

THE RELATIONSHIP BETWEEN CORPORATE SOCIAL  
INVESTMENT AND ENTITY FINANCIAL PERFORMANCE

By

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## DECLARATION OF ORIGINAL WORK

I, **Lorindi Joubert**, declare that this minor dissertation is my own unaided work. Any assistance that I have received has been duly acknowledged in the dissertation. It is submitted in partial fulfilment of the requirements for the degree of Master of Commerce at the University of Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

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## ABSTRACT

The concept of social responsibility has been in existence for centuries, but the modern notion of corporate social investment (CSI) only emerged in the 1950s. Since then, the adoption of initiatives and integration of CSI by corporations has seen a steady growth, primarily driven by stakeholders. The rise of CSI can also be attributed to a better understanding of its associated business benefits. The relationship between CSI and company performance has been investigated since the mid-1970s and consensus about this relationship has still not been reached. In this study, secondary data from company reports is used to perform a panel regression analysis to determine the relationship between CSI and company financial performance for 30 South African companies listed on both the FTSE/JSE Socially Responsible Investment (SRI) Index and FTSE/JSE Top 40 Index for the period 2010 to 2013. The relationship between the financial performance measures, return on assets (ROA), earnings per share (EPS) and CSI was confirmed as positive while the relationship between CSI and return on equity (ROE) was confirmed as negative. Mixed or inconsistent results makes it impossible to support the notion of a positive or negative relationship for the study overall. The results of this study only prove a relationship between CSI and financial performance in South Africa for the relevant companies and cannot therefore be generalised.

Key words: Corporate Social Responsibility (CSR), Corporate Social Investment (CSI), FTSE/JSE Social Responsible Investment (SRI) Index, financial performance

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# CHAPTER 1 – INTRODUCTION AND BACKGROUND TO THE STUDY

## 1.1 Introduction

Although Corporate Social Responsibility (CSR) is a concept that has been in existence for centuries in one form or another, the modern era of CSR commenced in the beginning of the 1950s (Carroll, 1999). Frank Abrams, a former executive with Standard Oil Company, introduced the notion of management's broader responsibilities as early as 1951. He highlighted the importance of not just thinking about profit, but also about company employees, customers and the public (Abrams, 1951). However, formal writing on CSR is largely a product of the twentieth century (Carroll, 1999).

The term 'Corporate Social Responsibility' (CSR) is used globally to describe good corporate citizenship. In South Africa, however, the phrase 'Corporate Social Investment' (CSI) is preferred, with businesses responding more positively to the concept of 'investment' than to 'responsibility'. For the purposes of this study, which focuses on companies listed on the South African FTSE/JSE SRI Index, 'CSR' will therefore be referred to as 'CSI'.

CSI is a very relevant topic and few are those who have not come into contact with the notion in one way or another. Discussion of CSI appears in the workplace or in the media on an almost daily basis (Carroll & Shabana, 2010). Stakeholders are therefore well aware of the value of CSI and companies cannot deny the importance of balancing social and financial responsibilities in order to meet the demands of stakeholders (Kocmanová, Hrebicek & Docekalova, 2011).

The growing awareness of CSI has led to greater calls for access to information on company involvement in CSI initiatives. As a result, CSI reporting has gained in importance (Kocmanová et al., 2011) since non-financial information is now considered as important as financial information (Dragu & Tudor-Tiron, 2012; Verschoor, 2011). If one examines the nature of information that companies issue on sustainability (Dragu & Tiron-Tudor, 2011) it is clear that companies do indeed value engagement with their stakeholders.



However, approaches to CSI differ from company to company with many factors playing a role in the level of commitment to CSI. For example, some companies may consider that the costs do not justify the benefits of CSI (Tsoutsoura, 2004) whereas others consider that CSI investment does result in improved financial performance (Mittal, Sinha & Singh, 2008; Preuss, 2011).

This study will explore the relationship between CSI in monetary terms and financial performance in South African companies forming part of the Johannesburg Stock Exchange Social Responsible Investment Index (FTSE/JSE SRI Index).

Chapter 1 sets the background to this study, explains factors identified from literature, formulate the research problem, define the research methodology, contextualise the relevance of the study and explain the limitations and the demarcation of the study.

## 1.2 Background

Most would agree that there is no single definition of CSI (Schwartz & Saiia, 2012). Diverse interpretations of CSI exist in different parts of the world, with companies reacting differently in their understanding and approach to CSI issues (Dobers & Halme, 2009).

McWilliams and Siegel, (2000), Margolis and Walsh, (2003) and Schwartz and Saiia, (2012) define CSI as un compelled activities that a company engages in to further social good, beyond the interests of the company. Aguilera, Rupp, Williams and Ganapathi, (2007) agree that most of the definitions relate to voluntary actions and practices undertaken by companies relating to business ethics, social and environmental concerns, community involvement as well as investment in communities, human relations and relationships with employees. Essentially, the definition of CSI centres on voluntary actions (Carroll, 1979; McWilliams & Siegel, 2000; Margolis & Walsh, 2003; Schwartz & Saiia, 2012; Aguilera et al., 2007) which are taken by a company to improve social, (McWilliams & Siegel, 2000; Margolis & Walsh, 2003; Schwartz & Saiia, 2012; Aguilera et al., 2007), environmental (Surroca, Tribo & Waddock, 2010; Aguilera et al., 2007) and economical (Carroll, 1979) conditions for all stakeholders (Surroca et al., 2010; Aguilera et al., 2007).

Advocates of a business case for CSI see it as a positive undertaking and argue that it improves financial performance, increases sales, productivity and customer loyalty, improves quality and enhances brand image and reputation. Over the last years, companies increasingly noticed the business benefits of investing in CSI (Mittal et al., 2008; Preuss, 2011).

Opponents of CSI, on the other hand, point to the costs associated with CSI which may put companies at an economic disadvantage (McGuire, Sundgren & Schneeweis, 1988). These challengers of CSI see it as a negative undertaking which reduces the time that top management and CEOs spend on their core function of managing a company (Mittal et al., 2008; Schwartz & Saiia, 2012; Wood, 2010) and shifts the focus away from maximising shareholder value (Lagoarde-Segot, 2011). Carroll and Shabana, (2010) refer to the Nobel Prize-winning economist, Milton Friedman, who argued that social issues were not the concern of business, that companies were ill-prepared to solve social issues and would make themselves less competitive globally by pursuing CSI.

Despite the views of detractors, CSI has nonetheless increased in prominence with a growing number of companies interested in generating benefits for both the company and its key stakeholders through CSI initiatives (Carroll & Shabana, 2010). This interest can be attributed in no small measure to pressure exerted by stakeholders (Mittal et al., 2008). It should be noted that the profile of stakeholders themselves has changed since the first half of the twentieth century: these now represent a much broader cross-section of society than before and are not limited to mere providers of capital but have come to include customers, employees, suppliers and members of government, to name but a few.

Stakeholders thus expect companies to be, and be seen as, good corporate citizens (King, 2009). As a result, emerging trends include embedding sustainability into a company's core business strategy and culture and working to integrate sustainability metrics into financial reporting (Ernst & Young, 2012a). This has in turn led to a rise in reporting on social and environmental performance in annual and sustainability reports (Ballou, Heitger & Landes, 2006; Blanco & Souto, 2009).

According to Pounder, (2011) current trends in sustainability reporting include, standardisation, globalisation, escalation and integration. In an October 2010 research report by Ernst & Young, it was concluded that more than two-thirds of the Fortune Global 500

companies now produce some form of sustainability report (Ernst & Young, 2010). Whereas in the past sustainability reporting was performed in addition to financial reporting (King, II), it is now, in accordance with King III, integrated with financial reporting (Institute of Directors in Southern Africa, 2009). The production of a single report covering both finance and sustainability enables stakeholders to make more informed assessments on the economic value of a company. Sustainability reporting has now become a widely accepted practice in South Africa which is an emerging market leader in the field (Institute of Directors in Southern Africa, 2009).

The implementation of CSI differs from company to company. Company size, the type of industry, business culture, stakeholder demands and the attitude of the company towards CSI determines the extent of CSI implementation. Some businesses choose to integrate CSI into all aspects of operations, while others chose to focus on an area of CSI where they believe they can make the biggest impact (Tsoutsoura, 2004).

Whatever the selected approach, for implementation to be successful, buy-in from both management and employees is essential. CSI should thus form part of the objectives and values of the company (Tsoutsoura, 2004). In addition, CSI initiatives should have bottom-line benefits as this facilitates sustainability (Carroll & Shabana, 2010; Demacarty, 2009; Falkenberg & Brunsæl, 2012; Graves & Waddock, 1994; Lagoarde-Segot, 2011; McGuire, Sundgren, & Schneeweis, 1988; Preuss, 2011; Rettab, Brik, Ben & Mellahi, 2008; Tsoutsoura, 2004; Ullmann, 1985; Wood, 2010) by engaging stakeholders, forging working partnerships, monitoring and evaluating projects, replicating and scaling successful models, building knowledge-sharing mechanisms and reporting on CSI (Skinner & Mersham, 2008).

CSI can be linked to a number of bottom-line benefits. Companies that implement CSI tend to attract loyal customers due to enhanced brand image and reputation associated with doing social good. The benefits of CSI can also increase a company's appeal as an investment option and, as such, improve its ability to attract capital and trading partners. Furthermore, companies that are perceived as having a strong CSI commitment are likely to attract and retain more employees (Tsoutsoura, 2004; Chavez & Jodi, 2011; Blanco & Souto, 2009; Orlitzky, Schmidt, & Rynes, 2003; Graves & Waddock, 1994; Surroca et al., 2010; Wood, 2010; Demacarty, 2009).

CSI and sustainability are thus a growing reality and the relationship between CSI and financial performance is increasingly being studied.

Orlitzky et al., (2003) examined 52 studies over a period of 30 years and inferred a positive relationship between CSI and financial performance. Innovest, (2004), a strategic value advisor, conducted a meta-analysis of 60 studies over six years and found a statistically significant relationship between CSI and financial performance. Aguilera et al., (2007) and Hillman and Keim, (2001) also argued that a positive and significant relationship exists, with an increase in CSI leading to enhanced financial performance and vice versa. More recently, Tang, Hull and Rothenberg, (2012) collected data from 130 companies from 1995 to 2007 and found that companies engaging in CSI initiatives slowly and consistently will experience improved financial performance.

The purpose of this study is to explore the relationship between CSI in monetary terms and financial performance in South African companies forming part of the FTSE/JSE SRI Index.

### 1.3 CSI in the South African context

Visser, (2005) states that academic research of CSI before 1994 dealt mostly with ethical investment issues relating to apartheid. This focus shifted in 1994 to deal with individual ethics of South African managers and other topics such as corporate social investment, corporate governance, corporate environmental management and sustainability reporting. Visser, McIntosh and Middleton, (2006) conclude in the article “Corporate Citizenship in Africa: Lessons from the Past; Paths to the Future,” that there are significant opportunities to extend the scope of CSI research in Africa.

South Africa has a positive track record with regard to compassion towards the community. South Africa’s business involvement in CSI has been driven by the legacy of colonialism and apartheid (Visser et al., 2006), with the private sector playing a global leadership role. This can be seen in the development of the International Standards Organisation’s (ISO) 14000 series on environmental management, cleaner production activities, the Minerals, Mining and Sustainable Development (MMSD) initiative, the Global Reporting Initiative and the Global Business Coalition on HIV/AIDS (Visser, 2005). As an example, the ISO 14000 standard

relating to environmental management provides companies with tools to manage and control environmental impact and assists in improving environmental performance (ISO, 2009). Providing companies with guidelines, support, examples and knowledge on how to improve CSI is crucial for sustainability and commitment to the economy, environment and society.

Mervyn King, chairman of the King Committee on Corporate Governance in South Africa (King, 2009), is one of the chief proponents of corporate governance in South Africa. The eponymous King II report on corporate governance was the first global corporate governance code to include the importance of all stakeholders and not just the interests of shareholders. This report was regarded as being ahead of its time in adopting an integrated and inclusive approach to the business life of companies (Visser, 2005).

## 1.4 Research problem

The importance of CSI for companies in South Africa is increasing in terms of disclosure requirements and continued pressure to embrace CSI. Worthington-Smith, Swart and Collins, (2012) argue that it is time that South African companies learned what sustainability really means, not only for the sake of the companies themselves, but for the future of the country as well.

Worthington-Smith et al., (2012) state that the value of CSI is not equally acknowledged by all companies in South Africa. Many still only contribute the minimal 1% of company profit to CSI. Trialogue, a provider of knowledge and services in the fields of CSI, estimates that government CSI expenditure, when considered in the broadest definitional terms, amounted to R6.9 billion in 2011/2012. Worthington-Smith et al., (2012) argues that CSI development is primarily the responsibility of government. Taking these recent figures into account, it is clear that much is to be done to truly embrace CSI.

Many companies may be reluctant to invest in CSI because the costs and benefits of CSI initiatives are often not be aligned (Tsoutsoura, 2004). Other companies fail to see the effects of CSI on the development of South Africa (Worthington-Smith et al., 2012). In a 2004 survey by Trialogue, only 38% of South Africa's Top 300 companies claimed that corporate governance made 'good business sense' (Visser, 2005).

Far more research has been done on CSI in developed countries than in developing countries. Yet CSI is even more important in developing countries due to the gaps in social provision and governance. The purpose of this study is to thus to explore the relationship between CSI in monetary terms and financial performance in South African companies which are listed on the FTSE/JSE SRI Index.

## 1.5 Proposed research methodology

A quantitative research approach will be used to allow for a systematic empirical investigation of the relationship between CSI and financial performance (Leedy & Ormrod, 2010; Saunders, et al., 2009). Panel regression analysis will be the main statistical method employed.

Companies selected for analysis must be listed on the FTSE/JSE SRI Index. To ensure that companies of a sufficient size are considered, entities also need to be listed on the FTSE/JSE Top 40 Index.

