders and certain rights to well performing BEE companies (Hinson & Ndhlovu 2011: 340). This action, theoretically, results in two scenarios. The first scenario is that companies tend to overspend on BEE initiatives. This has the effect of furthering the BEE agenda. The second scenario is that companies expect to reap the future financial rewards of being granted certain rights or being awarded the tender (Ferreira & De Villiers 2011: 23).

The reality of the situation is quite different to the theoretical framework presented. There has been criticism of the BEE initiative due to the lack of significant progress in factors such as poverty alleviation of the masses (Hamann, Khagram & Rohan 2008: 25). Many companies have, to a certain degree, resisted the BEE programme due to concerns over losing ownership for no immediate value in exchange. This is a deterrent to both local and foreign investors (Ferreira & De Villiers 2011: 23). This has resulted in some of the independence era challenges remaining unresolved or in some cases becoming more acute as is illustrated in Table 2.

Table 2-Challenges Source Hamann, Khagram & Rohan 2008: 25

1. Poverty: In 1994, an estimated 17 million South Africans were living in poverty. This corresponded to between 35 and 40 per cent of the total population. Ten years later, it was estimated that between 45 and 55 per cent were living in poverty, which represents an increase both in absolute numbers and proportion since 1994.
2. Unemployment: In 2002, the official unemployment rate was 31 per cent, but the expanded definition, which includes those of working age who have given up looking for work was 42 per cent. Furthermore, an estimated one in five workers is employed in the informal sector, which often involves low and haphazard income.
3. Housing and basic services: In 1994, there was an estimated backlog of at least three million houses, and about 12 million South Africans lacked access to water and 21 million lacked sanitation services. Despite significant progress, the housing shortage was still between three and four million units in 2000 and 40 per cent of non-urban households still had no access to water.
4. Inequality: South Africa has one of the most unequal distributions of wealth in the world. In 1994, five per cent of the population, mostly whites, owned 88 per cent of the nation's wealth. In terms of income inequality, the Gini coefficient in 1996 was estimated at 0.69, in comparison to an average of 0.43 for industrialised countries. Since 1994, inter-racial inequality has diminished, while intra-racial inequality has increased. The Gini coefficient among black South Africans increased from 0.62 in

1994 to 0.66 in 2004. Racial inequality is compounded by significant gender and geographic inequality, with rural women being consistently the worst off according to a range of indicators.

5. HIV/AIDS: HIV prevalence among women attending antenatal clinics increased from one per cent in 1990 to 25 per cent in 2001, translating into an estimated infection rate of one in five adults.

Proponents of BEE will argue that despite the speed of implementation, BEE is a necessity in South Africa. Similar programmes such as Affirmative Action in the United States of America has been in place since the 1960's and disparity between the races still exists. In comparison with the relatively new BEE programme in South Africa it is evident that there is no quick fix to this problem. Another similar programme was undertaken in Malaysia, with very positive results in poverty reduction (Sartorius & Botha 2008:438). The results of a study conducted by the same authors, reveals that a large proportion of companies believe that BEE is essential to the sustainability of the democratic and economic structures in the country. This is a view shared by Juggernath *et al* (2011:8227), "Business has a role to play in assisting with the transformation of the social landscape through measures to promote black economic empowerment."

There are several other reasons why companies choose to adopt BEE strategies. These reasons range from a commitment to building a better country to the fear of missing out on the potential financial benefits of implementing BEE. Table 3 illustrates some of these reasons:

Table 3- Reasons for implementing BEE ownership initiative Source: Sartorius & Botha (2008: 443)

Reason	Total
BEE is essential for South Africa to sustain its economic and democratic structures	37
Companies see BEE as an opportunity to grow their business and market share	32
Companies are committed to the principles of BEE	29

Companies realise that BEE is a business imperative and that they will lose market share if BEE is not implemented	23
Companies wish to comply with requirements of their respective industry charter/legislative reasons/licences	19
A BEE ownership initiative is part of a broader BEE strategy	17
Companies hope to attract and retain black staff by implementing a BEE ownership initiative	15
Companies see an advantage in being the first mover or leading BEE company in their industry	7
The companies customers require the company to have BEE credentials	7
Companies use a BEE ownership initiative as an opportunity to raise finance	7
Companies are required by government procurement to comply with BEE requirements	5

It is evident from the table that a large percentage of companies have adopted a proactive approach to BEE. The top three reasons for implementing BEE ownership initiatives constitute 49 percentage points of the entire study. The legislative aspect to adopting the initiative is fairly small despite the legislation that has been put in place to support BEE. More companies feel the need to adhere to the industry charter when adopting BEE strategies (Hamann 2004: 280). This particular study was premised on BEE and the mining industry in South Africa. One of the effects of consultation between the players in the mining industry and Government was the adoption of a, " broad-based socio-economic empowerment charter for the South African mining industry".

The bulk of BEE studies are based on specific criteria used to determine CFP. It could be argued that BEE does not only affect the financial aspects of a company but the general performance of all the divisions within the company. Kruger (2011: 218) chose to evaluate BEE on a broad spectrum by including the effects of BEE on other department such as

marketing, operations, human resources and general functional areas. In order to evaluate these areas, 10 dimensions of business performance were used:

- Overall domestic and global competitiveness
- Service excellence and client satisfaction
- Quality and acceptance of products and services
- Productivity (for example, increased output and less waste)
- Entrepreneurial spirit with innovative new products
- Production performance (for example, lower cost and greater speed)
- Human development and staff morale
- Business ethics (for example, transparency and reputation)
- Sales and access to markets (turnover)
- Financial performance (return on investment, dividends, share price)

One aspect of research which is often neglected is the determination of how individuals in the corporate environment feel about BEE or CSR. This could indicate some of the reasoning behind either passive or aggressive strategies towards implementing these practices. Kruger (2011: 216) conducted a survey of employees in various businesses in an attempt to gauge the different attitudes towards BEE in the South African work environment. Figures 4 and 5 are an indication of the demographics of the survey and their view towards BEE.

