The Relationship Between Corporate Governance Board Characteristics and Financial Performance of South African JSE Listed Companies in the Construction and Building Materials Sector

by

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Declaration

I, **Netsayi Landie Jingura,** declare that this minor dissertation is my own unaided work. Any assistance that I have received has been duly acknowledged in the minor dissertation. It is submitted in partial fulfilment of the requirements for the degree of MASTER OF COMMERCE in FINANCE at the University of Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

Signature

Date

Dedication

This dissertation is dedicated to my Grandfather Hans David Jingura who always believes in me and shows me direction in life.

I also dedicate this research to my son Ethan, so he appreciates my sacrifices and hard work and learns that education is the key to a better life, no matter what.

Acknowledgements

I am so grateful to the Almighty God for the strength which he invested in me throughout this study. I am humbled to have been taken this far. “I can do all things through Christ who strengthens me” (Philippians 4:13), and “being confident of this very thing, that he which hath begun a good work in me will perform it until the day of Jesus Christ” (Philippians 1:6).

I am also thankful to the Lord for the family and friends He gave me – thank you all for the support and words of encouragement from my mother, father, grandfather, siblings and especially my husband, who has been my pillar of strength.

Be blessed.

Abstract

The relationship between corporate performance and governance practices goes back for centuries yet is still relevant today, in the modern corporate environment. While corporate governance is argued to be an agency cost, as it curbs managers' self-interest, it is believed to increase company performance as it inspires group effort from all stakeholders. Corporate governance describes the mechanisms in place to ensure that management is taking appropriate steps, policies and procedures to protect every stakeholder's interest in the company. The study is an investigation on the relationship between corporate governance board of directors and company performance. Board of directors' characteristics were represented by board size, board independence, Chief Executive Officer (CEO) tenure, CEO compensation and CEO duality while company performance measures were represented by Return on Equity (ROE), Return on Assets (ROA) and Net Profit Margin (NPM). The study used panel regression analysis to estimate a sample of 12 South African public companies in the construction and building materials sector of the Johannesburg Stock Exchange for the period of 2011 to 2016. The size and leverage of a company were considered as control variables.

The findings indicated no significant relationship between board independence, board size and CEO duality but did find a direct significant relationship between CEO tenure and CEO remuneration and company performance. The research also found a statistically significant inverse relationship between leverage and company size and performance of the company.

This research is a useful aid to the comprehension of board characteristics affecting company performance in South Africa and improving corporate governance principles to eliminate corporate scandals that are crippling economies globally.

Key words

Corporate governance, governing body, corporate performance, agency theory, corporate board of directors, JSE, panel data analysis, shareholder, stakeholder.

Table of Contents

Declaration ..... **I**

Dedication ..... **II**

Abstract ..... **IV**

Key words ..... **IV**

Table of Contents ..... **V**

List of abbreviations ..... **IX**

List of Tables ..... **X**

List of Figures ..... **XI**

Chapter 1 Overview and background of the research **1**

1.1 Introduction 1

1.2 Background 2

1.3 Problem statement 6

1.4 Research question 7

1.5 Research objective 8

1.6 Purpose of the study 8

1.7 Research methodology 8

1.7.1 Research instrument 9

1.7.2 Data collection and analysis 9

1.7.3 Data collection 9

1.8 Limitations 10

1.9 Chapter outline 10

Chapter 2 Literature review **12**

2.1 Introduction 12

2.2 Corporate governance 12

2.2.1 Defining corporate governance 12

2.2.2 Corporate governance instrument: the board of directors 14

2.2.3 Financial performance as the ultimate goal of corporate governance 15

2.3 History of Corporate governance. 17
2.3.1 Corporate governance models 17
2.3.2 Corporate Governance theories 20
2.3.3 Corporate governance development in USA and UK 22
2.4 South African Corporate Governance 33
2.4.1 Origins of corporate governance practise in South Africa 33
2.4.2 Acts influencing corporate governance in South Africa 35
2.4.3 King Reports 36
2.4.4 Corporate scandals in South Africa 42
2.5 Board characteristics and financial performance Empirical evidence 46
2.5.1 Board independence and corporate performance 46
2.5.2 Size of the board and company performance 48
2.5.3 CEO tenure and corporate performance 50
2.5.4 CEO duality and corporate performance 51
2.5.5 CEO remuneration and corporate performance 52
2.5.6 Company size and corporate performance 53
2.5.7 Leverage and corporate performance 54
2.6 Literature gap indentified. 54
2.7 Summary 60
Chapter 3 Research methodology 61
3.1 Introduction 61
3.2 Research problem and question 61
3.3 Research design and approach 62
3.3.1 Research paradigm 62
3.3.2 Research method 63
3.3.3 Research instrument 64
3.4 Sources and Collection of Data 64
3.4.1 Independent variables: Corporate governance board characteristics 65
3.4.2 Dependent variable: Company performance 67

3.4.3 Control variables 68

3.5 Target population 68

3.6 Sampling 69

3.7 Panel regression model specification 69

3.7.1 Descriptive statistics 70

3.7.2 Pooled model 70

3.7.3 Random effects (RE) model 70

3.7.4 Fixed effects (FE) model 70

3.7.5 Redundant fixed effects test 71

3.7.6 Hausman test 71

3.8 Diagnostic tests 71

3.9 Reliability of data 71

3.10 Ethical considerations 71

3.11 Delimitations 71

3.12 Summary 72

Chapter 4 Research findings and interpretation 73

4.1 Introduction 73

4.2 Preliminary data analysis 73

4.2.1 Variables descriptive statistics 73

4.2.2 Normality analysis 75

4.2.3 Variable inferential statistics 75

4.3 Regression Analysis 76

4.3.1 Pooled OLS 77

4.3.2 Fixed effects model 78

4.3.3 Redundant fixed effects test 80

4.3.4 Random effects model 80

4.3.5 Hausman test 81

4.3.6 Final model (fixed effects model) 81

4.3.7 Post-estimation diagnostic tests 83

4.4 Conclusion 83
Chapter 5 Summary, conclusion and recommendations 84
5.1 Introduction 84
5.2 Research overview 85
5.3 Discussion and interpretation of RESULTS 85
5.3.1 Board independence and financial performance 85
5.3.2 Board size and company performance 87
5.3.3 CEO duality and financial performance 88
5.3.4 CEO tenure and financial performance 88
5.3.5 CEO remuneration and financial performance 89
5.3.6 Leverage and financial performance 89
5.3.7 Company size and financial performance 90
5.4 Contribution of the study 90
5.5 Recommendations for further research 90
5.6 Final remarks 91
Reference List 92

List of abbreviations

- BBBEE – Broad-Based Black Economic Empowerment
- BRICS – Brazil, Russia, India, China and South Africa
- CAE – Chief Audit Executive
- CEO – Chief Executive Officer
- CG – corporate governance
- CGB – corporate governance body
- EPS – earnings per share
- EVA – Economic Value Added
- FE – fixed effects
- GAAP – Generally Accepted Accounting Practice
- GDP – gross domestic product
- IoDSA – Institute of Directors in Southern Africa
- IRBA – Independent Regulatory Board for Auditors
- JSE – Johannesburg Stock Exchange
- NED – non-executive director
- NPV – net present value
- OECD - Organisation for Economic Co-operation and Development
- OLS - Ordinary Least Squares
- PM – profit margin
- RE – random effects
- ROA – return on assets
- ROE – return on equity
- UK – United Kingdom
- USA – United States of America
- FRC – Financial Reporting Council

List of Tables

Table 2-1: International scandals that influenced corporate governance globally 23
Table 2-2: Major Acts that shaped corporate governance in South African context 35
Table 2-3: Internal governance comparison of Cadbury Report and South African King Reports 40
Table 2-4: Corporate scandals in South Africa 42
Table 2-5: Summary of South African research on CG and and company performance 57
Table 3-1: Summary research data 69
Table 4-1: Variables' descriptive statistics 75
Table 4-2: Correlation of variables 76
Table 4-3: Pooled OLS - Company performance measured by ROE.................................. 77
Table 4-4: Pooled OLS - Company performance measured by ROA.................................. 77
Table 4-5: Pooled OLS - Company performance measured by NPM 78
Table 4-6: Fixed Effects Model - ROE, ROA and NPM.. 79
Table 4-7: Random Effects Model - ROE, ROA and NPM 80
Table 4-8: Final fixed effects model... 82

List of Figures

Figure 1: Stakeholder theory responsibilities of business 19

Chapter 1 Overview and background of the research

1.1 INTRODUCTION

"Whilst management processes have been widely explored, relatively little attention has been paid to the processes by which companies are governed. If management is about running businesses, governance is about seeing that it is run properly. All companies need governing as well as managing".

This was quoted by an American economist, Tricker (1984), articulating the need to continuously develop and improve corporate governance processes. Smit (2015) pointed out that, in order to advance and sustain the economy, the practise of good governance is increasingly becoming not only an ethical issue but an essential component of every contemporary business both globally and in South Africa.

The diffusion and dilution of ownership in contemporary organisations has continued to increase, "leading to the separation of ownership and control" as organisations are now being controlled and managed by individuals who do not own them (Jensen & Meckling, 1976:306). However, the main problem currently facing dispersed shareholders is the ability to act jointly "to influence managers to act in the best interest of the shareholders" (Akeem, Terer, Kiyanjui & Kayode, 2014:43). This creates an opening for managers, allowing them "to pursue their own interests instead of those of shareholders and stakeholders" (Hermalin & Weisbach, 1991:105). This context underpins the seminal study by Berle and Means (1932) who first developed the theory on agency costs. It is from the agency theory that the notion of corporate governance originated, taking into account "the principal-agent relationship as a key element in determining company performance" (Waweru, 2014:458).

Corporate governance issues gained prominence globally subsequent to the financial crisis of the 1990s and the rise in corporate fraud and corporate failure of high-profile companies worldwide (Abid, Ahmed & Ahmed, 2018). More recently, the worldwide economic crisis of 2007 to 2008 may also be a result of deficiencies in corporate governance in financial institutions (Kirkpatrick, 2009; Tshipa, Brummer, Wolmarans & Du Toit, 2018b). Managerial delinquency and carelessness, lack of direction, corporate scams and enormous forfeiture of shareholders wealth has been at the core of these corporate failures. As a result, there has been intensified scrutiny of corporate governance issues, with special emphasis on the board structures and characteristics. As a result, corporate financiers have lost certitude and trust in investing funds as this state of affairs casts doubt on the usefulness of corporate governance, and predominantly, the board's ability to lead and direct companies.

Against this backdrop, there has been increased promulgation of corporate governance reports globally in order to prevent the reoccurrence of corporate failures and to regain investors' trust (Haruna, Kwambo & Hassan, 2018). Broad recognition of corporate governance practices and developments is a fundamental component in reinforcing lasting economic growth and financial performance of companies.

Corporate governance aims to safeguard investor's capital investments by ensuring a sustainable yield on their investments. Financial performance assessment is thus a key element of sound corporate governance. The study is an examination of the relationship between board characteristics and financial performance within the context of South African public companies in the construction and building materials sector of the Johannesburg Stock Exchange during the period 2011 to 2016.

1.2 BACKGROUND

The corporate governance concept was evoked from the agency problem which originated from the split amid owners and those who control the companies. In this view, corporate governance is the foundation of reliability, transparency, accountability and clarity in the way a company operates (Budiarso, Mandey & Karamoy, 2018; Anandasayanan & Thirunavukkarasu, 2018). It fosters trust and instils confidence in the various stakeholders of a company. In support of the above view, in South Africa Mans-Kemp and Viviers (2015) point out that the main purpose of corporate governance is to curb agency problems, as described in agency theory, as the interest of shareholders and management are not always in tandem.

The application of good governance practises is the foundation of ethical leadership and the outcome is well-run corporations with sustainable earnings. This ensures the achievement of the lasting objectives of a company and maximises value creation and goodwill of the company. Moreover, the practice of good corporate governance is vital to any organisation, both for growth and survival. Boshkoska (2014) concurs, noting that a system of good corporate governance may increase company performance by opening doors for external funding. In a similar vein, the Global Investor Opinion Survey states that investors are highly probable to finance businesses that are well governed, where their safety and protection is perceived to be guaranteed (McKinsey & Company, 2002). More so, Muniandy and Hillier (2015) believe that good governance attracts foreign investment, which promotes financial stability and business growth. Therefore, South African companies have to continuously take stock of their compliance with corporate governance principles in order to attract foreign investment.

Internal mechanisms of corporate governance refer to the customs, approaches and procedures used by companies in creating value for shareholders while external governance refers to control over companies that is exerted from the outside such as market factors, suppliers, goods and services prevailing in the market (Muniandy & Hillier, 2015; Schymik, 2018). Some of these internal mechanisms include ownership structure, the governing body structures, board committees and company auditors (Ahmadi, Nakaa & Bouri, 2018). Moreover, other external factors such as the state and the judiciary, not only exercise external control over company operations but also create rules that safeguard all stakeholders and prevent corporate failure due to misconducts (Schymik, 2018). All of these factors combine to form the landscape of broad corporate governance.

Every company needs resources to attain its objectives; the practice of good corporate governance builds the reputation of companies with stakeholders, thereby assisting them to obtain the resources and backing they need from stakeholders to increase performance (Su & Sauerwald, 2018). However, the same authors maintain that the introduction of stringent governance principles is the cause of poor performance in companies due to the increased cost of governance. In line with this view Boshkoska (2014) viewed corporate governance as an agency cost as it diminishes company resources on societal well-being that adds little to company performance. However, these contradictory views lead to the question whether the board, as the custodian of control and direction of the company, is applying corporate governance practices for its own benefit or for that of the company. Conheady, McIlkenny, Opong and Pignatel (2015) point out that the way to counter agency theory and its self-serving interest is by having an effective board in the modern corporation. However, the most significant problem for corporations has been to strike a balance between good performance and compliance with good practices of corporate governance.

Accordingly, Ayari and Regaieg (2018) point to corporate board characteristics and their structures as an important factor in corporate governance. Zakaria, Purhanudin and Palanimally (2014) emphasise that the attributes of the board such as size, independence, CEO duality, CEO remuneration and CEO tenure are a key element of a board's success or failure. The board of directors needs to be structured in such a way that it adds value to the company. Getting the right board in place is therefore the key to good governance (Conheady *et al.*, 2015). The third King Report elucidates that “the board’s paramount responsibility is the positive performance of the company in creating value by appropriately considering the legitimate interests and expectations of all its stakeholders” (King Report III, 2009:29).The board of directors offers overall leadership and acts as the central point and direction from which important strategic decisions are made towards the accomplishment of a company’s objectives by creating value for stakeholders (King Report III, 2009; Padachi, Ramsurrun & Ramen, 2018). Consequently, the board of directors has been held accountable for diminishing shareholder returns worldwide, especially in developing countries like South Africa.

Subsequent to the global economic crisis of 2007 to 2008 and the frequent occurrence of corporate failure, coupled with corporate racketeering, managerial negligence, misconduct and loss of shareholders’ wealth, concerns has been raised about the usefulness and adequacy of corporate governance standards and practices in promoting company performance (Krechovská & Procházková, 2014). Smit (2015) holds the view that corporate calamities, as evidenced by the demise of companies in recent years, have led to the resurgence of corporate governance worldwide. The fall of Enron, Adelphia, Tyco International, Arthur Anderson and WorldCom (United States of America), HIH Insurance (Australia), Marconi (United Kingdom), the Royal Ahold (Netherlands), Satyam (India) and Parmalat (Italy) are examples of international corporate collapses that have dented stakeholders’ confidence in companies and in the usefulness of current corporate governance practices in promoting transparency and accountability.

Mansur and Tangl (2018) thus maintain that the spike in the financial scandals in developed nations has led to the introduction of legislation that facilitated the promulgation of corporate governance codes. Notable examples are in United States of America and the United Kingdom in the form of the 2002 Sarbanes-Oxley Act and the 1992 Cadbury Report. The scandals of recent years are confirmation of ineffective and deficient governance monitoring mechanisms as well as the failure of boards to direct companies. However, the lessons learnt from these international corporate failures has been phenomenal and have highlighted the role of corporate governance in supporting companies and safeguarding the stakeholders’ interests (Paul & Sy, 2015).