Secondary data will be gathered accessing the annual and sustainability reports for the period of 2010 to 2013 from the websites of the 30 selected companies. Companies which have not consistently reported on CSI over the entire period of 2010 to 2013 will be excluded from the study.

The annual and sustainability reports will be scrutinised and items identified as CSI will be selected. For the purposes of this study, CSI investment will thus include the following:

- Community donations, investments, grants or bursaries;
- Community education and training;
- Social upliftment projects;
- CSI initiatives or engagements;
- Socio-economic development (SED);
- Social and labour plans;
- Low-cost housing; and
- All voluntary contributions to the broader community.

The CSI figure will be expressed in South African Rand (Rand) to ensure comparability between the selected companies. In cases where the Rand is not the reporting currency, INET BFA reporting currencies for each specific year will be used to translate the amounts to Rand.

The secondary data relating to financial performance and relevant financial ratios will be obtained from the INET Bureau of Financial Analysis (BFA) database. These ratios and figures will be compared over time to seek a relationship between CSI and company financial performance for the sample companies.

The financial performance ratios include:

- Return on assets (ROA)
- Return on equity (ROE)
- Earnings per share (EPS).

Two other explanatory measures will be used to incorporate the size and financial leverage of the companies:

- Debt equity ratio (DE)
- Total Assets (TA).

Correlations will be sought between CSI and financial performance over the years 2010, 2011, 2012 and 2013. It will then be decided whether a relationship, either positive or negative, exists between CSI and financial performance for the entities combined.

## 1.6 Significance of the study

This study aims to provide a clearer understanding of the relationship between CSI and financial performance for the general public. This will ensure that individuals are aware of the importance of CSI and understand the reasons why companies invest in CSI. In addition, customers, suppliers and other stakeholders will be able to make more informed decisions about which company to support or do business with. The study may also inspire management to shift their focus from simply maximising shareholder wealth to a more socially responsible approach.

This study aims to increase awareness of CSI in investors who may come to realise that being socially responsible is not just a cost, and does enhance value. The results of the study should be of even greater use to corporate investors seeking to expand their CSI involvement.

The study also aims to create awareness of the FTSE/JSE SRI Index and motivate other listed companies on the FTSE/JSE All Share Index to improve their CSI stance by seeking inclusion in the Index. Companies already listed on the Index may be further inspired to increase their investment in CSI activities. The actions of companies listed on the Index might result in other unlisted companies perceiving CSI investment as the new way forward. Companies used in the study are also receiving positive publicity which may increase customer loyalty or even result in new customers or investors.

## 1.7 Limitations of the study

Determining the CSI investment figure for the sample may prove challenging in some cases as not all companies are equally committed to reporting these figures. The availability and reliability of information is therefore a limitation.

A positive relationship between CSI investment and financial performance may also be attributed to other factors such as launching a new product line or increased market share, and not simply due to an increase in CSI investment. The difficulty of isolating the reasons for a positive correlation is therefore a limitation.

Where correlations between CSI investment and financial performance do exist, the study is limited insofar as it is difficult to pinpoint which factor was responsible for the positive result. Companies with high sustainable financial performance may have had more money to invest in CSI. An increase in CSI in this case would not necessarily result in an increase in financial performance; rather, it may be the increased financial performance (as a result of other factors) which has caused the increased investment in CSI.

Although the study will investigate the possible relationship between CSI investment and financial performance over a four-year period, the benefits may only become evident in future periods not under investigation. Similarly, if CSI investment was made in years preceding the



study, this investment may result in improved financial performance during the period under the study. The timing of CSI investment and potentially improved performance is therefore a limitation of this study.

Generalisation and assumptions are limited in this study, as with all studies of an exploratory nature. The results of this study will only prove a relationship between CSI and financial performance in South Africa for the relevant companies and cannot therefore be generalised.

## 1.8 Chapter outline

The study consists of five chapters. Chapter 1 will introduce the concept of CSI and provide a clear understanding of the scope of research.

Chapter 2 will introduce the literature that will be used in the study. The literature will focus on the history, definitions, relevance and business benefits of CSI. Information on CSI reporting and SRI indices will also be provided. CSI will be contextualised in the South African environment and the relationship between CSI and financial performance will be examined using specific methods to determine this relationship.

Chapter 3 will focus on the research methodology and selection criteria of the companies under review. It will set out the calculation of financial performance ratios and provide a definition of CSI. Lastly, the chapter will clarify the process of data analysis used to obtain the results in the study.

Chapter 4 will use panel regression analysis to examine the data obtained.

Chapter 5 will provide a conclusion to the study on the relationship between CSI and company financial performance.

## 1.9 Summary

CSI is becoming increasingly prominent with a growing number of companies seeking to generate CSI benefits for both the company and its key stakeholders. This is in no small

measure due to pressure exerted by stakeholders. As companies have been encouraged to increase investment in CSI initiatives, stakeholders have demanded greater transparency in the reporting of CSI activities. This has led to a corresponding rise in annual and sustainability reporting on both financial performance and environmental and social issues.

CSI can be linked to a number of bottom-line benefits although in many cases these benefits are not immediately apparent and can be difficult to identify.

The purpose of this study is to explore the relationship between CSI in monetary terms and financial performance in South African companies listed on the FTSE/JSE SRI Index. A quantitative research approach will be adopted to allow for a systematic empirical investigation of the relationship between CSI and financial performance. Although the study does have some limitations, it is hoped that the findings will be of value to individuals, managers, investors and unlisted companies.

## CHAPTER 2 – LITERATURE REVIEW

### 2.1 Introduction

Chapter 1 set the background to this study, explained factors identified from literature, formulated the research problem, defined the research methodology, contextualised the relevance of the study and explained the limitations and the demarcation of the study.

This chapter will discuss the history, definitions and relevance of CSI, its business benefits, CSI reporting, CSI in a South African context, socially responsible investment indices as well as examining the relationship stated in the research problem and the measures used to determine that relationship.

### 2.2 History of CSI

Chavez and Jodi, (2011) and Carroll and Shabana, (2010) both state that the business culture of merely pursuing profits at the cost of society is not accurate and uphold this statement by pointing to the rise of CSI initiatives. Carroll and Shabana, (2010) agree that the importance of being responsible to society beyond making profits for shareholders is a principle that has been present for decades.

Although the importance of corporate social investment can be traced back for centuries (Carroll, 1999), the modern era of CSI commenced in the beginning of the 1950s. Frank Abrams, a former executive with Standard Oil Company, introduced the notion of management's broader responsibilities as early as 1951. He highlighted the importance of not just thinking about profit, but also about company employees, customers and society (Abrams, 1951). However, formal writing on CSI is largely a product of the twentieth century (Carroll, 1999). Carroll, (1999) also states that early writings on CSI referred to 'social responsibility' (SR) and not CSI, which may have been due to the fact that the dominance of corporations had not yet been noted.

As society became increasingly aware of the relevance of social and environmental issues and the financial complications of such initiatives (Jackson & Parsa, 2007), companies were required to become more accountable for such issues. This broader scope, which surpassed purely economic motives, evolved over time into a recognised corporate responsibility. The stakeholders who largely drove this process also evolved, and mere providers of capital came to include customers, suppliers, employees, communities, investors and others (Mittal et al., 2008; Tsoutsoura, 2004).

As a result, the demand for CSI transparency to society also increased. In response to such calls, a substantial amount of information on company CSI initiatives has been developed and communicated through annual reports or sustainability reports (Mittal et al., 2008; Tsoutsoura, 2004; Jackson & Parsa, 2007).

## 2.3 Definitions of CSI

Most agree that there is no single definition of CSI (Schwartz & Saia, 2012). CSI is a broad topic that consists of multiple concepts and ideas. Definitions are dependent on the country of origin and vary from company to company and author to author (Freeman & Hasnaoui, 2010).

Historically, various attempts have been made to define CSI. The 1960s saw significant attempts to arrive at a clearer definition of CSI as companies needed to make decisions and act in ways that reached beyond their direct economic and legal obligations. During the 1970s, definitions were very similar to those of the previous decade but added the need for companies to not only strive to increase shareholders' wealth, but also to consider their effect on other stakeholders. In the 1980s, concerns about CSI began to be transformed into concepts, theories, models or themes. Definitions came to include a focus on voluntary CSI as well as profit motives, adherence to legal obligations, ethical considerations and good corporate citizenship (Carroll, 1999).

Carroll, (1979) identified four different categories in the definition of CSI. These four categories revolve around the responsibility of companies to adhere to economic, legal, ethical and discretionary responsibilities. This definition has been successfully applied in CSI research for over twenty-five years (Carroll & Shabana, 2010).

Other researchers refer to five elements; extend beyond the production of goods or the delivery of a service at a profit, help to resolve social problems, demonstrate broader responsibility than to just shareholders alone, have an impact beyond simple marketplace transactions and serve a wider range of human values (Schwartz & Saiia, 2012). Dahlsrud, (2008) analysed thirty-seven definitions and isolates five dimensions. These include the stakeholder, social and economic concerns, voluntariness and the environment.

Surroca et al., (2010) and Munilla and Miles, (2005) state that CSI can be seen as a range of strategies and practices that aim to create relationships between the various stakeholders and the natural environment.

It can therefore be stated that, despite the different interpretations of CSI, there are nonetheless common threads which run through the various definitions.

## 2.4 Relevance of CSI

CSI cuts across virtually all industries. Considering the entertainment industry for example, the highest grossing movie of all time, Avatar, released in 2009 (Box Office Mojo, 2010), deals with the struggle of an organisation to meet its obligations towards society rather than extracting scarce resources (Schwartz & Saiia, 2012). In 1985, artists such as the late Michael Jackson, Lionel Richie, Madonna and others, performed as group “USA for Africa” and released the song ‘We are the World’ which aimed to raise awareness of the famine in Ethiopia and mobilise resources to support hunger victims. It reached Number 1 in numerous countries and the promotional materials and merchandise raised over US \$63 million for humanitarian aid in Africa and the United States (Nyirenda, 2013). The commercial success of such artistic expressions of CSI illustrates the importance the public places on such initiatives.

To further illustrate the relevance of CSI, a Google search for ‘Corporate Social Responsibility’ in 2014 reveals over three million results (Google, 2014). Peters, Smith, Acha, Martin, Harding, Vachani and Morsing, (2005) state that CSI is more broadly communicated, more urgent and more specific than ever before. Bendell and Kearins, (2005) argue that the growth of support for CSI is due to three main drivers. The first driver is growing criticism of voluntary CSI initiatives, the second is the increase in awareness of CSI and the third is the increased

knowledge of managers and investors of how legal and financial business frameworks can be shaped to support and improve social and environmental performance.

As the relevance and visibility of CSI have increased, companies are thus being impelled to act more responsibly on current CSI issues by shareholders, customers, suppliers, employees, communities, investors regulators, analysts, activists, labour unions and the media (Jin-Woo, 2010). As a result, an ever-increasing number of companies is seeking to generate noticeable benefits for both the company and its key stakeholders through CSI (Carroll & Shabana, 2010).

Well-established policies, activities and practices are required for companies to generate benefits from CSI (Carroll & Shabana, 2010). Companies that act proactively and leverage CSI can create and renew competitive advantage (Munilla & Miles, 2005). McWilliams and Siegel, (2000), for example, argue that companies which engage in CSI initiatives will gain a competitive edge in the marketplace through product differentiation. Companies are also aware that actions which improve relationships with employees, customers, suppliers, society and the environment are a way to signal to investors that the company is addressing those stakeholder-related CSI initiatives. This, in turn, builds competitive advantage and creates long-term value for shareholders (Ramchander, Schwebach & Staking, 2012).

Positive relationships with stakeholders and brand reputation are crucial for sustainability. Enron, Parmalat, WorldCom and others involved in scandals have turned to CSI to salvage brand reputation and mend relationships with stakeholders (Becchetti, Ciciretti & Hasan, 2009). Such incidents encouraged companies to adopt a broader strategy, extending beyond simply maximising shareholders' wealth (Becchetti et al., 2009; Hopkins, 2006). Furthermore, CSI principles can also spur executives to seek more efficient ways of operating (Tsoutsoura, 2004), with companies able to reduce negative environmental and social impacts due to increased transparency and improved controls.

Developing recycling or non-pollution programmes as well as employing people from the community are all ways to support local businesses and charities through CSI (Nelling & Webb 2008; Mittal et al., 2008). For example, Woolworths implemented a programme called "Farming for the Future". This programme transforms methods of agriculture to save water, reduce chemical use and enrich soil in a natural manner, thereby reducing the use of pesticides and artificial fertilisers (Woolworths Limited, 2012).

In 2011, the Committee Encouraging Corporate Philanthropy (CECP, 2011), an international forum of business leaders focused on measuring and encouraging corporate charity, released its Giving in Numbers report. The CECP, (2012) noted that one out of every two companies had actually increased the amount of funds contributed to charity or community organisations since the beginning of the recession in 2007. A quarter of the companies increased contributions by more than 25%. Total contributions of the 110 high-performing companies increased by 23% from 2007 to 2010.

More companies than ever are thus involved in CSI and are integrating CSI into all aspects of business (Jin-Woo, 2010). Different companies use different strategies to embed CSI in their business. Skinner and Mersham, (2008) state that for a company to balance CSI goals and company goals, it needs to align CSI with the business, integrate it into the business, select focus areas, understand the CSI context, consolidate the CSI function and encourage employees to volunteer. According to Tsoutsoura, (2004), in order for the implementation of CSI to be successful, both management and staff need to understand and support the CSI initiatives. A successful CSI strategy is therefore unlikely to be separable from the basic value propositions of a company and its stakeholders (Devinney, Schwalbach & Williams, 2013).

Peters et al., (2005) state that CSI features on the corporate agenda of many companies and is changing their corporate culture and performance. Some companies even place social goals before financial goals. The best companies manage to achieve both social and financial objectives.

