

Assessing the relationship between corporate governance scores and company performance on JSE

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ABSTRACT

This study examines the relationship between corporate governance and share returns of those companies listed on the JSE. Additionally this study examines whether companies which score higher in corporate governance perform better than those with lower scores. A sample of 31 Top 40 listed company on the Top 40 index from 2008 to 2012 (a total of 155 firm year observations) was reviewed. Corporate governance data was collected from the selected companies through a corporate governance questionnaire (CGQ). The share prices and other financial data were obtained from McGregor BFA. Different from the previous studies, this study obtained corporate governance data directly from the companies rather than relying on secondary annual integrated reports.

The results indicate that the levels of corporate governance in the JSE listed companies are high but substantial differences still exists. The corporate governance scores (CGX) ranged from a minimum of 58% to 91%. The results based on the multiple regression shows that there is a significant positive relationship between corporate governance and share returns. Also, the results of the independent sample T-test indicate that companies with a higher CGX have better share returns than those with Low CGX. These findings could mean that market perceives corporate governance as a good practice to reduce the agency problem. Three of the control variables included were found to have a significant negative effect on the share returns. These include Book to market value (BM), Company risk (STDDEV), and Dividend Yield (DY). The results conclusively indicate that corporate governance has an effect on share returns.

DECLARATION

I, **Selaelo Daphney Sebone**, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Selaelo Daphney Sebone

Signed at

On the day of 20.....

DEDICATION

I dedicate this research paper to my late father Mokhubu Johannes Sebone. I am grateful for the sacrifices he made, especially in educating me and my siblings. Papa you gave us the foundation and I know I made you proud.

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CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to evaluate the level of corporate governance of the JSE top 40 companies and the relationship of the corporate governance to the share performance of the company. The study further evaluates whether companies with high levels of corporate governance performs better than those with lower governance scores.

The corporate governance questionnaires were used to collect corporate governance data. Multivariate regression was then performed in order to determine the relationship between corporate governance and share performance measured in share returns. Based on the corporate governance scores (CGX) the companies were then ranked according to high and low corporate governance portfolios. The two portfolios were then compared in order to determine whether high CGX portfolios perform better than low CGX portfolios.

1.2 Context of the study

Corporate Governance originates from the agency theory. The agency theory refers to when owners or principal delegate the day to day running of the firm to the agents or managers, with the objective of maximising their wealth (Rossouw, van der Watt, & Malan, 2002). The conflict however arises when managers serve their own interests over those of the owners. Corporate governance was therefore aimed at reducing the agency costs (Grant, 2003; Rossouw et al., 2002).

The failures of big financial institutions such as Enron, and other big financial institutions internationally, and locally, Regal Treasury Bank and LeisureNet, have necessitated a review of corporate governance frameworks around the world. Furthermore, these failures have highlighted the weaknesses of corporate governance structures within organisations. Various governance compliance frameworks were implemented including Sarbanes-Oxley in the USA, Cadbury in the United Kingdom (Vaughn & Ryan, 2006).

The situation in South Africa was different from the global community according to McGregor (2006), corporate governance was not stimulated by corporate or financial crisis but by concerns of global competitiveness after the readmission in to the global economy. The two main governance compliance frameworks in South Africa are the King Code of corporate governance and the Companies Act of 2008 (West, 2006).

The purpose of the Companies Act of 2008 is to encourage compliance with the bill of rights, to encourage transparency and high standards of corporate governance and balancing the rights and obligations of directors (RSA, 2008). The Companies Act is based on the “comply or else” approach. The elements of the act include personal liability and the requirements of a high standard of director’s conduct. This places greater responsibilities on the directors with the aim of motivating them to act in the best interest of the company and its stakeholders.

The first King report on corporate governance was released in 1994, following the release of the Cadbury report in 1992 (McGregor, 2006). In 2002, King II was released, following the increased changes in corporate governance worldwide as well as growing local needs (West, 2009). According to (King Committee on Corporate Governance, 2009), King III of corporate governance was necessitated by the Companies Act of 2008 as well as changes in governance trends internationally.

To strengthen corporate governance in South Africa, the JSE made it compulsory for all listed companies to comply with King III. In line with the principles of King III, the company is required to “apply or explain” where the board is of the opinion that the application is not in the best interest of the company. The “apply or explain” principle is based on the approach that a one-size-fits-all cannot be suitable as the types of activities carried out by companies vary (King Committee on Corporate Governance, 2009). Additionally to strengthen the corporate citizenship in South Africa, the JSE launched a Social Responsibility Index (SRI) in 2004 for all its listed companies. As part of the requirement the companies are supposed to report on their social activities (Sonnenberg & Hamann, 2006).

Numerous studies indicate that corporate governance reduces corporate failure and improves the company performance, also that companies with good corporate governance perform better than those with bad governance structures (Bauer, Guenster, & Otten, 2004; Gompers, Ishii, & Metrick, 2003; Larcker, Richardson, & Tuna, 2007). As noted by Bebczuk (2005), corporate governance may influence company performance where the interests of management and shareholders are conflicting and therefore assist in resolving the agency conflict. The reduction of agency conflict is supported by Al-Haddad, Alzurqan, and Al_Sufy (2011) in their inclusive approach. These authors state that good corporate governance holds management accountable to the board and the board accountable to the stakeholders. The interaction of all these corporate governance participants then determines the direction and performance of the company.

A study performed on Ugandan commercial banks also found that corporate governance influences over 34 per cent of financial performance of the banks. Brown and Caylor (2004) however found that even though companies with stronger corporate governance perform better than those with bad corporate governance, the study also found that some specific corporate governance factors are driving factors of these results. Of the four factors examined, board

composition, compensation, takeover defences, audit, and board composition were found to be the main drivers influencing corporate performance.

The FSB has been instrumental in increasing the awareness of corporate governance and indirectly facilitating shareholder activism (Kumar, Rule, & Savard, 2007). With the rise of shareholder activism, investors are becoming more aware of companies' activities. One such activist is Theo Botha, who has been vocal about the perceived independence of the directors in South African boards and argues that King code may be too soft on non-compliance (Carte, 2009). The Public Investment Corporation, one of the biggest Institutional Investors in the country, also publicly challenged Barloworld on their lack of transformation (Mantshantsha, 2007).

1.3 Problem statement

1.3.1 *Main problem*

The main problem of this study is to determine the relationship between the corporate governance as measured in the following dimensions (Board effectiveness, remunerations, audit committee, Internal audit, governance of risk, governing stakeholders relationships and integrated reporting and disclosure) and company performance and ascertain whether companies with high governance perform better than those with low governance scores on JSE.

1.4 Significance of the study

The study fills a gap in that, despite having a high level of corporate governance structures in South Africa, studies to measure the relationship between firm performance and level of corporate governance are limited. The main governance frame work is King III. The level of corporate governance was also strengthened by the JSE requirements to make it mandatory for the listed

companies to comply or explain with King III. The limited studies linking corporate governance and performance in South Africa could be attributed to the failure to adequately assess the quality of corporate governance in South African Listed companies (Kumar et al., 2007).

Following a series of corporate scandals related to poor governance practices, investors are willing to invest in companies with a high level of corporate governance practices (Rappaport, 2002, 15 July). Companies that are successful in building this reputation through good corporate governance should therefore experience good performance. According to Carlos E. Campos (2002), in both emerging markets and developed countries, shareholders are willing to pay a premium for good corporate governance. The study may provide guidance for investors, institutions and companies to understand the impact of corporate governance practices on the company financial performance.

1.5 Delimitations of the study

This study focused on the Top 40 companies on the JSE and therefore represents companies which are already large.

The study followed a longitudinal approach and focused on the top 40 JSE listed companies for the period December 2008 to December 2012.

The Company financials were accessed from the published annual reports and Mc Gregor BFA.

1.6 Definition of terms

Corporate Governance (CG): Corporate governance is a relationship between the company's management, with its board, shareholders, and other

stakeholders. It provides the structure through which the company's objectives are set, and the ways of achieving those objectives as well as monitoring performance are determined (Al-haddad, Al-zuran & Alsufy, 2011).

JSE: Johannesburg Securities Exchange

PIC: Public Investment Corporation

CFP: Company Financial Performance,

DY: Dividend Yield

CGQ: Corporate Governance Questionnaire

CGX: Corporate Governance Score

PE: Price to Earnings Ratio

Beta: Market Risk

BM: Book value of Equity divided by the Market value of equity

Size: Market Capitalisation

1.7 Assumptions

a) Public Financial Information was obtained for all the selected companies, as it is a requirement by the JSE for all companies to make the information public.

b) The data collected from the corporate governance questionnaire measured the quality of corporate governance practices.

c) The people responding to the questionnaire had the knowledge of corporate governance performance within the company and had access to the necessary information to be able to respond to the questionnaire

d) It was assumed that Corporate Governance performance was constant for the selected period. Despite the fact that the King Code of corporate governance was published in 1994, only in 2010, the JSE has made it a requirement for companies to comply or explain their disclosure on corporate governance performance. Based on these facts it was assumed that the relative change in the performance of governance was minimal.

e) It was assumed that there is a clear distinction between high performer's vs low performers. The high performers are those companies with a score above the mean and low governance companies are those below the mean.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

The problem addressed in this study is to assess the relationship between CG and company performance on JSE in South Africa and also evaluate whether companies with high CGX outperforms those with low CGX. This chapter focus on the literature review of the relevant factors pertinent to the main problem mentioned above. Firstly, literature around CG and overview of CG South Africa is reviewed. Secondly, the characteristics of the companies on JSE are then discussed. Thirdly, the chapter review the measures of financial performance and lastly the literature around CG versus CFP is discussed. Lastly, the literature on various CG ratings and the ranking of CG are discussed.

2.2 Background discussion

The relationship between corporate governance and company performance has been of interest following the failures of large institutions such as Enron in the USA (Vaughn & Ryan, 2006). Numerous studies to link corporate governance and company performance have been conducted internationally (Bauer et al., 2004; Bhagat & Bolton, 2008; Gompers et al., 2003; Larcker et al., 2007). There is an ongoing debate on this link and in reviewing the literature, it is necessary to consider different ways that CG has been measured. Empirical research has not produced consistent results, also there is debate on whether corporate governance measures produce reliable results (Bhagat & Black, 1999; Larcker et al., 2007).

These factors are discussed in detail in the literature review below.

2.3 Corporate governance (CG) and Company performance (CFP) on JSE

2.3.1 *Overview of Corporate Governance (CG)*

CG originates from the agency theory concept concerned with the transfer of corporate power to management (Grant, 2003). Agency relationship is defined by Jensen and Meckling (1976) PP 5, as “a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.”

Agency theory analyses conflicts in this principal/agent relationship according to Jensen and Meckling (1976). The agents may desire to serve their own interests over those of the owners. Good CG should result in better company performance by helping the board discharge its duties in such a way that it is in the best interest of the shareholders.

There are various definitions of CG. The definition used by the UNGC (2009) PP4, says “CG refers to the way that Boards oversee the running of a company by its managers, and how Board members are held accountable to shareowners and the company. This has implications for company behavior not only to shareowners but also to employees, customers, those financing the company, and other stakeholders, including the communities in which the business operates.”

According to Al-Haddad et al. (2011), Corporate governance is a relationship between the company's management, with its board, shareholders, and other stakeholders. It provides the structure through which the company's objectives

are set, and the ways of achieving those objectives as well as monitoring performance are determined.

In essence, the responsibility for the corporate governance of a publicly owned company lies with the board of Directors. The above definitions are inclusive in that they refer to both the interests of the stakeholders and the shareholders. As noted by Rossouw et al. (2002) CG was introduced to ensure that the agents of the owners of companies' controls the companies in such a way that it will serve the interests of the shareholders. This was to control the agency problem, which result from the agents (managers) serving their own interest over those of the owners.

The shareholder model however can conflict with the stakeholder model of CG. King Committee on Corporate Governance (2009), elaborates on the conflict of the two approaches and emphasises the need for an inclusive approach. The "enlightened shareholder model", according to King Committee on Corporate Governance (2009), consider stakeholders only as far as it is in the best interest of the shareholders, but there is a need for a more inclusive approach. A stakeholder inclusive approach is emphasised where the legitimate interests and expectations of the stakeholders are considered on the basis of these being in the best interest of the company.

The King approach is in line with the OECD (2004) which also advocate an inclusive approach. There is no single model for corporate governance but the principles are built on different common elements that embrace different models. The shareholder or the stakeholder interests may be given precedence where they are in the best interest of the company (King Committee on Corporate Governance, 2009). Furthermore, the King Committee on Corporate Governance (2009) notes that the best interest the company should be interpreted within the boundaries of the company as a sustainable company and a good corporate citizen. This study will follow the inclusive stakeholder model as advocated by King III and the OECD.