South Africa is no exception to corporate failures. Major examples include Siemens, African Bank, LeisureNet, Fidentia, JCI-Randgold, Regal Treasury Bank, Steinhoff, Naspers, KPMG and McKinsey (refer to Chapter 2 section 2.4.4). These failures have led to the enhancement of corporate governance standards and practices in the form of the King Reports (Tshipa & Mokoaleli-Mokoteli; 2015; Smit, 2015). Recently South Africa has made headlines dominated by corporate mishaps. Since the inception of the JSE, the fall of Steinhoff is one of the most prominent failures in South Africa (Ben, 2017). Moreover, a number of companies connected to the 'state capture' by the Gupta family-linked companies have been the focus of attention, centred on the Gupta family's close ties to former South African president Jacob Zuma (Wolf, 2017; Bhorat, Buthelezi, Chipkin, Duma, Mondi, Peter & Swilling, 2017).

However, corporate governance in South Africa has received positive attention since the promulgation of the first King Report and Code of Corporate Governance which was published by the Institute of Directors in Southern Africa in 1994 (Smit, 2015). Several iterations of the report have followed with King II, King III and King IV of the King Report on Corporate Governance and the King Code of Corporate Governance being issued in 2002, 2009 and 2016 respectively. The issue of these reports facilitated the introduction and practice of good corporate governance mechanisms in South African companies (Tshipa *et al.*, 2018b). Since then, companies have been restructuring their operations and activities, particularly their governance structures. However, these reports are not regulated by law, thus they merely provide recommendations for 'good' practices. Nonetheless the Johannesburg Stock Exchange has made it a listing requirement to comply with recommendations by King III report and code on governance.

According to African Corporate Governance Network (2016), the JSE is arguably the most advanced stock market in Southern Africa and ranks in the world's best twenty stock markets based on gross revenue. The choice of the South African stock exchange has been influenced by the requirements of King III Code on Corporate Governance which must be complied with as a listing requirement for companies on JSE. Moreover, Ararat, Black and Yurtoglu (2017) maintain that emerging markets like South Africa have specific governance issues, different to those in developed markets, which is why South Africa was chosen for the study.

Although the South African construction and building materials sector remains under tremendous pressure from the general global and local economic melt-down it is a key sector for economic growth and infrastructure development. During times of economic hardships when the companies are faced with greatest challenges, they require effective leadership skills to think projects through, change strategies to meet changing conditions and remain focused on the end goal. This research aims to highlight and identify the corporate governance leadership elements in the construction and building materials sector that has a significant relationship with company performance. The research becomes crucial in identifying corporate governance factors that could be applied aggressively in current practices to revive, sustain and successfully lead the sector during difficult times.

The construction and building materials sector is the third largest contributor to South African Gross Domestic Product (GDP) despite the sector facing tremendous pressures. In 2016 South Africa was ranked third largest economy in Africa in terms of GDP (PricewaterhouseCoopers, 2016). The South African construction sector has been crucial in sustaining employments rates by employing more than 1.4 million people (Crampton, 2016). The growth of the construction and building materials sector (both in quantity and property appreciation rates) in South Africa provides an opportunity to analyse if the characteristics of corporate governance bodies have any influence on performance in the sector (PricewaterhouseCoopers, 2016). The South African National development plan is also dedicated to the continuous improvement of the construction and building materials sector through its continued commitment to public infrastructure investment. According to Njobeni (2019), the construction and building materials sector is set to improve in 2019 at a steady growth of 2.4% based on research done by credit rating agency Fitch Solutions.

This research tests the application of internal governance principles, as represented by the characteristics of the board of directors. The study casts light on the extent to which board characteristics, influences financial performance within the construction and building materials sector of South African companies listed on the Johannesburg Stock Exchange.

1.3 PROBLEM STATEMENT

The problem is the diffusion and dilution of equity ownership of listed companies which has seen more and more "separation of ownership and control" (Ferreira, Ornelas & Turner 2015:1). The managers who have been assigned the responsibility of directing companies on behalf of owners have the potential to serve their own interests instead of those of shareholders and other stakeholders (Akeem *et al.*, 2014). This state of affairs has led to an increase in agency costs and significant effects on company performance.

More so, constraints emanating from lack of good governance practices have been the key factor affecting company performance in emerging countries such as South Africa (Ntim, 2013). According to Tshipa and Mokoaleli-Mokoteli (2015) it is highly likely that this has led to the corporate collapses in the country. Existing corporate governance principles have therefore been blamed for failing to curb the behaviour of managers, particularly given the frequency with which board received inverse attention for negligence in their responsibilities (Tshipa *et al.*, 2018a).

Furthermore, in the South African context of JSE listed companies, the relationship between the characteristics of the board and company performance has never been examined before from the perspective of the construction and building materials sector. The greater part of research on corporate governance and company performance was conducted in advanced nations (Dzingai & Fakoya, 2017). The findings of most of these studies were generally mixed and lacking in consistency (Afrifa & Tauringana, 2015). This is also the case for the handful of similar studies conducted in South Africa, refer to section 2.6 for studies by Klapper and Love (2004), Durnev and Kim (2005), Chen, Chen and Wei (2009), Ntim (2013), Meyer and De Wet (2013), Waweru (2014), Tshipa and Mokoaleli-Mokoteli (2015), Mans-Kemp and Viviers (2015), Muniandy and Hillier (2015), Pamburai, Chamisa, Abdulla and Smith (2015), Smit (2015), Taljaard, Ward and Muller (2015), Muchemwa, Padia and Callaghan (2016), Dzingai and Fakoya (2017) and Tshipa *et al.* (2018abc). A gap has therefore been identified in the relationship between the board characteristics and company performance in South Africa. This study explores this relationship, thereby contributing to the pool of research on this topic.

1.4 RESEARCH QUESTION

The main research question is:

→ Is there any relationship between corporate governance, as represented by characteristics of boards of directors, and the financial performance of public companies on the construction and building materials sector of JSE in South Africa?

The following sub-questions will assist in unpacking the key research question step by step

- Is there a relationship between the proportion of independent, non-salaried directors on the board and company performance?
- Is there a relationship between board size and company performance?
- Is there a relationship between CEO duality roles and company performance?
- Is there a relationship between CEO tenure and company performance?
- Is there a relationship between company CEO remuneration and company performance?

For control purposes the following specific questions are posed:

- Is there a relationship between the company's leverage and company performance?

- Is there a relationship between size of the company and company performance?

1.5 RESEARCH OBJECTIVE

The objective of the research is:

- To examine, through empirical evidence, the relationship between the level of compliance of the corporate governance board characteristics and the financial performance of South African, public companies in the construction and building materials sector of the JSE.

The study thus investigates whether board characteristics (as represented by size, independence, CEO tenure, CEO duality and CEO compensation) have any relationship with company performance (as represented by net profit margin, return on assets and return on equity), and if so, which characteristics have a significant relationship with the performance of the companies.

In order to achieve the research objective above, the study examines whether corporate governance board characteristics can stimulate the financial performance of companies listed on the JSE in the construction and building materials sector.

1.6 PURPOSE OF THE STUDY

The purpose of this research is to explore the results of prior literature on the relationship between board characteristics and company financial performance. This research resolve is filling the gap by concentrating on the context of South African companies, particularly those in the construction and building materials sector. This sector has not been thoroughly investigated in the area of corporate governance, as denoted by board characteristics relationship to company performance. The findings on related research topics have proven inconsistent both in developed and emerging countries. Knowledge of the construction and buildings materials sector, which is the third largest contributor to GDP in South Africa, is an important topic for investors.

1.7 RESEARCH METHODOLOGY

The study followed a quantitative approach due to the measurable nature of the data. This approach has been previously adopted by Padachi *et al.* (2018) and Tshipa *et al.* (2018b). The collection and examination of quantitative data facilitated the adoption of a positivism paradigm in determining the relationship between data sets.

1.7.1 Research instrument

This research involves the use of a panel data linear regression model by means of e-Views 9.5 software. In determining the relationship between board characteristics and company performance panel regression analysis has been extensively applied. Similar studies that used this statistical method in emerging markets include Waweru (2014), Dzingai and Fakoya (2017), Haruna *et al.* (2018), Padachi *et al.* (2018) and Tshipa *et al.* (2018b).

To ensure the reliability of results, panel data analysis is the preferred method of estimation because it allows for wider data file and increases the number of observations. In this study, this was because the research period only spans six years by facilitating cross-sectional time series examination (Akeem *et al.,* 2014). Moreover, panel data analysis is preferable because of its capacity "to control for heterogeneity and endogeneity issues" (Akeem *et al*., 2014:48).

1.7.2 Data collection and analysis

1.7.3 Data collection

The research data was extracted from the audited annual reports available on company websites or the JSE website during the period of study 2011 to 2016. The analysis is conducted with reference to King III. The choice of the study period is dependent on the years during which King III was in effect since the board characteristics used as proxy for corporate governance are defined by King III. Selection of data from audited annual reports ensures reliability of the data as it is confirmable and conforms to IFRS (International Financial Reporting Standards).

1.7.3.1 Secondary data analysis

Secondary data analysis refers to the breakdown of the data contained in the annual reports. This data was not originally gathered by the researcher; instead, only data related to the study variables was selected. Secondary data analysis involves thoroughly and cautiously sifting through the annual reports to find data that can be collected directly from the annual reports or recalculated from the annual reports. This is done by means of financial ratios for use as study variables insofar as the data applies to the study.

1.7.3.2 Sampling method

The study uses a non-probability convenience sampling method to select a sample for testing from 12 listed South African companies in the construction and building materials sector. Convenience sampling was preferred to facilitate proximity and accessibility of secondary data during the period of study. This sampling method is consistent with previous studies done by Meyer and De Wet (2013) and Purag, Abdullah and Bujang (2016).

1.7.3.3 Data variables

To determine the relationship between corporate governance and company performance, the study used return on assets (ROA), return on equity (ROE) and net profit margin (NPM) as the dependent variables, board independence, board size, CEO tenure, CEO duality and CEO remuneration as independent variables whilst company size and level of leverage as control variables.

1.8 LIMITATIONS

- Although all data was from reliable, audited integrated reports, any mistake or miscalculation in these secondary sources could unavoidably be carried over in the research sample.
- The exploration was restricted to public companies in the construction and building materials sector of the JSE.
- The research focused on board characteristics such as size and leverage of company as variables to ascertain any association with company performance. Thus, not all factors that affect company performance were taken into consideration in this research. There is several company-level (strategy) and socioeconomic (network and social environment) factors that also affect company performance.

1.9 CHAPTER OUTLINE

Apart from introduction, reference and appendix, the research comprises five chapters. The topmost chapter covers the overall view by providing the basis on which the research is founded. It describes the background information, statement of the problem derived from literature, research objective, research questions, definitions and limitations.

The second chapter covers a detailed analysis on both theoretical and empirical literature. It is split into different parts. The first part briefly outlines the conceptual and theoretical framework as well as the history of the topic. The second part analyses the relevant empirical studies. This chapter aims at identifying a gap in prior research.

The third chapter outlines the overall blueprint of the research, giving details of the research methodology used to achieve the research purposes. It provides a detailed discussion and motivation for selected variables, research design, data collection and data analysis techniques employed.

The fourth chapter presents the analysis of the results, discussing and reporting on the results observed from the empirical analysis. The last chapter concludes the research by discussing how the research question was answered and the research objective achieved after conclusion. It includes a summary of the research outcomes, the significance of the contribution and recommendations for further study.

Chapter 2 Literature review

2.1 INTRODUCTION

This chapter is an exploration of empirical, historical and theoretical literature on the relationship between board characteristics and company performance of South African public companies in the construction and building materials sector of the JSE. It reviews previous studies that relate to the present study, to detect any gaps in literature studies.

2.2 CORPORATE GOVERNANCE

The objective of any company is to create wealth for stakeholders. Therefore, the main question of this study is whether board structures affect the way companies perform. Is there any relationship between corporate governance as represented by boards and the financial performance of companies? To answer these questions financial managers need to understand the role that the board of directors plays in helping a company to achieve better performance. This section will explain the definitions of corporate governance, its instrument as represented by the board and financial performance.

2.2.1 Defining corporate governance

According to Paul and Sy (2015), there is no general consensus on what corporate governance means due to diversity of corporate governance practices in different countries around the world. Zalewska (2014) holds a similar view, confirming the absence of a universal meaning of corporate governance. This is due to historical diversity in political, religious, cultural, legal and moral settings in which companies are run and monitored in different countries.

Despite the lack of a unanimous definition of corporate governance, researchers have classified corporate governance as either ‘narrow’ or ‘broad’ (Ntim, 2013). The narrow corporate governance structure is sometimes defined as the ‘shareholding’ corporate governance since its primary responsibility and accountability is to shareholders. Thus, it looks mainly at the internal environment. The broad definition is referred to as ‘stakeholding’ corporate governance since its responsibility and accountability is to a broader set of stakeholders that are found in both the internal and external environment (West, 2006). The corporate governance views evolve from the legal origins of their respective countries of origin. The shareholding or narrow view originated from Anglo-American countries where common law originates like the USA. The broader or the stakeholding view is generally practised in European and Asian countries where civil law originates like the UK and Germany (Ntim, 2013).

The Cadbury Report of 1992 which was initiated by the British government explained corporate governance narrowly as "a system by which companies are directed and controlled" (Paul & Sy, 2015:154). Mansur and Tangl (2018) in Jordan extended the Cadbury definition further by stating that corporate governance inculcates ethical values, company integrity, good reputation and best practices to manage companies to meet their objectives and maximise shareholders' wealth. Moreover, corporate governance has been narrowly defined as "processes to ensure that companies are run well, and shareholders receive a reasonable return on their investments" (Budiarso *et al.,* 2018:14). Similarly, Zalewska (2014) in the UK viewed corporate governance as a process by which management and leadership are enhanced through the moral values of fairness, accountability, responsibility and transparency. Furthermore, Fadun (2017) in Nigeria supports the above view by defining corporate governance as a tool that fosters risk management that enhances company performance and protect shareholders' interest.

The definitions above concur that the responsibility for corporate governance ultimately lies with the board of directors. The narrow view sees companies as merely a supplement of the shareholders with the aim of maximising shareholder wealth. Therefore, the company's primary responsibility and accountability is to its shareholders who have the power to appoint directors to ensure that the best corporate governance mechanisms are applied.

According to Tshipa and Mokoaleli-Mokoteli, (2015), there has been pressure on directors to not only to perform in favour of their shareholders but to consider the interest of all stakeholders, hence the introduction of the 'broader' meaning of corporate governance. The Organisation for Economic Co-operation and Development (2004:12) 'broadly' describes corporate governance as a "set of relationships between the management, board, shareholders and other stakeholders of a company". In a similar view, in 2007 the Malaysian Securities Commission explained corporate governance as a process and mechanisms that ensures the achievement of the long-term goals of a company and maximises value creation for shareholders and the needs of other stakeholders (Arsad, Said, Yusoff, & Ahmad, 2018; Zabri, Ahmad & Wah, 2016).

In support of the above view, the Institute for Corporate Governance in Indonesia described corporate governance as:

> "… a set of rules that define the relationship between shareholders, managers, creditors, the government, employees and other internal and external stakeholders in respect to their rights and responsibilities, or the system by which companies are directed and controlled. The objective of corporate governance is to create added value for the stakeholders" (Halimatusadiah, Sofianty & Ermaya, 2015:21).

The broader view points out that corporate governance surpasses internal governance systems and incorporates "external corporate governance systems that may include the legal system, the market, regulators, local communities, cultural, political, social and economic policies, and societies within which companies' function" (Ntim 2009:32).

The recent King IV Report (2016:43) ascribes to the broader view by requiring "that members of the governing body must act in good faith and in the interest of the organisation". According to this view, the 'company' includes all stakeholders; this is known as social responsibility. In South Africa, there is some legislation, for example, labour relations acts or Broad-Based Black Economic Empowerment (B-BBEE) Codes of Good Practice that compel the governing body to act in favour of certain stakeholders. However, such legislation creates pressure on the board to create value for the company. The development of research and innovation through company operations is facilitated by good governance through governing body structures (Detthamrong, Chancharat & Vithessonthi, 2017).

The King Reports' (broader) meaning will be applied in this study although the King Reports in South Africa did adopt some of its principles from the Cadbury Report which follow the 'narrow' view.

2.2.2 Corporate governance instrument: the board of directors.

Schymik (2018) defines the board as the 'backbone' of the business. According to Mehrotra and Mohanty (2018), the board provides the overall direction for the company, controlling the roles of hiring, dismissal and monitoring of management as well as facilitating access to resources. The board sets the guidelines of authority and governance within the company. The board is nominated and selected by the shareholders and is the overall decision maker of issues that affect the company by providing strategic supervision and direction and ensures the company's objectives support shareholders' interest (Padachi *et al.,* 2018).