## 2.5 CSI Business benefits

According to Mittal et al., (2008), Preuss, (2011) and Tsoutsoura, (2004), a growing number of companies is recognising the business benefits of CSI policies and practices. Furthermore, companies are committing to such initiatives not only, for their own benefit but also to meet stakeholder expectations (Mittal et al., 2008; Preuss, 2011; Tsoutsoura, 2004).

Ernst & Young, (2012b) conducted a survey of executives from 24 industry sectors to pinpoint the drivers of CSI initiatives. The survey results indicated that amongst the top drivers were changes in customer demand (87%), increased stakeholder expectations (86%) and competitive threats (81%). It is therefore clear that the second most important driver of CSI initiatives is

stakeholder expectations. Stakeholders are thus interested in both financial and non-financial information as they require companies to be accountable for CSI issues. Stakeholders include customers, suppliers, employees, communities, investors and other stakeholders (Mittal et al., 2008; Tsoutsoura, 2004). Stakeholders can not only affect the company's operations but they can also be themselves affected by the company's operations (Sierra-García, Zorio-Grima & García-Benau, 2013).

The demand for CSI transparency before the public is increasing. As a result, companies are communicating substantial amounts of information on CSI activities through their annual or sustainability reports (Mittal et al., 2008; Tsoutsoura, 2004; Jackson & Parsa, 2007). Reporting on CSI is a growing priority for companies irrespective of company size (D'Aquila, 2012).

In its International Survey of Corporate Responsibility Reporting 2011, KPMG reports that 95% of the Fortune Global 250 issue reports on sustainability (D'Aquila, 2012). Hopkins, (2006) is of the belief that only companies that show, and continue to show, a clear investment in CSI will be able to survive, and further states that CSI will form such an integral part of a company's culture and day-to-day activities, that it will no longer be noticed as a detached element.

Continuity in reporting on CSI is essential and integrated reporting is fast becoming the norm. The King III Report on Corporate Governance recommends integrated sustainability and financial performance reporting to allow stakeholders to make more informed assessments of the economic value of a company (Institute of Directors in Southern Africa, 2009). According to Pounder, (2011) current trends in sustainability reporting include standardisation, globalisation, escalation and integration. In an October 2010 research report by Ernst & Young, more than two-thirds of the Fortune Global 500 companies now produce some form of sustainability reports (Ernst & Young, 2010).

Reporting pressures differ, depending on the industry. Industries such as food, textiles and clothing receive more CSI pressure from stakeholders related to products, while others, such as refining, rubber, plastic, telephony or utilities receive pressure from stakeholders for their environmental and energy practices (Waddock & Graves, 2004). Mining companies specifically feel the pressure of reporting and are aware of the importance of transparency of revenue flows to the government, money and resources spent on CSI initiatives (Jenkins &

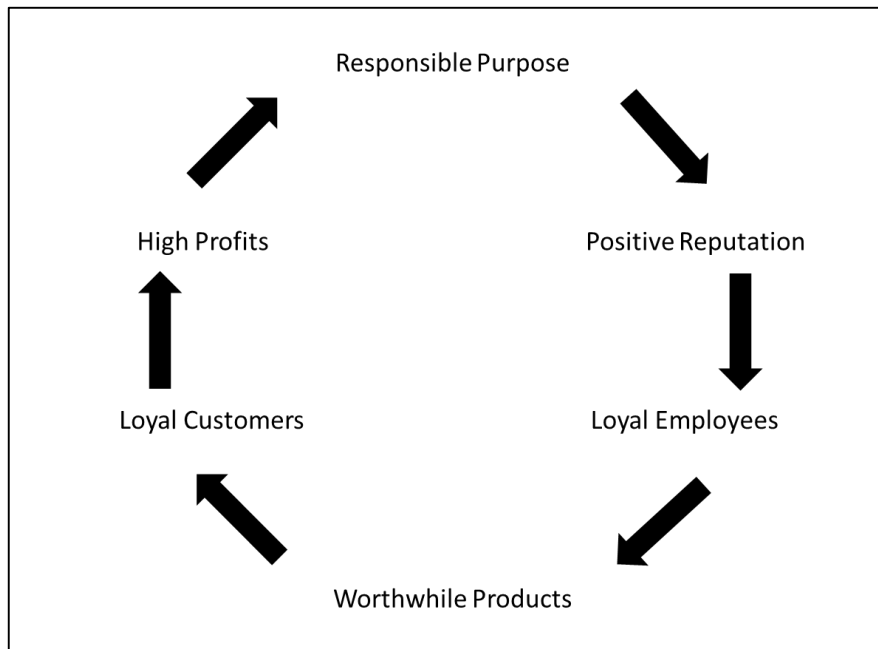


Obara, 2008). As part of the retail industry, Woolworths states in its Sustainability Strategy 2007–2015 that reporting publicly on its CSI commitments through the Woolworths Corporate Responsibility Report ensures that it is accountable and transparent to all its stakeholders. It further states that people reading its report should have confidence in the type of information that it is providing and its accuracy (Woolworths Limited, 2007).

Having access to publicly available sustainability reporting, and therefore information on CSI initiatives, ensures that society is increasingly aware of the relevance of environmental issues and the financial complications of such initiatives (Jackson & Parsa, 2007). Stakeholders are likely to perceive a company as being concerned with social and environmental issues if it is seen as being socially responsible. These same companies that invest in CSI initiatives may be doing so with the expectation of increasing their financial performance (Falkenberg & Brunsæl, 2012). Rettab et al., (2008) argue that CSI has a positive impact on company financial performance due to the way the company satisfies the needs of its stakeholders and communicates its CSI initiatives. To a large extent, this is due to the goodwill created on the part of the stakeholders (Demacarty, 2009; Ullmann, 1985; Waddock & Graves, 1997). Stakeholder satisfaction is crucial since the way that stakeholders evaluate a company affects the company's share price, consumer support, loyalty of employees and media attention (Peloza & Papania, 2008).

Another benefit of CSI is the increase in stakeholder loyalty which leads to the start of a positive circle for the company. The 'responsible purpose' derived from CSI initiatives results in a positive reputation for the company. This tends to increase the loyalty of employees who, in turn, tend to deliver better products or services. Delivering better products or services results in loyal customers which leads to higher profits (Demacarty, 2009). Figure 2.1 below presents a visual illustration of how CSI results in increased financial performance.

**Figure 2.1 – Simplified illustration of how CSI results in increased financial performance.**



Source: Adapted from Demacarty (2009)

Khanifar, Nazari, Emami and Soltani, (2012) state that CSI activities may improve a company’s relationships with bankers, investors and government officials which can translate into increased economic benefits. Graves and Waddock, (1994) suggest that a company’s CSI behaviour may go so far as to influence investment decisions, which suggests that CSI can facilitate access to capital. Other researchers support this claim by providing evidence that being more socially responsible, building relationships with key stakeholders and being more open about CSI will reduce capital constraints (Cheng, Ioannou & Serafeim, 2013).

Internally, companies that are perceived as having a strong CSI commitment are more likely to attract and retain employees (Tsoutsoura, 2004; Chavez & Jodi, 2011; Blanco & Souto, 2009; Orlitzky et al., 2003; Graves & Waddock, 1994; Surroca et al., 2010; Wood, 2010; Demacarty, 2009). This is can be attributed to the fact that companies involved in CSI tend to have fairer HR practices (Rettab et al., 2008) and because of the positive impact of ethically-related elements on employees (Perrini, Russo, Tencati & Vurro, 2009). Both of these characteristics are highly regarded by employees (Rettab et al., 2008).

It is also believed that implementing CSI initiatives increases staff morale and leads to increased productivity and profitability (McGuire et al., 1988; Lagoarde-Segot, 2011). Due to the positive associations CSI brings to an organisation, companies that are CSI leaders can more easily recruit, retain and motivate employees. This increases cash inflows through the development of innovative products and production processes which can create new market opportunities (Lagoarde-Segot, 2011).

It is essential for managers to balance what is in the best interest of the company and stakeholder expectations. Managers have to balance stakeholder expectations of social responsibility against the demands for company financial performance (Peloza & Papania, 2008). A broader set of stakeholder interests needs to be taken into account when managers of companies pursuing CSI initiatives are making decisions with regards to resource allocation (Ramchander et al., 2012). Simpson and Kohers, (2002) state that corporate stakeholders are likely to be faced with a number of key issues when implementing CSI initiatives, one being the decision as to the amount of resources to be allocated towards CSI.

Implementing CSI necessitates incurring costs. Some researchers such as Brammer and Millington, (2008) argue that implementing CSI will trigger disproportionately high costs, while stock market and product market returns will be negligible during that time. Costs may be short-term in nature or may be continuous and could include purchasing equipment, implementing management or changing current business processes or operations. Shareholders invest in a company expecting a return to compensate for the risk they expose themselves to. A company is therefore required to show benefits from CSI initiatives (Tsoutsoura, 2004).

This raises the question of whether a CSI initiative contributes to improved financial performance in relation to the amount spent. Some companies believe that social responsibility should only be pursued if it is consistent with the company's profit motives, while others believe that companies have a moral duty to embrace CSI irrespective of its profit motives (Jackson & Parsa, 2007). Yet others argue that being socially responsible results in treating stakeholders in an ethical manner and includes economic responsibility and should therefore be incorporated into the overall performance of the company (Jackson & Parsa, 2007; Hopkins, 2006). In order to build stakeholder loyalty, an investment of money and management attention is therefore required (Demacarty, 2009).

Chavez and Jodi, (2011) see social responsibility as a way of reducing costs and risk. Companies may thus cut costs through socially responsible business practices such as eco-efficiency. This may result in companies implementing a sustainability strategy which will encourage companies to choose less expensive materials, resulting in higher operational efficiency (Lagoarde-Segot, 2011).

Munilla and Miles, (2005) argue against the business case for CSI and state that companies investing in CSI may lose competitive advantage to other companies in the same market which have not undertaken costly CSI initiatives.

Peters et al., (2005) state that some companies invest in CSI initiatives from a genuine desire to do good whilst others are driven purely by self-interest. It is possible that some companies only invest in CSI to improve their public perception and ensure increased profits (Mittal et al., 2008) and only adopt a consistent CSI strategy to build stakeholder confidence (Carmeli, Gilat & Waldman, 2007). According to Preuss, (2011) and Carroll and Shabana, (2010) and Wood, (2010), investment in CSI can improve financial performance through competitive advantage, cost and risk reduction, legitimacy and synergistic value creation. It is also argued that pursuing CSI will ensure long-term viability and will protect against government regulation (Carroll & Shabana, 2010). Although these are compelling reasons for investing in CSI, they may motivate companies for questionable reasons, considering only the goals of the company and not those of stakeholders.

CSI and sustainability are a growing reality and the relationship between CSI and financial performance is increasingly being studied (McGuire et al., 1988; Waddock & Graves, 1997; Tsoutsoura, 2004; Oeyono, Samy, & Bampton, 2011; May & Khare, 2008; Peters & Mullen, 2007; Mutezo, 2011; Orlitzky et al., 2003; McPeak & Tooley, 2007; Simpson & Kohers, 2002; Muhamad, Saleh & Zulkifli, 2005; Ullmann, 1985; García-Castro et al., 2007; McWilliams & Siegel, 2000; Balabanis, Phillips & Lyall, 1998; Nelling & Webb, 2008; Fiori, Donato & Izzo, 2007; Lougee & Wallace, 2008; Okwoma, 2010; Aupperle, Carroll & Hatfield, 1985; Waddock & Graves, 1997; Yang, Lin & Chang, 2010; Tang et al., 2012; McGuire et al., 1988).

## 2.6 CSI Reporting

The priority stakeholders place on sustainability and CSI has led to a greater demand for more comprehensive corporate accountability and disclosure across a breadth of corporate activity (Jin-Woo, 2010; Kolk, 2008). As a result, corporate sustainability reporting is gaining in importance (Kocmanová et al., 2011; Mittal et al., 2008; Tsoutsoura, 2004; Jackson & Parsa, 2007) with companies required to provide forward-looking information to shareholders.

It is often difficult for companies to decide on how much and what type of information to divulge, since each company is different and each stakeholder requires different information. This is evidently a challenge for companies as available on the quality of relationships with employees, customers, suppliers, the community and the environment is patchy and inconsistent (Peters et al., 2005).

Companies that focus on reporting about stakeholder concerns and progress on environmental and social related metrics, as part of their sustainability reporting, demonstrate the accountability of the company and shows their contribution to long-term stakeholder value (Ernst & Young, 2012b; Perrini et al., 2009). Failure to address the evolving requirements of stakeholders by reporting on social or environmental issues can lead to a 'legitimacy gap' whereby the values of a company are not aligned with those of society. This can result in alienation from shareholders (Steyn & Niemann, 2008).

Separate environmental reports were first released by companies in 1989 (Kolk, 2004; Raar, 2002). According to a three-year KPMG survey of the 100 largest global companies in 11 countries, the percentage of companies that produced sustainability reports has increased since 1993:

1993 – 12%

1996 – 17%

1999 – 24%

2002 – 28%

2005 – 79%

(KPMG International, 2008)

2011 – 95%

(KPMG International, 2011).

It should be noted that over the years, the KPMG survey has been extended to include a larger number of companies worldwide. Although the sample size has increased, the same trend continues to rise.

According to Pounder, (2011) emerging trends in sustainability reporting include standardisation, globalisation, escalation and integration. Former judge, Mervyn King, is one of the principal proponents of corporate governance in South Africa and is chairman of the King Committee on Corporate Governance in South Africa (King, 2013). The ground-breaking 2002 King II report was the first to include integrated sustainability reporting. After the Enron and WorldCom debacles, King II was liberally quoted in the US Congress and certain aspects of it were adopted by the New York Stock Exchange and incorporated into the Sarbanes-Oxley Act (Visser, 2005). King III was released in 2009 and stipulated that companies need to accept responsibility for the impact of their decisions and activities on society and the environment. Companies also need to contribute to sustainable development by taking into account the legitimate interests and expectations of stakeholders, ensuring compliance with applicable laws and by integrating sustainability at all levels of operations (Institute of Directors in Southern Africa, 2009).