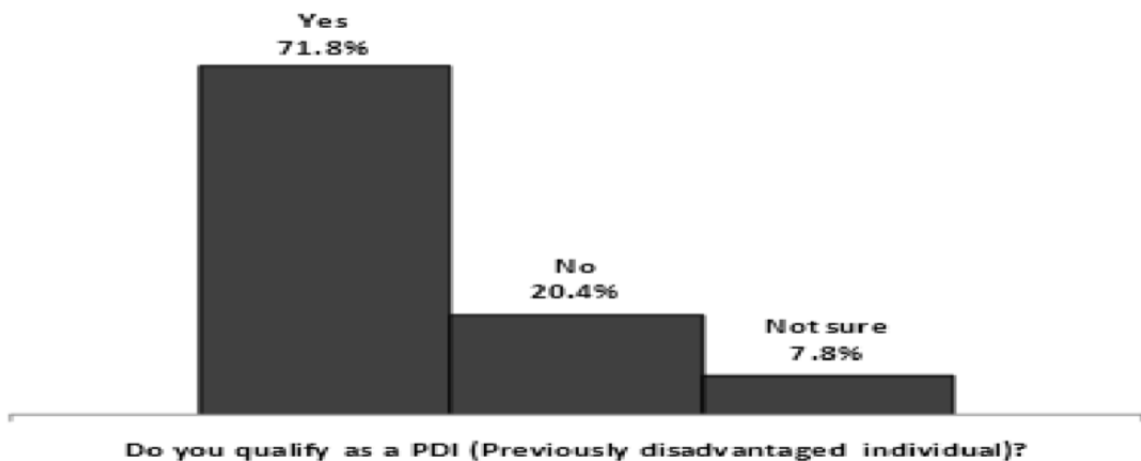


Figure 4- Kruger study demographics Source: Kruger (2011:217)

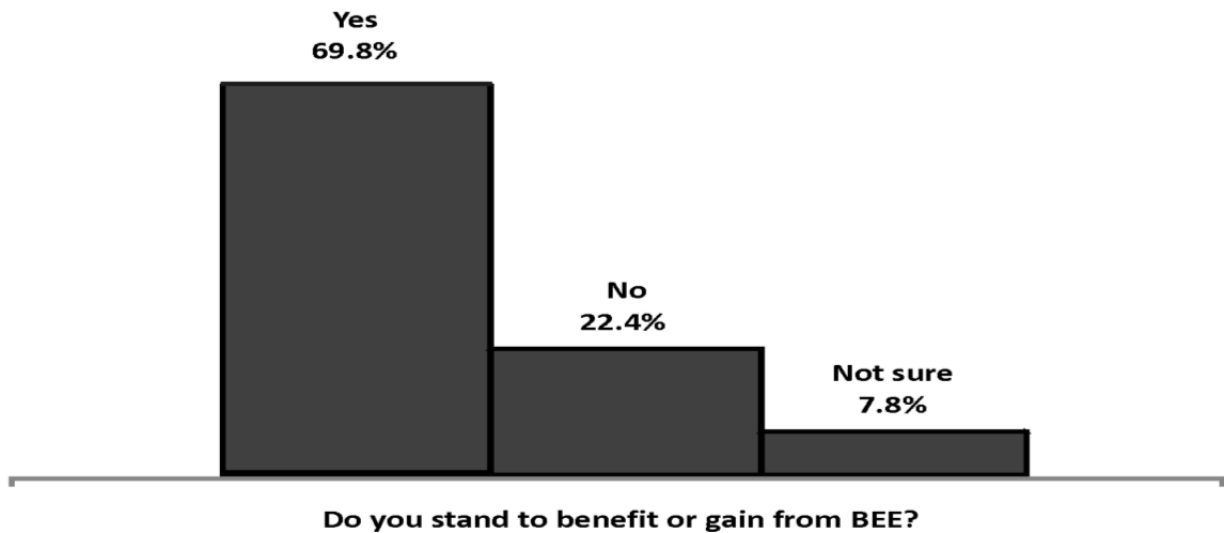


Figure 5- Kruger study BEE attitudes Source: Kruger (2011: 216)

Figures 4 and 5 present an interesting development, as despite 71.8% of the respondents being considered as previously disadvantaged only 69.8% of the respondents thought they would benefit from BEE. This shows that not all previously disadvantaged people have belief in the BEE system. A possible reason for this could be the criticism that BEE has endured over the years, for only bettering the lives of the politically connected elite (Southall 2004: 326).

BEE was further developed to create the broad-based black economic empowerment act (B-BBEE) in 2003. Some of the objectives the B-BBEE attempts to facilitate include (Kruger 2011: 209):

- (a) Promoting economic transformation in order to enable participation of black people in the economy.
- (b) Achieving a substantial change in the racial composition of ownership and management structures and in the skilled occupations of existing and new enterprises.
- (c) Increasing the extent to which communities, workers, cooperatives and other collective enterprises own and manage existing and new enterprises and increasing their access to economic activities, infrastructure and skills training.
- (d) Increasing the extent to which black women own and manage existing and new enterprises and increasing their access to economic activities, infrastructure and skills training.
- (e) Promoting investment programmes that lead to broad-based and meaningful participation in the economy by black people in order to achieve sustainable development and general prosperity.
- (f) Empowering rural and local communities by enabling access to economic activities, land, infrastructure, ownership and skills.
- (g) Promoting access to finance for black economic empowerment.

2.7 Firm Size

One important aspect to emerge from the literature is the need to factor in the effects of different firm sizes. Tang *et al.* (2012: 1287) suggest that larger firms are more inclined to have a stronger motive to engage in good CSR practices. Some of the main reasons behind this desire are:

- A desire to be industry leaders
- The avoidance of becoming targets of NGO protests or falling victim to Government regulations

- Due to the diverse nature of their operations, they are better equipped to handle more complex CSR strategies.