According to the Company's Act of 2008, the board of directors is legally answerable for the resolutions they make on behalf of their companies. Arsad *et al.* (2018) define the board as a group of people who make important decisions about the future direction of organisations and also play a critical role in maximising the shareholders' wealth as well as other stakeholders' interests.

Smit (2015) notes that the business affairs of a company are managed under the direction of the board of directors; that delegate to the CEO and other management staff the day to day affairs of the company. There are three types of directors: internal, external and independent. Internal directors work within the company, external directors work from outside the business, serving on several boards, while independent directors are external directors with no direct or indirect relationship with the company whatsoever.

To ensure that the board is effective, its structure must comply with the principles recommend by King III.

Duties of the board of directors

Abdullah (2016) indicates that the board has a dual role in implementing and maintaining effective leadership and control of the company. The board of directors is accountable legally for the decisions it makes on behalf of the company. At the time of auditing, they are accountable for the financial information provided concerning the company (South African Companies Act, 2008).

The board has four main roles, namely, resource dependency, stewardship, the agency theory and stakeholder theory. While the agency theory identifies the role of the board as the 'watch dog' of shareholders who monitor management activities, the resource dependency theory sees the board's role as providing valuable external resources (Meyer & De Wet, 2013).The stakeholder theory considers the board's main duty to be taking into account the interest of groups of individuals or organisations that can affect or are affected by the company in the pursuit of its goals. Lastly the shareholder theory posits the board's function as the preservation of shareholder yields from their investments.

2.2.3 Financial performance as the ultimate goal of corporate governance

According to the King Report IV (2016:29), the governing body's main role ''is the positive performance of the company in creating value''. This explains good performance as the ultimate goal of corporate governance.

Corporate financial performance, according to Azutoru, Obinne and Chinelo (2017:95) refers "to the manner in which the financial resources of a company are used to achieve overall company objectives". It keeps the company in business and generates future prospects. Similarly, Halimatusadiah *et al.* (2015) view financial performance as the extent to which the company has succeeded in making a profit and meeting its objectives. Michelberger (2016) uses three metrics to evaluate corporate performance, namely, profitability, return on equity and market success. Accordingly, he reports a positive association between well-governed companies and company performance.

This study has identified two functions of financial performance. The company's long-lasting purpose is the maximisation of investors' wealth whilst its temporary purpose is profit maximisation. The proponents of shareholders' wealth maximisation believe the role of financial managers is primarily to increase shareholders' wealth. This can be attained by improving the fair value of shares. Shareholders expect a return on the capital invested without undue risk exposure. However, the managers' interests are not always in tandem with the shareholders interest and as such, managers may artificially keep the share value high just to maintain the shareholders' returns. As a result, the share value of a company can then be enhanced, while investors' wealth is concurrently being undermined. Thus, financial managers' decisions and their insights for future performance have a substantial effect on investors' wealth.

The first King Report pointed out profitability maximisation as a significant element of compliance with corporate governance. The King Report proponents argued that there may not be any stakeholders with a lasting interest in a company without profit maximisation (King Report I, 1994). According to the stockholder theory of Milton Friedman, increasing profits for stockholders is the company's only social responsibility as long as the company is operating within the ethical boundaries. Friedman purports that the essence of a free society is challenged when companies chase other goals other than maximisation of company profit. According to an accounting viewpoint, profit maximisation is the ultimate company goal since "profit is essential for the survival and lasting prosperity of a company" (Mans-Kemp, 2014:23).

2.3 HISTORY OF CORPORATE GOVERNANCE.

2.3.1 Corporate governance models

There is on-going debate on what drives the existence of modern corporations. On the one hand, creating and growing shareholders' wealth is the key purpose of any company, while on the other, the company seeks to satisfy all the stakeholders. There are two distinct models of corporate governance models, viz, the stakeholder approach which follows the European model, and the shareholder approach which follows the Anglo-American model.

2.3.1.1 Shareholder model

The Anglo-American approach stresses the superiority of shareholder value and follows the single tier board structure. The proponents of this approach believe that the company is simply an extension of its owners and consequently, management should be exclusively answerable to the owners who are the shareholders (Mthanti & Ojah, 2016). This model assumes a widely diffused shareholding where company ownership is separate from control (Berle & Means, 1932). The main drawback of companies with low level of concentration in ownership is the inability of shareholders to monitor and pay more attention over the company affairs. This view creates agency problems, which is the dominant theoretical framework for this study. The agency theory will be explored in the next section.

The shareholding model response to the agency problems is as follows:

- The model encourages competition by removing restrictions on factor markets.
- The model encourages voluntary practice of good governance principles.
- To assist in matching the interest of management and shareholders, this model recommends performance-based executive compensation (Jensen & Meckling, 1976).

The shareholder model is criticised for its inability to incorporate outside involvements and supplementary duties imposed on companies by government establishments since they are presumed to misrepresent unrestricted market operations (Ntim, 2013). In this view, companies are financed by equity which is raised from efficient capital markets. Capital owners can thus freely move their capital from one company to another through efficient capital markets. Similarly, ineffective and unsatisfactory performance from managers cannot be tolerated and may result in dismissal and replacement thereby limiting management discretion on decision-making (Solomon, 2013).

This model is the norm in the USA and Commonwealth countries. Anglo-American model is arguably the best suited for the South African corporate governance system because of the following reasons (Mthanti & Ojah, 2016):

- South African companies' board structure is normally single-tiered, without any representation of the broader parties, for instance, the community.
- South Africa has highly developed financial markets (e.g. the Johannesburg Stock Exchange) with meticulous listing rules and insider trading enforcement.
- The main way of obtaining finance for large corporates in South Africa is through listing on the JSE as evidenced by the market capitalisation of the JSE to GDP ratio comparing favourably with developed countries.
- South African banks maintain detached relations with their corporate customers by not exercising effective control over their undertakings (Rossouw, Van der Watt & Rossouw, 2002).

However, the Anglo-American model (shareholder approach) may also be ill-suited for South Africa and its challenges for the following reason:

- It is mainly geared to generating wealth quickly and not necessarily distributing it equitably. The Anglo-American approach thus reproduces inequality and may be deemed by large segments of society to be unlawful. This is particularly the case in a fractured country such as South Africa in order to improve apartheid induced exclusion of blacks from the mainstream of the economy. This is currently evidenced by high unemployment rates and widespread poverty and disparity (Mthanti & Ojah, 2016).

2.3.1.2 Stakeholder model

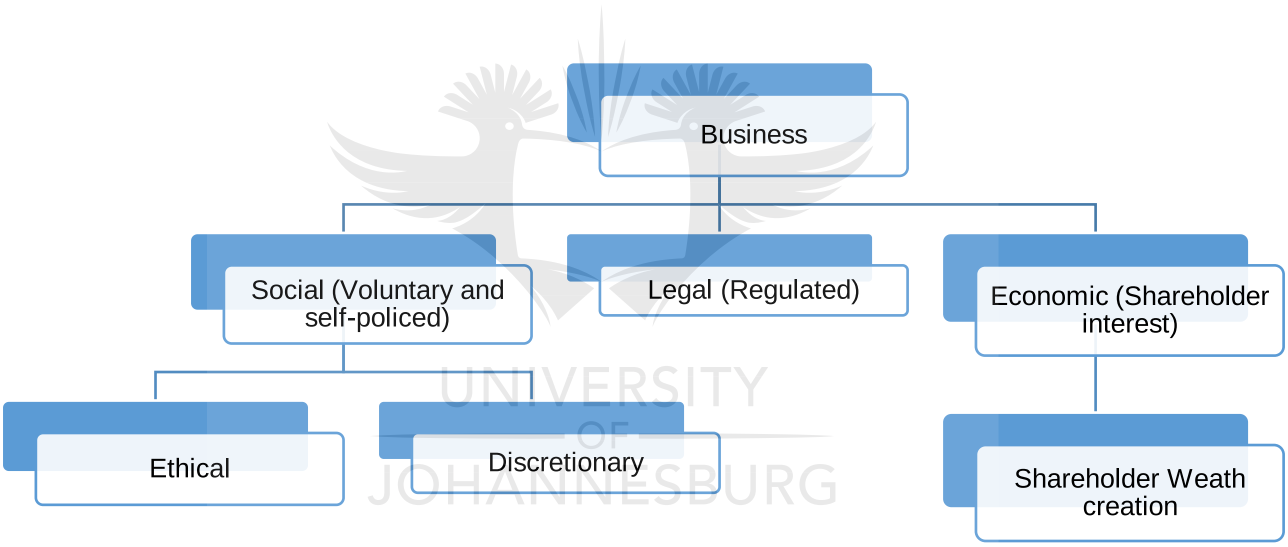
Mainly applied in European countries such as Germany, the stakeholder model emphasises a wide range of stakeholders. It has a dual board structure that includes all stakeholders and contends that companies, as social entities, are accountable to a wide spectrum of stakeholders including the workforce and indigenous communities, for example.

While the shareholder model stresses the importance of maximising shareholder value, the European stakeholder model may, nonetheless, not be able to prevent boards from pursuing narrow self-interests. This is especially so in markets like South Africa where ownership is highly concentrated, since controlling and supervisory boards tend to be weak and generally submit to management (Solomon, 2013)

Like the shareholder model, the stakeholder model subscribes to agency theory which was born from the separation of ownership and control. The stakeholder model also concurs with the shareholder model in addressing agency problems through the introduction of effective contracts between the various stakeholders (Ntim, 2013). Unlike its counterpart, however, the stakeholder model allows for occasional outside intervention and regulatory legislation to balance creating wealth for a broader set of stakeholders. Moreover, it concurs with the shareholding model in the assumption of efficient markets, however the stakeholder model assumes a fair share of market inefficiencies. In this regard, the stakeholder model is more reliant on debt than equity as a source of finance (Mason & Simmons, 2014).

Below is a depiction of the responsibilities of business under the stakeholder model.

Figure 1: Stakeholder theory responsibilities of business



Source: Conceptualised from Carroll and Shabana (2010)

The stakeholder model is heavily criticised for its inconsistency with business concepts and corporate governance (Solomon, 2013). The key objective of the stakeholder model is maximising the interest of all stakeholder by ensuring fairness in distributing the company benefits to all stakeholders. As such, the company is prevented from pursuing a single objective. This view is not consistent with the business concept which assumes long-term value creation and maximising shareholder return on their investments as the main purpose of business. However, it is challenging to strike a balance in meeting all stakeholders' needs while creating value for the business and maximising shareholder wealth. Without profit in the long run the company will fail, and this will affect all stakeholders (Ntim, 2013; Solomon, 2013).

Accountability is the key principle of corporate governance. The stakeholder model requires companies to be accountable to all stakeholders, unlike accountability to shareholders only. The third King Report states that a company that is accountable to all stakeholders is effectively accountable to no-one (King Report III, 2009). In this regard diffused accountability is unrealistic and impracticable in governance terms.

- However, despite the above arguments, irrespective of whether a country adopts a shareholder or stakeholder model, its governance system is used to organise corporate power and distribute wealth equally (Mthanti & Ojah, 2016). It is also important to note that there is no “one size fits all” in terms of which governance model to adopt. Corporate governance practices are increasingly converging due to globalisation, cross-listing facilitated by market integration and the proliferation of national (King and Cadbury) and transnational (Organisation for Economic Co-operation and Development) codes on corporate governance (Ntim, 2013).

2.3.2 Corporate Governance theories

This section is aimed at elucidating the theories that have been advanced to explain the board characteristics’ effect on company performance. The complementary nature of each theory inspired the use by this research of numerous theoretical viewpoints.

2.3.2.1 Agency theory

The continuous diffusion and dilution of equity ownership in companies has led to the divergence of ownership and control (Akbar, Poletti-Hughes, El-Faitouri, & Shah, 2016). The principals are the owners who assign the agents (as represented by board and executive management) to manage the company on their behalf by absorbing some risk (Boshkoska, 2014). Hence the need by shareholders to continuously monitor and reward managers, which then results in agency costs.

It is the responsibility of managers to run the company in a way which makes the most of shareholders capital. Nonetheless, managers’ interests are often perceived as not in tandem with the shareholders’ goals (Akeem *et al.*, 2014; Boshkoska, 2014). Managers have a tendency to commit the available funds to realise their own personal goals and reputation instead of fostering shareholders’ goals (Alalade *et al.*, 2014).

The main challenge encountered by principals is to motivate agents to grant them a return on their investments when there is excess cash flow rather than investing in loss-making ventures (Jensen, 1986). However, more agent costs will be incurred should shareholders commit to controlling management decisions. Accordingly, Smit (2015) recommends that managers be the incentivised through the issue of share options to match the goals of the agent and those of the principal in order to channel the decision-making by the agent in the direction of wealth creation.

Agency theory portrays management as self-interested and individualistic (Budiarso *et al.,* 2018). This focus on individualism overpowers the managers' own ambitions and goals. Hence agency theory can be used to discover the relationship between board characteristics of corporate governance and company performance since the practice of good corporate governance may be regarded as one of the measures to controlling the agency problems.

2.3.2.2 Stakeholder theory

Stakeholder theory stems from the idea that companies serve a bigger purpose besides maximising shareholder interest (Freeman, 2010). Unlike agency theory, stakeholder theory takes cognisance of both internal and external sociological and organisational aspects that are affected by the company's goals (Friedman & Miles, 2006). This theory follows an inclusive approach to decision-making. It stipulates the role of managers not only to shareholders but to all stakeholders and to act in favour of all these parties regardless of being internal or external to the company (Arsad *et al.*, 2018). Hence the prosperity and performance of a company is perhaps assessed based on its ability to satisfy the needs of all its stakeholders.

2.3.2.3 Resource dependency theory

The resource dependency theory originates from the supposition that external pressures and demands are the major constrictions to companies' survival. According to Nguyen, Locke and Reddy (2014), the resource dependence theory is key in explaining the relationship between board diversity and enhanced company performance. The theory postulates the role played by boards in ensuring that the company has all the necessary resources it needs for growth, survival and performance through unlimited access to the external environment (Ntim, 2013; Muchemwa *et al.,* 2016). King report III concurs with the resource dependence theory by recommending that "the board should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively" (King Report III, 2009:32).

Resources that are essential to the company are sourced through the appointment of directors who have “the appropriate mix of knowledge, skills and experience, including the business, commercial and industry experience needed to govern the organisation” (King Report III, 2009:32). Ararat *et al.* (2017) contend that company value could be enhanced if the corporate governance of a company included mechanisms that ensured that resources available to the company were fully utilised to derive maximum yield. Moreover, the board can be useful in providing external resources to the company though ‘director interlocking’. Ntim (2013) describes director interlocking as a situation when a member of the board of one company is also a director on the boards of other companies. In that way such directors are resourceful through their access to a variety of suppliers, social groups, buyers and policy makers. Accordingly, the company’s ability to access and source limited resources from its external environment influences its financial performance.

2.3.2.4 Stewardship theory

This theory recommends giving stewards (as represented by the board) bigger roles to play in a company to safeguard stakeholders’ interest. The stewards’ motivation and satisfaction are derived from the company’s success. The driver of company success is explained by the structures that empower the stewards and give them the freedom to act autonomously. This view builds trust hence agency costs of supervising and guiding the stewards’ conduct are reduced (Budiarso *et al.*, 2018).

This theory advocates the alignment of management goals with those of the company. Proponents of this theory recommend the practice of CEO duality to eliminate individualism and agency costs and improve the safeguarding of shareholders’ interest (Van Ness, Miesing & Kang, 2010; Nath, Islam & Saha, 2015).

2.3.3 Corporate governance development in USA and UK

The corporate failures in the USA and UK were virtually identical, with all emanating from the manipulation of accounting records and financial statements following dominant management born of ineffective and weak boards, insider trading and failure by both internal and external auditors to detect and report irregularities. The USA approach to curb these scandals has been centered on passing laws to tighten audit requests, curtail CEO power and mandate more on executive remuneration disclosure. This avenue was favored rather than improving and empowering board structures, particularly non-executive directors, as was done in the UK (Zalewska, 2014).