2.3.2 Corporate Governance in South Africa:

The revision of CG in South Africa was triggered by new developments internationally and locally, post the 1994 transition (Rossouw et al., 2002). Diagram 1 indicates the exertion of pressure by these developments suggesting the need for reform:

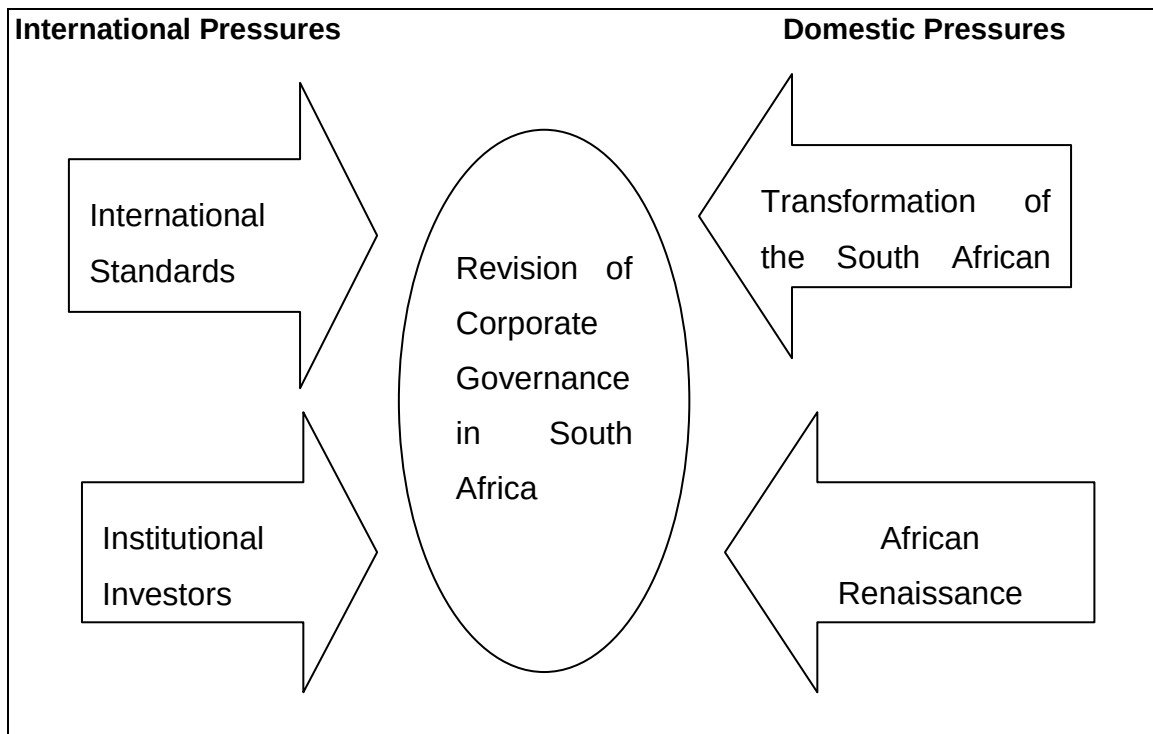


Figure 1: International and domestic pressures, (Rossouw et al., 2002).

According to Rossouw et al. (2002), in addition to the local transition in South Africa, there were also many developments in the area of CG internationally pushed by the demands of institutional Investors. South Africa was increasingly participating globally and therefore had to be attractive to business. Despite the challenges, South Africa is considered the leader in CG on the African continent (Vaughn & Ryan, 2006).

In response to the global and local developments, the first King report of corporate governance was published in 1994, following the release of the

Cadbury report which was released in 1992 (McGregor, 2006). King I, according to McGregor (2006), incorporated the standards of CG of commonwealth countries but was distinguished by its inclusive approach of various stakeholders. It was followed by the revised King II in 2002 and in 2009 King III was released. In 1995 and 2003 the JSE made it compulsory for listed companies to disclose the extent of their compliance with King I and II respectively (Vaughn & Ryan, 2006). Also in 2010, listed companies were required to apply the principles of King III or explain non-compliance.

King III acknowledges that Investors needs to make informed decisions when investing in a company and therefore recommends an integrated reporting to enable investors to make informed decisions when investing in the company. The code was drafted to apply to all entities, public, private and non-profit organisation. King III as aligned with OECD (2004) and UNGC (2009) recommends the following key principles and detail the guidelines of how they should be applied:

- Ethical leadership and Corporate Citizenship
- Board and Directors
- Audit committees
- The governance of risk
- The governance of information technology
- Compliance with rules, laws, codes and standards
- Internal Audit
- Governing Stakeholder relationships
- Integrated reporting and disclosure

According to the King Committee on Corporate Governance (2009) pp14, “each principle is of equal importance and together forms a holistic approach to governance.”

Other dimensions of CG included in various empirical studies include, treatment of minority shareholders, Takeover defences, Shareholding (stock ownership) and progressive practices (retirement age for directors and CEO succession plan) (Brown & Caylor, 2004; Gompers et al., 2003; Renders, Gaeremynck, & Sercu, 2010). In addition, Brown and Caylor (2004) identified the board of directors and remuneration to be the key drivers of corporate governance measurements.

2.3.3 Overview of the Companies on the JSE

The JSE has been instrumental in encouraging good corporate citizenship for the listed companies. In 2004, the JSE launched the sustainability index called the Socially Responsible Index (SRI), for its top 160 top companies (Sonnenberg & Hamann, 2006). The motivation for the sustainability index was based on three objectives including, identifying the JSE listed companies that integrate the principle of triple bottom line and corporate governance, provide a tool for holistic against local and global assessment of the company's practices standards and also contribute to developing responsible business practice (JSE, 2013).

To strengthen corporate governance in South Africa, the JSE made it compulsory for all JSE listed companies to disclose their level of compliance with King III. For the companies to make it to the Index, they must meet the minimum requirements. The JSE's minimum requirements of disclosure under governance and related sustainability concerns is that the company must disclose 50% of all indicators of which a third must be core (JSE, 2013). Furthermore, for the company to be recognised as a top performer, it must meet

all the core indicators and have an independent chairman on the board. Despite the JSE efforts in encouraging disclosure of compliance, there are weaknesses in corporate governance disclosures. According to Sonnenberg and Hamann (2006), the majority of the companies only disclose what is prescribed and do not give sufficient information about their actual operations to illustrate the level and effectiveness of their corporate governance structures.

Companies on the JSE can be simultaneously listed on the London's FTSE. This was made possible by the technical alliance formed between the JSE and London Stock Exchange (LSE) in 2002 (Simons & Laryea, 2006). Since the alliance, the JSE follows the FTSE classification system where the index is classified into economic groups, sectors and subsectors. The JSE companies are therefore classified under the relevant sectors and subsectors. Additionally, the FTSE/JSE alliance resulted in the alignment of the methodology for calculating the indices. Various indices have been created, of which some are used for trading and funds, such as the Top 40 index (JSE, 2013).

2.3.4 Measures of Company Financial Performance

There is a wide range of financial performance measures and no real consensus on which one is the proper measure (Cochran & Wood, 1984). Most of these financial performance measures, according to Cochran and Wood (1984), fall into two categories, namely, the accounting returns and market returns. These two categories have limitations and strengths. Lee, Faff, and Langfield-Smith (2009) note that accounting measures are concerned with efficiencies, productivity and the level of asset utilisation measures are historic but do not account for risk. To address the shortcomings of these accounting measures, they further note that market measures provide expectation of performance and also reflect the risks associated with investing in the company

as well as expected future returns. Merchant and Sandino (2009), are also in agreement that accounting measures are historic, short term and do not address the changes in risk. Despite the weaknesses in accounting measures they argue that the market measures are not perfect and cannot address the entire accounting measures shortcoming, the reason being that these market measures do not reflect the true intrinsic value of the company as the market does not have all internal information the managers have.

This study focuses on the market measures only and therefore the literature will be more on share performance measured in return. Bauer et al. (2004), cited a global investor survey performed by McKinsey which shows that 22% of the investors are willing to pay 19% average premium for companies that are well governed. It is vital to determine the measures of share returns, as it is ultimately the dependant variable in this study. Measuring the share returns is however not simple and various methods have been developed. The most commonly used measure of return is the use of the CAPM, which quantify the correlation of beta of an asset and its expected return (Womack & Zhang, 2003). Beta is therefore the only explanatory factor of stock return with the use CAPM. Womack and Zhang (2003) further note that CAPM is based on another three assumptions, firstly that the only concern for Investors is expected return and volatility, secondly that the Investors have similar beliefs with regard to the risks and corresponding trade-offs in the market and lastly only systematic market risk is common to the broader market portfolio.

Despite its simplicity, the CAPM has been criticised by several academics. The empirical study on return and market value by Banz (1981) provides evidence that the CAPM is mis-specified. The study found that size has some influence on average return, the smaller the size of the company the higher the returns. Fama and French (1992), in their study, found no evidence to support the

predication of the CAPM model, that the average stock returns are positively related to beta. Following these revelations several alternative models were built to address the weaknesses presented by the CAPM. One such model is the 3- Factor model by Fama and French (1992). This model was founded on the evidence that size; book to market value ratio also has an influence on the average stock returns. Carhart (1997), built on the three-factor Fama-French model and added another factor, the momentum of the stock price. The author employed the model to explain the excess returns and estimated the performance relative to the CAPM, threeFactor as well as four Factor models.

The findings of the Carhart (1997) study indicate that the four factor model explains more variation in returns than the other models and improves the average pricing errors of the CAPM and threefactor models.

Auret and Sinclair (2006) note that in the South African context, the JSE is dominated by the resource stock which has their own source of risk. Modelling returns therefore may require a different approach. In their study linking book-market value to returns on JSE, they found book market value ratio be significant in explaining the stock. The findings are therefore as per the Fama and French (1992) and Carhart (1997) models, indicating that book market value ratio has a significant role in explaining the share return. Other studies on the JSE, found that size and price earnings ratios to be the explanatory variables of share returns (Van Rensburg, 2001; Van Rensburg & Robertson, 2003b). In addition to the market to book value Strugnell, Gilbert, and Kruger (2011) also found size to be an explanatory variable on the JSE.

Some of the studies linking corporate governance and company performance that have used the three factor or four factor models in determining the excess

returns include Gompers et al. (2003), Rennings, Schrder, and Ziegler (2003), Bauer et al. (2004), Ziegler, Schroder, and Rennings (2007) and (Larcker et al., 2007).

2.3.5 Corporate Governance (CG) vs. company performance (CFP)

It is important for companies to have good corporate governance structures as corporations that have better CG have better performance (Chiang & Chia, 2005). This relationship between CG and CFP is of importance to academics, policy makers and practitioners, according to Larcker et al. (2007), but studies to link the two produce mixed results.

These inconsistencies are believed to be partly as a result of governance measures that have modest levels of reliability and validity (Larcker et al., 2007). Renders et al. (2010) note that the failure by most research to link corporate governance and company performance may result from endogeneity, selection bias and lack of statistical power. In agreement with Larcker et al. (2007), the authors note that the corporate governance ratings being used in these studies may not be reliable.

2.3.5.1 Positive relationship between CG and CFP

Some academic literature was able to link CG and CFP. Renders et al. (2010), found the relationship between CG and CFP both in accounting and marketing performance. The authors noted that statistical power was the reason the association was found. The study relied on panel data rather than cross sectional, also controlled for endogeneity and sample bias. The authors also note that when endogeneity and sample bias were not controlled the relationship between the two variables was insignificant. The study as performed on European countries produced interesting results, it was found that

in countries where there was strong shareholder protection CG was high, but the effect of CG on CFP was lower than in countries with lower standards. These results are supported by Bauer et al. (2004), who also found that the effect of CG on excess returns was much smaller in the Eurozone area, but higher in the UK where the market was still adjusting to CG standards.

These results, according to Renders et al. (2010), are consistent with the fact that in countries with higher legal standards, private benefit for Managers are low and therefore implementing CG is inexpensive. Compared to countries with lower legal standards, private benefits are high for the managers and therefore implementing CG becomes expensive for them and they stand to lose on the private benefits. According to Bauer et al. (2004), in the Eurozone CG standards have been accounted for by the Investors and not in the UK.

Another study that found a positive relationship between CG and share performance is by Larcker et al. (2007), but little evidence was found between CG and accounting returns. The findings for the CG and share returns were not confounded by endogeneity of the CG indices as in accounting returns. In South Africa, Abdo and Fisher (2007) found that corporate governance disclosures are positively correlated with the share performance. In each sector they found that companies with the highest CG scores had higher returns than those with lower CG scores. Abdo and Fisher (2007) conclude that Investors in South Africa place a higher premium on companies with good governance. These findings were consistent with Gompers et al. (2003), who also found that companies with a good governance portfolio out-perform those with poor portfolios. A Canadian study by Foerster and Huen (2004) found that corporate governance matters to Canadian investors. Companies with the highest corporate governance were found to outperform those in the lowest portfolios in terms of the excess returns.

2.3.5.2 Negative or No relationship between CG and CFP

Not all studies support the idea that the relationship between corporate governance and company performance is positive. Some academic literature found no evidence of this relationship. Bhagat and Black (1999), note that there is no empirical evidence to support the view that companies should have majority of independent directors on the board. The authors note evidence that companies with majority of independent directors performed badly than those with majority of insiders. Different companies requires different boards, according to Bhagat and Black (1999), slow growing firms may require majority independent boards to control the manager-shareholder conflict. The faster growing firms however may not require majority independent directors.

The relationship between reputation and company performance was found to be weak when recent data was examined (Flanagan, O'Shaughnessy, & Palmer, 2011). Dalton, Daily, Johnson, and Ellstrand (1999) concluded that there is no evidence of board composition and size effect on the company performance. In a study performed on CG of the companies during the financial crisis, Erkens, Hung, and Matos (2012) found that companies with more independent directors and higher institutional ownership performed badly in terms of stock returns during the financial crisis. In further exploration of this study the authors found that companies with more independent directors raised more equity capital during the crisis, furthermore firms with higher institutional owners took more risks before the crisis resulting in bigger loses during the crisis.

2.3.6 Rating and ranking of companies' corporate governance performance

Different rating methodologies have been developed by professional rating agencies (Donker & Zahir, 2008). Some of these ratings have received mixed reaction. Majority of these ratings, according to Donker and Zahir (2008),

concentrate on one of the following general categories, board of directors, ownership structure, compensation plans, antitakeover devices, financial disclosure, internal controls and director education. Donker and Zahir (2008) challenge most of these professional ratings used, firstly they note that most corporate governance mechanisms, such as take over defenses and ownership structure are interdependant and therefore a single index ignore the interdependence, secondly some of the criteria do not measure the real issues, as what is stated does not necessarily mean it is a fact, thirdly there is no proven weighting system, the effect of country specific corporate law is not considered in these ratings and lastly, the rating agencies are not necessarily independent as they also advise the same companies on how to improve corporate governance. This is supported by (Bhagat, Bolton, & Romano, 2008), who conclude that there is no one best measure of corporate governance, and the most effective measure depend on the firm specific circumstances.