The effect of different firm sizes has the potential to significantly affect the reliability of the results of a given study. Van Beurden and Gossling (2008: 418) found that the effect of firm size has a certain amount of influence in the relation between CSR and CFP. Brammer and Millington (2008: 1331) describe charitable donations as a function of firm size amongst other variables. Charitable donations often lead to improvement on stakeholder views, such as customer perceptions of the CSR activities of a company. The basic model for charitable donations is stated below:

Charitable donations= f (Size, Industry, Labour intensity, Resources)

2.8 Deduction

A review of the available literature regarding the link between CSR and CFP reveals a number of interesting arguments. The first argument is the need to include both accounting and market based measures of performance. It is not merely enough to have one or the other, as they both complement each other and ensure that a holistic view of financial performance is taken into consideration (McGuire *et al* 1988: 855). Studies that focus solely on one or the other are left open to scrutiny for not including all the facets that could be factors in determining the financial performance of companies used in the study.

It is also evident from previous studies that there is no general consensus on whether CSR affects CFP. The general trend suggests a relationship exists, however there are a number of studies that have identified no significant link. This ambiguity gives premise for the need for further research to be undertaken on the topic (Ogola & Dreer 2012: 2235).

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 Description of broad research design

As has been noted in the literature a number of different research methods have been adopted with regards to this subject area. The first consideration is to determine what constitutes good CSR practices. Scholars have often used inclusion in a social responsibility database or index, as evidence of good CSR practices. Internationally the KLD Socrates database has often been used for this valuation (Chiu and Sharfman 2011: 1569). From a South African perspective, the JSE SRII performs a similar function to the KLD Socrates database and as such; for the purpose of this study, a company that is included in the JSE SRII is deemed as having good CSR practices. Inclusion in the JSE SRII is based on an application and the fulfilment of certain criteria. This criterion was developed by the JSE in consultation with an advisory committee. The advisory committee consists of independent experts from across the spectrum, which includes (JSE SRI Index 2012):

- Investment managers
- Listed companies
- Sustainability experts
- Academics and civil society

The companies are then measured against criteria across the triple bottom line, namely environment, society and economy (ESG) in addition to governance. The JSE SRII is based on different areas of measurement as is shown in Figure 6:

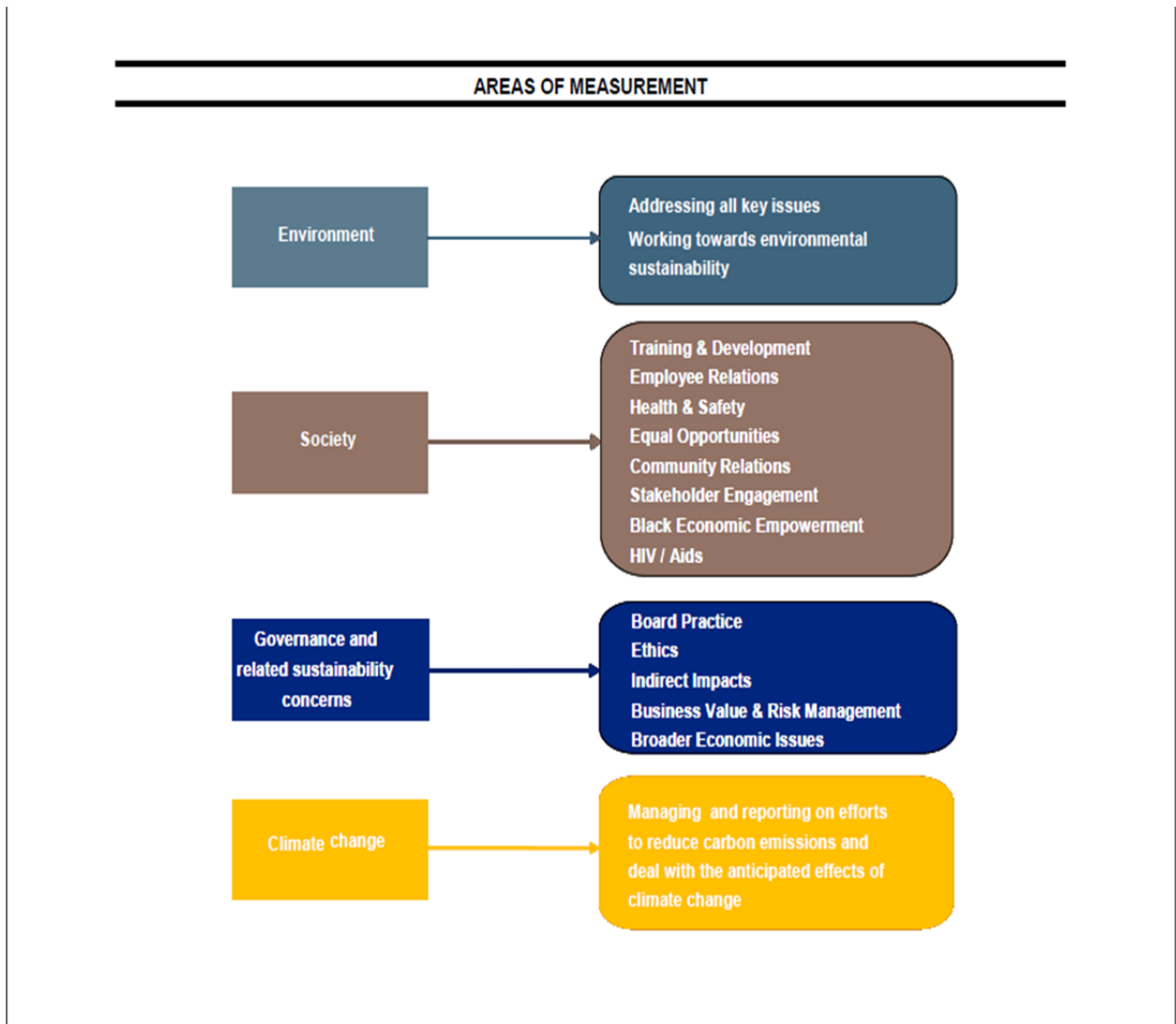


Figure 6- SRII Areas of Measurement Source: JSE SRI index 2012

Once the companies have been assessed on the measurements shown above, inclusion in the index is only granted if the company meets the minimum core and desirable indicators as set out in the criteria. The core indicators are the minimum elements that should be in place before inclusion. The desirable indicators are those that help to ensure that companies consider all the relevant issues that could affect their CSR practices.