2.3.3.1 Major corporate scandals that shaped corporate governance internationally

Governance systems were widely criticised after high profile corporate failures (Abid *et al.*, 2018). These scandals were mainly a result of greed, corruption, fraud and bribery. The massive losses and reputational damage that follows companies in scandals is an indication of how the managers mishandled the company resources to the disadvantage of the stakeholders (Fadun, 2017). Below is an overview of major corporate scandals that shaped corporate governance globally. These illustrate the inadequacies of the companies' corporate governance systems. This is a list of some of the major scandals that widely rocked the media; however, it is not exhaustive as not all companies that made headlines are in this summary.

Table 2-1: International scandals that influenced corporate governance globally

Scandal	History	Flaws in Corporate Governance	Lessons learnt
Polly Peck UK 1990	• British public company in the textile industry. • Incorporated in UK in 1940 • Head office in London • Employed about 17 000 people • By 1990 CEO Asil Nadir had bankrupted the company and stolen approximately 29m pounds and that led to its collapse.	• Weak board of directors dominated by CEO • Nadir, the CEO dominated the decision-making such that he could make decisions without board approval ie acquiring debt and transferring of company fund as he deemed necessary. • Insider trading, theft of money, manipulation of share price by executives coupled with liquidity problems and high rise in long term debts.	• The need to avoid domination by one individual in decision-making. Thus, delegation of decision-making power to one individual can be detriment to the company. • The need by the board to observe the legal standards of comportment. • The risks solely taken by the CEO stressed the need for sufficient risk management policies and procedures.
Maxwell Communication Group UK 1991.	• Maxwell Communication Corporation was a British Media Company. • Incorporated in1964 • It was listed on the London Stock Exchange.	• Domineering CEO and Chairman (Maxwell) • Maxwell controlled the entire group personally and solely made decisions. • Maxwell grew the entire group as he deemed necessary without regards for ethical and professional standards. • The board became ineffective.	• The need for CEO duality to avoid domination by CEO. • The need to make auditors accountable as they failed to detect Maxwell's unscrupulous activities.

		• Too much debt was obtained using company shares as collateral and unwarranted transfer of company funds	
Bank of Credit and Commerce International UK 1991.	• Incorporated in 1972 BCCI was an international bank with Pakistan origins. • The bank was liquidated in 1991	• Incompetence by management and the board • Improper internal control systems and lack of risk assessment procedures in granting of loans. • This was a case of accounting fraud, bribery, bogus transactions and financing and laundering money for terrorist- The Taliban • The bank had a complex structure to hide all these irregularities.	• The need for an authentic and transparency in banking systems. • The need to safeguard stakeholders' interest through independent audits and regulations.
The Asian Crisis 1997	• Started in 1997.	• The financial performance of a number of East Asian companies' financial performance deteriorated due to failure of these companies to govern their activities.	• Proper development of the supervisory and regulatory policies and procedures.
Enron USA 2001	• Incorporated in 1985, Enron was a supplier of natural gas and electricity • Enron went bankrupt in 2001 after SEC (Securities and Exchange Commission) inquiry and its 5 previous years' financial statements were revised and $586m losses were uncovered.	• CEO duality led to CEO domination. • Enron was highly leveraged and unprofitable by 2000 and the financial statements were manipulated to look lucrative • Bribed foreign governments to win contracts abroad. • Failure by the auditors to detect the manipulation of financial statements.	• Auditors should be accountable as they should have uncovered manipulations of financials and reported it in time. • Auditing procedures should be regulated.
Arthur Andersen USA 2001	• Company lost hundreds of clients and collapsed after its involvement in the Enron scandal by obstructing the ends of justice	• After the SEC (Securities and Exchange Commission) initiated an investigation into Enron, the company destroyed audit client's documents that linked them to the scandal.	• The need to regulate the accountably of auditors and their audit procedures • The need to have efficient and effective internal control systems that detects fraud.

WorldCom USA 2002	• Second largest telecommunication supplier in the USA in 1998 and 2002. • WorldCom was declared bankruptcy in 2002 following an investigation that related to accounting fraud.	• The company's line costs were understated; they were treated as capital expenditure instead of expenses. • The company inflated revenue, net income and ABITDA by reducing the reserves and increasing the sales revenue by $2.8b • The above twisted WorldCom's financials to look profitable • Undocumented $500 million in computer expenses • It failed to meet the accounting procedures as required by GAAP. • Internal communications showed that management had knowledge of the incorrect accounting procedures since 2000. • All these accounting malpractices were not discovered by auditors until June 2002.	• Auditors should be held accountable and improve their assurance function. • The rotations of auditors after 5 years are encouraged to ensure independence by auditors prevail. • Systems of external and internal controls should be monitored
ImClone Systems Incorporated USA 2002	• ImClone Systems established in 1984 as a biopharmaceutical company. • The company collapsed due to insider trading affair in 2002.	• Breach of fiduciary duty by CEO • The CEO had inside information on the rejection new major venture of the company such that Waksal's family and close friends benefited from the sale of their stock just before the announcement of the rejected deal. • CEO was found guilty of insider trading charges	• The need for stronger and tighter controls that prevent and detect insider trading.
Tyco International USA 2002	• Tyco International operated in over 100 countries specialising in high tech research and development • CEO Dennis Koslowski was also the chairman of the board. • The Tyco scandal was a case of greediness by the CEO and CFO (Mark Stewart). • The USA SEC (Securities and	• The company was defrauded of $600 million through a racketeering scheme comprising stock fraud, unapproved bonuses, unauthorised interest free loans and fabricated expense accounts. • Improper and or lack of controls to detect fraud • Lack of supervision and control by senior management	• The need to avoid CEO-chairman duality as it weakens the board. • The remuneration of executives should be monitored

	Exchange Commission) investigation revealed that Tyco manipulated their financials.	• Improper auditing procedures by the auditors to detect fraud • CEO duality led to the domination of the board by the CEO	
Parmalat Italy 2002	• Parmalat was the supplier of dairy products. • It is an international business, which is what makes the scandal a huge affair. • Calisto Tanzi (the founder) held both CEO and the board chairman positions. He was accused of manipulating accounting records in 2003 to the value of14 billion pounds.	• Parmalat lacked board independence as the Tanzi family dominated the board which led to the pursuit of non-core business activities that left the company in huge debt • The composition of Parmalat's key board committees was weak • Lorenzo Penca of Grant Thornton auditing company Parmalat (external auditor) were not rotated every 3 years as per Italian corporate governance • Calisto Tanzi was both CEO and the board chairman. • The involvement of auditors, executive directors, senior management and bankers weakened the internal control • The company's finance directors concealed large debts.	• The need for internal control and risk management functions to enhance the excellence in reporting. • The need to define procedures for the internal control system. • The need to verify the systems of internal control system is working effectively as required. • The need to impose strict regulation on independent directors, executive director and auditors.
Adelphia USA 2002	• Aldelphia was a cable franchise formed in 1952 that was turned into a communications empire by John Rigas and his brother in 1972, its founder. • It was a family business. • The Rigas family treated Adelphia as their personal piggy bank by taking out money for personal expenses and personal investments. • The company went bankrupt in 2002 due to internal corruption. • Fraud charges were laid against CEO John Rigas.	• The Rigas family dominated management and the board such that they became ineffective. • The Rigas family was involved in accounting fraud to cover high debts and sham transactions. This abuse of power resulted in self-enrichment for the family	• The need for ethical leadership and financial control procedures to detect such acts of corruption and fraud • Board independence should be enforced in family-controlled businesses to ensure effective monitoring and control of the business. • The need to avoid CEO-chairman duality as it weakens the board.

Mutual Funds USA 2003	• The Mutual Funds were investigated significantly ethical until the Attorney General of New York, Eliot Spitzer charged them of insider trading and elicitation of illegal gains.	• Detection of illegal market timing and late trading practices which may constitute insider trading on the part of certain hedge fund and mutual fund companies.	• The need for stronger and tighter controls that prevent insider trading.
Royal Dutch Shell UK 2004	• An international British gas and oil company incorporated in the UK. • In 2002 Shell had not sufficiently funded the oil to enhance production. • The small fields of oil were not sufficient to meet the production supplies.	• Shell was found guilty in 2004 January of not funding sufficient its oil to cover the anticipated production • Huge losses were incurred as a result of fines from the Financial Services Authority and subsequently stakeholders lost faith in the group when the chairman of the board departed.	• The need for regular independent audits to ensure internal controls are functioning as required ensuring quality accounting records • High targets should be set to incentivise the executive bonuses. • The need for independent auditors to identify any forms of financial statements manipulation.
Siemens Germany 2006	• Founded in1893, with international footprint in about 190 countries consisting approximately 400 000 employees. • Siemens was accused of corruption and bribery.	• About 300 employees were implicated in the se bribery cases. • To maintain the secrecy, generous bonuses were awarded to employees leaving the company. • As revealed by the German authorities, Siemens had paid about 1.3 billion Euros in bribes for the past 7 years using illegal funds. • These payments were to facilitate the winning of contracts worldwide including the tender for 2004 Olympics in Athens. • The board was negligent in failing to provide sufficient oversight, control and direction to the company, thus impairing the investors' confidence, company integrity and professional credibility in general.	• The need for ethical leadership and financial control procedures to detect such acts of corruption and fraud. • The need for confidential platforms for employees to air their grievances confidentially. • The need for regular independent audits to ensure internal controls are functioning as required ensuring quality accounting records.
Subprime Loans USA 2007	• The scandal relates to the 2007 housing crisis. • The drop in demand for mortgage loans and price in key housing markets	• Offering loans without security • Huge losses were incurred due to increased defaults in payments by borrowers. • Special Purpose Entities were set up to hide	• The need by the senior executives to have the necessary expertise and experience to effectively control and monitor credit and market risks

	caused the mortgagees to forfeit payments and abandon houses, resulting in the bank having been left with both the property and the unpaid loan • The losses from mortgage-backed securities totaled $200 billion. • Senior executives were arrested.	and repackage the mortgages. • The company incurred huge losses. • The management and the board indicated incompetence by taking in more risks for the company and intensified risk behaviour but issued new structured financing instruments	tolerated by the company.
Lehman Brothers USA 2008	• Founded in 1850 by Lehman Brothers. • It was a financial services company involved in mortgage origination. • However, the company was a real estate hedge fund that was camouflaged as an investment bank. Hence its vulnerability to downturns in real estate values. • Poor market conditions in the mortgage space resulted in huge losses as the conditions demanded a significant decrease in its dealings in the subprime space. • The Lehman Brothers was declared bankrupt and collapsed in 2008	• Lehman Brothers was highly leveraged by end of 2007. • It had borrowed significant amounts to fund its investments. • It had significant business undertakings worldwide	• The need by the senior executives to have the necessary expertise and experience to effectively control and monitor credit and market risks tolerated by the company. • The need for sufficient safeguarding measures for inters' assets. • The need for proper policies and procedures to quantify all risks in the financial markets.

Source: Researcher's own construct

2.3.3.2 United Kingdom corporate governance

According to Tshipa *et al.* (2018c), the corporate governance structures of the South African corporate environment is similar to that of UK, therefore the analysis below wishes to examine the characteristics of the UK corporate governance mechanisms. The UK corporate governance structures follow a stakeholder-centred approach to business principles. Muravyev, Talavera and Weir (2016) reiterate that the UK presents some of the best governance standards globally, ranking as the fifth most important economy.

The Cadbury Report 1992

The report was instigated by the British government. In December 1992, the Cadbury Committee released the Cadbury Report which was a collection of identical ideals organised as standards of corporate governance. The report stressed the principles of integrity, openness and accountability to enhance the integrity of auditing and financial reporting. The Cadbury Report recommended the following key principles from its code of best practices:

- Discouragement of CEO duality.
- The board should comprise at the minimum three non-salaried directors, with at least two of which not having any direct or indirect connections to the company.
- The board of every business should have an independent audit committee comprising at the minimum three non-salaried directors with no connection to the company.
- The remuneration of executives should be fully disclosed and be objectively set by a remuneration committee.
- The selection and engagement of board members need to be delegated to the nomination committee consisting at the minimum one non-salaried director with no connection to the company.

These principles became a listing requisite for the London Stock Exchange on a 'comply or explain' basis (Cadbury, 1992).

Greenbury Report 1995

Published in 1998 in the UK, the Greenbury Report concentrated on directors' remuneration standards, recommending the following:

- The remuneration committees should be made up only of non-salaried directors with no connection to the company.
- The AGM should be attended by the chairman of the remuneration committee to answer shareholders' questions on remuneration of executives' matters.

- Directors' remuneration including the name of directors should be released in the annual reports
- Excessive 'golden handshakes' should be eliminated by implementing fixed-term contracts of one year for directors.
- Performance-based compensation structures for directors should be introduced to enhance lasting company performance.

The Hampel Report 1998

Published in 1998 in the UK, the report contended that:

- Prescriptive rules were outdated as broad principles were necessary to ensure good governance
- Flexibly in the application of sound governance practices that meet each company's individual circumstances enhance good governance.
- The board's key responsibility is to the company shareholders.
- Recommended self-regulation method of governance as such there was no need for more company legislation.

The UK Combined Code 1998

Released in 1998, the UK Combined Code consolidated previous codes which were incorporated into the London Stock Exchange's listing requirements. The new code set out standards of best practice for board composition, director remuneration, accountability and audit in relation to shareholders. The code was accepted on the 'comply or explain' basis for all companies incorporated in the UK. This report was revised in 2006, 2008 and 2009.

The Turnbull Report 1999

Published in 1999, the Turnbull Report identified risk assessment through internal control analysis as a vital part of corporate governance processes. This report shed light on the internal controls of companies including financial, operational, compliance and risk management.

The Myners Report 2001

The report considered the functions of institutional investors. It explained the significance of good governance for diverse companies by proposing principles that facilitated the controlling and directing of companies in a manner which fulfils the goals of the shareholders. These proposals were designed to accomplish greater responsibility by life mutual funds to their members through procedures that encourage improved internal analysis of management by the boards as well as the functions of the UK's financial regulatory body.

The Higgs Report 2003

The UK government assigned Derek Higgs to conduct an independent appraisal concerning functions and efficacy of non-salaried directors. The report recommended more empowerment of non-salaried directors and limiting the influence of the CEO (Zalewska, 2014).

The Tyson Report 2003

The key emphasis of the Tyson Report was on board diversity and independence (Zalewska, 2014).

The UK Stewardship Code 2010

First issued in 2010, the UK Stewardship Code was revised in 2012 to replace the UK Combined Code. The Stewardship Code centered on governance principles relating to efficient monitoring of a company's performance and communication required between the company and the institutional investors (Financial Reporting Council, 2012a).

The UK Corporate Governance Code 2010

The first code on corporate governance was promulgated in 2010 for the first time and then reviewed in 2012, 2014 and 2016. Following the global financial crisis, the FRC revised the governance code. This code was initially focused on improving interaction between the board and shareholders (Financial Reporting Council, 2012b). The 2012 code focused on the accountability of the board (Financial Reporting Council, 2012a). In 2014, the revised code concentrated on the enhanced availability of details about the risks that affect the continued sustainability of companies. The 2016 revised version incorporated the European Union regulation on issues of audit committees (Financial Reporting Council, 2016).

Conclusion

Numerous reports were commissioned in the UK following a series of corporate scandals. These reports were regularly reviewed and included principles on board structure, remuneration, committees, roles and standards of external auditors and internal controls. However, none of the recommendations were enforced by law thus no penalties for non-compliance were sustained.

2.3.3.3 USA corporate governance

The USA follows a shareholder approach to corporate governance where companies are primarily perceived to be pursuing the financial interests of shareholders (Ntim, 2013). The series of high-profile corporate governance failures in the United States such as Enron, Tyco, Adelphi and others led to the introduction of the Sarbanes-Oxley Act in 2002 and the Dodd-Frank Act in 2010 (Tshipa & Mokoaleli-Mokoteli, 2015).

Sarbanes-Oxley Act 2002

Following the commissioning of the law in 2002 by US congress in response to corporate failures, the Securities and Exchange Commission (SEC) was mandated to administer the law and the application of corporate governance principles became mandatory (Van Ness *et al*., 2010; Tshipa *et al.*, 2018a).