Alongside this growth in sustainability reporting, the Global Reporting Initiative (GRI) was developed. Marx and Van Dyk (Ernst & Young, 2010) state that GRI is regarded as the best practice framework for sustainability reporting, incorporating current global thinking on reporting sustainability matters. In addition to its guidelines, the GRI has also developed various 'sector supplements' since 2003. These are adapted versions of the guidelines to assist industries in producing relevant reports on unique issues (Global Reporting Initiative, n.d.). Mervyn King chaired the GRI in the period during which many of the guidelines were developed.

The growth and development in sustainability reporting is thus a direct reflection of the fact that CSI is a growing priority for companies of all sizes (D'Aquila, 2012).

## 2.7 South African context

The implementation and support of CSI in South Africa has been shaped by the country's history and socioeconomic challenges. Historical influences include the racially skewed participation in the economy, unemployment, widespread poverty (Hamann et al., 2005) and low levels of education and training (Bond, 2008). These challenges are not unique to South Africa, but South Africa's history, and more pertinently that of apartheid, gave these challenges a specific severity (Hamann et al., 2005). To redress the racial imbalances resulting from apartheid, South Africa introduced a policy of Black Economic Empowerment (BEE) (Hamann et al., 2005), aimed at advancing black South African participation in, and ownership of, business in South Africa. Achieving the goals of BEE is not an undertaking that a government can take on by itself; the support of the private sector is also needed. Companies have thus taken on developmental and regulatory responsibilities because the state has not been able to fulfil this role on its own. This can be considered as a driver of CSI in South Africa (Hamann et al., 2005; Bond, 2008).

Historically, CSI in South Africa has focused on philanthropic initiatives in education, health or welfare. Later, CSI came to include concepts such as 'corporate citizenship', which emphasises the integration of social and environmental imperatives throughout all aspects of a company's activities (Hamann et al., 2005). Important market-based incentives for CSI have also developed in South Africa. Examples include the King Report on Corporate Governance (Hamann et al., 2005) and the JSE Securities Exchange Socially Responsible Investment Index (Hamann et al., 2005; Bond, 2008).

Although CSI investment is substantial and growing in South Africa, it is not significant when compared to total government spending, especially in priority sectors such as education and health care. It is therefore of the utmost importance that government resources are strategically leveraged to achieve sustainability (Skinner & Mersham, 2008).

Sustainability indices are developing and environmental objectives are being included in the stock selection processes of mutual funds in emerging markets. Many mutual funds now have specific mandates to only invest in companies that comply with specific sustainability criteria. This shows that the financial industry and the investors it represents are increasingly embracing

CSI objectives. This has the potential to result in improved relations between companies and capital suppliers, which may lead to lower cost of external finance and higher net present value (NPV) for selected projects (Lagoarde-Segot, 2011).

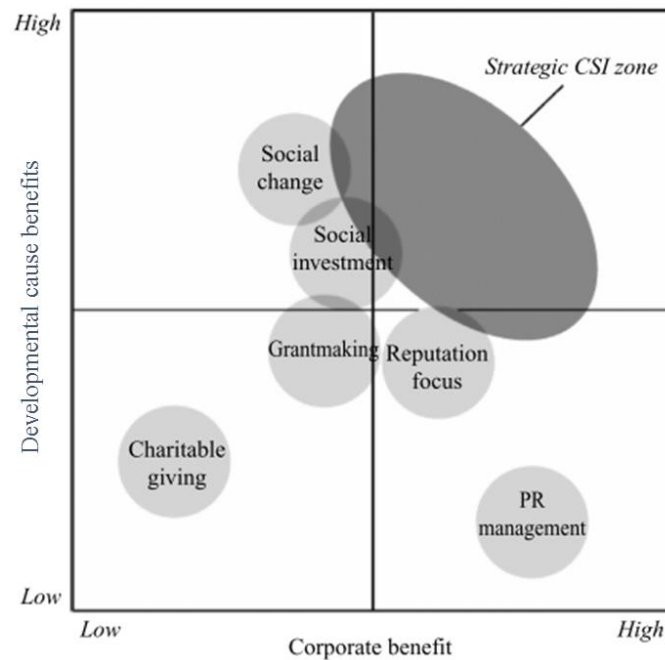
As CSI initiatives develop at a rapid rate globally, so does the need for the standardisation of these initiatives in order to ensure that CSI truly becomes a global force. Standardisation will promote greater efficiency and level the playing field so that companies from developing countries can compete with competitors worldwide (Hamann et al., 2005). The International Organization for Standardization (ISO) is a guidance document for companies and organisations of all sizes to effectively address their social responsibilities in various cultures, societies and environments. It is written in plain English to increase its usefulness and extend its reach globally (Hamann et al., 2005).

Lagoarde-Segot, (2011) collected data on CSI from six emerging markets including South Africa. The evidence shows that emerging markets should also adopt CSI best practice and report on quantitative extra-financial information to shareholders and regulators. The evidence also suggests that the communication of this type of information can be a promising source of competitive advantage. Having a good CSI track record enable managers to improve contacts with regulators and civil society. This mitigates the costs of opposing regulations and hedges against reputational risk (Lagoarde-Segot, 2011).

On the one hand, there are companies in South Africa that invest in CSI to derive a business benefit by earning publicity or reputation gain. On the other hand, there are companies which engage in CSI for motives of social investment or change. The strategic CSI point of balance is attained where benefits are maximised for both the company and the development cause. For CSI to be strategic, initiatives should be at an investment or social change level, as indicated by the shaded area in Figure 2.2 below (Skinner & Mersham, 2008).



**Figure 2.2 – The corporate giving spectrum**



Source: Skinner and Mersham (2008)

The terms used in Figure 2.2 warrant further explanation. ‘Public relations management’ refers to companies using CSI initiatives to gain publicity rather than attempting to address the social cause itself. Such initiatives are seen primarily as marketing. ‘Reputation focus’ involves initiatives that are seen as genuine efforts to do social good. ‘Charitable giving’ refers to companies making donations to society, in which case the impact and effectiveness of CSI is difficult to track. ‘Grant-making’ refers to companies awarding funds according to pre-defined criteria. This involves keeping records of basic project inputs and outputs such as materials supplied. ‘Social investment’ refers to long-term commitments to a project where social spend impact will be measured and evaluated. ‘Social change’ involves improving social conditions to build long-term business benefits in the form of a better operating environment, although this approach does not prioritise benefits for the company (Skinner & Mersham, 2008).

Companies of different sizes in South Africa experience different constraints and opportunities with respect to CSI. Small, medium and micro enterprises (SMEs) are specifically exposed because they struggle to meet international CSI standards. At the same time, SMEs are often closer to their customers, suppliers and local communities due to face-to-face interaction which makes CSI an inherent element of many SMEs (Hamann et al., 2005).

One of the main obstacles to CSI in South Africa is the difficulty of measuring the impact of initiatives and determining their efficacy. South African companies are becoming increasingly committed to investment in effective CSI projects that will deliver measurable development returns. The SA Social Investment Exchange (SASIX) was created to match donor funding with high-performance CSI projects. SASIX promotes a culture of social investment where measurement is a core function of the development process (Skinner & Mersham, 2008).

## 2.8 Socially responsible investment indices

In recent years many stock exchanges introduced socially responsible investment indices or SRIs. Various environmental and social governance (ESG) criteria are used to filter listed companies. These indices give better visibility to CSI companies and provide investors with additional financial information. These indices can be divided into four categories:

- i. Broad-based: All sectors are included provided that companies meet ESG standards (for example, the Dow Jones Sustainability Index).
- ii. Sector-based: Same as above, but focusing on one particular sector (for example, real estate or finance).
- iii. Sustainable sector-based: Inclusion is based on top-down sectoral filtering (for example, green, clean tech or renewable).
- iv. Sustainable issue-based: All sectors are included, but filtering focuses on a specific issue (for example, water scarcity, diversity or good governance) (Lagoarde-Segot, 2011).

The FTSE/JSE SRI Index was launched in May 2004 in response to the rising prominence of sustainability across the world and particularly in South Africa. The FTSE/JSE SRI Index was structured to follow standard international guidelines. This index was the first of its kind in an emerging market and to be launched by an exchange. The SRI Index provides a framework for non-financial risk management for companies and investors and also serves as a tool facilitating responsible investment (Skinner & Mersham, 2008).

The second King report encouraged companies to follow a triple bottom line approach, which requires organisations to report not only on financial matters but also on their impact on the environment and people or society (JSE & EIRIS, 2013). This notion was first suggested by Elkington, (1997) who surmised that if companies were required to report on a specific element

of its business, they would be motivated to manage that area more carefully. While many companies in South Africa already made use of triple bottom line or similar approaches, they needed guidance as to what to incorporate into their business. Furthermore, investors were looking for ways to invest in companies that followed a triple bottom line approach, as this ostensibly communicated commitment to sustainable business practices and the fair treatment of stakeholders and the environment. In response, the JSE developed criteria to measure the triple bottom line performance of companies in the FTSE/JSE All Share Index, with the aim of compiling an index, the FTSE/JSE SRI Index, comprising those companies which comply with specific criteria. This was a way of recognising the efforts of companies to put in place the triple bottom line approach (JSE & EIRIS, 2013).

In order to be included in the FTSE/JSE SRI Index, companies are assessed against criteria across the triple bottom line as well as governance criteria points. Within each area of measurement, policy, management or performance and reporting are also evaluated (JSE & EIRIS, 2013). Companies listed on the FTSE/JSE All Share Index are invited annually to participate in the assessment.

The SRI Index selection criteria are set by the JSE, in consultation with the Advisory Committee, which consists of members from different organisations such as Prudent Portfolio Managers, Government Employees Pension Fund (GEPF) and Eskom South Africa (JSE & EIRIS 2013). A list of the current Advisory Committee members is included in Appendix 1.

Three steps are involved in applying for inclusion in the SRI Index. The company must first report on CSI issues, in line with GRI guidelines. This report must then be reviewed by the Advisory Committee which will provide feedback to the company. Lastly, the company must provide additional data for clarification. The company will qualify for inclusion if it meets the environmental, social and governance requirements (Lagoarde-Segot, 2011).

## 2.9 Relationship between CSI and financial performance

Numerous researchers argue that CSI which forms part of manager behaviour contributes to better financial performance (García-Castro et al., 2007). They also argue that CSI and financial performance should go hand in hand and should not be seen as mutually exclusive. Companies that exhibit an ‘either or’ focus will be in an economically disadvantaged position compared to other companies because of incurred CSI implementation costs (Ullmann, 1985).

Extensive research has already been conducted on the relationship between company financial performance and CSI. Refer to section 2.5 for related studies. These studies have had mixed results. Controversy about the relationship between CSI and company performance existed since the mid-1970s and consensus still has not been reached (McWilliams & Siegel, 2001).

Despite the mixed results found in literature, the CSI / company financial performance relationship is reasonably well-established in general. Making use of the modern statistical techniques of meta-analysis, a positive relationship can be inferred between CSI and financial performance (Wood, 2010). In 2007 García-Castro et al., (2007) stated that this relationship has been studied for more than 35 years. According to Margolis and Walsh, (2003) more than 127 empirical studies have been conducted on the subject.

Margolis and Walsh, (2003) reviewed 109 studies and concluded that 54 of these showed a positive relationship, 20 showed mixed results and 28 showed a non-significant relationship. Only seven studies showed a negative relationship. García-Castro et al., (2007) state that empirical studies still deliver mixed results on this subject.

Twenty-two studies of the relationship between CSI and company financial performance have been investigated in this study. Of these studies, 11 inferred a positive relationship (McGuire et al., 1988; Waddock & Graves, 1997; Tsoutsoura, 2004; Oeyono et al., 2011; May & Khare, 2008; Peters & Mullen, 2007; Mutezo, 2011; Orlitzky et al., 2003; McPeak & Tooley, 2007; Simpson & Kohers, 2002; Muhamad et al., 2005), and 13 inferred inconsistent results (Ullmann, 1985; García-Castro et al., 2007; McWilliams & Siegel, 2000; Balabanis et al., 1998; Nelling & Webb, 2008; Fiori et al., 2007; Lougee & Wallace, 2008; Okwoma, 2010; Aupperle et al., 1985; Waddock & Graves, 1997; Yang et al., 2010; Tang et al., 2012; McGuire et al., 1988). Two of the studies that inferred a positive relationship conclude that evidence is not sufficient to firmly state that a positive relationship exists for the study. This study therefore included Waddock and Graves, (1997) and McGuire et al., (1988) as part of the 11 positive relationships, as well as part of the 13 inconsistent results. Researchers believe that the mixed results are not due to the samples used or the measurement instruments, but rather to the inconsistency of social strategic decisions which could be driving the findings (García-Castro et al., 2007; Ullmann, 1985).

This study will focus on positive, negative, non-significant and inconsistent relationship results separately. The study will also offer reasons for the positive, negative, non-significant or inconsistent evaluation of these relationships.

### 2.9.1 Positive relationship results

Samy et al., (2010) studied 20 selected UK corporations and found a weak positive relationship between CSI and financial performance. They argue that due to increased consumer and investor awareness of CSI, companies can make an impact on their bottom line by investing in CSI. Furthermore, in order to ensure survival in an increasingly competitive market, CSI should not just be seen as an optional extra but as a necessity.

Another study examining the relationship was conducted in Dubai, an emerging economy, by using survey data from 280 companies operating in Dubai. The results showed a positive relationship (Rettab et al., 2008). According to McPeak and Tooley, (2007) good corporate management tends to result in better financial and sustainability performance. A study of the UK banking industry found a positive relationship between CSI and company financial performance (Simpson & Kohers, 2002). The study conducted by May and Khare, (2008) demonstrates a positive relationship between CSI and company financial performance when using accounting-based measures of financial performance. The findings of Orlitzky et al., (2003) also resulted in positive, mutually reinforcing relationships.