The second important consideration when determining an appropriate research method is deciding on how to measure financial performance. The literature suggests the most commonly applied measures as being either accounting based measures or market based measures (Van Beurden and Gossling 2008: 412). A combination of accounting and market based measures is employed. This is done in order to maximise the positives whilst, as much as possible, negating the frailties relating to both measures (Nelling and

Webb 2009: 199). The ratios selected to measure the financial performance aspect of the study are as follows:

- Total Return Index (TRI)
- Market to Book Value (MB) - Book value of a firm \div Market value of the firm.
- Price Earnings ratio (PE) - Market value per share \div Earnings per share.
- Net Profit Margin % - [Net income after taxes \div Revenue] x 100.
- Return on Assets (ROA) – Net income \div Total Assets.
- Return on Equity (ROE) – Net income \div Shareholders Equity.

The TRI was selected on the basis that it is an equity based index that tracks the stock performance over time and assumes that cash distributions such as dividends are reinvested back into the index. The literature also suggests a market based measure that tracks share price growth and includes the dividends paid (Brammer and Millington 2008: 1333). The market to book value and price earnings ratio were selected on the basis that they provide good market based measurements of the financial performance of the companies (Van Beurden and Gossling 2008: 411). MB is an indication of the value of company determined by comparing its book value to its market value. PE is a valuation of a company's current share price compared to its per share earnings.

The accounting based measures employed for this study include the ROA. ROA is a commonly used measure that is very effective in determining the financial performance of a company (Tang *et al.* 2012: 1287; Eccles *et al.* 2009: 28). ROA is an indication into how efficient assets are used to generate earnings. The ROE is also a well-known and accepted measurement of financial performance. It indicates how much profit is generated from investments made by shareholders. In addition to ROA and ROE, a measure of profitability includes a profit margin ratio (Wu 2006: 164). The net profit margin ratio was selected on the basis that it provides better insight into the actual profitability of the company as opposed to the gross profit margin. This ratio shows how much profit is made for every R 1 generated in revenue.

A third consideration is the time period over which the relevant data will be collected. It is necessary to collect the data over a suitable time period, in order to provide more

consistent results to be analysed. The period of analysis was determined to be 10 years (2002 – 2011). This period takes into account the fact that the JSE SRII has been in existence since 2004, whilst also aiming to provide an appropriate amount of relevant data.

A fourth consideration is the firm sizes to be used in the comparisons. It is important to ensure that relatively similar sized companies are employed in the study to act as a control variable. Larger firms are often more visible to the public and as such face greater scrutiny over their CSR actions (Tang *et al.* 2012: 1287). This presents two possible scenarios. The first outcome is that large companies may choose to voluntarily meet their social obligations as a means of preserving their competitive advantages (Brammer & Millington 2008: 1331). This could lead to large companies over spending on CSR activities and thus affecting their CFP results. The second scenario is if the large companies, by adopting the obligations exploit the extra publicity this may attract. Any possible CSR actions that a big company may undertake are likely to receive wide spread coverage and as such if there are any CFP benefits to good CSR practices then the larger companies stand to benefit more through their greater visibility.

3.2 Sampling

The sample size is 100 companies based on the JSE's top 100 listed companies. The rationale behind the selection of the top 100 companies is that fact that included in the top 100 is wide range of companies across all the different subsectors of the JSE. This provides a broad spectrum to adequately analyse the relationship between CSR and financial performance. The sample was then split into two main groups. The groups were CSR and non CSR companies. The sample of 100 companies was cross referenced to the list of companies included in the JSE SRII. The companies that were included in the index were placed into the CSR group and those not included in the SRII were placed into the non CSR group.

Both groups were further subdivided into three sub groups. The sub groups were created through a combination of size and sector. The size of the sub groups was kept as equal in

numbers as possible, whilst the sectors were also kept as comparable as possible. The resultant sub groups created are as follows:

- Group 1: Financials
- Group 2: Industrials, energy and materials
- Group 3: Consumer staples, consumer discretionary, health care, IT telecoms.

Figure 7 is an illustration of the final breakdown of the sample.

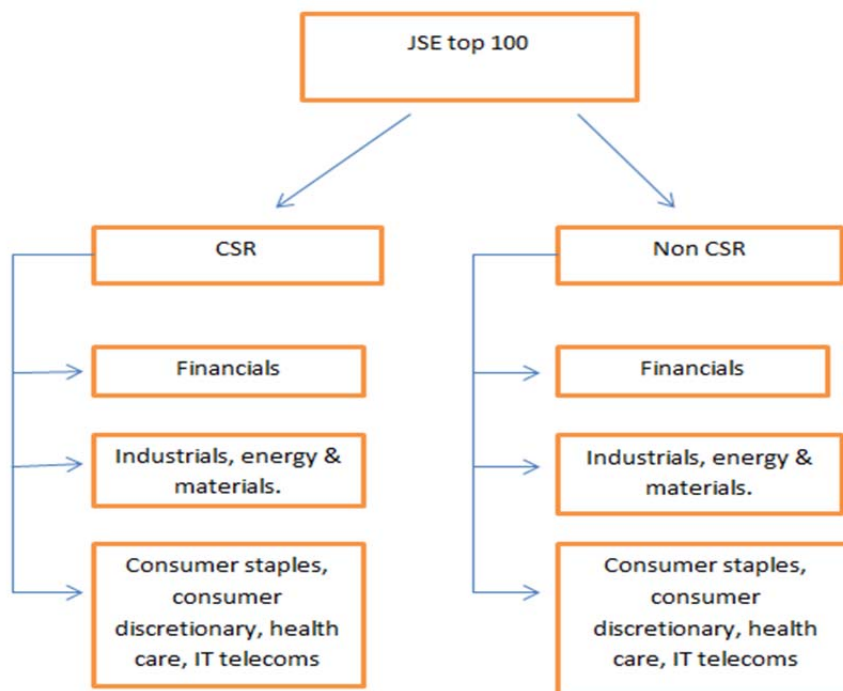


Figure 7- Sample groups

The sample was then further reduced to take into account the firm sizes. The firm size was based on the annual market capitalisation figures for the year 2011 available on the ShareData online website. (ShareData online 2012). Companies with an annual market capitalisation that was either too large or too small were excluded from the sample. The final sample consists of 68 companies with a market capitalisation range of between R 2 billion and R 50 billion. This sample size was derived after taking into consideration the need to have an appropriate overall sample size and appropriate sample sizes within the particular groups.