Balling, Holm, and Poulsen (2005) however, have a different view of CG ratings, in their study they concluded that CG data by rating agencies represents the quality of CG. They however found no evidence that the ranking and the weighing of CG data improves the ability to rank between the companies according to corporate governance quality. In South Africa, Abdo and Fisher (2007) created their own CG score cards, based on the principles of King II and note that even though there is reliance on public information and the scoring is subjective, most of the information is factual including the level of compliance to the code. In Germany Drobetz, Schillhofer, and Zimmermann (2004) created their own matrix where a survey comprised governance proxies were sent to companies, the information was supplemented with annual reports and company websites information. They believe that the measure was objective and thorough to constitute a proxy for risk and therefore influencing CFP .

Measuring the quality corporate governance outcomes has been a challenge in South Africa due to lack of a comprehensive tool. PIC together with the University of Stellenbosch created a CG matrix for the South African context in 2009. This is the only matrix created in South Africa. The matrix consists of 62 indices divided in to 14 categories (Botha, 2012). The purpose of the matrix was to assist PIC in the evaluation the companies in which they invest and to assist the companies in improving their corporate governance.

The matrix incorporates the principles of King III, Companies Act of 2008, UN Global Compact, UN Principles of Responsible Investment and UN Global Reporting Initiatives and other corporate governance codes. A pilot study was performed in 2009. These results included the top 40 JSE listed companies in 2010. From 2011 the study included the top 100 companies (Botha, 2012). With PIC being the biggest institutional investor, this tool encourages companies to be conscious of their corporate governance practices, not only the disclosures, but the quality of those disclosures. Furthermore with a more holistic tool, the relationship between corporate governance and company performance can be measured (Botha, 2012). The results of the companies' assessments as well as the matrix are not released to the public.

Many studies has used corporate governance ratings whilst some, such as Abdo and Fisher (2007) and Larcker et al. (2007) created their own CG scores. Larcker et al. (2007) note that the lack of other rating tools to find the link between CG and CFP is the failure in generating reliable and valid measures. This was supported by Donker and Zahir (2008), who noted that using these ratings in different contexts e.g. cross countries, may not be effective. The CG ratings should best fit the context. Renders et al. (2010), also noted the weaknesses in CG ratings and noted that a good rating instrument has a strong correlation with the endogenous variable but not correlated with error term of the quadratic equation. Most studies however use imperfect instruments

(Renders et al., 2010). Abdo and Fisher (2007) used the results of their ratings to rank the companies according to good and bad CG portfolio then compared performance of the two portfolios.

Most studies seem to follow the same scoring methodology. Gompers et al. (2003)'s index consisted of five categories and each categories has sub-indices. A score of 1 is allocated where the company does not meet the criteria set for each criteria and 0 if such a criteria is met in terms of best practice. The scores are added for each company to determine the score of a company. Gompers then ranked the firms in terms of Dictatorship and democracy portfolios. Dictatorship in this case will be the companies with the highest scores meaning they generally have poor protection of minority shareholders whilst democracy portfolio is more inclusive. Various measures were performed to determine which portfolio performs better. Following Gompers et al. (2003), the following studies by Abdo and Fisher (2007); Bauer et al. (2004); Brown and Caylor (2004); Drobetz et al. (2004); Larcker et al. (2007), even though they used different categories of corporate governance applicable to their context, used similar methods to rate governance and additionally used the ratings to rank their CG portfolios.

2.3.7 Proposition 1

As cited by Bauer et al. (2004), a global investor survey performed by McKinsey shows that 22% of the Investors are willing to pay 19% average premium for companies that are well governed. Also, poor CG practices are cited as the reason for the financial crisis in 2008. This leads to the first proposition. There is a positive relationship between CG and CFP on the JSE.

2.3.8 Proposition 2

There is a debate in the literature as to whether companies with high levels of CG achieve higher returns than those with lower of CG (Larcker et al. (2007). This leads to the second proposition that share returns for companies with high CGX is higher than those with a lower CGX.

2.4 Conclusion of Literature Review

There is extensive literature relating to CG and CFP. There is however mixed results on this topic. The literature was divided into various sections. Firstly CG was reviewed in general, as well as in South Africa. It was found that there are two models of CG, the stakeholder and shareholder model. Recently there is a move towards a more inclusive approach where the interest of shareholders and stakeholders will take precedence where they are in the best interest of the company. CG therefore focuses on the sustainability of the organisation. King reports contributed a lot to the corporate governance in the South Africa and King III subscribes to the inclusive stake holder approach.

Secondly, an overview of the JSE listed companies was reviewed. JSE listed companies are to disclose their level of disclosure on corporate governance. The JSE uses the FTSE model to classify its companies and indices. Thirdly, the study reviewed the measures of CFP as they relate to this study. In terms of the market measures, there has been a lot of debate in the literature on whether Beta is the reliable predictor of expected returns. The use of the CAPM has been widely criticised, leading to further research in the field. Other models such as the three factor and Carhart four factor have been created to estimate the expected returns and these are believed to include other predictors as proxies for risk.

Fourthly, the literature around CG and CFP was reviewed. Although the findings are mixed, most of the studies have found that CG influences CFP positively. The mixed results however attracted a lot of criticism. The main criticism is the different ways CG is measured. The rating and the ranking of CG was reviewed lastly. It was found also that there are mixed opinions on the use of these ratings especially commercial ratings. Measuring CG continues to be a debatable issue in business and academic studies.

2.4.1 *Proposition 1:*

There is a positive relationship between the level of CG and CFP on JSE as measured by expected returns.

2.4.2 *Proposition 2:*

The performance of companies with high CGX as measured by share returns is higher than those with lower CGX.

CHAPTER 3. RESEARCH METHODOLOGY

This section covers the methodology used in conducting this research. The methodology around the chosen quantitative research is discussed, followed by the research design and the research instrument. The target population and sample is also discussed followed by the method around data collection, limitation, reliability and validity of the study.

3.1 Research methodology / paradigm

This study took the form of quantitative method in the collection and analysis of data. Quantitative research is defined by Bryman (2012) pp 35-36 as “a research strategy that emphasize quantification in the collection and analysis of data and that entails the deductive approach to the relationship between theory and research in which the accent is placed on the testing of theories, has incorporated the practices and norms of the natural scientific model and of positivism and embodies a view of social reality as an external objective reality”

The quantitative method is appropriate to collect the required data, as the nature of this study is inferential. This is in line with (Sukamolson, 2007) who states that quantitative research is suited to testing hypothesis and is used to generalise about the truth found in the sample to the population. This method is therefore suited for this research.

The methodology followed is in line with other studies done in this area. In earlier academic literature, quantitative strategy has been followed. Corporate governance indices have been used to measure the level of corporate

governance in companies. These studies include, (Bauer, Guenster, & Otten, 2004, Abdo & Fisher, 2007, Renders et al., 2010). The research strategy is therefore in line with the previous studies done in this area.

3.2 Research Design

This study followed a longitudinal research design. In a longitudinal design, the sample surveyed is measured on more than one occasion (Bryman, 2012). This methodology is the most appropriate as it will enhance the causal inference (Rindfleisch, Malter, Ganesan, & Moorman, 2008). The longitudinal data therefore allows assessment of the governance and its effect on the company performance over a period. The advantage of longitudinal data, according to Bryman (2012), is that it allows some insight into the order of variables and therefore allows more causal inferences to be made.

Earlier studies on this subject also support the use of longitudinal data and highlight the advantages of choosing this method. The long term view of data avoids the influence of other conditions affecting the firm at a particular point in time (Gompers et al., 2003). Renders et al (2010), in their study of corporate governance rating and performance used longitudinal data to obtain more variation in the cross section of corporate governance and also to add power to the design. The common weakness of longitudinal study is that its time consuming and costly (Bryman, 2012). This therefore may result in some of the subjects withdrawing at later stages of the research. In this study, some companies may be delisted in the process and therefore result in missing data in the later periods. Delisted companies in any year of review will be removed from the sample, the design therefore remain appropriate and relevant.

3.3 Population and sample

3.3.1 *Population*

The population consists of the companies on the JSE. The study covered the period January 2008 to December 2012. Even though the period is short for this type of study, it would have given lag period for the companies to implement King III which was released in 2009.

3.3.2 *Sample and sampling method*

A purposive sampling method was followed. According to Guarte and Barrios (2006), a purposive sampling is defined as randomly selecting the sample units with the most information on the subject of interest. The purposive sampling technique is most effective where the focus is to study certain cultural domains with knowledgeable experts within (Tongco, 2007). The sample consists of all the companies listed on the JSE top 40 with the following characteristics:

- The companies should be listed on the JSE for the period 2008 to 2012
- The companies should have had a negative publicity in the media or any public forum. The companies in the Top 40 were therefore investigated. Companies with the negative publicity related to corporate governance were then included in the sample.

Once the companies have been selected as per the above criteria, a sample of company employees (one per company) was selected as potential respondents of the corporate governance questionnaire. The individuals were also purposively selected to include those who are not responsible for the preparation of the corporate governance reports e.g. Directors, but individuals who are aware of the concept of corporate governance. The sample therefore included employees in assurance functions, such as Auditing, Risk Management and Compliance functions. The reason for selecting respondents

in Assurance functions is that they are deemed to be somewhat independent from management, they are generally educated in the concept of corporate governance and finally they are mandated to provide assurance of the processes within the company. The sample profile is detailed in section 4.2 of the report.

3.4 The research instrument

To obtain corporate governance information from the respondents, a corporate governance questionnaire CGQ was constructed as detailed in Appendix A. The CGQ was constructed with the aim to objectively assess the level of corporate governance in companies

Measuring corporate governance is subjective, but the use of a corporate governance scorecard based on governance principles provides a certain level of consistency and objectivity (Abdo & Fisher, 2007). Botha (2012) however states that too much emphasis on conformance or tick box mentality result in the weaknesses in the measurement of corporate governance. The questionnaire was constructed using King III and best practice from the literature as a guide. The focus was also on most corporate governance issues identified in the media reports. It therefore covered seven categories (Board effectiveness, remuneration of directors, audit committees, governance of risk, governance of stakeholders, Internal Audit, and integrated reporting and disclosure). The questionnaire had 67 questions, which included mostly yes and no as well as validating text in some questions to substantiate the Yes and No.

(Drobetz et al., 2004), in a similar study used a corporate governance questionnaire to obtain corporate governance information of the listed

companies in Germany. Other studies, Gompers et al. (2003), Bauer et al. (2004) and Renders et al. (2010), used agency ratings to obtain corporate governance information. There are conflicting views on the use of these ratings in the literature, Donker and Zahir (2008) note that most of these professional ratings are biased and focus on a single aspect of governance such as BoD and exclude other interdependent governance factors.

The objectives of the categories of the CGQ are further explained below:

Board effectiveness (BoD): To assess the board, in terms of functionality, ethics independence, and size.

Remuneration: To assess the remuneration strategy of the company for the nonexecutive directors and executives of the company and the oversight role played by the board and shareholders

Audit committees: To assess the functions of the audit committees and their independence to ensure assurance function is not compromised.

Governing of risk: To ensure that the board has the structures in place to manage the company risks

Governing of stakeholder relationships: To ensure effective management of stakeholders to ensure that the company management acts in the best interest of the company.

Internal Audit: To ensure that the company has an independent and effective internal audit function

Integrated reporting and Disclosure: To assess whether the company's disclosure is both transparent and clear with respect to business specific issues

3.5 Procedure for data collection

This study will follow (Drobetz et al., 2004) who used a corporate governance questionnaire specific to the German regulatory standards to obtain the governance information directly from the companies. Majority respondents in this study were uncomfortable sending the responses by email, the questionnaire was therefore constructed in Qualtrics and the link was distributed using the Institution of Risk Managers (IRMSA), direct emails and some instances indirectly through contacts who know a respondent with qualifying criteria within the selected company.

To rate the responses a score of 1 was awarded for complying and a 0 for not complying. The validating text also assisted in determining whether particular constructs were compliant or not. The results were then aggregated into a single corporate governance score (CGX). Each sampled company therefore has a single aggregated CGX. Since there is no time varying corporate governance data, the study assumed a constant governance rating during the sample period.

Financial information for the dependant and control variables for these sampled companies was collected from McGregor BFA data. The share prices were obtained from the McGregor BFA Expert for the period January 2008 to December 2012. Using the daily closing prices obtained from McGregor BFA Expert, the daily share returns were calculated. The average daily returns were then used to calculate the annual returns as follows $R = (1+r)^n - 1$. The logarithm of the market capitalisation (No. of shares x share price) was used as a proxy for size. Additionally, the data for the following control variables was collected and calculated, P/E Ratio (Share price/earnings per share), Book to Market value (MV Equity/BV Equity), Dividend Yield (DPS/Share Price),

Company risk (Standard Deviation), and Market Risk (Beta). The CGX, share performance and control variables were recorded on an excel spread sheet and analysed in SPSS.

3.6 Data analysis and interpretation

Firstly, a multivariate regression analysis was performed to determine the relationship between corporate governance and annual share returns (CFP). Multivariate regression analysis is defined as the analysis of more than three variables simultaneously (Bryman, 2012; Garcia & Filzmoser, 2011). Gompers et al. (2003); Rennings et al. (2003) Drobetz et al. (2004), Bauer et al. (2004), and Larcker et al. (2007), used the multivariate regression analysis in similar studies.