The Nasdaq Stock Exchange as well as New York Stock Exchange adopted the Sarbanes-Oxley Act which advocated for stringent auditing standards and procedures for listed companies (Sarbanes, 2002; Van Ness *et al.*, 2010). According to Sarbanes (2002), the following are the main provisions of the Sarbanes-Oxley Act:

- The larger number of board members must not have any relations with the company.
- The memberships of audit, remuneration and nomination committees must be independent.
- Performance-related remuneration must be enforced.
- Meetings of directors who are not employed by the company on a full-time basis to be held separately.
- Corporate chapters written to evaluate CEOs and select new board members.
- Stringent procedures for granting of personal loans to directors and management executives.
- Compulsory for listed companies on New York Stock Exchange to implement those provisions between 15 January 2004 and 31 October 2004.
- Criminal penalties for non-compliance with the Act and violation of accounting practices defined.

Dodd-Frank Act 2010

In addition to the SOX requirements on remuneration disclosure, the Dodd-Frank Act focused on the following according to Zalewska (2014):

- Disclosure of the average annual overall remuneration of all workers and the proportion of this average to the CEO total remuneration.

- Shareholders were sanctioned to have power to influence executive directors' remuneration in annual statements.
- Disclosure for reason of CEO duality by the company.

Council of Institutional Investors

It was set up in 1985 to provide more information on public pension funds about investing their members' retirement resources.

Conclusion

Different bodies in the USA addressed corporate governance standards. However, there is no document on corporate governance that is applied solely. The principles contained in all the reports are similar to worldwide corporate governance principles.

2.4 SOUTH AFRICAN CORPORATE GOVERNANCE

2.4.1 Origins of corporate governance practise in South Africa

According to Waweru (2014), corporate governance was first practiced in developed countries; however, South Africa as a developing country has been phenomenal in keeping pace with developed nations in terms of corporate governance practices. As an emerging economy, South Africa requires well-run companies in order to attract investment, facilitate job creation for the young generation and compete in the global market (Ntim, 2013).

South Africa is a member of the BRICS nations, which is the mainstay of stability in the world economies (Tshipa & Mokoaleli-Mokoteli, 2015). According to Muniandy and Hillier (2015), South Africa is undoubtedly the largest and leader in economic development in the sub-Saharan Africa. However, it is still an emerging market characterised by high unemployment, socio-economic disparities and poverty.

According to the World Economic Forum's (WEF) Global Competitiveness Index (2017), the JSE is regarded as one of the most highly regulated stock exchanges in the world. Good leadership in corporate governance is a key factor in South Africa's continued economic dominance in the region (Muniandy & Hillier, 2015). However, these cutting-edge corporate governance practices at international standards are a recent development.

According to Armstrong, Segal and Davis (2006), the South African economy followed a shareholder-centric, Anglo-American model in which companies were led by entrenched and complacent managers who were disorientated and gave rise to agency costs. This was, however, before the introduction of King I in 1992 by the Institute of Directors in Southern Africa. Nonetheless, these companies have survived due to a different economic climate from the third world economies. Mthanti and Ojah (2016) identified these companies' main shield from foreign competition as economic and political quarantine by means of sanctions during apartheid which kept foreign companies out of the local market. During that time South African corporate policies, practices, procedures, laws and regulations lagged far behind international standards.

According to Nag (2016), the end of apartheid and the release of Nelson Mandela from prison paved the way for the South African economic climate, corporate landscape and markets to embrace change. This was aided by a new in political climate with the rise to power of the black-dominated African National Congress (ANC). This rapidly led to trade liberalisation, demand of transnational financiers, evolving markets and prompt regulatory reform (Mthanti & Ojah, 2016). Since 1994, irrevocable change has occurred in corporate structures with the dismantling of conglomerates and corporate restructuring. This transition in South Africa took place at the same time as interest in corporate governance was rising globally as a tool to protect shareholders' interests. Moreover, international standards in listing procedures, the adoption of accounting standards, laws and regulations have slowly become the order of the day.

The path to democracy taken by South African government after 1994 explains these rapid changes. The government made a choice to shy away from property seizure and pursued growth, which in turn funded community services and job creation. However, to achieve greater development, South Africa needed both local and foreign finance as well as efficient use of that finance (Muniandy & Hillier, 2015). High standards of corporate governance were induced by the need for finance which was essential for corporate growth. In this light, corporate governance by means of effective decision-making and efficient monitoring impacts enhanced stability and growth prospects of companies.

The market has been a major player in corporate governance transformation in South Africa; the South African corporate sector became very competitive following the attainment of independence in 1994 and the advent of democracy (Waweru, 2014). Upon the return of international investors in 1994, the South African markets were heavily criticised in terms of performance, corporate structure and governance. Hence the desire to apply and meet international standards has been the driving force for change in the accounting profession, government, the stock exchange and regulatory bodies.

Despite having developed solid corporate governance principles through the issuance of King Reports, South Africa has experienced a number of corporate scandals. Names such as Telkom, PPC, Regal Treasury African Bank, Fidentia, JCI-Randgold and Macmed are amongst the corporate disgraces of South Africa (Nag, 2016). However, South Africa is considered to be a noticeable power in corporate governance practices in Africa and the world at large. This is explained by the compulsory application of the King Reports as a listing requirement for JSE. Therefore, South African companies are recommended to implement effective governance procedures and practices that are consistent and sustainable to effect and complement objectives of improving company performance (Tshipa *et al.*, 2018c)

2.4.2 Acts influencing corporate governance in South Africa

Despite the political transition of 1994 that marked the end of apartheid era, South Africa is still suffering from high levels of poverty, racism and inequality. Moreover, South African society is fragmented along ethnic and financial lines and the country's economy is split (Mthanti & Ojah, 2016). In a bid to curb the above effects of decades of white colonialism and apartheid, the South African administration introduced acts that have profound influence on the application of corporate governance principles. The following is a summary of the key local acts that haves influenced governance in South Africa.

Table 2-2: Major Acts that shaped corporate governance in South African context

Act	Provisions
Labour Relations Act of 1995	It is aimed at inspiring voluntary collective bargaining and settlement of disputes relating to dismissals.
Basic Conditions of Employment Act 1997	Enacted to set the minimum requirements of employment for employers to adhere to thereby giving effect to fair labour practices.
Employment Equity Amendment Act, No 47 of 2013	This act promotes equality in the working environment through eradication of discrimination by upholding equal prospects for all races and genders ensuring the workplace are demographically representative of the SA population, thereby enhancing financial growth and productivity in the working environment.
Broad-Based Black Economic Empowerment Act of 2003 **Promotion of Equality and Prevention of Unfair Discrimination Act of 2000**	To increase the control and ownership of South African companies by South African blacks to influence racial transformation and economic growth.

Preferential Procurement Framework Act 2000	
Insider Trading Act 1998	Enacted to prohibit individuals with access to inside information on the performance of securities or financial instruments from engaging in dealings relating to those instruments, thereby providing guidelines and empowering the Financial Services Board to deal with such matters by providing civil and criminal law penalties.
Public Finance Management Act of 1999	An act aimed to ensure sound financial management practises are adhered to both in government and public institutions to facilitate transparency and accountability in the management of finances by providing a guideline for efficient and effective management of assets, liabilities, expenses and income.
Company's Act Amendments of 1999	It sets out the liabilities of directors in their dealings on behalf of the company, compels the appointment of the company secretary for public companies and disclosure of share owners.
Bank's Act Amendments of 1999	This act imposes higher levels of corporate governance in local banks.
JSE Listings Requirements revisions of 1995 and 2000	JSE's listing requirements have been revised to ensure companies are adhering to certain principles of corporate governance.

Source: Conceptualised from African Corporate Governance Network (2016)

2.4.3 King Reports

According to Muniandy and Hillier (2015), the King Reports set the tone for South African business behaviour by providing management with well-defined principles of corporate governance. Waweru (2014) and Smit (2015) claim the King Reports to be the world's leading corporate governance standards. The King Committee was set up in 1992 by the Institute of Directors in Southern Africa (IoDSA). The major provisions of the report are sustainability, leadership and corporate citizenship (King Report III, 2009). The recurring iterations of the King Reports have placed South Africa on the global map. The status of South African corporate governance as a result of these reports is held in high esteem because of their implications for shareholder protection.

2.4.3.1 King I Report

This was the first report by the King Committee commissioned in November 1994 and which was born around the same time South Africa was being integrated into the international economy at the end of apartheid (Pamburai *et al*., 2015). King I ranked sixth set of codes of corporate governance issued globally after the US, Hong Kong, Ireland, UK and Canada in

1978, 1989, 1991, 1992 and 1993 respectively. This marked South Africa as the first country in sub-Sahara to be the forerunner of a set of corporate governance principles (African Corporate Governance Network, 2016). Compliance with the codes of King I was not mandatory, based on approach of 'comply or explain'. King I identified the effective board of directors as significant component of good corporate governance (Muniandy & Hillier, 2015).

Although, the King I report adopted numerous standards and principles from the international corporate governance codes, particularly those supported by Cadbury Report of 1992 in the United Kingdom (Pamburai *et al*., 2015). The King Report diverted from the shareholder primacy approach to an inclusive approach and prescribed an 'integrated' methodology to corporate governance taking into account the needs of all stakeholders by incorporating the social, financial, ethical and environmental aspects (Andreasson, 2011). It was during the same time; corporate governance became a widespread issue of concern following the fall of major international corporate collapses that were well publicised for instance Bank of Credit and commerce International (BCCI) and Maxwell Communications Corporations.

2.4.3.2 King II Report

The changing worldwide economic environment, accompanied by regulatory and legislative advances, led to the updating of King I. Locally, this amendment was driven by post-apartheid changes such as the promulgation of the Employment Equity Act, 55 of 1998 whilst internationally it was the introduction of the Combined Code of 1998 in the UK (Pamburai *et al.*, 2015). The King II report was published in 2002 and targeted companies that were listed on JSE. It was based on the principles of listed companies complying with King II or explaining why they were not doing so. King II advocated the triple bottom line which embraces not only the company's economic value but its social responsibility and environmental activities as well (Ntim, 2013).

According to Andreasson (2011), the King II Report originated from stakeholder theory and known for taking on an "inclusive stakeholder-centred approach to corporate governance including employment equity (EE), affirmative action, Broad-Based Black Economic Empowerment (B-BBEE) and environment". These statutory changes resulted in the need to ensure equitable demographic representative of the South African population in the workplace and improve the control and ownership of South African companies by black South African shareholders. This was important to address the lingering effects of apartheid.
The influence of the King II Report on legislative transformations and regulatory measures was remarkable in creating corporate integrity in South Africa. Notably the Companies Act of

2008 was modified in 2011 and this strengthened the application of corporate governance codes for corporate sector entities.

2.4.3.3 King III Report

The Companies Act, 71 of 2008 and the rapid changes in international governance trends necessitated the compilation of the third report by the King Committee which was published in 2010 (Pamburai *et al.*, 2015). This report adopted the voluntary stakeholder approach. Moreover, its approach tried to preserve the Anglo-American model.

The distinguishing feature of King III is its focus on integrated reporting. It became compulsory of companies listed on the JSE to produce an "integrated report" effective 1 March 2010 or to explain any non-compliance. According to Muniandy and Hillier (2015), South Africa is the first nation to give an injunction on the integrated report while providing guidelines and standards for the notion. In this regard South Africa had set the tone for other nations.

This study considered the period 2011-2016 affording precise attention to the King III principles. Chapter 3 provide a detailed dialogue on corporate governance research instrument applied according to the King III Report recommendations.

The King III philosophy was centred on the notions of leadership, sustainability and corporate citizenship. It consisted of a set of principles, guidance and practises that could be adopted willingly by all corporations irrespective of their form or way of incorporation.

2.4.3.4 King IV Report

Published in 2016, King IV application since 1 April 2017 established the central role of the governing body of corporate governance, as represented by board of directors. King IV described the governing body as the provider of a well-organised and ethical management system within the company, achieved through the principles of competence, responsibility, integrity, fairness and transparency. King IV 2016 maintains that good governance assists the company in achieving the following:

- Good performance
- Ethical culture
- Effective control
- Legitimacy.

Although it is not mandatory in terms of South African law, adherence to the King reports has been welcomed by numerous companies because of its ability to provide managers with well-defined standards and principles of corporate governance.

2.4.3.5 Internal governance comparison of Cadbury Report and South African King Reports

According to Waweru (2014), South Africa's colonial connection to Britain has influenced its adoption of corporate laws and corporate practices from the UK. The King Committee adopted some of the principles included in the King reports from the UK Cadbury report of 1992.

The King reports held a similar view to the Cadbury report by advocating for a unitary board of directors headed by a chairman who has been nominated by shareholders. This was aimed at resolving the principal-agent problem by holding management accountable. The emphasis was made on the chairperson's position to be held by a separate individual from CEO.

In addition, the King reports adopted an internal audit control and risk management from the Cadbury report and recommended that every South African company must have internal audit headed by the Chief Audit Executive to continuously monitor controls and procedures.

The King Reports held a similar view to the Cadbury Report by recommending that the directors of South African companies prepare annual reports in conformance with GAAP as required by the South African Accounting Standards Board and the listings regulations of the JSE.

Like the Cadbury report, the King reports recommended that South African companies adopt the principle of self-regulation by observing applicable laws, standards, rules and regulations.

However, unlike the Cadbury report, the King reports recommended that South African companies improve their disclosure practices and recognise and preserve the significance of the relationship between a company and the social and environmental aspects it exists in.

Table 2-3: Internal governance comparison of Cadbury Report and South African King Reports

Below is an overview of each report in comparison to the Cadbury Report of 1992 from which the King Committee adopted some of the principles.

Internal Governance Recommendation	Cadbury Report	First King Report	Second King Report	Third King Report	Fourth King Report
Board Structure	Single board system	Single board system	Single board system	Single board system	Single board system
Salaried Director	Undefined	Undefined	Undefined	minimum CEO and additional finance director for listed companies	minimum CEO and additional finance director for listed companies
Non-Salaried Director	Minimum three	Minimum two	Most of the board members ought to be non-salaried directors	Most of the board members ought to be non-salaried directors	Most of the board members ought to be non-salaried directors
Independent Non-Executive Director	Minimum two	Undefined	The greater of non-employee board members should not hold any interest in the company directly or indirectly.	The greater of non-employee board members should not hold any interest in the company directly or indirectly.	Most of non-employee board members should not hold any interest in the company directly or indirectly.
Non-Employee Director Tenure	Undefined	Undefined	At most 3 years	At most 3 years	Not specified, recommend staggered replacement

CEO Duality	Discouraged	Discouraged	Discouraged	Discouraged	Discouraged
Directors' Remuneration	Undefined	Undefined	Recommend disclosure of individual director's remuneration	Recommend disclosure of individual director's remuneration	Recommend disclosure of individual director's remuneration
Board Size, Diversity and Demographics	Not specified, however recommended the board to consider the environment and circumstances to determine proper mix	Not specified, however recommended the board to consider the environment and circumstances to determine proper mix	Not specified, however recommended the board to consider the environment and circumstances to determine proper mix	Not specified, however recommended the board to consider the environment and circumstances to determine proper mix	Not specified, however recommended the board to consider the environment and circumstances to determine proper mix
Board Meetings	on a regular basis	at least quarterly	at least quarterly	at least quarterly	at least quarterly
Staggered Boards	Not more than 3 years on board	none	Not more than 3 years on board	Not more than 3 years on board	Not more than 3 years on board
Insider Trading	Undefined	undefined	Insider trading prohibited	Insider trading prohibited	Insider trading prohibited
Risk Management	None	none	Recommended through risk committee	Recommended through risk committee	Recommended through risk committee
Accounting and Financial Reporting Standards	According to GAAP standards	According to GAAP standards	According to IFRS standards	According to IFRS standards	According to IFRS standards
Internal Audit Function	Applicable	Applicable	Applicable	Applicable	Applicable
Internal Control Function	Applicable	Applicable	Applicable	Applicable	Applicable
Regulation Approach	Voluntary and self-policed approach	Voluntary and self-policed approach	Voluntary and self-policed approach	Voluntary and self-policed approach	Voluntary and self-policed approach
CG Type	Financial	Integrated	Inclusive	Inclusive	Inclusive
Governance Model	European approach	Anglo-American model	Hybrid approach, broader stakeholder	European approach	European approach

			interest yet largely preserving the Anglo-American model		

Source: Researcher's own construct

2.4.4 Corporate scandals in South Africa

The deterioration of ethical values and lack of accountability of those charged with governance was evidenced by continuous corporate failure in South Africa. This resulted in many people questioning the recommended corporate governance principles contained in the King Reports (Smit, 2015).

Table 2-4: Corporate scandals in South Africa

Below is an outline of selected South African corporate failures that made headlines in the media.