3.3 Data Collection

The data was collected from the McGregor BFA database (McGregor BFA 2012) and the annual financial statements. The database contains information relating to all six of the ratios used in the study and contains at least ten years' worth of annual data for a large proportion of the JSE's top 100 listed companies. In some cases the data for specific companies is incomplete over the ten year time period (2002 – 2011). In such circumstances a background check on the company in question was undertaken.

Often the missing data was due to a change in the company's name or the company was recently formed. In the circumstances where there was a change of company name, the ratios were computed using the information on the annual financial statements under the previous company for the missing data points. The ratios were calculated based on the description of the ratios provided on the McGregor BFA database (McGregor BFA 2012). Listed companies on the JSE are required to adhere to the JSE listing requirements which include the appointment of a sponsor. Sponsors are normally corporate brokers, bankers and other such professional advisors, including accountants and attorneys. The sponsor ensures compliance to, amongst others, the International Financial Reporting Standards (IFRS) (JSE listing requirements 2012). These stringent requirements ensure that the information published in the annual financial statements is a true reflection of the company's financial standing.

In the specific case relating to banks, the NPM was calculated using a proxy. The proxy involved the use of the total revenue line item in the supplementary data for banks section found on the McGregor BFA database (McGregor BFA 2012). This figure was used to replace the turnover line item on the income statement of the banks.

Outliers were excluded from the data based on a calculation of standard deviations of the different ratios. Any data that was more than three standard deviations away from the mean was considered an outlier. The outliers were excluded to provide more consistent data and avoid basing the analysis on skewed data.

CHAPTER 4

RESULTS AND DISCUSSION

The sample size was reduced from the original JSE top 100 to 68 companies of a relatively similar size based on the annual market capitalisation of the companies. The largest and smallest companies in the different sub groups, henceforth referred to as sectors, were eliminated. Table 4 shows the original mean values of the companies and the mean values of the adjusted final sample.

Table 4- Sample means

	Sector	Original (Rm's)	Revised (Rm's)
SRII	1	63662.27	29310.50
	2	72224.14	14978.42
	3	78942.50	24208.21
Non SRII	1	17141.80	17141.80
	2	9797.63	14803.20
	3	121310.50	17892.00

The SRII sector 1 mean was decreased drastically from R 63 662.27 million to R 29 310.5 million, thus making it more comparable with the non SRII sector 1 mean of R 17 141.80 million. The SRII sector 2 mean was decreased from R 72 224.14 million to R 14 978.42 million, whilst the non SRII sector 2 mean was increased from R 9797.63 million to R 14 803.20 million. The final sector 2 means for both SRII and non SRII companies are very similar. The final SRII sector mean was decreased from R 78 942.50 million to R 24 208.21 million. The final non SRII sector mean was also decreased from R 121 310.50 million to R 17 892 million.

This data was placed into the Statistical Analysis Systems (SAS) computer programme on the mainframe of the University of Pretoria for analysis and obtaining results.

3.4 Parametric tests

The results of the mean, standard deviation and the extreme values are shown in Table 5. SRII=1 is equivalent to the SRII companies, whilst SRII=2 is equivalent to the non SRII companies.

Table 5- Means, standard deviations and extreme values

SRII =1					
Variable	N	Mean	Std Dev	Minimum	Maximum
TRI	410	16.00	36.76	-68.24	232.24
ROA	403	14.32	11.22	-14.17	65.83
NPM	389	10.11	28.45	-396.99	275.12
PE	405	12.04	20.07	-122.64	237.37
ROE	406	20.21	19.16	-56.34	129.6
MB	403	2.78	2.96	0.24	21.83
SRII=2					
Variable	N	Mean	Std Dev	Minimum	Maximum
TRI	204	22.78	37.20	-75.22	180.40
ROA	200	16.07	12.30	-73.40	49.71
NPM	191	41.02	74.34	-172.35	325.38
PE	198	11.12	12.00	-55.70	101.53
ROE	199	21.66	18.39	-33.00	88.93
MB	204	2.46	1.99	0.20	14.74

A method of obtaining more meaningful analysis of the results is by conducting a sector analysis. Each SRII group and the different sectors were cross referenced. The mean figures of the different sectors are shown in Table 6.

Table 6- Sector means

	Variable	Sector 1	Sector 2	Sector 3
SRII = 1				
	TRI	15.39	14.22	18.80
	ROA	8.22	14.84	17.89
	NPM	16.09	7.97	9.33
	PE	8.38	13.12	13.15
	ROE	15.27	20.04	23.97
	MB	2.44	2.58	3.28
SRII = 2				
	TRI	27.19	16.08	20.55
	ROA	13.59	17.09	18.54
	NPM	84.39	10.09	7.69
	PE	10.89	9.55	12.07
	ROE	21.46	19.71	22.77
	MB	1.72	2.79	3.19

An analysis of variance (ANOVA) was conducted at a five per cent level of significance to test if there were differences between the mean figures provided in both Table 5 and 6. The test indicates any differences between the SRII groups and the sectors for all the ratios calculated. The sector differences were also tested individually by means of a cross effect between SRI and sector.

The results obtained for the PE, ROE and MB ratios indicate that no significant differences occur between both the different SRII groups and the different sectors. For these ratios, this result shows that there is no significant relationship between CSR and CFP. The result of the ANOVA's conducted for these ratios are presented in Appendix B.

3.4.1 Total Return Index

An ANOVA was conducted to test for the differences between the TRI results based on the SRII groups, the sectors and the years. The results are shown in Table 7.