Various control variables were identified in the literature. According to Fama & French (1992), in their Fama-French three factor model in addition to Market risk (Beta), share returns are also influenced by size of the firm, market to book value ratio. The Carhart four factor model was constructed by (Carhart, 1997) as an extension of Fama-French 3-factor model. Carhart expanded on the 3-factor model and added another factor, the momentum, i.e. share returns are also influenced by historical returns (Carhart, 1997). Other additional variables found to have an effect on the share returns in the literature include: Price to earnings ratio (P/E), company's total risk measured in standard deviation, industry (SECT), and dividend yield (DY), Van Rensburg and Robertson (2003b), Van Rensburg and Robertson (2003a) and (Auret & Sinclair, 2006).

The variables to be included in the regression model are detailed below:

Dependant variable: Annualised share returns (CFP)

Independent Variable: Corporate Governance Rating (CGX)

Control Variables: Size (S) as measured by market capitalisation, Book to market Value (BM), Industry (Sect) where dummy variables will be used to represent JSE sector classification, Market risk (Beta), Standard deviation (σ), Price to earnings ratio (P/E), and dividend yield (DY),

The regression model will therefore be:

$$CFP_t = \beta_1 CGX_t + \beta_2 S_t + \beta_3 SECT_t + \beta_4 BETA_t + \beta_5 PE_t + \beta_6 \sigma_t + \beta_7 DY_t + \beta_8 BM_t + \epsilon_t$$

In the final stage of the study, Gompers et al. (2003), Abdo and Fisher (2007) were followed. The companies were ranked according to high CGX and low CGX portfolios. As the sample used in this study is much smaller, the ranking did not use the percentile weighting. The average CGX from the selected companies was determined and thereafter companies scoring above average were ranked as a high CGX portfolio and those below average as low CGX. A comparison of the average stock market returns of the two portfolios was then performed using the independent two sample T-test to determine whether companies with high CGX perform better than those with low CGX.

3.7 Limitations of the study

There were potential weaknesses anticipated in this study. Firstly the measuring of corporate governance can be subjective. The subjective nature may then over and under exaggerate the level of corporate governance in certain companies. Secondly, the purposive sample used might lead to potential bias and lastly the assumptions that the corporate governance is constant for the period might have some weaknesses.

3.8 Validity and reliability

Reliability and validity are the key instruments in measuring quality of the instruments (Kimberlin & Winterstein, 2008). Furthermore these two concepts are focused on reducing the error in the measurement process and using measurements that are valid and reliable is a vital component of research quality according to Kimberlin and Winterstein (2008).

Validity is concerned with integrity generated from the instrument used in research (Bryman, 2012). In addition, Kimberlin and Winterstein (2008) note that it is the extent to which the instrument measure what it purports to measure and validity requires the instrument to be reliable. Reliability evaluates the stability and the internal consistency of a measuring instruments (Kimberlin & Winterstein, 2008) and (Bryman, 2012). The subsections below describe validity and reliability in the context of this study.

3.8.1 External validity

External validity refers to the extent to which the study can be generalised beyond the specific context (Bryman, 2012). In this study, the Top 40 companies are sampled from the JSE. The application would be whether the effect of corporate governance on performance can be generalised beyond this sample. The top 40 is classified in terms of size i.e. market capitalisation and therefore the companies in the index could be biased on size. The Top 40 is, however, in itself diverse in terms of different sectors in the whole JSE and the size difference from the biggest to the smallest in the index reduce the bias.

3.8.2 *Internal validity*

Internal validity is concerned with the extent to which the conclusion that incorporates a causal relationship between two or more variables holds water (Bryman, 2012). In the context of this study several control variables have been suggested as predictors of share returns. These include risk, size, industry, market to book value ratio, P/E ratio, Dividend yield, Market risk, and Company risk, (Auret & Sinclair, 2006; Banz, 1981; Carhart, 1997; Fama & French, 1992; Van Rensburg & Robertson, 2003a, 2003b). These control variables are considered in this study to reduce the bias.

3.8.3 *Reliability*

Reliability is concerned with whether the results of the study are repeatable (Bryman, 2012). To enhance reliability, an additive governance index is used in this study. According to Larcker et al. (2007) and Renders et al. (2010), the governance indices used as a whole have a higher reliability than the single indicators that are normally used in empirical research. Donker and Zahir (2008) noted that using a single indicator such as Board independence is unreliable as different governance factors are interdependent and need to be reviewed as a whole. Also to further enhance reliability the information was obtained by the majority of the respondents in assurance functions, who are guided by the standards of independent bodies such as SAICA or IIA.

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the results obtained by the tests performed. Firstly the demographics of the respondents are presented under section 4.2. The results pertaining to proposition are presented in section 4.3. These results present descriptive statistics, correlations measuring the degree of the association between the variables and the regression analysis which assess the causal relationships between CGX and the share returns. The causal relationship between the control variables and share returns is also assessed. Section 4.4 presents the second proposition showing the comparison of means between companies with higher CGX and those with low CGX. Lastly, a summary of the key findings of the study is presented in section 4.5.

4.2 Demographic profile of respondents

The study targeted the companies on the JSE Top 40 for the period 2008 to 2012, which attracted negative publicity either in the media or where governance issues were noted in their annual reports. Thirty three companies were identified covering the five year period.

Financial data was obtained from McGregor BFA for all companies. From these companies, respondents for collecting corporate governance information were selected from either Senior Management or Assurance professionals whether in Auditing, Compliance and Risk Management, as they were deemed to have sufficient knowledge and close to the information related to corporate governance. Out of the 33 companies, governance information was obtained from 31 Companies. Companies where the respondents did not return the CGX were excluded from the sample.

The respondents included Chief Audit Executives (CAE), Senior Managers (SM), Compliance Officers (CO), Risk Management Professionals (RM); Audit Manager or Senior Auditor (AM), Internal Auditor (IA) and Company Secretary (CS). The profiles of the respondents are detailed in table 1 below:

Table 1: CGX Respondents profiles

Total	CAE	SM	CO	RM	AM/SIA	IA	CS
31	2	8	2	1	14	3	1

The sampled companies also fell within different industries. These include Life Insurance (LA), Banking (BA), Mining (Min), Retail (Ret), Beverages (Bev), Investments (Inv), Telecommunication Tel), Oil and Gas (O&G), Food Producers and Processors (FPP), and Real Estate (RE). The breakdown per industry is detailed on Table 2 below:

Table 2: Sample per Industry

Total	LA	BA	MIN	RET	BEV	INV	TEL	O&G	FPP	RE
31	2	5	10	4	1	4	1	1	1	1

The sample was further split in to high governance and low governance portfolios. The breakdown per portfolio is detailed on table 3:

Table 3: Ranking of Portfolios

Portfolio	Observations	Percentage
High CGX	80	52%
Low CGX	75	48%

4.3 Results pertaining to Proposition 1

4.3.2 Descriptive Statistics

The first step is to get acquainted with the data. The descriptive statistics of the collected variables are presented in Table 4. It details the mean, standard deviation, skewness, kurtosis, maximum and minimum.

Table 4: Descriptive Statistics

	N	Minimum	Median	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Share returns	155	-1.5817	.1773	.9206	.1173	.4192	-1.098	.195	2.181	.387
CGX	155	.5821	.7611	.9105	.7539	.0753	-.062	.195	-.424	.387
PE	155	-11.0343	.1291	3.4103	.1642	1.0914	-7.142	.195	74.539	.387
BM	155	.0346	.4761	2.5648	.5346	.4214	1.925	.195	5.700	.387
Risk: Beta	155	.2744	.9258	1.9283	.9372	.3495	.391	.195	-.340	.387
Risk: Stdev	155	.0082	.0184	.0735	.0220	.0097	1.724	.195	4.593	.387
DY	155	0.0000	3.0953	13.1604	2.902	2.0265	1.125	.195	3.569	.387
Size	155	15.58	17.9666	20.49	18.06	.9725	.262	.195	-.389	.387

The average share returns (CPF) for the selected firms is 0.12. The median is 0.18, with a very wide range with a minimum of -1.58 and a maximum of 0.92. The companies achieved an above average CGX score in general, with a minimum achieving a 58% and the maximum 91%. The average CGX for all firms are 75%. The Logged size ranged from a minimum of 15.58 to 20.49 with a close enough median and mean of 17.97 and 18.06 respectively. The PE ratio is notable with a median of 0.12, a stretching minimum of -11.03 and a maximum of 3.4.

The skewness and kurtosis measures the symmetry and the distribution of the data respectively. Their interpretations are as follows:

The skewness of greater than 0 implies that most values are concentrated on the left of the mean with extreme values to the right, less than 0 implies that most values are concentrated on the right of the mean with extreme values to the left and where it is equal to 0, means the distribution is symmetrical around the mean. As evident from the data, all variables are asymmetrical. CPF, CGX and PE are negatively skewed, indicating the tail on the right hand side of the distribution. BM, Size, Beta, DY, Stdev are positively skewed, indicating the tail in the left hand side of the distribution.

To check if the skewness is significant, the method by Tabachnick and Fidell (2001) was used. The authors state that if the absolute value of the skew is more than 2X the standard error then there is a significant skew in the distribution. Using this test, it is found that the variables are significantly skewed with the exception of CGX and size. This indicates that with the exception of CGX and Size all variables are significantly asymmetrical.

To determine the kurtosis, the statistic is also used. The statistic of more than 3 implies that there is a sharper than a normal distribution, with values concentrated around the mean and thicker tails. This means high probability for extreme values. Less than 3 the probability for extreme values is less than for a normal distribution, and the values are wider spread around the mean and where the statistic is equal to 3 implies that there is a normal distribution. The kurtosis statistics show that all variables are not normally distributed. To check the significance of the kurtosis, Tabachnick and Fidell (2001) state that the absolute value of the skew to be more than 2 X standard error of the kurtosis. It was found that CGX, Beta and Size are normally distributed. The remaining variables, i.e. CPF, Stdev, PE, BM and DY are not normally distributed.

4.3.3 Correlation Coefficients

This study aimed to assess the relationship between CGX and share returns (CFP). To assess this relationship we start with the correlation analysis. One of the basic assumptions of a regression analysis is that the independent variables are not mutually correlated. If they are correlated, then multicollinearity or endogeneity exist, which causes the regression coefficients to be imprecise and therefore it becomes difficult to assign the change in dependant variable precisely to one or the other explanatory variables. This study uses the multivariate analysis, therefore starts with the estimation of the correlation coefficients amongst all other variables to be included in the model. Table 5 below details the correlation coefficients between the variables.

Table 5: Correlation Coefficients

	Share Returns	CGX	PE	BM	Risk: Beta	Risk Stdev	DY	Size
Share Returns	1							
CGX	.194*	1						
PE	.163*	.040	1					
BM	-.330**	-.064	-.130	1				
Risk: Beta	-.054	-.374**	.144	.100	1			
Risk:Stdev	-.512**	-.156	-.069	.173*	.141	1		
DY	-.087	.394**	-.051	.172*	.082	.076	1	
Size	.007	-.262**	.199*	-.174*	.480**	-.073	-.177*	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The results above indicate that the independent variable CGX is positively correlated to CFP and the correlation is statistically significant at 0.05 level. For the control variables, PE is positively correlated to share returns and statistically significant at 0.05 levels. Both book to Market Value (BM) and Standard deviation are negatively correlated to share returns and statistically significant at the 0.01 level.

It was found that Beta, Size and Dividend Yield (DY) are significantly correlated to the independent variable CGX at 0.01 levels. There is some evidence in the literature to support endogeneity. According to the study by Renders et al. (2010), market value of equity (size) was found to have a statistically significant relationship with corporate governance. The correlations are all below 40%. The findings indicate that even though these controls variables are significantly correlated to the independent variable, the correlation coefficients are not strong enough to suggest multicollinearity and endogeneity. These variables will therefore remain in the regression model.

4.3.4 Regression Results

Following, the descriptive and correlation analysis above, the regression analysis was performed to assess the effect of CGX on Share Returns. The linear regression shows no major assumption violations. An analysis of the multicollinearity through the VIFs and Condition numbers, the possibility of non-linearity through partial residual plots did not indicate violation of the assumptions, and the correlations between the variables did not suggest any endogeneity. The histogram and residual probability plots did not suggest the possibility of heteroskedasticity and non-normality.

Some outliers may exist as indicated by a high Cooks D, SDR, histogram and the residual probability plots. The 3 outliers with the highest Cook Ds were found. The DF Betas were checked to investigate if there is an effect on the individual independent variable slope and were found not to be influential. It was noted that the observation with the second highest Cooks D has an unusual dependent variable. This case was therefore deleted and was found to have substantial change on the regression line. The initial and final regression outputs are detailed in appendix B and C respectively.

Tables 6-8 presents the results of the final regression analysis using CGX as the independent variable controlling for Industry, Beta, Size Stdev, PE, BM and DY. The overall fit has an R² of 44% and adjusted R² of 37% and Anova at the 1% significance as seen in tables 6 and 7 below.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.665 ^a	.442	.372	.3149313	.442	6.331	17	136	.000

Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.674	17	1.166	6.331	.000 ^b
	Residual	13.489	136	.102		
	Total	24.163	153			

a. Dependent Variable: Share Returns

b. Predictors: (Constant), SIZE3, Industry, Dividend Yield(DPS/Share Price), Company risk, Share price/earnings per share, Book to Market value (MV Equity/BV Equity), Corporate Governance Score, Market Risk

The model specification regressed the share returns against CGX, BM, Stdev, PE, Size, Beta and DY. Additionally share returns was regressed against Industry, where the dummy variable indicate the industries represented in the study. The results for the individual coefficients are presented on table 8.