Scandal	History	Flaws in Corporate Governance	Lessons learnt
Beige Holdings Limited 1999	• Leading contract manufacturer and distributor in South Africa of: ➢ Cosmetics; soaps; homecare products; toiletries; ➢ Laundry soaps; bath products; a ➢ Personal care products. • With about 750 employees. • Listed in 2003 on JSE's AltX • Rapid growth drive in 1998 exhausted the company's resources as it was funded by company's shares and cash.	• Tax fee payments made to directors • Restatement of 1997 financial results prior listing • Abuse of company credit cards • Overstatement of revenue and profits to increase share prices • 3 executives fired for financial fraud in accounting irregularities. • Failure by the auditors to uncover fraudulent activities	• The need for improved oversight role by the auditors and enforce accountability of auditors • The need by the board to introduce and implement the applicable checks and procedures, mostly where finances are concerned.

Johannesburg Consolidated Investments. (JCI)	• Accounting irregularities were traced back from April 2002	• Accounting irregularities stemming from: ➢ Asset overstatement ➢ Internal control systems manipulation	• The need for appropriate use of high driven performance incentives to executives.
Macmed 1999	• A healthcare company. • The fraud occurred between 1998 and 1999 • Lost R982million to fraud • Collapsed in 1999	• The financial statements were manipulated to look better by: ➢ Falsifying invoices to overstate profits	• Need to implement personal liability for executives who either knowingly participates in misconduct, or who fail to make sure the implementation of adequate risk management. Such liability will provide rational chance of enticing ex post judicial inspection of managerial oversight.
Saambou Holdings Limited	• The irregularities in accounting occurred in 2000 and 2001	• Financial statements were manipulated to look favourable	• The need for co-ordinated approach by management to measure and evaluate companywide risk exposures to fraud.
Tigon Limited	• Manipulations of financial statements from 1997 to 1999 • Investors were defrauded R160m.	• Non-compliance with GAAP ➢ Line expenses were capitalised ➢ Manipulation of financial statements using fabricated journal entries	• The need for competent board oversight and vigorous risk management with reference to accepted standards and governance codes like King Report. • The need for tighter controls on the classification of costs.
LeisureNet 2002	• Lifestyle and health fitness company	• The Executives treated company finance as their	• The need to enforce tighter penalties for financial fraud

	• About R1.2 billion was lost to fraud by senior executives. • Went into liquidation and collapsed in 2000	personal [piggy banks. • Manipulation of financial statements to look favourable.	• The need for auditors to be held accountable for their inability to detect such manipulation of financials.
Steinhoff 2017	• Steinhoff International was the second biggest furniture and homeware retailer in the world.	• Corruption and fraud stemming from manipulation of financial figures, unethical conduct stemming from greed and relentless quest of financial profits by not disclosing its acquisition of a 45% interest in Swiss company (GT Branding Holding) in 2015.	• The need to instil a mind-set that strong governance is not just about financial and regulatory compliance but creation of an ethical culture that promotes prudent financial management and transparent reporting.
• **State capture 2017** ➢ **KPMG 2017** ➢ **McKinsey** ➢ **Naspers** ➢ **SAP** ➢ **Transnet** ➢ **Eskom**	• In her report published November 2016, the former Public Protector Thuli Madonsela outlined the way in which the former President of the RSA Jacob Zuma and senior officials in government have conspired with a shadow network of corrupt brokers. • The report outlined allegations of corruption, irregularity and personal enrichment of President Jacob Zuma and his government officials through the Gupta linked companies. • Through their ties to Jacob Zuma, the Gupta family had placed themselves into a position where they could influence the nomination of Cabinet positions	• Money-laundering • Sham transactions by government entities and Gupta family members and Gupta linked entities • Pravin Gordhan, the former Minister of Finance estimated the total costs of state capture R250 billion. • Auditors' failure to uncover and report the fraudulent activities. • McKinsey& company was charged of fraud, racketeering and collusion for ignoring warnings of possible dubious deals with Trillian, Eskom and other Gupta-linked companies • KPMG facilitated the draining of state resources and	• The need to inspire a culture of transparency and accountability that those in power establish around the laws • The need to create an environment that put emphasis on creating an ethical culture and mind-set as recommended by King IV • The need to regulate the accounting profession and auditors. • The needs to be reinforce the oversight capacities of IRBA and the GAAP monitoring panel of the JSE.

	and influence the running of government activities in order to fraudulently award government contracts and benefits to enrich themselves at the expense of the citizens. • The rand value deteriorated, and South Africa experienced a recession and was rated to junk status by global credit ratings agency.	escaping tax by the Guptas. • KPMG abetted the manufacture a document at the South African Revenue Service that was prominent in get rid of anti-corruption executives. • Naspers's TV unit MultiChoice had a corrupt relationship with ANN7, a 24-hour news channel formerly owned by the Gupta family. • To secure contracts from Transnet and Eskom SAP South Africa paid approximately R100 million kickbacks disguised as commission to a Gupta-linked company	

Source: Researcher's own construct

2.5 BOARD CHARACTERISTICS AND FINANCIAL PERFORMANCE EMPIRICAL EVIDENCE

This section reviews empirical studies published on similar topics on the relationship between corporate governance compliance and company financial performance.

2.5.1 Board independence and corporate performance

The board of directors is grouped into executive and non-executive directors. Board independence measures the proportion of external directors on a company's board. To ensure that one individual or a group does not dominate the decision-making of the company, the King Report on corporate governance for South Africa 2009 states that ''the corporate board should comprise a majority of non-executive members, most of whom should be independent'' (King Report III, 2009). The report further explained the need to have a balance of power within the board by ensuring that majority of the members is non-executive directors. However, the stewardship theory holds a different view by preferring the board to be dominated by executive directors whose in-depth knowledge of company operations and commitment presumably has a positive impact on company performance (Van Ness *et al.,* 2010; Meyer & De Wet, 2013).

The inclusion of external directors with no relations with the company on the board is essentially a monitoring tool in corporate governance, as put forward by the agency theory (Zakaria *et al.*, 2014; Muniandy & Hillier, 2015; Dzingai & Fakoya, 2017). In addition, the independent non-executive directors have ties to outside connections that give easy access to valuable external resources which are highly likely to increase company performance, as proposed by the resource dependency theory (Meyer & De Wet, 2013).

Muniandy and Hillier (2015) examined the relationship of 151 JSE-listed companies' performance and board independence during the period of 2008 to 2012 and found that board independence was positively related to company performance as represented by ROE. Similarly, in Nigeria Paul and Sy (2015) studied the impact of board independence on microfinance banks' performance over the period of 2011 to 2013 and found a positive significant relationship on EPS as a proxy for performance. Nonetheless, these results may not be comparable although they are similar and both countries are emerging markets. The sample for South Africa excluded financial institutions like banks while the Nigerian study did examine banks.

In addition, Pamburai *et al.* (2015) in South Africa found that the proportion external directors with no relations with the company had a positive effect on Tobin's Q, indicating that greater board independence may facilitates enhanced performance in companies.

The above studies were supported by Liu, Miletkov, Wei and Yang (2015) in China, whose findings indicate a positive effect of board independence on performance on a sample of public companies for a period of 15 years from 1999 to 2012. Moreover, a handful of related studies performed by scholars concur with this viewpoint (Al-Manaseer *et al.*, 2012; Adekunle & Aghedo, 2014 and Chen *et al.,* 2015). The above studies' findings indicate the synergistic effects of having external directors with no relations with the on board, as evidenced by increases in company performance.

Wintoki, Linck and Netter (2012) in the USA found a strong positive relationship between board independence and company performance as represented by ROA and Tobin's Q. Nonetheless, there was no causal relationship between board independence and company performance hence their evidence was inconclusive. This is supported by Fuzi, Halim and Julizaerma (2016), who applied data sets from diverse countries and found mixed relationships between percentage of external directors with no relations with the company and company performance. However, Fuzi *et al.* (2016) hold the view that the appointment of more independent directors is mere regulatory compliance and does not enhance company performance.

Dzingai and Fakoya (2017) analysed a sample of JSE-listed mining companies in South Africa for the period of 2010 to 2015 and found a weak positive association between board independence and ROE. Nonetheless, Dzingai and Fakoya (2017) recommend that South African companies comply with King IV as a moral imperative to meet stakeholders' community and environmental needs. They maintain that the practice of good corporate governance attracts investors which in turn assists in raising the necessary finance for corporate growth sustainability and lays the foundation for improved company performance.

Johl, Kaur and Cooper (2015) in Malaysia studied public companies for the year 2009 and found board independence did not have any effect on ROA as a representation for company performance. However, these results can be considered inconclusive and unreliable as the period of study was only one year. The extension of the study period may have yielded different results. Similarly, Detthamrong *et al.* (2017) in Thailand examined non-financial companies for the period of 2001 to 2014 and found board independence did not have any influence on ROE as a performance proxy. These findings are supported by Zakaria *et al.*

(2014) and Abdullah (2016) in Malaysia, who found an insignificant effect of board independence on return on assets and Tobin Q as proxy for company performance.

Muravyev *et al.* (2016) in the UK studied the relationship between board independence and company performance as represented by ROE and Tobin's Q using panel data during the period of 2002-2008 and found a strong positive relationship. However, this study was done in 2016 whereas the period of study is before 2010 hence the findings of this study may be invalid because of the change in economic focus in the country.

Smit (2015) in South Africa during the period of 2008 to 2011 investigated small to medium enterprises listed on the JSE AltX. He examined whether the quality of reported earnings as represented by EPS had any relationship with the level of board independence and found no evidence of such a relationship.

As seen from the above literature, the conclusions on the relationship between directors' independence and company performance show inconsistency. A key difficulty in linking these studies is the endogeneity of variables used.

2.5.2 Size of the board and company performance

Studies on the effects of board size on company performance yield three differing findings. Some studies show a positive relationship (Zakaria *et al.*, 2014; Johl *et al.*, 2015; Arora & Sharma, 2016), others show an inverse relationship (Pamburai *et al.*, 2015; Al-Malkawi & Pillai, 2018; Paniagua *et al.*, 2018) while others still show no relationship at all (Van Ness *et al.*, 2010; Detthamrong *et al.*, 2017, Wintoki *et al.*, 2012).

There is no consensus as to the exact board size acceptable in terms of South African law and the King III Report. In a different view, Yeung (2018) stresses that an ideal board size is between seven to ten members. Wintoki *et al.* (2012) reiterated the need for companies to maintain a sizable limit on the board of directors leading the company to ensure smooth coordination among the board.

Pamburai *et al.* (2015) in South Africa concur with the view above by suggesting that smaller boards improve company performance through the members' increased capability to initiate tactical interactions. They found a significant inverse association between board size and company performance as represented by EVA. Similarly, stewardship theory contends that smaller boards encourage better contribution and social interconnection and facilitate unanimity on significant resolutions (Budiarso *et al.*, 2018). Moreover, Garefalakis, Dimitras and Lemonakis (2017), examining banks worldwide, hold a similar view insofar as small boards can function efficiently to reduce agency costs.

Al-Malkawi and Pillai (2018) analysed the Gulf Cooperation Council (GCC), namely, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates using a panel regression model. They examined the impact of board size on company performance as represented by Tobin's Q and ROA and found a negative and statistically significant relationship. These findings are consistent with agency theory which points to the inefficiencies of a larger board size, indicating that larger boards increase agency costs thus leading to overall inefficiency in operations due to slow decision-making processes. Other studies of the GCC countries (Naushad & Malik, 2015; Al-Matari, Swidi, Fadzil & Al-Matari, 2012) indicated a significant inverse relationship between board size and ROA as proxy for company performance.

Paniagua, Rivelles and Sapena (2018) argue that smaller boards' ability to maintain cohesiveness improves company performance. Paniagua *et al.* (2018) examined the board size relationship to performance covering 1 207 companies from 59 nations for the period of 2013 to 2015. They reported an inverse relationship between board size and performance as represented by ROE. They argued that large board size leads to ineffective communication among the members hence poor decisions were likely to be made. Their results concur with the agency theory that a large board increases agency cost. However, Al-Malkawi and Pillai (2018) point out that sharing skills and knowledge is a benefit of larger boards. The resource dependency theory maintains a similar view.

Agency theorists, stakeholder theorists and resource dependency theorists prefer larger board (Meyer & De Wet, 2013), however, while agency theorists contend that larger boards reduce manipulation from self-centred managers, the resource dependency theorists and the stakeholder theorists view larger boards as a pool of quality and diversified resources in terms of talents and abilities as well as knowledge to cater for the needs of all stakeholders.

Zakaria *et al.* (2014) in Malaysia studied public companies in the trading and services sector, covering a period of six years from 2005 to 2010. Their findings reveal that the size of the board has a direct significant effect on company performance as represented by ROA. Similarly, Arora and Sharma (2016) view large boards as advantageous as more ideas, skills and experience are pooled on the board which facilitates better strategies and decisions.

According to Detthamrong *et al.* (2017) in Thailand, the governing body's ability to supervise and direct managers is determined by the board size. Their hypothesis was based on the assumption that larger boards provide a variety of skills and talents that enhance performance through careful decision-making procedures by bringing in diverse experience and knowledge. However, they found no relationship between board size and company performance as represented by ROE.

Pucheta-Martínez (2015) argues that the size of the board is a factor in improving the performance of a company to a limited extent. These results are consistent with Dzingai and Fakoya (2017) who found a weak inverse association between board size and ROE after analysing a sample of JSE listed mining companies for the period of 2010 to 2015.

While board size is arguably improving company performance, Cabrera-Suárez and Martín-Santana (2015) contend that a balance should be drawn between the pros (supervision and advice) and the cons (coordination, control and decision-making issues) of a large board.

The evidence on the effect of board size on company performance thus yields diverse findings, hence "the size of the board as a corporate governance mechanism has continued to receive a lot of attention" (Johl *et al.*, 2015).

2.5.3 CEO tenure and corporate performance

CEO tenure describes the number of years the CEO is serving the company in their current position. A long tenure is considered to be more than six years (Conte, 2018). Numerous corporate scandals in recent years have left the boards less tolerant of any form of misconduct or bad behaviour from CEOs. As such, "increased pressure from shareholders may compel boards to act against CEOs during times of poor performance, even if the bad performance is not the CEO's fault" (Jenter & Kanaan, 2015:2159). A similar view is held by Conte (2018) insofar as performance declines lead to reputational losses for the CEO and increase the likelihood that the board of directors will replace the CEO. However, the instability that comes from the exit and recruitment of CEOs can be unsettling, even damaging, to a company's long-term goals and financial performance.

Cornelli, Kominek and Ljungqvist (2013) show that in private companies, soft information (for example, subjective evaluation) plays a much larger role than hard information (for example, accounting performance) in boards' decisions to fire CEOs. In the USA, Dikolli, Mayew and Nanda (2014) found CEO tenure to have a positive effect on ROA as a proxy for company performance. They recommend that companies support governance practices of monitoring CEOs' ability early in their careers to reduce any uncertainty about their ability to improve company performance. They postulate that the longer the CEO is entrenched, the more likely the CEO will be acquainted with overall company objectives hence the more likely company performance will increase.

Cornelli and Karakas (2015) in the United Kingdom found a positive significant association between CEO tenure and performance when a company is privatised. They conclude that more efficient control and extra internal information reduces reliance on immediate performance, hence the companies can afford CEOs' extended tenure.

Ahmadi *et al.* (2018) in France found an inverse effect of CEO tenure on company performance. Moreover, Falato, Kadyrzhanova and Lel (2014) studied European companies and found that listed companies are highly likely to fire CEOs during periods of bad performance than unlisted companies. They conclude that agency problems in listed companies may be less severe than in private companies because the stork markets play a key governance role.

The analysis above indicates mixed results which show the need to further examination the relationship between CEO tenure and the performance of a company.

2.5.4 CEO duality and corporate performance

Al-Malkawi and Pillai (2018) explain "CEO duality as a situation where the positions of a CEO and the chairman of the board are held by one person". Al-Manaseer *et al.* (2012) view CEO duality as a signal of poor governance structure as it implies inside power domination that can hinder effective monitoring.

CEO duality proponents argue it is useful in facilitating sustained leadership within the company as it sets clear-cut leadership and provides unique command for the formulation and implementation of strategy that increase company performance (Al-Manaseer *et al.*, 2012). Detthamrong *et al.* (2017) on the other hand argue that corporate failures such as those outlined in section 2.5.3 (WorldCom, Enron, Tyco, Maxwell Communication Group and Parmalat) are associated with CEO duality issues.