Table 7- TRI ANOVA results

Source of variation	Degrees of freedom	ANOVA SS	Mean Square	F-value	P-value
SRII	1	6259.5983	6259.60	6.68	0.0100
Sector	2	4877.2722	2438.64	2.60	0.0748
Year	9	267282.7860	29698.09	31.71	<.0001
SRII* Sector	2	534.2362	267.1181	0.29	0.7520
Model	14	278953.8927	19925.2780	21.27	<.0001
Error	599	561047.4737	936.6402		
Corrected Total	613	840001.3663			

From the results it is evident that there is a significant difference in the means between the two SRII groups. The decision variable employed is the p-value. Table 5 shows the actual mean figures, for the TRI this indicates that companies that are considered non SRII companies perform better than SRII companies. The difference between the sectors is only significant at a 10% level of significance. For the purposes of this study this value is not considered significant. The cross effect of SRII group and sector reveals no significant difference for the TRI. The overall effect of these results suggests a negative relationship between CSR and CFP.

3.4.2 Return on Assets

An ANOVA was conducted to test for the differences between ROA results based on the SRII groups, the sectors and the years. The results are shown in Table 8.

Table 8- ROA ANOVA results

Source of variation	Degrees of freedom	Anova SS	Mean Square	F-value	P-value
SRII	1	407.7041	407.7041	3.39	0.0663
Sector	2	5123.9253	2561.9626	21.27	<.0001
Year	9	3692.3121	410.2569	3.41	0.0004
SRII*Sector	2	1066.9449	533.4724	4.43	0.0123
Model	14	10290.8866	735.0633	6.10	<.0001
Error	588	70817.2880	120.4375		
Corrected Total	602	81108.1747			

The difference between SRII groups for the ROA is not meaningful at a 5% level of significance. The cross effect between SRII and sector does indicate a significant difference in mean values. Table 6 shows that the best performing sector with regards to ROA is the non SRII sector 3, whilst SRII sector 1 is the worst performing sector. This implies a negative relationship between CSR and CFP.

3.4.3 Net Profit Margin

An ANOVA was conducted to test for the differences between NPM results based on the SRII groups, the sectors and the years. The results are shown in Table 9.

Table 9- NPM ANOVA results

Source of variation	Degrees of freedom	Anova SS	Mean Square	F-value	P-value
SRII	1	122389.0878	122389.0878	67.83	<.0001
Sector	2	206267.6527	103133.8264	57.16	<.0001
Year	9	70216.2063	7801.8007	4.32	<.0001
SRI*Sector	2	67954.5638	33977.2819	18.83	<.0001
Model	14	466827.511	33344.822	18.48	<.0001
Error	567	1019478.994	1804.388		
Corrected Total	579	1486306.505			

It is clear from the results that significant differences exist between all the variables tested with regards to NPM. The value of the NPM means, as shown in Table 5, shows that non SRII companies perform better than SRII companies. A closer look at Table 5 indicates that the magnitude of these differences could be affected by the maximum value for the non SRII group and the low minimum value for the SRII group. Table 6 also indicates an extraordinarily high mean value for the non SRII group sector 1 in contrast to the other sector mean values. These values could cause the data to be skewed and affect the credibility of this testing method in determining the nature of the relationship between CSR and CFP. Non parametric testing was conducted as a possible technique to overcoming this concern.

3.5 Non Parametric Tests

The results so far are based on parametric tests, the assumption being that the data is based on a normal distribution. The ANOVA's were conducted on the mean values. It is worthwhile to consider non-parametric tests, such as the Kruskal-Wallis test to determine if there are differences in the median values of the SRII groups and sectors. The median values may be a better indication to use in the analysis of the results as opposed to the means. This is due to the median being less affected by extreme values. The Kruskal-Wallis test is an appropriate tool that has been adopted to identify differences in the median values (Wolmarans 2012: 4977). Table 10 shows the median results obtained after the PROC UNIVARIATE procedure was conducted.

Table 10- Median values

	Variable	Median
SRII=1	TRI	13.91
	ROA	11.91
	NPM	6.15
	PE	11.23
	ROE	18.36
	MB	1.96

SRII=2	TRI	20.26
	ROA	16.84
	NPM	12.23
	PE	10.94
	ROE	19.11
	MB	1.92

An analysis of the differences in the median values between the SRII groups was conducted for all the ratios. The p-value results obtained from Kruskal-Wallis test after the PROC NPAR1WAY procedure was conducted are shown in Table 11.

Table 11- Kruskal-Wallis test values

Variable	Chi square value	Degrees of freedom	p-value
TRI	5.6517	1	0.0174
ROA	18.5502	1	<.0001
NPM	37.2641	1	<.0001
PE	0.0621	1	0.8033
ROE	1.0050	1	0.3161
MB	0.7437	1	0.3885

The results indicate no significant difference between the median values for the PE, ROE and MB ratios. This would suggest no relationship between CSR and CFP for these ratios. The p-value for the TRI shows that there are differences in the mean values. The figures in Table 10 indicate that non SRII companies perform better than SRII companies, as the median value is much higher for the non SRII group.

The p-value for ROA shows a relationship between CSR and CFP for this ratio. An analysis of the mean values for ROA in Table 10 suggests that non SRII companies have a better ROA than their SRII counterparts. This assessment is also true in the analysis of the NPM figures. Despite the use of median values, the figures relating to the NPM analysis could still be affected by the high percentage of large values found in the non SRII sector 1 data.

3.6 Revised Results

Further analysis of the data revealed unusually high values in the NPM for sector 1 of both the CSR and non CSR groups. These values were derived from various property companies included in the sample. In order to present a more accurate reflection of the relationship between CSR and CFP, sector 1 has been omitted from both SRII groups and the non-parametric statistical calculations have been re calculated.

3.6.1 Revised Non-Parametric Tests

Table 12 shows the median values for the different SRII groups and sectors 2 and 3 based on the ratios calculated. The PROC UNIVARIATE procedure on the SAS computer programme was used to calculate the values.