Lougee and Wallace, (2008) conducted studies over 15 years and found that companies with more CSI strengths or fewer CSI weaknesses produced a higher return on assets. This suggests that investment in CSI goes hand in hand with profitability and long-term value maximisation. It also suggests that poorly performing companies either do not have the money to invest in CSI or they are missing out on an opportunity. It was also found that companies invest more to build on the CSI strengths than to cover their CSI weaknesses. This means that companies invest in CSI for long-term value maximization rather than to just please their stakeholders.

Earlier studies used questionnaires or corporate reputation indices to measure company CSI. More recent studies made use of the Kinder, Lydenberg, Domini (KLD) index to measure CSI and support the positive relationship theory (García-Castro et al., 2007). Furthermore, McWilliams and Siegel, (2000) proved that customer relationships are correlated with

company research and development and the introduction of new products. At the same time, it was shown that research and development had a positive relationship with CSI and company financial performance. The positive relationship may therefore be overstated due to the fact that research and development was not taken into account separately (McWilliams & Siegel, 2000; Demacarty, 2009).

Most of the research conducted on CSI and financial performance infers a positive relationship (McGuire et al., 1988; Waddock & Graves, 1997; Tsoutsoura, 2004; Oeyono et al., 2011; May & Khare, 2008; Peters & Mullen, 2007; Mutezo, 2011; Orlitzky et al., 2003; McPeak & Tooley, 2007; Simpson & Kohers, 2002; Muhamad et al., 2005).

### 2.9.2 Negative relationship results

García-Castro et al., (2007) argue that there is very little evidence that a negative relationship exists between CSI and company financial performance and companies can increase financial performance even if they do harm stakeholders and the environment.

### 2.9.3 Non-significant relationship results

Due to a lack of rigorous data and reliable measures, Ullmann, (1985) states that no noticeable relationship exists between CSI and company financial performance. According to Filbeck and Gorman, (2004) there is no relationship between CSI and company financial performance in US utility companies. Other researchers conclude that no significant relationship exists between CSI and company market performance (Alexander & Buchholz, 1978).

### 2.9.4 Inconsistent relationship results

Aupperle et al., (1985) state that it is not possible to support the notion of a positive or negative relationship. Waddock and Graves, (1997) and Ullmann, (1985) also argue that support for either a positive or a negative relationship is far from overwhelming. Similarly, Amato and Amato, (2002) propose that previous CSI studies have garnered inconsistent evidence.

Inconsistent or mixed results can be due to the lack of consistent and reliable instruments to measure CSI (García-Castro et al., 2007; Waddock & Graves, 1997). Another reason for

inconsistent results can be attributed to a change in circumstances of the relationship which may not have been understood at the time of measurement (McWilliams & Siegel, 2000; Waddock & Graves, 1997; García-Castro et al., 2007). The third reason for inconsistency is due to the fact that the relationship is usually measured over the same single year which leaves the long-term consequences of certain decisions affecting stakeholders unexplored (García-Castro et al., 2007; Demacarty, 2009). Much of the research conducted has concluded an inconsistent relationship between CSI and financial performance (Ullmann, 1985; García-Castro et al., 2007; McWilliams & Siegel, 2000; Balabanis et al., 1998; Nelling & Webb, 2008; Fiori et al., 2007; Lougee & Wallace, 2008; Okwoma, 2010; Aupperle et al., 1985; Waddock & Graves, 1997; Yang et al., 2010; Tang et al., 2012; McGuire et al., 1988).

In an overview of 52 individual studies Orlitzky et al., (2003) argue that three conclusions can be drawn. Firstly, CSI initiatives are generally associated with higher or improved financial performance. Secondly, companies that experience successful financial performance are likely to invest more in CSI initiatives. Thirdly, CSI has a positive effect on financial performance mainly due to its impact on a company's reputation with external stakeholders (Orlitzky et al., 2003).

Some researchers feel that further investigation is needed to fully understand the relationship between CSI and company financial performance (Margolis & Walsh, 2003; Griffin & Mahon, 1997). Surroca et al., (2010) argue that the variability of results in literature is due to the variability in research and development which has not been taken into account. This omission generates a misspecification problem. They also argue that social performance can be both a predictor and a consequence of financial performance.

## 2.10 Measures used to determine the relationship between CSI and financial performance

As mentioned in section 2.3, most agree that no single definition of CSI exists (Schwartz & Saiia, 2012). Carroll, (1979) states that companies need to adhere to economic, legal, ethical and discretionary responsibilities. One of the challenges of sustainability reporting is determining how to measure all of these variables. This is particularly challenging because there is no common unit of measure (D'Aquila, 2012).

Measuring the CSI of a company is not as clear-cut as measuring its financial performance. This is mostly due to the fact that researchers use their own methods and definitions of CSI which makes it difficult to compare one company with another (Aupperle et al., 1985).

This study will measure company CSI in monetary terms. The definition and elements of CSI investment of a company will be clarified as the study progresses past the secondary data analysis stage. A company's monetary investment in CSI will therefore be used to compare against various financial performance measures.

Griffin and Mahon, (1997) review numerous studies and state that as many as 80 different types of financial performance measures have been used to prove this relationship. McGuire et al., (1988) determine that company size, return on assets (ROA), return on equity (ROE), return on sales and asset age are frequently used as financial performance measures.

Unlike other accounting measures, ROA is not affected by the differential degree of leverage present in companies. ROA is positively correlated with stock price; a higher ROA will therefore imply higher value creation for shareholders (Mishra & Suar, 2010). ROA has been used as a measure for financial performance in numerous studies (McGuire et al., 1988; Peters & Mullen, 2007; García & Anson, 2008; García-Castro et al., 2007; Nelling & Webb, 2008; Griffin & Mahon, 1997; Lougee & Wallace, 2008; Aupperle et al., 1985; Okwoma, 2010; Waddock & Graves, 1997; Tsoutsoura, 2004; Yang et al., 2010; Muhamad et al., 2005; Simpson & Kohers, 2002; Orlitzky et al., 2003; Mutezo, 2011; Tang et al., 2012).



ROE (Balabanis et al., 1998; Waddock & Graves, 1997; Griffin & Mahon, 1997; Okwoma, 2010; Tsoutsoura, 2004; May & Khare, 2008; Orlitzky et al., 2003; McPeak & Tooley, 2007; Yang et al., 2010; Mutezo, 2011; García-Castro et al., 2007) and earnings per share (EPS) have also been used in many of these studies (Muhamad et al., 2005; Mutezo, 2011; Oeyono et al., 2011; Samy et al., 2010).

Ratios including financial leverage were used by Muhamad et al., (2005), Ullmann, (1985), McWilliams and Siegel, (2000), Fiori et al., (2007), Nelling and Webb, (2008) and Waddock and Graves, (1997). These six studies also included company size to determine the relationship between CSI and company financial performance.

García-Castro et al., (2007) made use of the KLD index as a measure of the quality of stakeholder relations. KLD measures have been used in previous studies (García-Castro et al., 2007; Waddock & Graves, 1997; McWilliams & Siegel, 2000; Gregory, Whittaker & Yan, 2010). This rating was used to measure CSI because these CSI scores are consistently measured by a group of professionals with the same criteria across a large sample. This is also publicly available information which allows researchers to conduct studies by using the same measurement instruments. However, the study results found that KLD does not affect CSI performance *per se*. Only when the specific reasons for managers adopting KLD are understood, will the relationship between CSI and company financial performance be understood (García-Castro et al., 2007). Overall, these findings suggest that companies with a serious commitment to CSI tend to provide superior returns (Lagoarde-Segot, 2011).

Some argue that the ultimate test of the success or failure of any strategic initiative is to examine the impact of a company's CSI on its market value (Luo & Bhattacharya, 2006). Market value-added (MVA) is also used by some researchers in calculating financial performance. MVA is calculated by deducting loans, retained earnings and paid-in capital from the market capitalisation of the company (García-Castro et al., 2007).

Using event-study methodologies, the impact of CSI-related news on share market prices was analysed by Lagoarde-Segot, (2011). Results showed that companies experience abnormal declines in share prices two days before pollution figures are reported. Results also highlighted a negative premium for companies with poor pollution records on publication day. In summary,

research in this area has consistently shown that negative environmental information results in a short-term drop in market prices (Lagoarde-Segot, 2011).

Ramchander et al., (2012) measure the intra-industry shareholder wealth effects after the announcement of a company's CSI investment. The share price response is captured using a sample of addition and deletion announcements in the Domini Social 400 Index, a prominent stock market social responsibility benchmark. Fiori et al., (2007) conducted a study on the relationship between CSI reports and company share prices. The results showed a positive relationship between the disclosure of good CSI concerning employees and company share prices. However, a negative relationship was noted between the disclosure of good CSI concerning the environment and community and company share prices.

Tobin's q has also been used to measure financial performance, mainly because the value of long-term investments is also taken into account (García-Castro et al., 2007; Surroca et al., 2010). Tobin's q is a ratio that is calculated by dividing the total market value of the company by the replacement value of the company's assets. This ratio has considerable macroeconomic significance and usefulness as the nexus between financial markets and markets for goods and services (Investopedia, n.d.).

## 2.11 Summary

Despite the challenges linked to South Africa's colonial and apartheid past, or perhaps as a result of them, South Africa has a positive track record with regard to social responsibility, largely thanks to its wide-spreading BEE policies. South Africa's emerging role as a global leader in the field has been further cemented by initiatives such as the King reports and the FTSE/JSE SRI Index.

The concept of social responsibility has been in existence for centuries but the modern notion of CSI only came to the fore in the 1950s. Since then, the adoption of initiatives and integration of CSI by corporations has seen a steady growth, primarily driven by stakeholders.

The growing awareness of the importance of CSI has seen a corresponding pressure exerted by stakeholders for greater transparency of companies regarding their CSI activities, particularly over social and environmental concerns. As a result, there has been significant growth of

publicly available information on CSI-related issues in annual and sustainability reports of companies.

The rise of CSI can also be attributed to a better understanding of its associated business benefits. Ideally, companies would need to strike a balance which satisfies the needs of stakeholders without neglecting business imperatives.

Extensive research has already been conducted on the relationship between company financial performance and CSI for over forty years and consensus still has not been reached. Measuring the CSI of a company is challenging due to the fact that researchers use their own methods and definitions of CSI which makes it difficult to compare. As many as 80 different types of financial performance measures have been used to prove this relationship. Frequently used as financial performance measures include company size, ROA, ROE, return on sales and asset age.

## CHAPTER 3 – RESEARCH METHODOLOGY

### 3.1 Introduction

In the previous chapter the history, definitions and relevance of CSI, business benefits, CSI reporting as well as CSI indices were discussed. CSI was contextualised for the South African environment and the relationship between CSI and financial performance was also considered as well as the methods used to determine the relationship.

This chapter will discuss the methodology used to achieve the goal of this study. The chapter will start with the overarching research strategy, which includes the research design, research instrument, sampling strategy, data collection method and data analysis. Thereafter, the validity and reliability of data, ethical considerations and limitations of the study will be discussed.

### 3.2 Research Strategy

#### 3.2.1 Research design

A quantitative research approach will be used to allow for a systematic empirical investigation of the relationship between CSI and financial performance. This methodology enables the researcher to develop and employ mathematical measures to solve the research problem. A quantitative research approach is suitable for this study because it will allow the researcher to link observations made from the annual and sustainability reports and the mathematical demonstration of quantitative relationships (Leedy & Ormrod, 2010; Saunders et al., 2009).

#### 3.2.2 Research instrument

To study the relationship between company financial performance and CSI, this study will employ panel regression analysis as the main statistical method, as used by various researchers for similar studies (McWilliams & Siegel, 2000; Waddock & Graves, 1997; Hillman & Keim, 2001; Garcia-Castro, Arino & Canela, 2007; Garcia & Anson, 2008; Muhamad et al., 2005; Vermeulen & Barkema, 2002; Mutezo, 2011; Tang et al., 2012). Panel regression is a statistical process which estimates the relationships among variables. This model ensures that the

heterogeneity of the 30 companies included in the sample is taken into account. In order to control for individual company heterogeneity, company-specific heterogeneity as well as temporary changes in the company's operating environments, the most suitable method of capturing the variation over time is panel data (Garcia & Anson, 2008). A balanced panel is ensured by including the same number of time observations for every variable. The panel regression analysis will assist in understanding how the value of CSI would change should any one of the independent variables change.

The measures discussed in section 2.10 will then be exploited as follows. The dependent, and therefore primary, variable is CSI. Return on assets (ROA), return on equity (ROE) and earnings per share (EPS) are the selected independent variables which act as indicators of company financial performance. A one-year lag will be fitted to performance measures to allow for the time horizon over which CSI and financial performance can be linked. Two other explanatory variables were included: debt equity ratio (DE) and total assets (TA). These measures are added to account for the effect of financial leverage of the companies and for their size. The model will be estimated using the EViews 8 software package.

The basic regression model for the proposed balanced panel data set is:

$$Y_{it} = \alpha + \beta X_{it} + \mu_{it} \quad (\text{Asteriou \& Hall, 2007})$$

Where  $t=1 \dots 4$   $i=1 \dots 120$

$Y_{it}$  = dependent variable e.g. CSI

$X_{it}$  = independent variables e.g. ROA, ROE, EPS, DE and TA

$\beta$  and  $\alpha$  are the coefficients of regression and  $\mu_{it}$  is the error term

The analysis will start with a pooled model, which assumes that all the companies are homogenous. In other words, the principal assumption is that there are no differences between the data matrices of the cross-section dimension. In all the diagnostic testing this will be the benchmark model. Two panel methods, the fixed effects and random effects models, will be fitted to the data. These two models will be compared to the pooled model to establish which model is better suited for this analysis. The fixed effects model allows for different constants for each group by including a dummy variable for each group. This makes it possible to

determine whether to account for heterogeneity in the companies. An F-test will be done to determine whether the fixed effects model should indeed be included and whether significant differences exist between the companies in the fixed effects model. The F-test will then be used to check fixed effects against the pooled model. If the F-statistical is bigger than the F-critical, the null hypothesis will be rejected. The second panel method to be used is the random effects model, which handles the constants for each section as random parameters. This model therefore assumes that each company differs in its error term. The Hausman test determines whether the fixed effects or the random effects model is correlated or not. Should there be correlation, this model would not be suitable (Wooldridge, 2002; Schmidheiny, 2014; Asteriou & Hall, 2007).