Tshipa and Mokoaleli-Mokoteli (2015) examined JSE listed companies during the period of 2002 to 2011 and found CEO duality to have a positive effect on ROA and Tobin's Q as performance proxies. These findings support CEO duality, arguing that it facilitates faster decision-making in times of crisis and reduces the chain of command. In a similar study, Fadun (2017) in Nigeria found CEO duality had a positive effect on ROA as proxy for company performance. However, an inverse relationship was observed with ROE, which makes the results inconclusive. Moreover, inconclusive evidence was found in prior studies by Gill and Mathur (2011) and Al-Hawary (2011).

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Al-Manaseer *et al.* (2012) examined the impact of CEO duality on the performance of banks in Jordan. The results indicate an inverse relationship between CEO duality and ROA and ROE as proxies for bank performance. Bhagat and Bolton (2008) report similar findings in the USA, showing that CEO duality has a negative effect on ROE as a proxy for company performance. These findings were consistent with the recommendation of King III which discourages CEO duality.

However, in Thailand Detthamrong *et al.* (2017) found no effect of CEO duality on ROE and ROA as proxy for performance in a study conducted during the period of 2001 to 2014. Similarly, Adekunle and Aghedo (2014) in Nigeria found no substantial association between CEO duality and company performance as represented by ROA and PM. These findings corroborate the evidence of Ayari and Regaieg (2018) in Tunisia which showed no association between CEO duality and company productivity as proxy for performance. In addition to the above, in India Arora and Sharma (2016) found CEO duality not to have a relationship with company performance as represented by ROA, ROA and Tobin's Q. Therefore, CEO duality does not appear to be an element in determining company performance. Abbasi, Kalantari and Abbasi (2012) studied companies in the food industry in Iran and found that CEO duality has statistically immaterial relationship with the performance.

The evidence above thus shows mixed results which indicate the need to further analyse the relationship between CEO duality and the performance of a company.

2.5.5 CEO remuneration and corporate performance

According to Schymik (2018), CEOs are highly compensated during periods of good performance by the company; however, in down times CEOs may be prone to severe consequences. This view has resulted in concerns among policy makers and researchers that executive rewards are independent of company performance. However, high executive remuneration is argued to be a result of threatening competition for executive talent due to globalisation (Schymik, 2018). Moreover, the increase of executive remuneration is presumed to arise from executives that are so powerful that they can stand firm themselves against warnings by shareholders.

In Malaysia, Ismail, Yabai and Hahn (2014) studied public companies in the consumer product sector during 2006 to 2010 and found a significant direct association between remuneration of CEO and performance as denoted by ROA and ROE. They argued that companies need to encourage CEOs to work harder by paying a high salary in order to increase CEOs' performance. Similarly, in Australia, Ndayisaba and Ahmed (2015) studied the top 200 companies on the Australian Stock Market from 2003 to 2013. The results indicate that CEO remuneration has a significant direct effect on performance.

Bussin and Nel (2015) studied the relationship between CEO guaranteed total cost to company and company performance using South African companies in the retail and consumer goods sector from 2006 to 2011. Their findings indicate an inverse relationship between ROE and CEOs remuneration. These conclusions corroborate with the view of the agency theory that managers' interests are seemingly not in tandem with the shareholders' goals. This may be attributable to managerial power and the incapability of remuneration committees to direct an effective remuneration policy that will entice, retain and inspire CEOs. However, agency problems may be minimised by proposing an ideal CEO remuneration package that motivates the CEO to perform in the best interests of shareholders.

2.5.6 Company size and corporate performance

Larger companies have an advantage over their smaller counterparts as they are able to achieve efficiency and effectiveness through economies of scale and have access to cheaper finance as they have collateral security. Moreover, financial institutions are more likely to finance larger and established companies than smaller companies that are still entering the market. As a result, larger companies are likely to perform better. This view is supported by Pamburai *et al.* (2015) in South Africa whose study of JSE listed companies found a direct significant relationship between company size and performance as measured by EVA and ROA. On the other hand, inefficiencies of larger companies may also lead to poor performance. Research by Al-Matari *et al.* (2012) in Kuwait and Al-Malkawi and Pillai (2018) in United Arab Emirates also use company size as a control variable in their corporate governance and performance study and found a positive relationship between the size of company and performance. Contrary to the above arguments, however, Zakaria *et al.*

(2014) in UK found size to negatively influence firm performance, hence the bigger the size of the company the lower the performance.

2.5.7 Leverage and corporate performance

Liao, Mukherjee and Wang (2015) viewed very high and very low debt ratios as an indication for weak governance. The challenge is for financial managers to strike a balance between low level debt and high-level debt to obtain an optimum capital structure that will enhance company growth and performance. Companies that comply with good governance principles are more likely to retain their debt levels diligently at the shareholders' preferred debt level (Liao *et al.*, 2015). Pamburai *et al.* (2015) observed a significant inverse relationship between ROA and leverage, indicating that companies that use internal finances perform better than their counterparts that rely on debt. Therefore, the more leveraged the company, the riskier it is considered to be and the more prone to poor performance. Zakaria *et al.* (2014) maintain that the higher the gearing ratio of the company, the lower its performance.

2.6 LITERATURE GAP INDENTIFIED.

Waweru (2014) points out that whilst there have been a number of studies in the past on the impact of corporate governance on company performance globally and locally, a number of these studies have been in advanced nations, and only a handful in developing countries. In addition, Tshipa *et al.* (2018a) reiterate the need to investigate corporate governance at country level as mixed or inconclusive results have been reported for developing nations.

According to Dzingai and Fakoya (2017), there are very few studies in South Africa on the related topic. Furthermore, the conclusions on those studies were mixed, largely due to contradictions in the variables used to define corporate governance and company performance, small misrepresentative samples and estimation problems. A search of journal articles on the study topic for South African listed companies retrieved the following results: Klapper and Love (2004), Durnev and Kim (2005), Chen *et al.* (2009), Ntim (2013), Meyer and De Wet (2013), Waweru (2014), Tshipa and Mokoaleli-Mokoteli (2015), Mans-Kemp and Viviers (2015), Muniandy and Hillier (2015), Pamburai *et al.* (2015), Smit (2015), Taljaard *et al.* (2015), Muchemwa *et al.* (2016), Dzingai and Fakoya (2017) and Tshipa *et al.* (2018abc). These studies have numerous short comings, making it challenging to generalise the findings. This point to the need for further research on related topic focusing on specific industries and the King Report III governance reforms, specifically, the characteristics of company boards.

Some of the South African studies explored the effect of a single corporate governance variable on company performance. For example, Tshipa and Mokoaleli-Mokoteli (2015) and Taljaard *et al.* (2015) examined the influence of board dynamics on performance whilst Ntim (2013) explored the influence of board meetings on performance. Further, Muniandy and Hillier, (2015) and Smit (2015) focused on the effect of board independence on performance. Finally, Dzingai and Fakoya (2017) and Muchemwa *et al.* (2016) applied only two variables as proxy for corporate governance, namely, board size and board independence. The limited number of corporate governance variables used in the studies above signal the need for a study in South Africa with more corporate governance variables.

Klapper and Love (2004), Durnev and Kim (2005), Chen *et al.* (2009) and Munisi and Randøy (2013) adopted the Crédit Lyonnais Securities Asia's Index as proxy for corporate governance. However, as this study was conducted in Asia, it may not applicable to South Africa as a result of traditional and institutional variations. Moreover, their results cannot be universally applied as the use of corporate governance index is particularly prone to subjectivity (Tshipa *et al.,* 2018c). Furthermore, the sample sizes in all these studies were very small and may therefore not be a reliable representation of all public companies in South Africa. These discussions above further expound the need for a study that applies South African governance principles.

Meyer and De Wet (2013), Muchemwa *et al.* (2016), Waweru (2014), Mans-Kemp and Viviers (2015), Muniandy and Hillier (2015) and Tshipa *et al.* (2018a-c) included companies from different economic sectors in their studies without focusing on a specific industry. Corporate governance applicability may vary across industries; therefore, the results may not be representative of one sector, which justifies the need for a study that examines a specific industry.

Pamburai *et al*. (2015) and Meyer and De Wet (2013) covered single year and three-year periods respectively, which reduces the reliability of their results.

The study of Tshipa *et al*. (2018a-c) lacked consistency in the applicability of the corporate governance reforms as the period covers both the first and second King reforms. More so, Klapper and Love (2004), Durnev and Kim (2005), Chen *et al.* (2009), Ntim (2013), Munisi and Randøy (2013), Waweru (2014), Tshipa and Mokoaleli-Mokoteli (2015) and Mans-Kemp and Viviers (2015) focused on outdated corporate governance practices of the first and second King reports due to the promulgation of the King Report

(2009) and the new companies Act No. 71 of 2008. This again calls for further research incorporating the subsequent corporate governance reforms of King III.

Some recent studies (Muchemwa *et al.,* 2016, Dzingai and Fakoya, 2017 and Tshipa *et al.,* 2018abc) tried to address the limitations of earlier literature such as smaller sample sizes, outdated corporate governance practices and the short periods. However, like previous studies, they failed to consider industry dynamics and an estimation method that is robust to endogeneity issues.

Below is a summary of the previous South African research on the study topic. The motivation of this study is to resolve the above-mentioned literature gap.

Table 2-5: Summary of South African research on CG and and company performance

Research		Results					
Author(s)	**Background**	**Board size**	**Board independence**	**CEO Duality**	**CEO Tenure**	**CEO Compensation**	**weaknesses**
Klapper & Love (2004)	South Africa was part of the 14 emerging countries studied.	• The Credit Lyonnais Securities Asia's Index for corporate governance • CG positively related to company performance. • Inconclusive evidence was found to determine the nature of relationship between CG and performance					• Index used originated from Asia which may not be applicable to South Africa
Durnev & Kim (2005)	South Africa was part of the 27 countries studied.	• The Credit Lyonnais Securities Asia's Index for corporate governance • CG has a positive relationship with performance					• Index used originated from Asia which may not be applicable to South Africa
Chen *et al.* (2009)	South Africa was part of the 17 countries studied in emerging markets	• The Credit Lyonnais Securities Asia's Index for corporate governance • CG has a positive relationship with performance					• Index used originated from Asia which may not be applicable to South Africa
Ntim *et al.* (2013)	• Period: 2002-2007 • 100 listed companies • Method: Panel data analysis	Significant positive relationship with ROA and Tobin Q	Not applicable	Not applicable	Not applicable	Not applicable	• No specific industry, CG applicability may vary across industry
Meyer & De Wet (2013)	• Sample from listed companies from 6 sectors • Period: 2010-2012	Significant positive relationship with EPS and Tobin-Q	Significant positive relationship with EPS and Enterprise value	Not applicable	Not applicable	Not applicable	• Covers short period • Different sectors have different governance structures - results are not representative of one sector.
Munisi & Randøy	• Period: 2005-2009	• The Credit Lyonnais Securities Asia's Index for corporate governance • CG has a positive relationship with performance					• Index used originated from Asia which may not be

(2013)							applicable to South Africa
Waweru (2014)	• Period: 2006-2010 • 50 largest JSE listed companies • Method: Panel data analysis	• The CG Index was used by summing CG factors • CG positively related to company performance as measured by ROA					• Results may not be applicable to smaller companies • Only one variable used as a measure of performance has been applied. • No specific industry, CG applicability may vary across industry
Tshipa & Mokoaleli-Mokoteli (2015)	• Period 2002-2011 • JSE listed companies	• Positive relationship • Performance measures: ROA & Tobin Q • Panel data analysis			Not applicable	Not applicable	• No specific industry, CG applicability may vary across industry
Mans-Kemp & Viviers (2015)	• Period 2002-2012	• Positive significant relationship with board gender and race diversity with EPS • Performance measures: EPS, NPM, ROE, ROA and total shareholders return (TSR) •					• No specific industry, CG applicability may vary across industry
Muniandy & Hillier (2015)	• South African 151 JSE listed companies from 2009-2012	Not applicable	Positive relationship with ROA & ROA	Not applicable	Not applicable	Not applicable	• Only one CG measure (board independence) which makes it limited to base a conclusion on these results.
Pamburai *et al.* (2015)	• JSE listed companies • Period is 2012	Negative and significantly associated to EVA	Positive and significant relationship to Tobin's Q.	Not applicable	Not applicable	Not applicable	• The study period only covers one year • No specific industry - not possible to conduct industry or sector analysis
Smit (2015)	• Period: 2008 - 2011 • JSE listed companies on AltX	Not applicable	No relationship with EPS	Not applicable	Not applicable	Not applicable	• Only one CG measure (board independence) which makes it limited to base a conclusion on these results • Only one variable used as

							company performance
Muchemwa *et al.* (2016)	• Period: 2009 - 2012 • JSE listed companies • Method: Multiple regression analysis • Performance measures: ROE, ROE & Tobin's Q	Mixed results with majority findings indicating no significant relationship	Mixed results with majority findings indicating no significant relationship	Not applicable	Not applicable	Not applicable	• Only 2 variables used as proxy for CG. Study did not cater for other company level factors affecting performance • No specific industry, CG applicability may vary across industry.
Dzingai & Fakoya (2017)	• JSE listed companies in the mining • Period: 2010-2015 • Method: Panel data analysis	Weak negative relationship with ROE	Weak positive relationship with ROE	Not applicable	Not applicable	Not applicable	• Only 2 variables used as proxy for CG • Only one variable as company performance.
Tshipa *et al.* (2018a)	• Method: Fixed effect generalised least squares regression • Period: 2002 - 2014 • Performance measures: EPS & Share price	Positive relationship	Positive relationship	Positive relationship	Not applicable	Not applicable	• The study period encompasses the financial crisis of 2008, which may affect the results. • Lack of consistency. The 1st and 2nd King reforms applied to the study • Sample drawn from nine industries; CG applicability may vary across industry.

Source: Researcher's own construct

2.7 SUMMARY

Mixed results were found in earlier research exploring the relationship between corporate governance and company performance (Al-Manaseer *et al.*, 2012; Conheady *et al.*, 2015). Some studies did find a relationship between corporate governance, as represented by board characteristics and corporate performance while others found no relationship at all (Abid *et al.*, 2018). However, it can be concluded that the majority of the studies that found a relationship, stressed the impact of board characteristics and structure on company performance without applicable clarification or confirmation as to why these relationships exist. The inconclusive nature of prior research thus creates a gap in the understanding of these interactions. The findings discussed above indicate 'spurious relationships', which has been defined by Abid *et al.* (2018) as a meaningless relationship without probable explanation and evidence to back that relationship. Previous literature has thus been unsuccessful in identifying the actual mechanism behind the relationships between corporate governance and company performance.

The extensive literature review presented above points to a blurred and inconsistent association between board characteristics and performance. This therefore provides strong rationale for the present study within the South African economic context. The present study differs from prior research insofar as it compares company performance with the board characteristics, who are the key drivers of corporate governance.

Although evidence from literature is inconclusive in suggesting that good corporate governance practices may lead to improved corporate performance, companies are nonetheless encouraged to comply with the principles of corporate governance in order to promote stakeholder needs (Dzingai & Fakoya, 2017).

Chapter 3 Research methodology

3.1 INTRODUCTION

This chapter describes the processes and techniques adopted in the research for data gathering, data presentation and data inquiry in order to answer the research question and achieve the study objective. According to Kumar (2011) superior research results are achieved through systematic problem-solving. Systematic research entails a well-planned and organised process that involves finding the research gap in the domain of prevailing evidence on the study topic selected, followed by thoughtfully choosing a research design and managing the complete research process (Creswell & Poth, 2017).

Kumar (2011) defines research as the impartial and methodical procedure of gathering, recording, analysing and interpreting data to resolve decision-making problems. For the purposes of this study, stakeholders require corporate governance and performance information for strategic and financial planning. It is ordinarily expensive, slow-moving and tedious to ensure corporate governance compliance in a company. Investors and stakeholders are therefore concerned with understanding the rewards for appropriate adoption and implementation of corporate governance practices.