Table 8: Regression: the relationship between CGX and Share Returns

Coefficients							
	B	Beta	t	sig	95% confidence Interval		VIF
(Constant)	.658		.679	.499	-1.260	2.576	
CGX	.980	.186	2.074	.040	.046	1.914	1.963
PE	.034	.095	1.339	.183	-.016	.085	1.219
BM	-.350	-.372	-3.872	.000	-.528	-.171	2.243
Beta	.154	.136	1.422	.157	-.060	.368	2.226
Stdev	-17.067	-.414	-5.664	.000	-23.026	-11.108	1.300
DY	-.049	-.249	-2.936	.004	-.082	-.016	1.759
Size	-.042	-.102	-.920	.359	-.131	.048	3.004
Banking	.126	.117	1.305	.194	-.065	.317	1.967
Investments	.050	.043	.544	.588	-.132	.232	1.490
RealEstate	-.309	-.138	-1.629	.106	-.683	.066	1.750
Retailers	.130	.110	1.066	.288	-.111	.370	2.592
Forestry	.302	.135	1.791	.076	-.031	.635	1.385
Telecomms	.099	.045	.620	.537	-.218	.417	1.258
Life Assurance	.062	.037	.502	.616	-.182	.306	1.301
Beverages	-.296	-.133	-1.594	.113	-.664	.071	1.687
Oil & Gas	-.002	-.001	-.010	.992	-.307	.304	1.166
Food	-.066	-.030	-.386	.700	-.405	.273	1.435

The results show that CGX, BM, Stdev and DY are the influential predictors of share returns. Stdev is the most influential, with a B coefficient of -17.06 and β of -41% and a $p < .01$. This indicates that as the company risk increases the share returns decrease by 41%. BM is the second most influential ($B = -.35$, $\beta = -37\%$, $p < .01$). The share returns therefore decrease by 37% as the BM increase by 1 unit. The third influential predictor is DY, ($B = -.049$, $\beta = -24\%$, $p < .05$). DY also has a inverse relationship with share returns. CGX, is the fourth most influential predictor with and has a positive relationship with share returns ($B = .98$, $\beta = 19\%$, $p < .05$). PE, Size, Beta and Industry appear to have no impact on performance.

4.3.4. Conclusion regarding the first Proposition

The empirical results presented show that there is a significant relationship between CG and CPF measured in share returns. This relationship was found to be positive.

4.4 Results pertaining to Proposition 2

Financial performance of companies with high governance scores were further compared with those with lower governance scores. Two portfolios were created, high portfolios being companies with the CGX above the mean and low portfolio being below the mean. The average share returns of the high governance and low governance were then compared.

4.4.1 Descriptive Statistics

The table below presents the descriptive statistics for the 2 defined portfolios.

Table 9: Descriptive Higher Governance vs Lower Governance Portfolios:

Higher Governance Portfolio		Statistic	Std. Error
Mean		.181144	.0433760
95% Confidence Interval for Mean	Lower Bound	.094806	
	Upper Bound	.267481	
Median		.217650	
Std. Deviation		.3879666	
Minimum		-.9713	
Maximum		.9206	
Lower Governance Portfolio		Statistic	Std. Error
Mean		.049399	.0511247
95% Confidence Interval for Mean	Lower Bound	-.052469	
	Upper Bound	.151267	
Median		.130338	
Std. Deviation		.4427526	
Minimum		-1.5817	
Maximum		.7918	

The average share returns for the higher and lower governance portfolios are 0.18 and 0.04 respectively. This suggests that the average returns for the higher portfolio is higher than the lower governance portfolio. The lower portfolio has a Median of 0.13, with a wide range showing a maximum of 0.79 and a stretching minimum of -1.58.

Normality and equality of variances were checked for violation. Test of normality was performed using the Shapiro-Wilk. The data was found to be normal with a significance of $p < 0.05$ for both rankings of corporate governance, therefore independent samples T-test can be applied. Table 10 presents the results for the Shapiro-Wilk tests.

Table 10: Shapiro-Wilk Test

		Statistic	df	Sig.
Share Returns	Higher	.965	80	.026
	Lower	.906	75	.000

4.4.2 Comparison of the Means: High Portfolio Vs Low Portfolio

The Levene's test for the equality of variances was performed. The results show that the variances of the 2 portfolios are equal as detailed on table 11.

Table 11: Levene's tests of equality of variances

		F	Sig.
Share Returns	Equal variances assumed	.680	.411
	Equal variances not assumed		

The equal variances will therefore be assumed based on the results of the Levene's test. To determine whether the difference between the means is large, the T-test for the equality of means was performed. The results as presented shows in table 12 that the means of the two portfolios are significantly different at $p=0.05$.

Table 12: Independent Sample Test –T-test for equality of means

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Interval Difference Lower	Confidence of the Upper
Share Returns	Equal variances assumed	1.973	153	.050	.1317447	.0667610	-.0001477	.2636371
	Equal variances not assumed	1.965	147.358	.051	.1317447	.0670463	-.0007518	.2642412

Assuming equal variances the average share returns for the high portfolio is significantly higher than the average share returns for the lower portfolio. These are also presented in figure 2

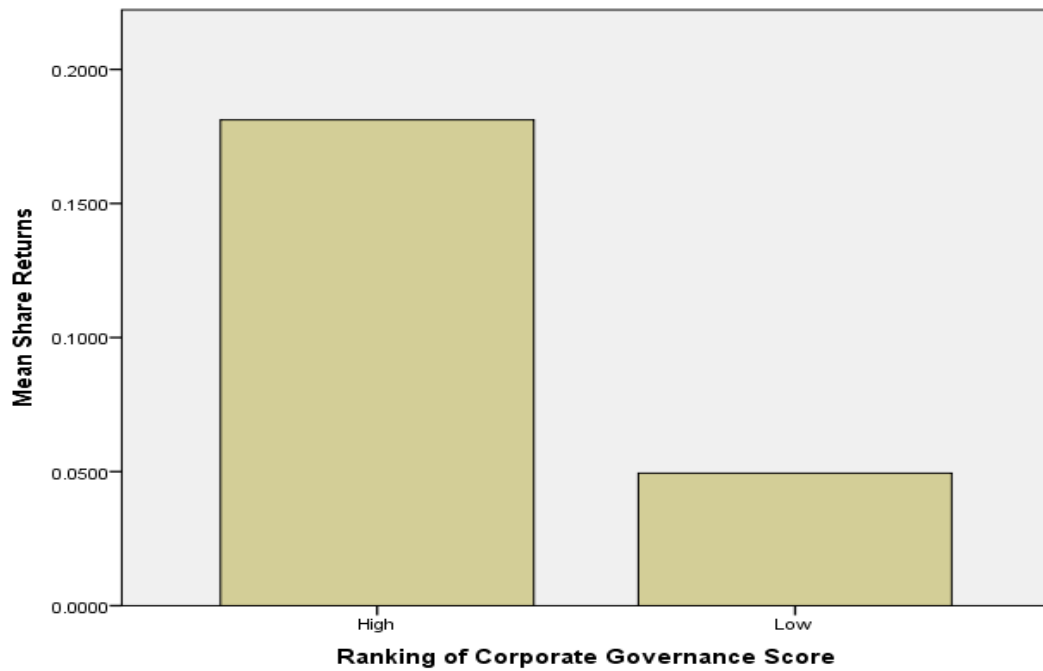


Figure 2: Average share returns-High CGX Portfolio vs Low CGX Portfolio

In addition to this, the high governance portfolio performed better than the low governance portfolios in all years as presented in figure 3.

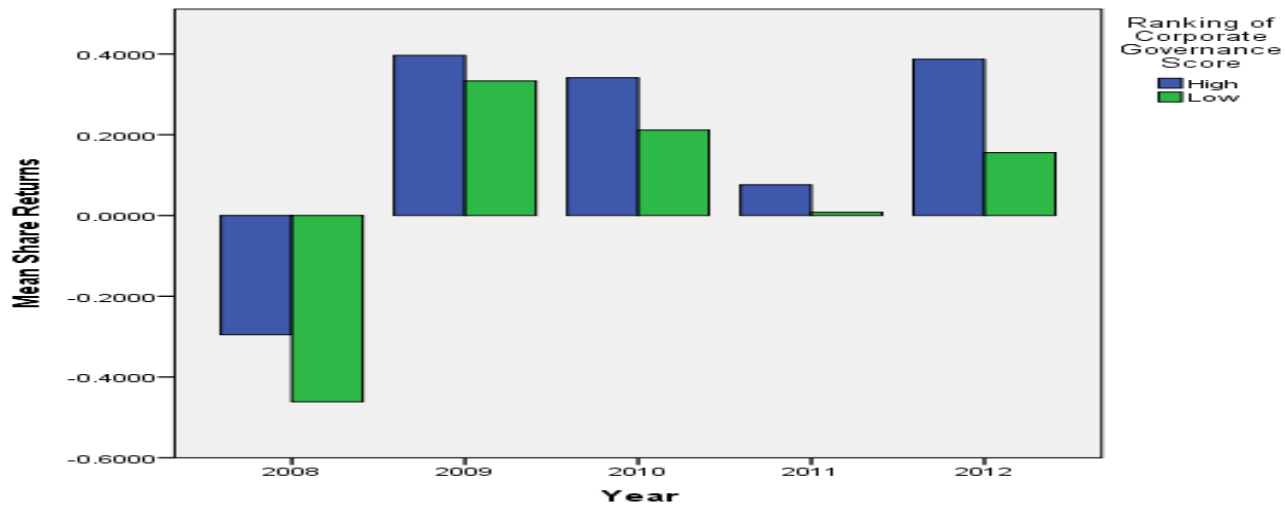


Figure 3: High portfolio vs. Low portfolio 2008 – 2012

4.4.3 Industry Comparison

Figure 4 shows a graphical presentation of the average share returns for the high and low governance portfolios of all the industries represented in this study.

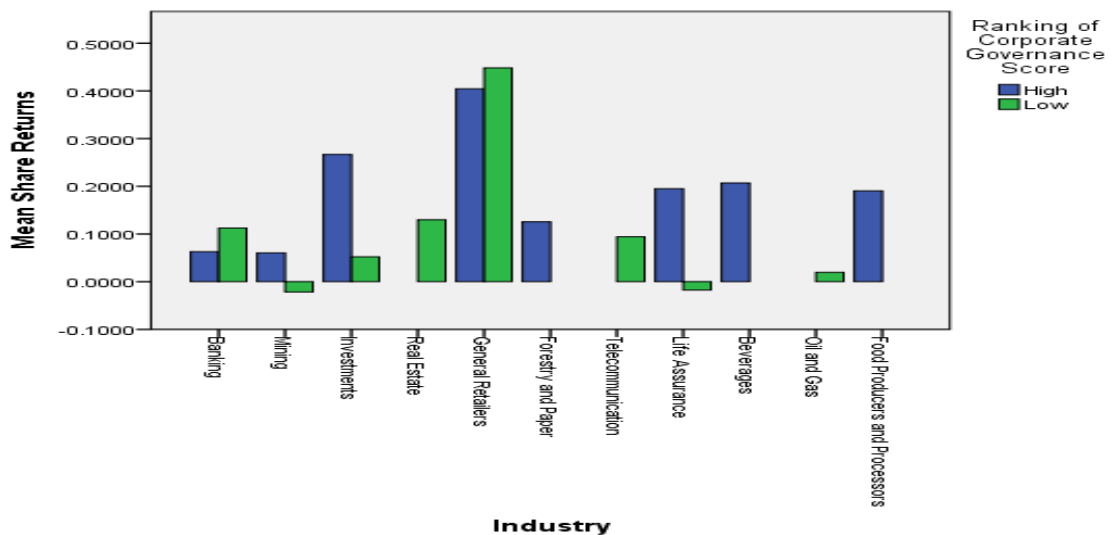


Figure 4: Industry average returns for the High and Low portfolios

The High portfolio outperforms the Low portfolio in all industries except with the General Retailers and Banking where the Low outperformed the High portfolio.

4.4.4 Conclusion regarding Proposition 2

The results show that firms with a higher CGX have on average higher returns than those with Lower scores. The difference was found to be significant with $p= 0.05$.

4.5 Summary of the results

The results are consistent for the tests performed. The regression results show that there is a significant positive relationship between CGX and CPF. This indicates that the share returns increase as the CGX increase. The independent two sample T-test show that the share returns for the High CGX portfolio are higher than those of the Low CGX portfolio. The results also show that BM, company risk (Stdev) and DY has a significant inverse relationship with share returns. Other variables as noted by previous studies, specifically industry, size, PE ratio, Market Risk (Beta) have no impact on the share returns.

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

This chapter discusses and compares the results of this study with the findings of other studies that explored the relationship between Corporate Governance and Company Performances. Section 5.2 link the demographics of the respondents to what was initially planned, Section 5.3 and 5.4 highlights the linkages between the findings pertaining to proposition 1 and 2 to the findings of other studies. Additionally, these sections discuss the existing underlying differences between this study and previous studies. Section 5.4 concludes the chapter.

5.2 Demographic profile of respondents

The plan with regard to corporate governance was to obtain information from the Managers in the Assurance functions such as Auditing, Compliance and Risk Management as they are deemed independent and also close to the overall corporate governance performance within the company. Twenty three respondents were found in Assurance functions. Due to unavailability or difficulty in finding respondents in Assurance functions for the other companies the remaining eight respondents were Senior Management and are also deemed to be reasonably closer to corporate governance issues within the firms. Of the 33 companies selected, corporate governance could not be obtained for two of the sampled companies. These two companies were therefore excluded from the study.

5.3 Discussion pertaining to Proposition 1

The first proposition states that there is a positive relationship between the level of corporate governance and company performance measured in share returns.