These analyses will illustrate the relationship (or its lack) between a company's financial performance, as depicted by the relevant measures, and the company's company spent on CSI. It will also provide an indication as to whether a company that performs well financially is likely to spend more on CSI or whether company performance has no bearing on CSI patterns. In the event that the CSI of the company increases over the four years and financial performance improves accordingly over the same period, a positive relationship will exist, and vice versa, assuming all other factors remain constant.

### 3.2.3 Sampling strategy

Inclusion in the FYSE/JSE SRI Index is the first pre-requisite for selection. To ensure that companies of a sufficient size are considered, companies also need to be listed on the FTSE/JSE Top 40 Index. The initial selection criteria therefore indicate that companies should be listed on both the above-mentioned indices. Annual reports and sustainability reports for the period of 2010 to 2013 will be sourced from each company's website. Companies which have not reported on CSI for the entire period of 2010 to 2013 will be excluded from the study. Thus, only entities that reported on CSI over these four consecutive years will be considered in order to avoid unbalanced variance. This sampling strategy is similar to that used by Mittal et al., (2008), Oeyono et al., (2011), Peters and Mullen, (2007).

The selection process of companies used in this study will now be explained step-by-step. The FTSE/JSE SRI Index results for 2013 indicated that there were 157 companies assessed by the FTSE/JSE SRI Index. These companies were evaluated on the four areas of measurement,

namely environment, society, governance and related sustainability concerns and climate change. Only 46% of the companies assessed qualified for inclusion in the Index. Only five companies qualified for the first time in 2013. Results show that there were 72 successful constituents on the FTSE/JSE SRI Index in 2013 (Roux & Mollo, 2013). These 72 companies are listed alphabetically in Appendix 2.

In order to include large, listed companies in South Africa spanning all industries, companies from the group of 72 which are also listed in the FTSE/JSE Top 40 Index are then further isolated. The companies in the FTSE/JSE Top 40 Index represent over 80% of the total market capitalisation of the companies listed on the FTSE/JSE All Share Index. Companies on the FTSE/JSE Top 40 Index are ranked by market capitalisation. The FTSE/JSE Top 40 Index is therefore a fair reflection of what happens to the South African stock market as a whole (Courtney Capital, 2013).

Thus, of the 72 constituents on the FTSE/JSE SRI Index, 35 companies are also included in the FTSE/JSE Top 40 Index for 2013 (Courtney Capital, 2013). These 35 companies are listed alphabetically in Appendix 3.

The next step in the process entails the investigation of the annual and sustainability reports of the 35 companies to determine which ones reported on CSI over the period of 2010 to 2013. Only companies that reported on CSI spend for the four consecutive years will be used in the study. The amounts considered to be CSI are clearly identifiable as CSI on annual or sustainability reports. It should be noted that no alternative sources other than annual and sustainability reports will be used to gather data. It is therefore possible that companies spent more on CSI than is indicated in this study.

Of the 35 companies which met the selection criteria, 30 reported on CSI in their annual and sustainability reports from 2010 to 2013. These 30 companies, as set out in Table 3.1 below, are therefore deemed eligible for use in this study.

**Table 3.1 – The 30 companies that reported on CSI for 2010-2013**

African Rainbow Minerals	FirstRand	MTN Group
Anglo American	Gold Fields Ltd	Nedbank
Anglo American Platinum	Intu Properties	Old Mutual
AngloGold Ashanti	Impala Platinum Holdings	Remgro
Barclays Africa Group	Imperial Holdings	SAB Miller Plc
BHP Billiton	Investec	Sanlam
The Bidvest Group Ltd	Kumba Iron Ore	Sasol
British American Tobacco	Massmart Holdings	Standard Bank Group
Discovery Holdings	Mediclinic International	Truworths International
Exxaro Resources	Mondi	Woolworths International

Source: Author's own representation

### 3.2.4 Data collection method

The secondary data used in the study will be gathered accessing the annual and sustainability reports from the websites of the 30 selected companies for the four years under review.

Annual reports and sustainability reports of the selected companies will be scrutinised and the items identified as CSI will be selected as criteria for inclusion. To ensure consistency, amounts made publicly available in the reports will be included. For the purposes of this study, CSI investment thus includes the following:

- Community donations, investments, grants or bursaries;
- Community education and training;
- Social upliftment projects;
- CSI initiatives of engagements;
- Socio-economic development (SED);
- Social and labour plans;
- Low-cost housing; and
- All voluntary contributions to the broader community.

The CSI figure will be expressed in South African Rand (Rand) to ensure comparability between the selected companies where reporting currencies differ. In cases where the Rand is



not the reporting currency, INET (BFA) reporting currencies for each specific year will be used to translate the amounts to Rand.

The secondary data relating to financial performance and relevant financial ratios will be obtained from the INET Bureau of Financial Analysis (BFA) database, a subscription service supplying real-time and historical financial information on South African listed companies. This web-based fundamental research platform is designed for flexibility, ease of use and depth of content and allows for the export of all information required for the study. Each of the 30 companies selected was included in the report formulated by INET (BFA).

The report provides key financial information including an overview, ratios and statements. Making use of the 'ratio function', various ratios can be extracted. Under the 'general function', all the relevant ratios needed, namely ROE, ROA, EPS, DE and TA, were selected as well as the reporting periods of 2010 to 2013. The figure needed for TA is not a ratio but rather a reporting figure, included in the statement of financial position of a company. Key financial information under the 'statements function' allows for the selection of companies required for the reporting periods of 2010 to 2013.

The components and definition of each of the ratios will be discussed in detail in the following section.

### 3.2.5 Data analysis

The annual and sustainability reports of companies providing information on CSI over the four consecutive years will be studied. These reports and figures need to be carefully examined and understood.

These ratios and figures will be compared over time to seek a relationship between CSI and company financial performance for the sample companies as a whole.

The financial performance ratios used for this study include:

- Return on assets (ROA)
- Return on equity (ROE)
- Earnings per share (EPS).

The ratios are selected on the frequency of use in similar studies and have been used as a measure of financial performance in numerous studies: ROA (McGuire et al., 1988; Peters & Mullen, 2007; García & Anson, 2008; García-Castro et al., 2007; Nelling & Webb, 2008; Griffin & Mahon, 1997; Lougee & Wallace, 2008; Aupperle et al., 1985; Okwoma, 2010; Waddock & Graves, 1997; Tsoutsoura, 2004; Yang et al., 2010; Muhamad et al., 2005; Simpson & Kohers, 2002; Orlitzky et al., 2003; Mutezo, 2011; Tang et al., 2012). ROE (Balabanis et al., 1998; Waddock & Graves, 1997; Griffin & Mahon, 1997; Okwoma, 2010; Tsoutsoura, 2004; May & Khare, 2008; Orlitzky et al., 2003; McPeak & Tooley, 2007; Yang et al., 2010; Mutezo, 2011; García-Castro et al., 2007) and EPS (Muhamad et al., 2005; Mutezo, 2011; Oeyono et al., 2011; Samy et al., 2010).

Two other explanatory measures will also be used to incorporate the size and financial leverage of the companies:

- Debt equity ratio (DE)
- Total Assets (TA).

These two measures are consistent with similar studies by Muhamad et al., (2005), Ullmann, (1985), McWilliams and Siegel, (2001), Fiori et al., (2007), Nelling and Webb, (2008), Waddock and Graves, (1997).

According to INET (BFA), ROA measures how effectively a company uses its assets and can be calculated by dividing earnings before interest and tax by total assets, excluding intangible assets, expressed as a percentage. ROE measures how well a company used reinvested earnings to generate additional earnings. It is calculated by dividing earnings after tax and preference dividends by the book value of equity, expressed as a percentage return.

The earnings per share or EPS of the company is calculated by dividing total earnings by the number of shares in issue. The debt equity ratio or DE is a measure of a company's financial leverage or risk. Financial leverage is the degree to which a company uses fixed-income securities such as debt and preferred equity. The more debt financing a company uses, the higher its financial leverage. Thus, DE is equal to long-term debt divided by ordinary shareholders' equity. The TA figure is the total asset amount presented in the statement of financial position.

This analysis will be conducted by comparing a given company's CSI in 2010 to the relevant financial performance measures in 2010 for that same company. The same will be performed for 2011, 2012 and 2013 and for each of the companies in the sample.

Correlations will then be sought between CSI and financial performance over the periods 2010, 2011, 2012 and 2013. It will then be determined whether a relationship, either positive or negative, exists between CSI and financial performance for the entities combined.

### 3.3 Validity and reliability of data

Twenty-two studies investigated by Margolis and Walsh, (2003) addressing some form of CSI and financial performance research problem, made use of regression. Where CSI acted as the dependent variable, financial performance was used as the independent variable. In addition to the 22 studies referred to above, the same approach was used in studies by Graves and Waddock, (1994) and Yang et al., (2010).

The business nature of the companies selected in the study varies over different industries. The selected companies are primarily in the banking, retail or mining industries. Panel data is used to capture any variations over time and thus ensure control for individual company heterogeneity, company-specific heterogeneity as well as temporary changes in the company's operating environments.

Many researchers have employed panel regression analysis as the main statistical method for studying the relationship between CSI and financial performance: (McWilliams & Siegel, 2000; Waddock & Graves, 1997; Hillman & Keim, 2001; Garcia-Castro et al., 2007; Garcia & Anson, 2008; Muhamad et al., 2005; Vermeulen & Barkema, 2002; Mutezo, 2011; Tang et al., 2012).

Seven of the studies mentioned above concluded a positive relationship between CSI and financial performance: (Tsoutsoura, 2004; Mutezo, 2011; Muhamad et al., 2005; Waddock & Graves, 1997; Brammer & Millington, 2008). Two studies concluded a negative relationship: (Garcia-Castro et al., 2007; Hillman & Keim, 2001).

The secondary data used in this study will be obtained from reliable sources such as company annual and sustainability reports, which are externally assured, and the INET (BFA) database, which is generally regarded as reliable for research purposes.

### 3.4 Ethical considerations

When conducting a quantitative study, it allows the researcher to plan most of the research process in advance. This makes it easier to understand and identify potential ethical challenges. In this case, since all of the information required for the study is in the public domain and therefore readily available, and the analysis can be replicated by any person with the requisite skills, no ethical issues relating to the data or the results are foreseen.

Furthermore, this research proposal was submitted for review to ensure that the focus and title of the minor dissertation is accepted and registered at the Faculty of Economics and Financial Sciences of the University of Johannesburg. The study complies with the Professional Code of Ethics, as specified by the Faculty of Economics and Financial Sciences of the University of Johannesburg.

### 3.5 Limitations

Due to the fact that the study is of an exploratory nature, generalisations and assumptions are difficult to formulate. Using the FTSE/JSE SRI Index to identify the companies for review in this study can be considered as a reasonable starting point, although the criteria used by the Index may not be entirely free from criticism.

Although the companies used in the study can be considered as a fair representation of the South African market, the study is limited to a four-year window of 30 large, listed South African companies. Results cannot therefore be generalised to the population at large.

Furthermore, the study is limited to only include the CSI that is clearly identifiable in annual and sustainability reports. Amounts falling outside this criterion are not included and it is acknowledged that the companies may have spent more on CSI than was actually reported.

It should also be noted that financial ratios are based on historical accounting data, which could be considered as an inherent limitation. External profitability measures, such as market value-added (MVA) (Garcia-Castro et al., 2007) or market-based measures such as stock market return (Muhamad et al., 2005) and Tobin's q ratio (Muhamad et al., 2005; Garcia-Castro et al., 2007; Surroca et al., 2010) have also been employed by other researchers. These can be used to ascertain whether the same results can be concluded for the same companies.

Lastly, the study has not considered the possibility of other variables that may have had an impact on the results in this research model.

### 3.6 Summary

Secondary data will be used to perform a panel regression analysis to determine the relationship between CSI and financial performance. CSI will act as the dependent variable and various performance measures will act as independent variables. The performance variables will include ROE, ROA and EPS. Two other explanatory variables will also be included in the study to account for company size and financial leverage.

Companies listed on both the FTSE/JSE SRI Index and the FTSE/JSE Top 40 Index will be included in the study. A balanced panel regression will be used to avoid unbalanced variance. Therefore, only companies that reported on CSI for the consecutive years 2010 to 2013 will be included. Data will be obtained from annual reports and sustainability reports as well as the INET (BFA) database. The ratios and CSI of the 30 companies will be compared over time for each company selected.

Panel regression analysis has been used in numerous, similar studies to achieve valid results. Although the data in this study will be tested for reliability, some limitations do exist with regards to the sample size (30 companies) and sample period (four years). It is difficult to ascertain whether the amount spent on CSI analysed in the study indeed represents the full amount spent on CSI by the companies.

## CHAPTER 4 – DATA ANALYSIS

### 4.1 Introduction

The previous chapter described the research methodology that will be applied in this study, as well as the process involved in selecting the sample companies. It also explained the types of companies selected for review, as well as the selection criteria. It set out how the financial performance ratios will be calculated and provided a definition of CSI for the purposes of this study. Lastly, the chapter also clarified the process of data analysis used to obtain the results in this study.

In Chapter 4, the panel analysis will be conducted, starting with the pooled model, followed by the fixed and random effects panel methods and the appropriate diagnostic tests.