Table 12- Sector 2 and 3 median values

	Variable	Sector 2	Sector 3
SRII=1	TRI	8.70	16.94
	ROA	11.37	16.36
	NPM	4.96	7.77
	PE	10.84	12.09
	ROE	16.47	20.54
	MB	1.89	2.24
SRII=2	TRI	11.25	21.25
	ROA	21.43	17.95
	NPM	9.96	7.59
	PE	9.92	11.84
	ROE	24.16	19.41
	MB	2.45	2.21

An analysis of the differences in the median values between the SRII groups was conducted for all the ratios. The PROC NPAR1WAY procedure was conducted in order to achieve the Kruskal-Wallis test. The results obtained are shown in Table 13.

Table 13- Kruskal-Wallis test results sector 2 and 3

Variable	Chi square value	Degrees of freedom	p-value
TRI	1.4966	1	0.2212
ROA	13.8267	1	0.0002
NPM	3.8089	1	0.0510
PE	0.0126	1	0.9106
ROE	0.6740	1	0.4117
MB	3.0072	1	0.0829

The figures in Table 13 show that there appear to be significant differences between the median values of the SRII groups with regards to the TRI, PE, ROE and MB ratios. The MB value is only significant at a 10% level of significance. This indicates that no significant relationship exists between CSR and CFP. The p- value for ROA shows that a significant difference exists between the medians. An analysis of the median values in Table 12 shows that the non SRII group has a higher ROA in both sector 2 and 3. The median values for the NPM can also be considered different based on the p-value. The non SRII group also out performs the SRII group for this ratio, albeit only marginally.

3.7 Discussion

When there is a difference between either the mean or median value the non SRII companies have performed favourably compared to the SRII companies. Some of those differences can be explained by the high values in the non SRII group sector 1, however even when sector 1 is omitted from the sample the trend remains the same.

The TRI is a measurement of the stock performance with cash distributions reinvested back into the index and as such it could be considered the most important of the six variables employed. The TRI is more than just an accounting or market based measure as it is an indication of investor's perception of the company whilst being cognisant of the company's actual performance. The non SRII group is superior in both the mean and median value analysis of the TRI. There are a number of scenarios that could possibly explain this result. One possible explanation is that investors do not view CSR as being deciding factor in their investment decision. Another possible scenario is that, despite the

seemingly lack of good CSR practices, the non SRII companies do in fact perform better than their SRII counterparts.

It could also be the case that the costs involved in maintaining good CSR practices affect the amount of cash distributions that the SRII companies could dispense and as such cause lower TRI figures. It should be noted that when a sector was omitted from the analysis of the medians, there was no significant difference between both SRII groups. This suggests that the difference in the TRI comes from the non SRII sector 1 companies.

The non SRII group has higher ROA values that are significant in all the tests conducted apart from the mean. When coupled with the results from the NPM, it is fair to surmise that there is a relationship between CSR and CFP. The NPM results also show the non SRII group performing better in all the tests conducted. Even when the high values for the NPM in sector 1 were omitted the results were still positive for the non SRII group. Based on the results of these two ratios it would be fair to conclude that there is a relationship between CSR and CFP. This is evidenced by the results showing that on average non SRII companies perform better than their SRII counter parts.

The analyses of the PE, ROE and MB ratios revealed no significant differences between both the median and the mean values between the two SRII groups. This shows that no relationship between CSR and CFP exists for these three ratios. Table 14 is an illustration of the areas where the non SRII companies outperform the SRII companies. The (X) denotes a result were the non SRII group outperforms the SRII group, whilst the (=) denotes a result were no significant difference was found.

Table 14- Summary of results

Variable	Mean	Sector Analysis	Median	Median(less sector 1)
TRI	X	=	X	=
ROA	=	X	X	X
NPM	X	X	X	X
PE	=	=	=	=
ROE	=	=	=	=
MB	=	=	=	=

CHAPTER 5

CONCLUSION

The main objective of this study was to determine the nature of the relationship between CSR and CFP within the South African context. The findings indicate a mixture of results. In some cases a relationship was established, whilst in other cases there was no significant relationship. The literature supports both these scenarios. Becchetti and Ciciretti (2009: 1292) found no significant relationship between CSR stocks and CFP. It is suggested that the reason for this is based on the possibility of CSR investors being more patient than non CSR investors and as such any positive effects relating CSR are yet to be fully experienced. Nelling and Webb (2009: 208) also find no causality between CSR and CFP with relation to the community, diversity or the environment. Minimal evidence of causality was found only when CSR and stock returns were examined. These findings support the results shown by the analyses of the PE, ROE and MB ratios.

The tests that did show some form of causality between CSR and CFP were the TRI, NPM and ROA ratio. This causality is supported by the conclusions derived by Ramchander *et al.* (2012: 312). Companies that engaged in exemplary stakeholder management were rewarded with positive stock reactions to the CSR announcements. The study found that CSR activities aid in the creation of a competitive advantage that ultimately leads to the creation of long term value for shareholders.

Tang *et al.* (2012: 1288) found that an analysis of the ROA as a measure of CFP indicates a relationship between CSR and CFP. However, in contrast to the findings of this study, that relationship was deemed to be a positive relationship. As discussed earlier, all the areas in which a link between CSR and CFP was identified suggested that the link between CSR and CFP is negative in nature. This negative relationship was also determined by Chipeta and Vokwana (2011: 88). This outcome was based on the analysis of BEE transactions being the driving force behind the determinant of good CSR practices.

Arguments for both a negative relationship and a neutral relationship have been presented and corroborated. The ratios that imply neutral relationships are accounting based ratios and as such their importance in the determination of an outcome can be considered limited. The TRI is a good indication of actual company performance and stakeholder perceptions of a company. Stakeholder perceptions include those of the investors, the community and employees. It is fair to assume that TRI is of greater importance as the TRI provides a more complete view of both CSR and CFP and the relationship between the two. The study concludes that there is a relationship between CSR and CFP.

The findings of the study would suggest that there is a relationship between CSR and CFP as on average the non SRII companies perform better than their SRII counter parts. It may be argued that, whilst this relationship exists currently, it may not provide the whole picture when examining CSR and CFP. South Africa is still a relatively young, developing country and as such CSR practices, views and effects may yet to be fully realised. As the market continues to grow, different factors will take on greater significance. One of these factors may well be the influence of good CSR practices. Ofori (2006: 31) alluded to the notion that the greater the international influence on a company in a developing country, the more wholesome their attitude towards CSR becomes. The adoption of good CSR practices should be encouraged despite the fact that the CFP payoffs are yet to be experienced.