At $p = 0.05$, the regression tests shows that corporate governance has a positive relationship with CPF. The first proposition is therefore accepted. Despite the positive relationship the impact of CG on CPF was found to be weak to moderate, with ($r = .194$, $B = .98$, $\beta = .186$, $p < .05$).

These results are consistent with the findings by Renders et al. (2010), Larcker et al. (2007), Drobetz et al. (2004) and Abdo and Fisher (2007) who found evidence that companies with a corporate governance is positively related to market performance. The findings of Larcker et al. (2007), consistent with this study found that the relationship between CG and Share returns were not confounded by endogeneity of the governance indices. This study used the aggregated governance scores as opposed to single governance indicators such as board of Directors. Drobetz et al. (2004) found that even after controlling for industry, the effect of CG on CPF was significant and was found to have a significantly negative DY correlation. The findings were consistent with this study in that all industry dummies had no significant coefficients and DY was found to be having a significant negative effect on CPF. In line with Abdo and Fisher (2007), this study found a significant correlation between CG and share returns for companies listed on the JSE.

Renders et al. (2010) found that the association between CG and CPF was found as a result of statistical power. The authors relied on longitudinal data. Performed in different European countries, the study found that in countries where there is strong share holder protection, the CG performance was high but the effect of CG on returns was weaker than other countries. The findings are consistent with the positive but weak effect of CG on CPF in this study.

The first King Code of governance was implemented in 1994, followed by King II and King III. The listed companies are required to comply or explain the reasons for non-compliance. Additionally the (Companies Act, 2008), based on the “comply or else” was also implemented to encourage the transparency and high standards of CG as well as balancing the rights and obligations of the Directors. It can therefore be argued that South Africa has strong shareholder or stakeholder protection which may explain the weak effect of CG on share returns. As highlighted on the descriptive statistics, the lowest CG score was 58% and the highest 91%. All companies therefore achieved an above average score for CG. The other reason proposed for a weak to moderate relationship between CG and CFP are that the majority of the Investors in the South African market are Institutional Investors who typically invest in the long term. These Investors may not necessarily change their investment holdings due to CG only.

The findings of this study are however inconsistent with Bhagat and Black (1999), and Erkens et al. (2012). These studies found a negative relationship between CG and CFP. Bhagat and Black (1999) argued that different companies requires different boards and that slow growing companies may require independent board to control the Agency conflict. The authors found that, in general, companies with a majority of independent directors performed worse than those with Insider majority. Erkens et al. (2012) performed a study on company performance during the financial crisis and found that companies with more independent boards performed badly in terms of stock returns during the financial crisis. The study found that companies with majority of independent board raised more equity capital during the crisis. Using company size as a moderator, (Dalton, Daily, Ellstrand, & Johnson, 1998), found no relationship between CG and CPF.

In conclusion, the proposition that there is a positive relationship between CG and CPF is accepted. This relationship was found to be significant after controlling for size, PE ratio, DY, Industry, systematic and unsystematic risk. The effect of CG on CPF was found to be weak to moderate. The weak to moderate effect was found to be consistent with the study by Renders et al. (2010).

5.4 Discussion pertaining to Proposition 2

The second proposition states that companies with a higher CGX perform better than those with Lower CGX. The results show that the average returns for the high CGX portfolio is better than Low CGX at $p=.05$. The second proposition is therefore accepted. These results are consistent with Abdo and Fisher (2007) who found that on the JSE, companies with higher CG performed better than those with lower CG. The authors found that these results were consistent across all sectors. This study however found the results not to be consistent across sectors. In Banking and General Retailers, the Low CGX portfolio outperformed the high CGX portfolio.

Gompers et al. (2003), Bauer et al. (2004), and Drobetz et al. (2004), found companies with good CG generate better returns for the shareholders than those with bad governance structures. Gompers et al. (2003) ranked the CG into Dictatorship (firms with weak shareholder rights) and Democracy (strong shareholder rights) and explains that he found Democracy portfolios generating more returns than the Dictatorship. The authors explain that weak shareholder rights caused the poor performance.

The study by Drobetz et al. (2004) found that the historical share returns for the high CG performing firms was 2.3% higher than those on the lower performing

firms. The authors argued that the results could be that systematic risk was not controlled and therefore suggest a multivariate analysis controlling for Risk. In this study, this comparison of means was supplemented by a multivariate regression which also supports the significant link between CG and CPF.

In conclusion, the proposition that companies with higher CG have better share returns than those with low CG is accepted. The results show that in all the years under review, the High CG portfolio performed better than the Low CG portfolio.

5.5 Conclusion

The 2 propositions tested in this study were accepted.

- A significant positive relationship was found between CG and CPF.
- Companies with a high CGX have higher returns than those with lower CGX.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This chapter discusses the conclusion of the study. Section 6.2 summarises the conclusion, 6.3 suggest appropriate recommendations and 6.3 suggests the future implications of the study.

6.2 Conclusions of the study

This study attempted to assess whether corporate governance is linked to company financial market performance. There are different views about whether corporate governance is linked to company performance. The Agency theory suggests that companies with good corporate governance perform better. In this context therefore, companies with a better corporate governance performance, should be a signal to the market that the agency costs are reduced. Companies with better corporate governance should therefore perform better.

Based on the findings of this study, the following conclusions can be held: 1) On the JSE there is a significant positive relationship between corporate governance and company performance; 2) companies with higher CGX perform better than those with lower CGX. The relationship between corporate governance and share returns was found to be consistent in both the multivariate regression and Independent sample T-tests.

6.3 Recommendations

There are several implications of the findings. The study found the positive link between CG and share returns. This supports the recommendations by King III to improve the level of corporate governance in companies. South African

companies should therefore strive to improve their governance performance as this was found to be influencing share returns.

Secondly, companies with higher corporate governance performance have higher returns than those with lower governance. This supports the findings of previous studies and therefore Investors can look into investing in companies with better governance scores.

Thirdly, despite the strong institutions and the advanced development of corporate governance in South Africa, there is no standard measure for corporate governance in South Africa. The Investors therefore have to rely on the disclosures in the annual reports to determine the corporate governance performance. It is recommended that the JSE considers qualitative and quantitative measures for rating and ranking corporate governance for the listed companies.

Fourthly, despite the strong institution and development of corporate governance in South Africa, there are companies in the Top 40 which scored less than 75% on corporate governance. The reporting of corporate governance structures could be simplified to allow the companies to focus more on implementing and encouraging the culture of good citizenship, rather than focusing on administration and reporting.

6.4 Suggestions for further research

This study represented the companies in the top 40 therefore larger companies on the JSE. Size was found to have an insignificant effect on this study. Future studies could focus on including larger and smaller firms. Additionally, the

studies can also compare the corporate governance performance of larger and smaller firms.

The rating and measuring of corporate governance was met with conflicting views in the literature. A qualitative study on the corporate governance could be performed. The study could also focus on the enablers, challenges or the barriers for implementing corporate governance in South African companies within the company. This could contribute towards developing an objective measure for corporate governance.

Finally, there may be some corporate governance factors that are regarded as important by South African Investors. Future studies on important attributes of corporate governance in the South African market can be explored and a quantitative review can then be performed to assess the relationship between corporate governance and performance with the focus on the identified attributes.

REFERENCES

- Abdo, A., & Fisher, G. (2007). The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE. *Investment Analysts Journal*(66), 43-56.
- Al-Haddad, W., Alzurqan, S. T., & Al_Sufy, F. (2011). The Effect of Corporate Governance on the Performance of Jordanian Industrial Companies: An empirical study on Amman Stock Exchange. *International Journal of Humanities and Social Science*, 1(4), 55-69.
- Auret, C., & Sinclair, R. (2006). Book-to-market ratio and returns on the JSE. *Investment Analysts Journal*(63), 31-38.
- Balling, M., Holm, C., & Poulsen, T. (2005). *Corporate governance ratings as a means to reduce asymmetric information*: Aarhus School of Business, Department of Accounting, Finance and Logistics.
- Banz, R. W. (1981). The relationship between return and market value of common stocks. *Journal of financial economics*, 9(1), 3-18.
- Bauer, R., Guenster, N., & Otten, R. (2004). Empirical evidence on corporate governance in Europe: The effect on stock returns, firm value and performance. *Journal of Asset Management*, 5(2), 91-104.
- Bebczuk, R. N. (2005). *Corporate governance and ownership: Measurement and impact on corporate performance and dividend policies in Argentina*: Interamerican Development Bank.
- Bhagat, S., & Black, B. (1999). The uncertain relationship between board composition and firm performance. *The Business Lawyer*(54), 921-963.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), 257-273.
- Bhagat, S., Bolton, B., & Romano, R. (2008). The promise and peril of corporate governance indices. *Columbia Law Review*, 108(8), 1803-1882.
- Botha, D. (2012, 12 September). Measuring and engaging investee companies - the PIC/GEPP approach. Retrieved 2 September, 2013, from http://www.icsa.co.za/index.php?option=com_content&view=article&id=374&Itemid=472
- Brown, L., & Caylor, M. (2004). Corporate governance and firm performance. *Journal of Accounting and Public Policy*, 25(4), 409-434.

- Bryman, A. (2012). *Social research methods* (Fourth ed.). New York: Oxford university press.
- Carhart, M. M. (1997). On persistence in mutual fund performance. *The Journal of Finance*, 52(1), 57-82.
- Carlos E. Campos, R. E. N., and Gregory Wilson. (2002). Corporate governance develops in emerging markets. *McKinsey on Finance*(3), 15-18.
- Carte, D. (2009, 19 May). King 3's too soft Retrieved 2 August, 2013, from <http://www.moneyweb.co.za/moneyweb-corporate-governance/king-3s-too-soft>
- Chiang, H.-t., & Chia, F. (2005). An empirical study of corporate governance and corporate performance. *Journal of American Academy of Business*, 6(1), 95-101.
- Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. *Academy of management Journal*, 27(1), 42-56.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic management journal*, 19(3), 269-290.
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of management Journal*, 42(6), 674-686.
- Donker, H., & Zahir, S. (2008). Towards an impartial and effective corporate governance rating system. *Corporate Governance*, 8(1), 83-93.
- Drobetz, W., Schillhofer, A., & Zimmermann, H. (2004). Corporate governance and expected stock returns: Evidence from Germany. *European Financial Management*, 10(2), 267-293.
- Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance*, 18(2), 389-411.
- Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *The Journal of Finance*, 47(2), 427-465.
- Flanagan, D. J., O'Shaughnessy, K. C., & Palmer, T. B. (2011). Re-Assessing the Relationship between the Fortune Reputation Data and Financial Performance: Overwhelming Influence or Just a Part of the Puzzle? *Corporate Reputation Review*, 14(1), 3-14.

- Foerster, S. R., & Huen, B. C. (2004). Does corporate governance matter to Canadian investors? *Canadian Investment Review*, 17(3), 19-23.
- Garcia, H., & Filzmoser, P. (2011). *Multivariate Statistical Analysis using the R package chemometrics*. Austria: Vienna University of Technology,.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107-156.
- Grant, G. H. (2003). The evolution of corporate governance and its impact on modern corporate America. *Management Decision*, 41(9), 923-934.
- Guarte, J. M., & Barrios, E. B. (2006). Estimation under purposive sampling. *Communications in Statistics—Simulation and Computation*®, 35(2), 277-284.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- JSE. (2013, 8 May). Introduction to SRI Index. Retrieved 1, September, 2013, from <http://www.jse.co.za/About-Us/SRI/Criteria.aspx>
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *Am J Health Syst Pharm*, 65(23), 2276-2284.
- King Committee on Corporate Governance, I. o. D. S. A. (2009). *King Report on Corporate Governance for South Africa, 2009*. (0620288515). Institute of Directors in Southern Africa.
- Kumar, R., Rule, M., & Savard, K. (2007). Corporate Governance in South Africa an Investor perspective. Task force report. . In I. o. I. Finance. (Ed.).
- Larcker, D. F., Richardson, S. A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, 82(4), 963-1008.
- Lee, D. D., Faff, R. W., & Langfield-Smith, K. (2009). 2 Revisiting the Vexing Question: Does Superior Corporate Social Performance Lead to Improved Financial Performance? *Australian Journal of Management*, 34(1), 21.
- Mantshantsha, S. (2007, 25 January). PIC whips Barloworld into line. Retrieved 15 August, 2012, from <http://www.fin24.com/Companies/PIC-whips-Barloworld-into-line-20070125>

- McGregor, L. (2006). Corporate governance in South Africa. In P. Armstrong, N. Segal & B. Davis (Eds.), *Handbook on international corporate governance* (Second ed.). London: Edward Elgar Publishing.
- Merchant, K. A., & Sandino, T. (2009, 30 August). Four Options for Measuring Value Creation Strategies for managers to avoid potential flaws in accounting measures of performance. *Journal of Accountancy*. Retrieved 1 September, 2013, from <http://www.journalofaccountancy.com/issues/2009/aug/20091518>
- OECD. (2004). *OECD Principles of Corporate Governance 2004*: OECD Publishing.
- Rappaport, L. (2002, 15 July). McKinsey Survey shows Directors and Investors are ready for governance reform. Retrieved 12th August, 2013, from <http://www.institutionalinvestor.com/Article/1037060/McKinsey-Surveys-Show-Directors-And-Investors-Are-Eager-For-Governance-Reform.html>
- Renders, A., Gaeremynck, A., & Sercu, P. (2010). Corporate-Governance Ratings and Company Performance: A Cross-European Study. *Corporate Governance: An International Review*, 18(2), 87-106.
- Rennings, K., Schrder, M., & Ziegler, A. (2003). The economic performance of European stock corporations. *Greener Management International*, 2003(44), 33-43.
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: concepts, findings, and guidelines. *Journal of Marketing Research*, 45(3), 261-279.
- Rossouw, G. J., van der Watt, A., & Malan, D. P. (2002). Corporate Governance in South Africa. *Journal of Business Ethics*, 37(3), 289-302.
- RSA. (2008). *Companies Act No. 71 of 2008*. Pretoria: Government Printer.
- Simons, D., & Laryea, S. A. (2006). Testing the efficiency of selected African stock markets. *Finance India*, 20(2), 553-571.
- Sonnenberg, D., & Hamann, R. (2006). The JSE Socially Responsible Investment Index and the state of sustainability reporting in South Africa. *Development Southern Africa*, 23(2), 305-320.
- Strugnell, D., Gilbert, E., & Kruger, R. (2011). Beta, size and value effects on the JSE, 1994-2007. *Journal of Investment Analysts*(74), 1-17.
- Sukamolson, S. (2007). Fundamentals of quantitative research (pp. 1-20). Bangkok: Language Institute Chulalongkorn University.

- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (Fifth ed.). North Ridge: Pearson.
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research & Applications*(5), 147-158.
- UNGC. (2009). *Corporate Citizenship and Sustainable Businesses*. New York: International Finance Corporation.
- Van Rensburg, P. (2001). A decomposition of style-based risk on the JSE. *The Investment Analysts Journal*(54), 44-58.
- Van Rensburg, P., & Robertson, M. (2003a). Size, Price-to-Earnings and Beta on the JSE. *Investment Analysts Journal*(58), 1-11.
- Van Rensburg, P., & Robertson, M. (2003b). Style characteristics and the cross-section of JSE returns. *Investment Analysts Journal*(57), 7-15.
- Vaughn, M., & Ryan, L. V. (2006). Corporate Governance in South Africa: a bellwether for the continent? *Corporate Governance: An International Review*, 14(5), 504-512.
- West, A. (2006). Theorising South Africa's Corporate Governance. *Journal of Business Ethics*, 68(4), 433-448.
- West, A. (2009). The ethics of corporate governance: A (South) African perspective. *International Journal of Law and Management*, 51(1), 10-16.
- Womack, K., & Zhang, Y. (2003). Understanding risk and return, the CAPM, and the Fama-French three-factor model (pp. 1-14). Dartmouth: Tuck School of Business
- Ziegler, A., Schroder, M., & Rennings, K. (2007). The Effect of Environmental and Social Performance on the Stock Performance of European Corporations. *Environmental and Resource Economics*, 37(4), 661-680.

APPENDIX A

Actual Research Instrument

I am a student at the Wits Business School in Johannesburg, South Africa. In partial fulfillment of the requirements of my qualification, I am conducting a study that seeks to understand the level of corporate governance for companies on the JSE.

I invite you to participate in this study by completing a questionnaire that requires no more than 20 minutes of your time. Your participation is voluntary and your responses completely anonymous. If at any time you do not wish to participate in the survey you may close the survey and any information provided will be deleted. There are seven sections within the survey that must be completed.

Please feel free to call me, Selaelo Sebone (0828796738) selaelose@gmail.com or my supervisor, Professor Stuart Woolman (0828288056) Stuart.Woolman@wits.ac.za if you require clarity on any aspect of the survey.

Thank you for your participation and the valuable contribution to the study.

General Information

1. Name of the Company
2. Please indicate your position in the firm
3. How long have you been employed by the company:
4. Gender:
☐ Male
☐ Female

Part 1: Board of Directors ('BoD')

- 1.1. What is the size of the Board of Directors ('Board' or 'BoD')?
☐ 1-2
☐ 3-4
☐ > 4
- 1.2. How many individual Board members constitute the entire Board of Directors?
(i) Independent Non-Executive Directors:
(ii) Non Executive Directors
(iii) Executive Directors
- 1.3. Do one or more Independent Non executive Directors have other business with the company?
☐ Yes
☐ No
If Yes is selected, provide details about the nature and the extent of the business:
- 1.4. Is the Chairman of the Board also the Chief Executive Officer ('CEO') of the company?
☐ Yes
☐ No
- 1.5. The Chairman of the Board is an Independent Non-Executive Director?
☐ Yes
☐ No

If No, then please describe how she or he is *more or less* independent:

1.6. Does a formal process exist to review and to assess the performance of the Board of Directors and its individual members:

- ☐ Yes
☐ No

1.7. If the answer to 1.6 is Yes, then how often is the performance of the Board and its Directors reviewed?

- ☐ Once a year
☐ More than once a year
☐ Other (e.g. once in 2 years)

1.8. Does the BoD have a succession plan for its current CEO?

- ☐ Yes
☐ No

1.9. Does the Board have an Ethics Committee to provide oversight with respect to internal and external relationships?

- ☐ Yes
☐ No

1.10. Does the Board possess written guidelines with respect to how director's dealings with firm are to be regulated?

- ☐ Yes
☐ No

1.11. The Board has ratified an Ethical Code of Conduct for the firm:

- ☐ Yes
☐ No

If the response for 1.11 is Yes, then please answer 1.12. to 1.13:

1.12. Is the ethical code of conduct distributed to all employees

- ☐ Yes
☐ No

1.13. The consequences of non-ethical behaviour are clearly articulated in the Code:

- ☐ Yes
☐ No

1.14. The company has created an independent process through which ethical issues or complaints are raised, reported and reviewed:

- ☐ Yes
☐ No

1.15. Does the company have a policy prohibiting insider trading?

- ☐ Yes
☐ No

1.16. The company discloses:

- | | Yes | No |
|-------------------------------------|--------------------------|--------------------------|
| (i) major transactions, | ☐ | ☐ |
| (ii) related party transactions, | ☐ | ☐ |
| (iii) off-balance sheet activities, | ☐ | ☐ |
| (iv) other material events | ☐ | ☐ |

If any of the above items on 1.16 are selected How are they disclosed (e.g., Annual Report, Company Website)?

1.17. The Board has formalised and published the roles, responsibilities and the powers of the board:

- ☐ Yes
☐ No

1.18. Does the company provide training for newly appointed Directors?

- ☐ Yes
☐ No

1.19. How many times did the Board meet in the last financial year?

- ☐ Did not meet in the last financial year

- ☐ 1-2 annually
☐ 3-4 annually
☐ More than four times a year
- 1.20. Does the Board have a nomination committee?
- ☐ Yes
☐ No
- 1.21. How many Individual Board members constitute the Nomination Committee?
- (i) No. Executive Directors:
 (ii) No. of Non Executive Directors
 (iii) No. of Independent Non Executive Directors
- 1.22. Who is responsible for the appointment of Directors to the Board?
- ☐ CEO
☐ Chairman of the Board
☐ Senior Management
☐ Nomination Committee
☐ Other (Specify)
- 1.23. Does the firm have formal and transparent procedures for selecting the Directors?
- ☐ Yes
☐ No

Part 2: Remuneration of Directors

- 2.1. Does the company have written policies and procedures on Director remunerations:
- ☐ Yes
☐ No
- 2.2. Does the board review the CEO's compensation?
- ☐ Yes
☐ No
- 2.3. Is any portion of the compensation of the individual Directors performance based?
- ☐ Yes
☐ No
- 2.4. Does the remuneration report include the following?
- | | Yes | No |
|--|--------------------------|--------------------------|
| i. all benefits paid to directors | ☐ | ☐ |
| II. the salaries of the three most highly paid employees who are not directors | ☐ | ☐ |
| III. the policy on base pays | ☐ | ☐ |
| IV. participation in share incentive schemes | ☐ | ☐ |
| V. the use of benchmarks | ☐ | ☐ |
| VI. justification of salaries above the median | ☐ | ☐ |
| VII. material payments that are ex-gratia in nature | ☐ | ☐ |
| VIII. policies regarding executive employment | ☐ | ☐ |
| IX. the maximum expected potential dilution as a result of incentive awards | ☐ | ☐ |

Part 3: Audit Committee

- 3.1. Has the Board created a separate Audit Committee ('AC')?
- ☐ Yes
☐ No
☐ Yes, but Board and the Audit Committee are identical.
☐ Yes, but the Board and the Audit Committee have many of the same individuals serving on both entities.
- 3.2. If the Board has an Audit Committee ('AC') please give your responses to the following:
- | | Yes | No |
|---|--------------------------|--------------------------|
| i. Do written terms of reference specify the responsibilities of the AC?: | ☐ | ☐ |
| ii. Does the AC have someone with accounting background and experience? | ☐ | ☐ |

- iii. Does the committee meet with External and Internal Auditors at least once a year without Management being present? ☐
- 3.3. How often does the AC meet?
- ☐ 0 times a year
- ☐ Once a year
- ☐ 2 or more times a year
- 3.4. Who is responsible for recommending external auditors to the Board:
- ☐ CEO
- ☐ Senior Manager
- ☐ Company Internal Auditors
- ☐ Members of the Board
- ☐ Audit Committee
- ☐ Other (Specify):
- 3.5. What is the size of the Audit Committee?
- ☐ 1 Member
- ☐ 2 members
- ☐ 3 members
- ☐ More than 3 members
- 3.6. The Audit Committee is made up of:
- i. No. of Independent Non-executive Directors
- ii. No of Non Executive Director
- iii. No of Number of Executive Directors
- 3.7. Is the Chairperson of the AC also the Chairperson of the Board?
- ☐ Yes
- ☐ No
- 3.8. Is the Chairman of the AC also member of the Board?
- ☐ Yes
- ☐ No
- 3.9. Does AC report on the state of the company's Financial Controls at the end of the Financial Year?
- ☐ Yes
- ☐ No
- 3.10. Does the AC review the performance of the firm's finance function annually?
- ☐ Yes
- ☐ No
- 3.11. Does the AC review the Financial Statements of the company?
- ☐ Yes
- ☐ No
- 3.12. Are the financial statements ratified by External Auditors?
- ☐ Yes
- ☐ No
- 3.13. What were the results of the External Audit Report, if any, in the past financial year?
- ☐ Qualified
- ☐ Unqualified
- ☐ Other (specify)

Part 4: Governance of Risk:

- 4.1 The Board reviews the effectiveness of the firm's risk management process through:
- ☐ Internal Audit review
- ☐ External Audit Review
- ☐ Other assurance providers
- ☐ N/A (No annual review is performed)
- 4.2 The Board assigns assessment of risk responsibilities to which committee?
- ☐ Audit Committee
- ☐ Risk Committee
- ☐ N/A (No dedicated committee)
- ☐ Other (Specify)
- 4.3 What is the size of the Risk Committee?

- ☐ 1
☐ 2-3
☐ More than 3
☐ N/A (No dedicated Risk Committee)
- 4.4 How many times did the committee dedicated to risk management meet in the past financial year?
- ☐ Never met
☐ Once
☐ Twice
☐ More than 2 times
☐ N/A (No dedicated Risk Committee)
- 4.5 Has the performance of the risk committee been formally reviewed by the Board in the past financial year?
- ☐ Yes
☐ No
☐ N/A (No dedicated Risk Committee)
- 4.6 Did the Board determine the company's risk appetite?
- ☐ Yes
☐ No
- 4.7 Have the high risks facing the company, if any, been identified?
- ☐ Yes
☐ No

Part 5: Governance of Stakeholders

- 5.1. Has the Company identified all of its important stakeholders?
- ☐ Yes
☐ No
- 5.2. The Board has documented how it achieves an appropriate balance with respect to the company's responsibilities to various stakeholders?
- ☐ Yes
☐ No
- 5.3. The Board has implemented or created a process of resolving disputed between and with various stakeholder?
- ☐ Yes
☐ No
- 5.4 What dispute resolution mechanisms, if any, does the Board employ for stakeholder disputes?

Part 6: Internal Audit

- 6.1. Does the company have an Internal Audit (IA) Function?
- ☐ Yes
☐ No
- 6.2. Does the IA Function have a charter that is approved by the Audit Committee or the Board of Directors?
- ☐ Yes
☐ No
- 6.3. Does the IA Function have full access to information relevant to their audits?
- ☐ Yes
☐ No
- 6.4. The Internal Audit Function reports to
- ☐ CFO

- ☐ CEO
- ☐ COO
- ☐ CIO
- ☐ Audit Committee
- ☐ Other (Specify)

6.5. Does the Board of Directors monitor management's response to deficiencies and weaknesses identified by the IA function and/or external auditors?

- ☐ Yes
- ☐ No

6.6. Did the Internal Audit provide an accurate assessment of the overall effectiveness of the company's internal controls?

- ☐ Yes
- ☐ No

6.7. If the response to 6.6 is yes, please choose one of the following:

- ☐ Significant adverse weaknesses identified
- ☐ Moderate weaknesses identified
- ☐ Minor weaknesses identified
- ☐ No weaknesses identified

6.8. If weaknesses were identified, how did the Board or Senior Management respond to this assessment?

- ☐ Significant changes made
- ☐ Minor changes made
- ☐ No changes made

Part 7: Sustainability and Integrated Reporting

7.1. The sustainability reporting and disclosure was independently assured by

- ☐ Internal Auditors
- ☐ External Auditors
- ☐ Not Independently Assured
- ☐ Other assurance providers (identify)

7.2. Is the Board's commitment to social development and engagement, environmental protection and workplace safety

- ☐ Significant
- ☐ Moderate
- ☐ Limited
- ☐ Non-existent

7.3. What measures does the Board employ, if any, to discharge its commitment to social development and engagement, environmental protection and workplace safety?