### 4.2 Panel analysis results

The objective of the analysis is to investigate the relationship between CSI and financial performance in 30 companies listed on both the FTSE/JSE Top 40 Index and the FTSE/JSE SRI Index.

The dependent variable is CSI, as set out in the previous chapter. The selection of variables as independent variables for this model is based on previous, similar studies. The explanatory variables, TA and DE, ensure that the study takes leverage or financial risk and company size into account in addition to the other performance measures. The choice of a one-year lag for the performance indicators is based on the fact that all companies make use of a budgeting process. Historic data is used to budget for the current year. When investigating the annual reports of companies, it became evident that many companies calculate their annual CSI as a percentage of profit after tax. Brammer and Millington, (2008) point to a debate regarding the time horizon over which CSI and financial performance can be linked. In this study, CSI for 2013 will therefore be based on performance in 2012. It is also evident from the annual and sustainability reports that companies have fixed investments in CSI initiatives, thus making it difficult to reduce spending due to existing partnerships and commitments. It is therefore assumed in this study that the CSI of the current year relates to the performance (ROA, ROE

and EPS) of the company in the previous year. The choice of a one-year lag corresponds with the approach used by Waddock and Graves, (1997), Yang et al., (2010) and McGuire et al., (1988).

This analysis incorporates the panel regression model to account for the heterogeneity of the 30 companies included in the sample. At first the pooled model is run where it is assumed that all the companies are homogenous.

**Table 4.1 - Pooled Model**

Variable		Coefficient	p-value
Dependent Variable:	CSI	125886.200	0.021
Independent Variables:	ROA (-1)	7057.065	0.139
	ROE (-1)	-5780.416	0.134
	EPS (-1)	58.582	0.120
	TA	0.001	0.000***
	DE	-67430.300	0.000***
<b>R-squared</b>		0.537	

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.10

Source: EViews Estimation

The results of the pooled model in Table 4.1 above show that ROA (7057.065) is positive, ROE (-5780.416) is negative, EPS (58.582) is positive, TA (0.000) is positive and DE (-67430.300) is negative. The three performance indicators, ROA, ROE and EPS, are significant on an 85% confidence level with a positive, negative and positive relationship with CSI respectively. There is a significantly positive relationship between CSI and the size of the company and a negative relationship between CSI and financial leverage. These relationships will be explained in the final model at the end of this chapter since the relationship signs are the same for the three models; relationships only differ with regards to their significance.

The next model to be employed is the fixed effects model which accounts for the heterogeneity of the companies.

**Table 4.2 - Fixed Effects Model**

<b>Variable</b>		<b>Coefficient</b>	<b>p-value</b>
Dependent Variable:	CSI	67555.060	0.602
Independent Variables:	ROA (-1)	1889.350	0.755
	ROE (-1)	-6482.272	0.191
	EPS (-1)	82.312	0.080*
	TA	0.000	0.051*
	DE	31256.490	0.432
<b>R-squared</b>	0.941		

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.10

Source: EViews Estimation

Accounting for the differences between the companies yielded different results from the pooled model. The results are presented in Table 4.2 above. ROA (1889.350) and ROE (-6482.272) are insignificant whereas EPS (82.312) is significant on a 90% confidence level with a positive sign. TA (0.000) is positive and significant whereas DE (31256.490) is insignificant. To determine if the fixed effects are indeed an appropriate model for this study, i.e. are there significant differences between the companies in the sample, an F-test is conducted to determine the redundancy or significance of accounting for differences. The test results are presented in Table 4.3 below. The null hypothesis states that the fixed effects are redundant, the p-value is in this case = 0. The null hypothesis can therefore be rejected and it can be concluded that there is indeed a difference between the companies and that heterogeneity does need to be taken into account.

**Table 4.3 - Fixed Effects Test (F-test)**

<b>Effects Test</b>	<b>p-value</b>
Cross-section F	
Cross-section Chi-square	0.000

Source: EViews Estimation



After fitting the fixed effects, the random effects can also be estimated. The company-specific effects in this model are captured in the error rather than as a dummy (Wooldridge, 2002). The results for the random effects models are showed in Table 4.4 below.

**Table 4.4 - Random Effects Model**

<b>Variable</b>		<b>Coefficient</b>	<b>p-value</b>
Dependent Variable:	CSI	171672.100	0.021
Independent Variables:	ROA (-1)	5523.258	0.256
	ROE (-1)	-6928.385	0.082*
	EPS (-1)	75.246	0.043**
	TA	0.001	0.000***
	DE	-39037.940	0.010***
<b>R-squared</b>	0.268		

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.10

Source: EViews Estimation

It is important to determine whether there is any correlation between the errors before interpreting the results. The null hypothesis for the Hausman test indicates that the errors are correlated. The p-value is 0.044 which means the null hypothesis can be rejected and it can be concluded that there is no correlation present.

The fixed effects and the random effects are appropriate according to the diagnostic tests (Tables 4.3 and 4.5); the random effects model is, however, the most appropriate since the sample is over a very short time period of four years and covers a large cross-section. The final model is thus the model above in Table 4.4.

**Table 4.5 - Hausman Test**

<b>Test Summary</b>	<b>p-value</b>
Cross-section random	0.045

Source: EViews Estimation

The final model is the random effects model, see Table 4.4, and shows that ROA (5523.258) is positive, ROE (-6928.385) is negative, EPS (75.246) is positive, TA (0.001) is positive and DE (39037.940) is negative.

As its name implies, ROA gives an indication of the efficiency of management in using company assets to generate earnings. In other words, ROA is an indication of how much return a company derives relative to the assets under its control. The results indicate a positive but insignificant relation between ROA and CSI. This insignificant relationship is confirmed by Yang et al., (2010). In this study, it is considered that the four-year period, reduced to three years when the lag is taken into account, might be insufficient to produce conclusive results since the financial effect of CSI may take longer to fully filter through to earnings, resulting in an insignificant relationship.

ROA can also be distorted by the effect of inflation and depreciation on the book value of assets. As the cost of assets declines over time in real terms, the income and costs that represent return are subject to inflation, and as such, returns increase relative to the cost of the assets. Since assets are depreciated, the effect of inflation is exacerbated. When the book values of assets are depreciated, the value of the assets not only declines in real terms but also in nominal terms. Higher ROA implies higher value creation for shareholders and ROA is not affected by the degree of leverage present in companies (Mishra & Suar, 2010).

According to the results, if ROA increases with R1 000, *ceteris paribus*, CSI will increase with 5523.258c. The positive relationship between CSI and ROA accords with the findings of Mutezo, (2011), Peters and Mullen, (2007), Garcia-Castro et al., (2007), Nelling and Webb, (2008), Lougee and Wallace, (2008), Okwoma, (2010), Tsoutsoura, (2004), Simpson and Kohers, (2002), Tang et al., (2012) and Yang et al., (2010); McGuire et al., (1988), Waddock and Graves, (1997), Muhamad et al., (2005), Orlitzky et al., (2003). However, in this analysis, this relationship is insignificant, which is accordance with the findings of Yang et al., (2010). It can therefore be concluded that an insignificant relationship exists between ROA and CSI.

ROE is negatively correlated and significant on a 90% confidence level. ROE is a profitability ratio that measures the ability of a company to generate profits from its shareholders' investment. The effect of leverage plays a significant role in ROE since ROE focuses on earnings accruing to equity providers, after finance costs have been paid. The negative

relationship contradicts the initial expectation. The results of the random effects model with regards to the negative relationship between ROE and CSI are in contrast to the findings of Waddock and Graves, (1997), Tsoutsoura, (2004), Okwoma, (2010), Orlitzky et al., (2003), Mutezo, (2011), Balabanis et al., (1998), May and Khare, (2008) and McPeak and Tooley, (2007). However, Yang et al., (2010) also concluded that a negative relationship existed between CSI and ROE. Balabanis et al., (1998) stated that differing capital structures make the comparison of ROE of companies difficult at times. Relying on ROE as a measure of company financial performance might be misleading because it is also a function of a company's financial leverage, and not only of profitability (Bowman & Haire, 1975), as cited by (Aupperle et al., 1985). Investigating the sample data further, it is noted that the average Debt/Equity ratio for the companies under review decreased from 2.86 in 2010 to 2.70 in 2013. This reduced financial leverage contributed to a lower average ROE in the companies under review, decreasing from 19.9% in 2010 to 13.23% in 2013. The average EPS (an 'after finance cost' measure) increased from 1011.63 cents in 2010 to 1191.70 cents in 2013, which further explains the impact of the reduced financial leverage on ROE. It seems that the average decrease in ROE over the period under review is mainly attributable to the decrease in financial leverage. It can be concluded that the negative relationship between CSI and ROE may be mainly caused by macroeconomic factors affecting the specific companies in the period under review. According to Buehler, Samandari and Mazingo, (2009), these factors may include the higher costs of borrowing to end users of capital and the effects of a short-term tightening in the availability of credit. It should be noted that, according to the data, if ROE increases with a R1 000, CSI will decrease with 6928.385c, all other factors remaining constant.

EPS is positive and significant on a 95% confidence level. This is in line with expectations because the relationship indicates that companies with a higher EPS, or profitability, spend more on CSI and vice versa. EPS measures net income per share and is expressed in a currency, Rand in this case. It seems that the higher the profitability of a company, the more money it has to spend on CSI. According to the data, if EPS increases with a R1 000, *ceteris paribus*, CSI will increase with 75.246c. This accords with the findings of Mutezo, (2011), Oeyono et al., (2011), Muhamad et al., (2005) and Samy et al., (2010) who indicate a positive relationship between CSI and EPS.

The two explanatory variables, TA and DE, are significant on a 99% confidence level, with a positive and negative relationship, respectively. The positive relationship between CSI and TA

accords with expectations due to the fact that larger companies have a higher TA value, and thus have more funds available to spend on CSI, and vice versa. Companies of a larger scale have greater capability to attend to the needs of society and the environment due to greater resources capabilities, while the community also has higher expectations of social responsibilities. Waddock and Graves, (1997) suggest that smaller companies participate less in CSI initiatives than larger companies, as suggested by the results in this study. Therefore, the size of a company does impact CSI. It is noted that larger companies feel the responsibility to spend more on CSI and don't just spend the minimum to match the spending of smaller companies. Larger companies are more in the public eye and should therefore respond to the needs of public interest stakeholders. This conclusion is in line with the findings of Waddock and Graves, (1997), Fiori et al., (2007) and McGuire et al., (1988) who also indicate a positive relationship between CSI and TA or size. The negative relationship between CSI and DE can be explained by considering financial leverage, which refers to the balance between debt and equity in the company's funding structure. The higher the leverage, the more the company relies on debt for funding. The servicing of debt is a contractual obligation and cash must be applied to servicing the interest on the debt, resulting in less cash to spend on CSI. Financial leverage also increases the financial risk of a company and shareholders will therefore require a higher return, which could further erode the available cash to spend on CSI. The result of a negative relationship between CSI and DE is in line with the findings of Fiori et al., (2007) and Nelling and Webb, (2008). According to the data, if TA increases with R1 000, CSI will increase with 0.001c, all other factors remaining constant. If DE increases with R1 000, *ceteris paribus*, CSI will decrease with 39037.940c.

Mittal et al., (2008) state that companies which engage in CSI initiatives incur significant programmatic and administrative costs and it is therefore likely that companies engaging in such initiatives are likely to be financially successful and can therefore afford the 'CSI overhead'. In this sense, CSI is almost regarded as a luxury and not a necessity.

### 4.3 Summary

The panel regression commenced by running a pooled model, which assumed that all the companies were homogenous. This was followed by a fixed effects model, which accounted for heterogeneity among companies. An F-test was completed to determine whether significant differences existed between the companies. It was then possible to run a random effects model

to account for company-specific effects. A Hausman test was used to determine whether a fixed effects model or a random effects model was the most appropriate tool for this study. The random effects model was proven to be the most appropriate for the study.

Even though the significance of the relationships differed between the different models, the sign of the relationships remained the same. The relationship between CSI and ROA, EPS and TA was confirmed as positive while the relationship between CSI and ROE and DE was confirmed as negative. This study found the main significant financial performance determinant of CSI to be EPS, with TA and DE as other useful explanatory measures.

The positive relationship between CSI and ROA, EPS and TA, as well as the negative relationship between CSI and DE, support the findings in the literature explored as part of this study. The variable ROE was expected to have a positive sign according to theory, but in this study it accorded with the findings of Yang et al., (2010), posing a negative sign. The reason for the similarity in finding a negative relationship may be due to the fact that Yang et al., (2010) also tested the relationship between the previous year's financial performance against the latest year's social performance. Yang et al., (2010) also made use of a one-year lag, as well as employing financial performance measures as independent variables and social performance as the main dependent variable.

# CHAPTER 5 – FINDINGS, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

The relationship between CSI and financial performance has been studied for more than four decades. According to Margolis and Walsh, (2003) more than 127 empirical studies have been conducted on this relationship during that period. Empirical studies still deliver mixed results (García-Castro et al., 2007), although it appears that the majority of research infers a positive relationship between CSI and company performance. The relationship remains controversial, however, and has been hotly debated since the 1970s with no consensus in sight (McWilliams & Siegel, 2001).

There are divergent views regarding the social role and responsibilities of companies as ‘good corporate citizens’. There appears to be general consensus that companies should abide by legal frameworks and conduct business in an ethical manner. Some companies argue that this is adequate as they meet their social responsibilities merely by generating profits in an ethical manner. Others argue that shareholder wealth maximisation and self-gain should not be the sole goals of the company and that more should be done for society and the environment. Most companies identify benefits from socially responsible behaviour, however, many of these benefits are hard to quantify and measure. It is therefore difficult to determine whether these benefits are worth the cost of investing in CSI, and consequently, whether the company’s net position has improved as a direct result of CSI initiatives.

This study explores the relationship between CSI in monetary terms and company financial performance in South African companies forming part of the FTSE/JSE SRI Index. A quantitative research approach was used to allow for a systematic empirical investigation of the relationship between CSI and financial performance.