5.1 Areas for further study

One possible area for further study would be to investigate the changes in the relationship between CSR and CFP over a given time period intervals. Brammer and Millington (2008: 1328) suggest that the results relating to CSR and CFP might not be purely linear and as such are could be subject to diminishing returns. A method of achieving this could be to analyse the relationship between CSR and CFP at two to three year intervals and plot the results to gain insight into the trends that exist. This could further enhance this study, as the current results could be part of a greater shift in the relationship between CSR and CFP.

Another area for further study could be to investigate the pre and post CFP of companies that have been added to SRII since its inception. This would provide information relating to

the actual effects of joining the index and help to determine if the costs of good CSR practices are perhaps a major influencing factor that has led to the results attained in the study.

Another area of further study would be to determine the actual activities that CSR firms undertake. It would be beneficial to know just how many CSR activities companies on the JSE SRII carry out when compared with their non SRII counterparts. A scenario could exist where there is a very fine margin between being considered socially responsible and not. In addition to this further research, it would be of value to determine the expenses that the different SRII groups incur for their CSR activities. By analysing the expenses for both group sets, it is possible to identify if the lower CFP performance is as a result of the added CSR expense or not.

A further area of possible study could include adjustments to the measures of CFP. The use of six measurements provided significant results on only half of the measures employed. The addition of extra accounting and market based measures could help to identify a more comprehensive conclusion as to the relationship between CSR and CFP. By broadening the definition of CFP to, for example, business performance a greater understanding of the true effects of adopting good CSR practices could be explored. It could worthwhile to create specified measures of performance based on a range of factors such as:

- The environment
- The community
- Marketing
- Financial aspects
- Employee relations

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APPENDIX A

Table 15- Sample questionnaire Source: Turker (2009: 418).

CSR Scale

1. Our company provides a wide range of indirect benefits to improve the quality of employees' lives.
2. The employees in our company receive a reasonable salary to maintain an acceptable quality of life.
3. Our company policies provide a safe and healthy working environment to all its employees.
4. Our company supports employees who want to acquire additional education.
5. There are sufficient numbers of opportunities to develop my skills in my current job.
6. Our company policies encourage the employees to develop their skills and careers.
7. Our company implements flexible policies to provide a good work & life balance for its employees.
8. The management of our company is primarily concerned with employees' needs and wants.
9. The managerial decisions related with the employees are usually fair.
10. I believe that our company provides equal opportunities to all its employees.
11. One of the main principles of our company is to provide high-quality products to its customers.
12. Our products comply with the national and international standards.
13. The guarantee extension of our products is the most advantageous choice in the market.
14. Our company provides full and accurate information about its products to its customers.
15. Our company respects consumer rights beyond the legal requirements.
16. Customer satisfaction is highly important for our company.
17. Our company is responsive to the complaints of its customers.
18. Our company is known as a respected and trustworthy company.
19. Our company emphasizes the importance of its social responsibilities to the society.
20. Our company contributes to schools, hospitals, and parks according to the needs of the society.
21. Our company contributes to campaigns and projects that promote the well-being of the society.
22. Our company endeavours to create employment opportunities.
23. Our company always pays its taxes on a regular and continuing basis.
24. Our company complies with legal regulations completely and promptly.
25. Our company tries to help the government in solving social problems.
26. Our company acts legally on all matters.
27. Our company's main principle is honesty in every business dealing.
28. Our company cooperates with its competitors in social responsibility projects.
29. Our company competes with its rivals in an ethical framework.
30. Our company always avoids unfair competition.
31. Our company implements special programs to minimize its negative impact on the natural environment.
32. Our company participates in activities which aim to protect and improve the quality of the natural environment.
33. Our company has the necessary equipment to reduce its negative environmental impact.
34. Our company makes well-planned investments to avoid environmental degradation.
35. Our company targets sustainable growth which considers future generations.
36. Our company makes investment to create a better life for future generations.
37. Our company makes investments to create employment opportunities for future generations.
38. Our company conducts research & development projects to improve the well-being of society in the future.
39. Our company makes sufficient monetary contributions to charities.
40. Our company encourages its employees to participate in voluntarily activities.
41. Our company supports nongovernmental organizations working in problematic areas.
42. Our company considers every warning of nongovernmental organizations.

APPENDIX B

Table 16- PE ANOVA results

Source of variation	Degrees of freedom	ANOVA SS	Mean Square	F-value	P-value
SRII	1	114.2411	114.2411	0.37	0.5453
Sector	2	1187.5245	593.7622	1.90	0.15
Year	9	5896.1776	655.1308	2.10	0.0278
SRI*Sector	2	591.5840	295.7920	0.95	0.3881
Model	14	7789.5275	556.3948	1.78	0.0376
Error	588	183440.2433	311.9732		
Corrected Total	602	191229.7707			

Table 17- ROE ANOVA results

Source of variation	Degrees of freedom	ANOVA SS	Mean Square	F-value	P-value
SRII	1	279.1775	279.1775	0.82	0.3660
Sector	2	2851.2565	1425.6282	4.18	0.0158
Year	9	9999.8083	1111.0898	3.26	0.0007
SRI*Sector	2	1540.3764	770.1882	2.26	0.1054
Model	14	14670.6189	1047.9014	3.07	0.0001
Error	590	201224.3753	341.0583		
Corrected Total	604	215894.9942			

Table 18- MB ANOVA results

Source of variation	Degrees of freedom	ANOVA SS	Mean Square	F-value	P-value
SRII	1	13.9243	13.0243	2.10	0.1482
Sector	2	134.9857	67.4928	10.16	<.0001
Year	9	236.5742	26.2860	3.96	<.0001
SRI*Sector	2	11.3074	5.6537	0.85	0.4275
Model	14	396.7918	28.3422	4.27	<.0001
Error	592	3932.6542	6.6429		
Corrected Total	606	4329.4460			