APPENDIX B

Initial Regression:

Descriptive Statistics

	Mean	Std. Deviation	N
Share Returns	.117396	.4192527	155
Corporate Governance Score	.753972	.0753857	155
Share price/earnings per share	.164256	1.0914199	155
Book to Market value (MV Equity/BV Equity)	.534666	.4214533	155
Market Risk	.937245	.3495351	155
Company risk	.022009	.0097053	155
Dividend Yield(DPS/Share Price)	2.902810	2.0265948	155
SIZE2	18.0684	.97258	155

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.645 ^a	.416	.343	.3397055	2.019

a. Predictors: (Constant), SIZE2, Banking, Company risk, LifeAssurance, ForestryPaper, OilandGas, FoodProducers, Telecomms, Share price/earnings per share, Investments, RealEstate, Corporate Governance Score, Beverages, Dividend Yield(DPS/Share Price), Book to Market value (MV Equity/BV Equity), Market Risk, GeneralRetailers

b. Dependent Variable: Share Returns

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.259	17	.662	5.739	.000 ^b
	Residual	15.810	137	.115		
	Total	27.069	154			

a. Dependent Variable: Share Returns

b. Predictors: (Constant), SIZE2, Banking, Company risk, LifeAssurance, ForestryPaper, OilandGas, FoodProducers, Telecomms, Share price/earnings per share, Investments, RealEstate, Corporate Governance Score, Beverages, Dividend Yield(DPS/Share Price), Book to Market value (MV Equity/BV Equity), Market Risk, GeneralRetailers

Coefficients^a

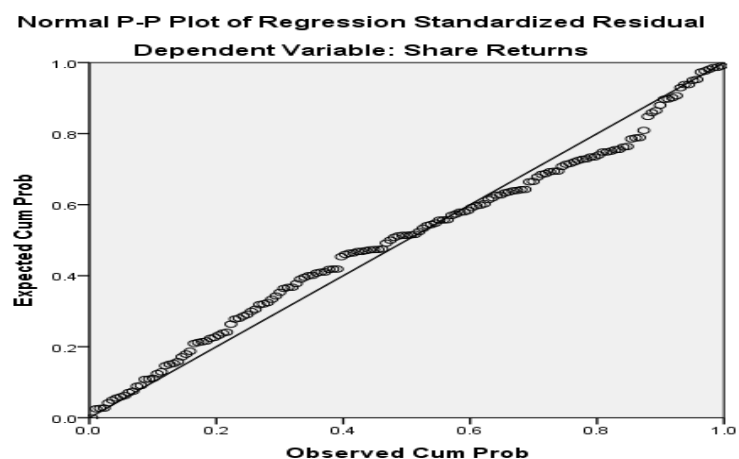
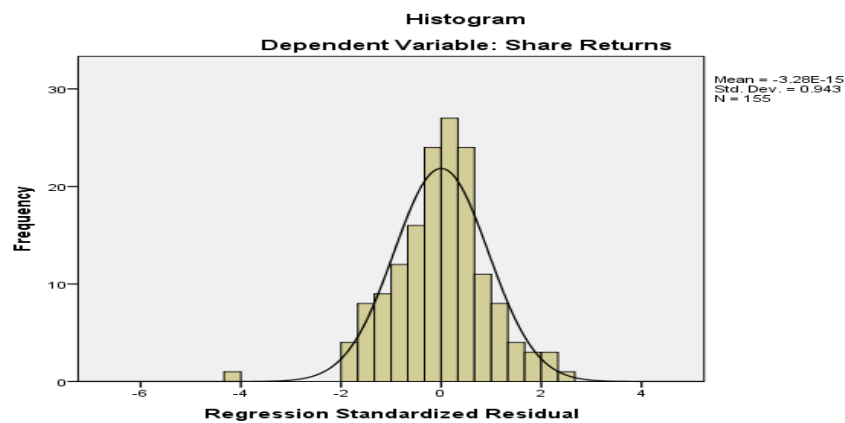
Coefficients									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.445	1.045		.426	.671	-1.622	2.512		
Corporate Governance Score	1.019	.510	.183	2.001	.047	.012	2.027	.508	1.969
Share price/earnings per share	.038	.028	.098	1.357	.177	-.017	.092	.820	1.220
Book to Market value (MV Equity/BV Equity)	-.309	.097	-.310	-3.182	.002	-.501	-.117	.448	2.231
Market Risk	.144	.117	.120	1.231	.220	-.087	.375	.449	2.226
Company risk	-19.560	3.202	-.453	-6.108	.000	-25.893	-13.228	.776	1.289
Dividend Yield(DPS/Share Price)	-.040	.018	-.193	-2.232	.027	-.075	-.005	.570	1.755
Industry- Banking	.078	.104	.068	.751	.454	-.127	.283	.513	1.949
Investments	.042	.099	.034	.422	.674	-.155	.238	.671	1.491
Industry- RealEstate	-.292	.204	-.123	-1.429	.155	-.696	.112	.571	1.750
Industry- GeneralRetailers	.123	.131	.099	.939	.350	-.136	.382	.385	2.594
Industry- ForestryPaper	.259	.182	.110	1.427	.156	-.100	.618	.724	1.381
Industry- Telecomms	.079	.173	.033	.457	.648	-.263	.422	.795	1.257
Industry- LifeAssurance	-.111	.127	-.065	-.871	.385	-.363	.141	.760	1.315
Industry- Beverages	-.311	.201	-.132	-1.553	.123	-.708	.085	.593	1.687
Industry- OilandGas	-.036	.167	-.015	-.215	.830	-.365	.294	.859	1.164
Industry- FoodProducers	-.079	.185	-.034	-.429	.669	-.445	.286	.697	1.435
Industry- SIZE2	-.030	.049	-.069	-.613	.541	-.126	.067	.333	3.001

a. Dependent Variable: Share Returns

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1.190701	.630364	.117396	.2703922	155
Std. Predicted Value	-4.838	1.897	.000	1.000	155
Standard Error of Predicted Value	.059	.303	.110	.035	155
Adjusted Predicted Value	-1.400752	.660532	.113049	.2872026	155
Residual	-1.4059167	.7974468	.0000000	.3204073	155
Std. Residual	-4.139	2.347	.000	.943	155
Stud. Residual	-4.485	2.437	.004	1.003	155
Deleted Residual	-1.6509209	1.0350852	.0043471	.3687759	155
Stud. Deleted Residual	-4.838	2.482	.002	1.019	155
Mahal. Distance	3.640	121.359	16.890	13.136	155
Cook's Distance	.000	.410	.010	.038	155
Centered Leverage Value	.024	.788	.110	.085	155

a. Dependent Variable: Share Returns



APPENDIX C

Final Regression

Descriptive Statistics

	Mean	Std. Deviation	N
Share Returns	.128430	.3974034	154
Corporate Governance Score	.754312	.0755117	154
Share price/earnings per share	.161234	1.0943304	154
Book to Market value (MV Equity/BV Equity)	.536670	.4220869	154
Market Risk	.937455	.3506657	154
Company risk	.021896	.0096341	154
Dividend Yield(DPS/Share Price)	2.919546	2.0224326	154
SIZE2	18.0717	.97489	154

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.665 ^a	.442	.372	.3149313	.442	6.331	17	136	.000	1.840

a. Predictors: (Constant), SIZE2, LifeAssurance, Company risk, Banking, ForestryPaper, OilandGas, FoodProducers, Telecomms, Share price/earnings per share, Investments, RealEstate, Corporate Governance Score, Beverages, Dividend Yield(DPS/Share Price), Book to Market value (MV Equity/BV Equity), Market Risk , GeneralRetailers

b. Dependent Variable: Share Returns

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.674	17	.628	6.331	.000 ^b
	Residual	13.489	136	.099		
	Total	24.163	153			

a. Dependent Variable: Share Returns

b. Predictors: (Constant), SIZE2, LifeAssurance, Company risk, Banking, ForestryPaper, OilandGas, FoodProducers, Telecomms, Share price/earnings per share, Investments, RealEstate, Corporate Governance Score, Beverages, Dividend Yield(DPS/Share Price), Book to Market value (MV Equity/BV Equity), Market Risk , GeneralRetailers

Coefficients^a

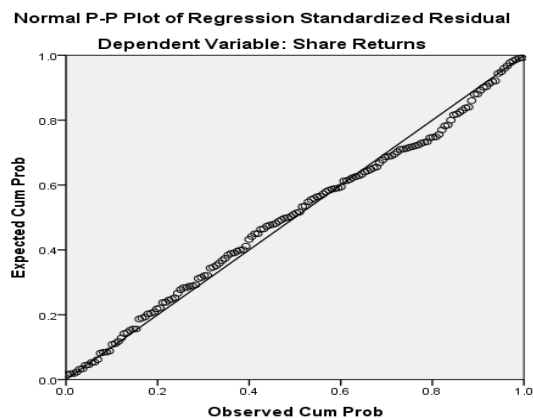
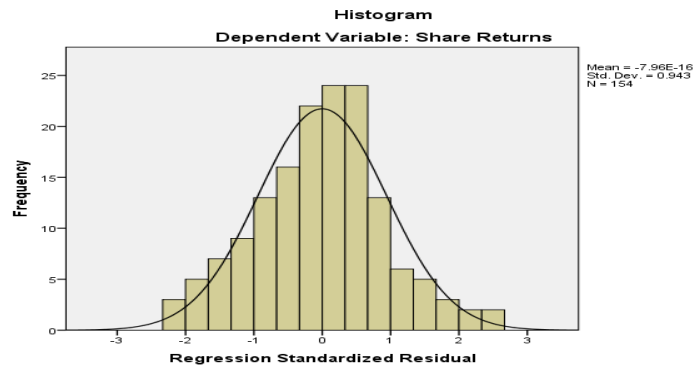
		Unstandardized		Standardize			95.0% Confidence		Collinearity	
		Coefficients		d			Interval for B		Statistics	
			Std.							
Model	B	Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF	
1	(Constant)	.658	.970		.679	.499	-1.260	2.576		
	Corporate Governance Score	.980	.472	.186	2.074	.040	.046	1.914	.509	
	Share price/earnings per share	.034	.026	.095	1.339	.183	-.016	.085	.820	
	Book to Market value (MV Equity/BV Equity)	-.350	.090	-.372	-3.872	.000	-.528	-.171	.446	
	Market Risk	.154	.108	.136	1.422	.157	-.060	.368	.449	
	Company risk	-17.067	3.013	-.414	-5.664	.000	-23.026	-11.108	.769	
	Dividend Yield(DPS/Share Price)	-.049	.017	-.249	-2.936	.004	-.082	-.016	.568	
	Banking	.126	.097	.117	1.305	.194	-.065	.317	.508	
	Investments	.050	.092	.043	.544	.588	-.132	.232	.671	
	RealEstate	-.309	.189	-.138	-1.629	.106	-.683	.066	.571	
	GeneralRetailers	.130	.122	.110	1.066	.288	-.111	.370	.386	
	ForestryPaper	.302	.168	.135	1.791	.076	-.031	.635	.722	
	Telecomms	.099	.161	.045	.620	.537	-.218	.417	.795	
	LifeAssurance	.062	.123	.037	.502	.616	-.182	.306	.769	
	Beverages	-.296	.186	-.133	-1.594	.113	-.664	.071	.593	
	OilandGas	-.002	.155	-.001	-.010	.992	-.307	.304	.857	
	FoodProducers	-.066	.172	-.030	-.386	.700	-.405	.273	.697	
	SIZE2	-.042	.045	-.102	-.920	.359	-.131	.048	.333	

a. Dependent Variable: Share Returns

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-1.089097	.609077	.128430	.2641362	154
Std. Predicted Value	-4.609	1.820	.000	1.000	154
Standard Error of Predicted Value	.055	.281	.103	.032	154
Adjusted Predicted Value	-1.129539	.637925	.125321	.2724097	154
Residual	-.6771866	.7556254	.0000000	.2969201	154
Std. Residual	-2.150	2.399	.000	.943	154
Stud. Residual	-2.264	2.521	.003	.997	154
Deleted Residual	-.7504755	.8341966	.0031089	.3361561	154
Stud. Deleted Residual	-2.299	2.573	.003	1.004	154
Mahal. Distance	3.668	120.778	16.890	13.155	154
Cook's Distance	.000	.260	.008	.023	154
Centered Leverage Value	.024	.789	.110	.086	154

a. Dependent Variable: Share Returns



APPENDIX D

Consistency matrix

Research problem: The main problem of this study is to determine the relationship between the corporate governance as measured in the following dimensions (Board effectiveness, remunerations, accounting and auditing, shareholder treatment, Internal audit, risk management, governing stakeholders relationships and integrated reporting and disclosure) and company performance and ascertain whether companies with high governance perform better than those with low governance on JSE.					
Main Problem	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
The main problem of this study is to determine the relationship between the corporate governance as measured in the following dimensions (Board effectiveness, remunerations, accounting and auditing, shareholder treatment, Internal audit, risk management, governing stakeholders relationships and integrated reporting and disclosure) and company performance and ascertain whether companies with good governance perform better than those with bad governance on JSE.	King III (2009), Brown & Caylor, (2004); Gompers et al., (2003); Renders, Gaeremynck, & Sercu, (2010), Rossouw, van der Watt, & Malan, 2002), Carhart (1997), Fama and French (1992), Van Rensburg & Robertson, (2003), Van Rensburg (2001); Larcker, Richardson, & Tuna, (2007), Renders, Gaeremynck, & Sercu, (2010), Foerster and Huen (2004), Bhagat & Black, (1999), Flanagan, O'Shaughnessy, & Palmer, (2011), Erkens, Hung, and Matos (2012), Dalton et al. (1999), Bauer, Guenster, & Otten, (2004), Lee, Faff, and Langfield-Smith (2009), Drobetz et al., Abdo and Fisher (2007);	Proposition 1: There is a positive relationship between the level of CG and CFP on JSE as measured by expected returns. Proposition 2: The performance of companies with good CG score as measured by expected share returns is higher than those with lower CG score.	Corporate governance questionnaire And JSE data using McGregor BFA,	Nominal And Ratio/scale	Multivariate regression analysis And Independent sample T-test