To study the relationship between company financial performance and CSI panel regression analysis was employed as the main statistical method, as used by various researchers in similar

studies (McWilliams & Siegel, 2000; Waddock & Graves, 1997; Hillman & Keim, 2001; García-Castro et al., 2007; García & Anson, 2008; Muhamad et al., 2005; Vermeulen & Barkema, 2002; Mutezo, 2011; Tang et al., 2012). Panel regression is a statistical process that estimates the relationships among variables. This model ensured that the heterogeneity of the 30 companies included in the sample was taken into account. In order to control for individual company heterogeneity, company-specific heterogeneity as well as temporary changes in the company's operating environments, the most suitable method of capturing the variation over time is panel data (García & Anson, 2008). The panel regression analysis assisted in understanding how the value of CSI would change should any one of the independent variables change.

Based on panel regression analysis, the study investigated the relationship between companies listed on both the FTSE/JSE SRI Index and FTSE/JSE Top 40 Index and which reported on CSI for the period under review. Thirty companies adhered to these specifications and represented the sample selection. The study used data covering a four-year period from 2010 to 2013. Secondary data used in the study was gathered from INET (BFA) as well as annual and sustainability reports. The CSI figures were gathered from the annual and sustainability reports, while financial performance measures in the form of ratios were gathered from INET (BFA). The selection of ratios was based on variables deemed to have a link with CSI. The variables included ROA, ROE and EPS. Two other explanatory variables were added, namely TA and DE, to ensure that company size and financial leverage were considered. CSI acted as the dependent variable in the panel regression analysis and ROA, ROE, EPS, TA and DE acted as the independent variables.

The previous chapter conducted the panel analysis, starting with the pooled model, followed by the fixed and random effects panel methods and the appropriate diagnostic tests.

This chapter will discuss the findings, provide a conclusion, outline the limitations of the study and suggestions areas for further research.

## 5.2 Findings

The purpose of this study is to explore the relationship between CSI and company financial performance, as represented by specific financial ratios and measures. These measures include the ROA, ROE, EPS and DE ratios as well as the TA measure.

### 5.2.1 The relationship between ROA and CSI

The results of this study indicate a positive but insignificant relationship between ROA and CSI. This insignificant relationship is confirmed by Yang et al., (2010). It is considered that the insignificant relationship may be ascribed to the four-year period (reduced to three years when the lag is taken into account) as being insufficient to produce conclusive results since the financial effect of CSI may take longer to fully filter through to earnings. Furthermore, ROA can be distorted by the effects of inflation and depreciation on the book value of assets (Mishra & Suar, 2010).

The positive relationship between CSI and ROA accords with the findings of Mutezo, (2011), Peters and Mullen, (2007), Garcia-Castro et al., (2007), Nelling and Webb, (2008), Lougee and Wallace, (2008), Okwoma, (2010), Tsoutsoura, (2004), Simpson and Kohers, (2002), Tang et al., (2012) and Yang et al., (2010); McGuire et al., (1988), Waddock and Graves, (1997), Muhamad et al., (2005), Orlitzky et al., (2003).

### 5.2.2 The relationship between ROE and CSI

ROE is negatively correlated and significant on a 90% confidence level. The results of the random effects model with regards to the negative relationship between ROE and CSI are in contrast to the findings of Waddock and Graves, (1997), Tsoutsoura, (2004), Okwoma, (2010), Orlitzky et al., (2003), Mutezo, (2011), Balabanis et al., (1998), May and Khare, (2008) and McPeak and Tooley, (2007). However, Yang et al., (2010) also concluded that a negative relationship existed between CSI and ROE. As stated by Balabanis et al., (1998) it should be noted that differing capital structures make for difficult comparison of ROE across companies. ROE is also reliant on a specific company's level of financial leverage as well as the effect that the cost of debt finance has on ROE. It appears that the average decrease in ROE over the



period under review is mainly attributable to the decrease in financial leverage. It is therefore concluded that the negative relationship between CSI and ROE may primarily be caused by macroeconomic factors, such as interest rates, which may have affected the specific companies during the period under review.

### 5.2.3 The relationship between EPS and CSI

EPS and CSI are positively correlated and significant on a 95% confidence level. The relationship indicates that companies with a higher EPS or profitability spend more on CSI and vice versa. This is in line with the findings of Mutezo, (2011), Oeyono et al., (2011), Muhamad et al., (2005) and Samy et al., (2010) who indicate a positive relationship between CSI and EPS.

### 5.2.4 The relationship between TA and DE, and CSI

The two explanatory variables, TA and DE, are significant on a 99% confidence level, with a positive and negative relationship respectively. The positive relationship between CSI and TA is in line with expectations due to the fact that larger companies have a higher TA value, or larger asset value, and thus have more funds available to spend on CSI and vice versa. This conclusion is in line with the findings of Waddock and Graves, (1997), Fiori et al., (2007) and McGuire et al., (1988) who also indicate a positive relationship between CSI and TA or size.

The negative relationship between CSI and DE can be explained by considering financial leverage, which refers to the balance between debt and equity in the company's funding structure. The higher the leverage, the more the company relies on debt for funding. The servicing of debt is a contractual obligation and cash must be applied to service the interest on the debt, resulting in less cash to spend on CSI. The result of a negative relationship between CSI and DE is in line with the findings of Fiori et al., (2007) and Nelling and Webb, (2008). The conclusion on the effect of leverage is also in line with the findings of this study regarding ROE.

### 5.3 Conclusion

The positive relationship between CSI and ROA and EPS-supports the findings in the literature explored as part of this study which infers a positive relationship between CSI and financial performance.

The variable ROE, representing financial performance, was expected to also have a positive relationship according to theory, but in this study it accorded with the findings of Yang et al., (2010), posing a negative relationship. The reason for the similarity in finding a negative relationship may be due to the fact that Yang et al., (2010) also tested the relationship between the previous year's financial performance against the latest year's social performance. Yang et al., (2010) also made use of a one-year lag as well as employing financial performance measures as independent variables and social performance as the main dependent variable.

This study found the main significant financial performance determinant of CSI to be EPS, with TA and DE as other useful explanatory measures. It is clear that mixed or inconsistent results were also the case for the present study and it is not possible to support the notion of a positive or negative relationship for the study overall, which is consistent with the stance of Ullmann, (1985), García-Castro et al., (2007), McWilliams and Siegel, (2000), Balabanis et al., (1998), Nelling and Webb, (2008), Fiori et al., (2007), Lougee and Wallace, (2008), Okwoma, (2010), Aupperle et al., (1985), Waddock and Graves, (1997), Yang et al., (2010), Tang et al., (2012) and McGuire et al., (1988).

Inconsistent or mixed results can be due to the lack of consistent and reliable instruments to measure CSI (García-Castro et al., 2007; Waddock & Graves, 1997). Another reason for inconsistent results can be attributed to a change in circumstances of the relationship which may not have been understood at the time of measurement (McWilliams & Siegel, 2000; Waddock & Graves, 1997; García-Castro et al., 2007). The third reason for inconsistency in study results is the fact that the relationship is usually measured over the short-term and long-term of the same year. This means that the long-term consequences of decisions affecting stakeholders were not taken into account (García-Castro et al., 2007; Demacarty, 2009). Much of the research conducted infers an inconsistent relationship between CSI and financial performance (Ullmann, 1985; García-Castro et al., 2007; McWilliams & Siegel, 2000; Balabanis et al., 1998; Nelling & Webb, 2008; Fiori et al., 2007; Lougee & Wallace, 2008;

Okwoma, 2010; Aupperle et al., 1985; Waddock & Graves, 1997; Yang et al., 2010; Tang et al., 2012; McGuire et al., 1988).

## 5.4 Limitations of the study

This study is of an exploratory nature and generalisations and assumptions are therefore difficult to formulate. Using the FTSE/JSE SRI Index to identify the companies for review in this study can be considered as a reasonable starting point, although the criteria used by the Index may not be entirely free of criticism.

Determining the CSI investment figure for the sample may have proven challenging in some cases as not all companies are equally committed to reporting these figures. The availability and reliability of information can therefore be considered as a limitation.

It should be noted that financial ratios are based on historical accounting data, which could be considered as an inherent limitation. External profitability measures, such as market value-added (MVA) (García-Castro et al., 2007) or market-based measures such as stock market return (Muhamad et al., 2005) and Tobin's q ratio (Muhamad et al., 2005; García-Castro et al., 2007; Surroca et al., 2010) have also been employed by other researchers. These can be used to ascertain whether the same results can be concluded for the same companies.

Although this study investigates the possible relationship between CSI investment and financial performance over a four-year period, the benefits may only have become evident in future periods not under investigation. Similarly, if CSI investment was made in years preceding the study, this investment may have resulted in improved financial performance during the period under the review. The timing of CSI investment and potentially improved performance is therefore a limitation of this study.

A positive relationship between CSI investment and financial performance may also be attributed to other factors such as launching a new product line or increased market share, and not simply due to an increase in CSI investment. The difficulty in isolating the reasons for a positive correlation is therefore another limitation.

Where correlations between CSI investment and financial performance do exist, the study is limited insofar as it is difficult to pinpoint which factor was responsible for the positive result. Companies with high sustainable financial performance may have had more money to invest in CSI. An increase in CSI in this case would not necessarily have resulted in an increase in financial performance; rather, it may have been the increased financial performance (as a result of other factors) which had caused the increased investment in CSI.

Generalisation and assumptions are limited in this study, as with all studies of an exploratory nature. The results of this study only prove a relationship between CSI and financial performance in South Africa for the relevant companies and cannot therefore be generalised.

## 5.5 Suggestions for further research

Much remains to be learned about the relationship between CSI and company financial performance. For example, as more CSI data becomes available in coming years in annual and sustainability reports, it will be possible to conduct studies over a longer period of time. It would be useful to determine whether the relationship between CSI and the variables used in this study would change when a longer period is used for analysis or whether those relationships would remain consistent over time.

This study was limited to examining the effect of accounting-based performance measures, namely ROA, ROE, EPS, on CSI. It would be interesting to determine whether market-based performance measures affect CSI in the same way. Furthermore, the study only investigated five aspects of financial performance; it is likely that other financial performance indicators would have resulted in a different conclusion.

It would also be important to determine the timing of the relationship and establish when the link between CSI costs and benefits takes place. The length of time from investment in CSI to the time of generating benefits could thus be determined. It would also be useful to examine lags other than the one-year time period used in the study.

Where a correlation between CSI and financial performance exists, the difficulty in determining which factor drives which can also be considered as a limitation. Companies with high sustainable financial performance may have had more money available to invest in CSR.

In such cases, an increase in CSR would not necessarily result in an increase in financial performance; rather, the increased financial performance (as a result of other factors) may have caused the increased investment in CSR. This question would warrant further investigation.

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## APPENDICES

### Appendix 1 – JSE SRI Index Advisory Committee

<b>Member</b>	<b>Organisation</b>
Cromwell Mashengete	Prudential Portfolio Managers
Derick de Jongh	Centre for responsible leadership, University of Pretoria
Adrian Bertrand	Government Employees Pension Fund (GEPF)
Karin Ireton	Standard Bank Group
Mandy Rambharos	Eskom South Africa
Marian van der Walt	Harmony
Nicky Newton-King	JSE Limited
Raymond Ndlovu (Chairman)	Black Elephant Investments
Tsholo Diale	Afrisam SA (Pty)
Zithulele Cindi	Unity Incorporation
Zoe Lees	Independent

Source: (JSE, 2013)



## Appendix 2 – Successful constituents

Advtect	Barloworld	Growth Point Properties
AECI	BHP Billiton	Harmony Gold Mining Co
African Bank Investments	The Bidvest Group Ltd	Intu Properties Plc
African Oxygen	Business Connexion Group	Illovo Sugar
African Rainbow Minerals	British American Tobacco	Impala Platinum Holdings
Allied Electronics Corp	Discovery Holdings	Imperial Holdings
Anglo American	DRD Gold	Investec
Anglo American Platinum	Exxaro Resources	JD Group
AngloGold Ashanti	FirstRand	JSE Ltd
ArcelorMittal South Africa	The Foschini Group Ltd	KAP Industrial Holdings
Aspen Pharmacare Holdings	Gold Fields Ltd	Kumba Iron Ore
Barclays Africa Group	Grindrod	Lewis Group Ltd
Liberty Holdings	Northam Platinum	Sanlam
Lonmin Plc	Oceana Group	Santam
Massmart Holdings	Old Mutual Plc	Sappi Ltd
Mediclinic International	Pick n Pay Holdings	Sasol
Merafe Resources	PPC	Sibanye Gold
MMI Holdings	Rainbow Chicken	Standard Bank Group
Mondi	Redefine Properties	Steinhoff International
Mpact	Remgro	Sun International
MTN Group	Reunert	Tongaat Hulett
Nampak	RMB Holdings	Truworths International
Nedbank	Royal Bafokeng Platinum	Vodacom Group
Netcare Ltd	SAB Miller Plc	Woolworths International

Source: (Roux & Mollo, 2013)

### Appendix 3 – FTSE/JSE SRI Index companies on the FTSE/JSE Top 40 Index

African Rainbow Minerals	Gold Fields Ltd	Old Mutual
Anglo American	Growth Point Properties	Remgro
Anglo American Platinum	Intu Properties	RMB Holdings
Anglogold Ashanti	Impala Platinum Holdings	SAB Miller Plc
Aspen Pharmacare Holdings	Imperial Holdings	Sanlam
Barclays Africa Group	Investec	Sasol
BHP Billiton	Kumba Iron Ore	Standard Bank Group
The Bidvest Group Ltd	Massmart Holdings	Steinhoff International
British American Tobacco	Mediclinic International	Truworths International
Discovery Holdings	Mondi	Vodacom Group
Exxaro Resources	MTN Group	Woolworths International
FirstRand	Nedbank	

Source: (Courtney Capital, 2013)