3.2 RESEARCH PROBLEM AND QUESTION

The research problem on which this study is founded is explained below. The problem is the diffusion and dilution of equity ownership of listed companies which has seen more and more "separation of ownership and control" (Ferreira, Ornelas & Turner 2015:1). The managers who have been assigned the responsibility of controlling and directing companies on behalf of owners are prone to pursuing their own interests instead of those of shareholders and other stakeholders (Akeem *et al.*, 2014). These situations have led to rising agency costs and significant effects on company performance. Constraints emanating from lack of good governance practices have been the key factor affecting company performance in emerging countries such as South Africa. This view is said to have led to the collapse and unforeseen corporate failures in South Africa. However, despite the response by the regulatory authorities to curb corporate failures by issuing the King reports to encourage company accountability, transparency and responsibility, the collapse of corporates due to poor governance continues to persist. These corporate failures have led to the notion that existing corporate governance principles have failed to effectively control the behaviour of managers – this is reflected in the frequency with which boards have been negligent in their governance oversight role. Accordingly, this has led to questions as to the sufficiency and effectiveness of governance principles on board structures (Zakaria *et al.*, 2014). It is against this backdrop that this research study examines the influence of the characteristics of the board charged with the custodianship of companies, and the performance of those companies.

Moreover, no similar studies have to date been conducted on public companies on the construction and building materials sector of the JSE. Prior research and debate on similar study topic has been conducted in developed countries (Dzingai & Fakoya, 2017) and the findings of these studies were generally mixed and spurious (Afrifa & Tauringana, 2015). To this end, a gap exists in the relationship between the board characteristics and performance of South African companies.

The main research question can therefore be formulated as follows:

→ Is there any relationship between corporate governance, as represented by characteristics of boards of directors, and the financial performance of public companies on the construction and building materials sector of JSE in South Africa?

3.3 RESEARCH DESIGN AND APPROACH

In pursuance of addressing the research question and the research objective, the research design which sets out the research strategy is defined to ensure proper integration of the study components (Creswell & Poth, 2017). The study uses a quantitative analysis design derived from a panel regression analysis model following a positivist approach.

The population of companies listed in the construction and building materials sector selected for the six-year period from 2011 to 2016 is small; however, the design chosen for the study will allow meaningful statistical analysis by adopting panel data that expand data observations.

3.3.1 Research paradigm

The decision on what methodology to apply in a study stems from the selection of the research paradigm that informs the study. A paradigm is a “systematic procedure that formerly guides the way a problem can be resolved” (Granlund & Lukka, 2017:66).

The research paradigm is best understood by first considering its framework, which is made up of the research ontology, epistemology and methodology. Ontology is a philosophical view of the researcher which is based on fact while epistemology is how a researcher examines the information which will define the method of research.

There are five research paradigms according to Bless, Higson-Smith and Kagee (2013):

- **Positivism** is consistent with quantitative research that involves hypothesis testing to explain reality as it is mainly dependent on quantitative data. This paradigm focuses on the validity and reliability of tools applied. (Bless *et al*., 2013).
- **Interpretivism** is consistent with qualitative research that is used to get a viewpoint from an individual perspective.
- A **pragmatist** approach evaluates ideas or views in terms of their ability to be applied practically in resolving problems.
- **Subjectivism** "is a paradigm whose ontology is reality is what we perceive to be real and knowledge is purely a matter of perception" (Scotland, 2012:11).
- A **critical** paradigm "is where there is reality that is constantly under internal influence thus the reality and knowledge are both influenced by power and socially constructed" (Scotland, 2012:11).

According to Granlund and Lukka (2017), quantitative research is centred on arithmetic data that can be scrutinized statistically whilst qualitative research uses non-arithmetic data. As a result, this study follows a quantitative approach and a positivist paradigm to answer the research question. A positivist paradigm examination involves explanation, prediction, control and causality by empirically presenting and revealing reality. Positivists believe that the reality is quantitatively given and is measurable in units which are autonomous of the investigator and the investigation instrument.

3.3.2 Research method

A research method is a description of the techniques used in data gathering and scrutiny to address the research question (Al-Malkawi & Pillai, 2018). Panel data regression was adopted because the research data was quantitative in nature, consisting of both time series and cross-sectional data. To analyse the data, a blend of a quantitative approach and a correlation and panel regression was applied. Therefore, the research used multiple regressions as a method of analysis and Generalised Least Squares (GLS) as the method of estimation. GLS was chosen for its robustness in dealing with the effects of heterogeneity and endogeneity (Nguyen *et al.*, 2014; Aroora & Sharma, 2016; Al-Malkawi & Pillai, 2018).

Moreover, in order to reduce endogenity, which is a common problem in corporate governance research, the corporate governance variables were lagged one year as the present company performance may be determined by prior corporate governance settings (Wintoki *et al.*, 2012).

3.3.3 Research instrument

The study is based on numerical measurements of secondary data. Similar studies that used this numerical secondary data in emerging markets include Waweru (2014), Dzingai and Fakoya (2017), Haruna *et al.* (2018) and Padachi *et al*. (2018). Tshipa *et al.* (2018c) recommend panel data as the most appropriate technique to capture disparities over time.

The ability of panel data analysis to control for heterogeneity and endogeneity issues permits for the control of distinct explicit effects, which are generally not visible and may be correlated with other independent data sets encompassed in the specification of the relationship between board of directors' characteristics and company performance.

For the purposes of this study, secondary data was gathered from electronic sources such as journal articles, press statements, books and websites to conduct a detailed literature review.

In this study, company integrated reports were the units of analysis. These were downloaded from company websites for the period 2011 to 2016. Financial data was collected from each report as published in a standardised format. Standardised financial data is easily comparable with accuracy between the tested companies. Secondary data sources are frequently utilized in corporate governance and financial performance researches. Nonetheless, data is not always obtainable in readily usable format. The data must be transformed into the necessary format: "data transformation refers to the process of converting the original form of data to a format that is more suitable to achieve the research objective(s) of a specific study" (Kumar, 2011:102). To carry out the analysis, data was extracted from audited integrated reports and processed to variables as per their definitions and stored in Excel file format before importing it into panel linear regression models. Data analysis for this was is done with the aid of the e-Views software programme.

3.4 SOURCES AND COLLECTION OF DATA

The sample of 12 companies selected for the study was limited to South African public companies on the Johannesburg Stock Exchange in the construction and building materials sector. The use of listed companies is supported by prior studies such (Waweru, 2014; Dzingai & Fakoya, 2017; Muchemwa *et al.*, 2016). The convenience sampling techniques was applied in the selection of companies as applied by prior authors (Meyer & De Wet, 2013; Purag *et al.*, 2016) depending on the accessibility of the data variables for the period of six years from 2011 to 2016. This period is between the publishing of the third King and the fourth King Codes of Corporate Governance in South Africa. However, for the purposes of this study the companies selected must meet two criteria - being listed on the JSE and being in the construction and building materials sector.

The identification of the relevant variables is part of the data collection process. While some of the variables like ROA and ROE were somewhat simple to measure, others such as corporate governance measures were more challenging to expound and measure. However, the study utilised the principles of King III to define corporate governance measures as the period of study falls in the King III setting.

3.4.1 Independent variables: Corporate governance board characteristics

The basis for the selection of the independent variables was informed by the existing literature and was therefore based on the selected five board characteristics according to King III, the JSE listing requirements and the Company's Act of 2008.

Board independence

Board independence was practically measured by considering independent directors as a percentage of the total number of directors. This information is in the integrated reports provided by the relevant database, such as the respective company websites or Bloomberg. This information was hand-collected from each company's respective audited published integrated report.

This measurement is consistent with Liao *et al*. (2015) who defined board independence as the degree of outside representation of directors on the board who are not company executives. Liao *et al*. (2015) explain that boards with greater representation from outsiders are highly probable to safeguard shareholders' interests and be independent. Padachi (2018) holds a similar view that strong board independence expedites objective, partial and constructive conclusions to the boardroom to ensure all stakeholder needs are met. King III principle 2.18 recommends that "the board should comprise a balance of power; with a majority of non-executive directors and that the majority of non-executive directors should be independent" (King Report III, 2009:25). This variable is consistent with existing literature

(Al-Manaseer *et al.*, 2012; Adekunle & Aghedo, 2014; Chen *et al.*, 2015; Muniandy & Hillier, 2015; Zakaria *et al.*, 2014; Abdullah, 2016; Purag *et al.*, 2016; Dzingai & Fakoya, 2017).

Board size

The actual total sum of directors sitting on the board describes board size. The size of the board may influence agency costs, especially in companies with large boards, which may in turn affect company performance (Su & Sauerwald, 2018). King III does not prescribe to a precise figure concerning the size of the board nevertheless recommends all boards ought to ponder whether its size, diversity and demographics make it effective. The variable is consistent with earlier literature (Zakaria *et al.*, 2014; Johl *et al.*, 2015; Abdullah, 2016; Mandal & Al-ahdal, 2018; Su & Sauerwald, 2018; Paniagua *et al.*, 2018).

CEO tenure

CEO tenure refers to the “number of years the CEO is in position”, as stated by Conte. (2018:56). The third King report did not provide specific tenure for CEOs; however, it recommended that the board ensure succession procedures of senior executives including the CEO. The following prior studies are consistent with the use of this variable (Cornelli *et al.*, 2013; Falato *et al.*, 2014; Cornelli & Karakas, 2015; Fadun, 2017; Ahmadi *et al.*, 2018).

CEO-Chairman duality

CEO duality is a situation where the CEO of a company and chairman of the board responsibilities are simultaneously assigned to single individual. Splitting up the duties of CEO and chairman is a way of separating management and control. King III principle 2.15 recommends that “the board should elect a chairman who is an independent non-executive director. It also stipulates that the CEO of the company should not fulfil the role of chairman of the board” (King Report III, 2009:24). The use of this variable is consistent with earlier studies (Abdullah, 2016; Detthamrong *et al.*, 2017). The dummy variable was equal to 0 if the two functions were separated or 1 if the functions were held by one individual.

CEO remuneration

CEO remuneration includes guaranteed salary income and benefits received as a result of service to the company during the period under study. However, it does exclude performance-based remuneration. The King III report principle 2.25 identified “remuneration systems as a governance point requiring greater transparency and alignment to the long-term strategies of companies” (King Report III, 2009:30). The use of this variable is consistent with Schymik (2018), Bussin and Nel (2015), Ndayisaba and Ahmed (2015) and

Ismail *et al.* (2014). Liao *et al.* (2015:173) argue that while incentive remuneration is perceived to assist in matching CEOs' interest with the stockholders, "it is also believed to lead to so much power that CEOs are able to use the company to further their own interests rather than the interests of stockholders".

3.4.2 Dependent variable: Company performance

The third King Report clearly states that "without reasonable profit levels, it is doubtful that stakeholders would have an enduring interest in a company" (Mans-Kemp & Viviers, 2014:25).

Accounting-based performance measures

Annual reports contain the financial information from which accounting-based performance measures are collected. These focus on company profitability, reflecting the history of the company's performance. These measures were extensively adopted in earlier studies including those on the association of corporate governance and financial performance (Mans-Kemp & Viviers, 2015; Smit, 2015; Arora & Sharma, 2016; Muravyev *et al.*, 2016; Fadun, 2017; Ahmadi *et al.*, 2018).

The measures of company financial performance selected are essential to best reflect boards' effectiveness in achieving company objectives. The below is an outline of profitability ratios selected as the performance measures for this study.

Net profit margin (NPM)

NPM is a measure of net profit for the year, divided by total revenue for the year. The variable was used in earlier studies by Halimatusadiah *et al.* (2015) and Mans-Kemp and Viviers (2015).

Return on equity (ROE)

ROE is a measure of net profit for the year divided by shareholder equity for the year. This variable was also used by Halimatusadiah *et al.* (2015); Mans-Kemp & Viviers, 2015; Arora & Sharma, 2016; Muravyev *et al.*, 2016; Fadun, 2017).

Return on assets (ROA)

ROA describes how efficiently the company's total resources are being used to generate profit and reduce costs in support of shareholders' interest. ROA is calculated as a proportion of operating profit to total assets by Arora and Sharma (2016). The variable wss used as a performance measure in prior literature (Halimatusadiah *et al.*, 2015; Mans-Kemp & Viviers, 2015; Pamburai *et al.*, 2015; Purag *et al.*, 2016; Arora & Sharma, 2016; Fadun, 2017 and Mandal & Al-ahdal, 2018).

3.4.3 Control variables

Control variables serve “to reduce potential bias of omitted variables” (Tshipa, 2017:126). Company performance is determined numerous elements other than the selected independent corporate governance measures. Abid *et al.* (2018) identified resource management, decision-making and resources as effective polices and key contributing factors to company performance. The interaction between these various factors determines the survival or downfall of companies. The company size and leverage has been adopted as the control determinants of financial performance in this research study.

Size of the company (Size)

The effects of different size variations on performance variables were controlled by including the size variable in the model. Company size is described as the natural log of the total assets (Al-Manaseer *et al.*, 2012; Mandal & Al-ahdal, 2018). This variable is log transformed to control for effects of skewedness. The use of this variable as a control variable in studies on related study topic is consistent earlier literature (Al-Manaseer *et al.*, 2012; Munisi & Randøy, 2013; Muniandy & Hillier, 2015; Pamburai *et al.*, 2015; Arora & Sharma, 2016; Su & Sauerwald, 2018; Purag *et al.*, 2016; Mandal & Al-ahdal, 2018; Mariappan & Thyagarajan, 2018).

Leverage (Debt Ratio)

In order to control for financing structure disparities among the selected companies, leverage was selected as a control variable. High leverage reduces the free cash flow of a company hence debt ratios are used as a control variable as they influence company performance. Debt ratio is a measure of leverage being used by the company and is calculated as a fraction of total debt to total assets. The use of this ratio is consistent with past studies (Munisi & Randøy, 2013; Pamburai *et al.*, 2015; Abdullah, 2016; Arora & Sharma, 2016).

3.5 TARGET POPULATION

The target population of the study is limited to South African public companies in the construction and building materials sector of the JSE during the period of 2011 to 2016. To facilitate the comparison of similar companies, companies listed within the same sector were selected, as the impact of board dynamics on company performance may differ from industry to industry (Dzingai & Fakoya, 2017). Similarly, Muniandy and Hillier (2015) concur that companies in the same industry have similar corporate governance structures. Specific exclusions were those companies which were either liquidated or suspended from the JSE. Based on these modifications, the sample size equated to 12.

Table 3-1: Summary research data

Total public companies on the JSE construction and buildings materials sector	**18**
Subtract: Companies liquidated during the period of study	1
Subtract: Companies suspended from the JSE during the period of study	2
Subtract: Companies without full data set publicly published during the period of study	3
Sample of companies with full data set	12

Source: Researcher's own construct.

3.6 SAMPLING

The sample consisted of 12 public companies on the JSE in the South African construction and building materials sector. Published annual reports for the sampled companies were available over the time period beginning on 1 January 2011 and ending on 31 December 2016. The relationship between variables over this period was studied and tracked longitudinally, from when the third King Report became effective on the first of March 2010 to the publication of forth King Report in 2016. As a result, the search only used data after 2010 and before April 2017 when King III was in effect. The unit of analysis was the application of the recommended corporate governance board of directors' characteristics on as suggested by King III. The recommendations of King III were selected as that was the governing report effective during the period of study.

3.7 PANEL REGRESSION MODEL SPECIFICATION

The ordinary least square panel regression method was used to analyse the data which was panel in nature (Waweru, 2014; Zakaria *et al.*, 2014). The ability of the panel data estimation framework to control for heterogeneity and endogeneity informed its selection for this research. In addition, panel data analysis enables a cross-sectional time series analysis which can make allowance for wider data sets. This research covered a period of 6 years with 7 independent variables and 12 companies, consisting of 72 observations. Data of 12 different companies was analysed in e-Views as per the models below. These models were consistent with the research of Afrifa and Tauringana (2015), Kara and Erdur (2015) and Dzingai and Fakoya (2017).

3.7.1 Descriptive statistics

Kumar (2011:55) defined descriptive statistics as measures “that are used to describe, characterise and summarise the gathered data”. These statistics include measures like the arithmetic mean, median, minimum, maximum, standard deviation and measures of central tendency. Descriptive statistics are useful in illustrating the nature of the data file as well as forming the foundation for other analytical techniques (Creswell & Poth, 2017).

3.7.2 Pooled model

The pooled regression model is a technique that is run in panel data that ignores the individual specific effects of the variables tested, assumes a zero mean and a constant variance. The coefficients of the pooled ordinary least square regression are fixed over time periods. Whilst Nhleko (2014) believes the observations are independent and the model is simple to apply, Permani (2009) cautions against applying the model in situations where observations are not identically dispersed. In light of the above view, the fixed and the random effects models were also considered.

3.7.3 Random effects (RE) model

The random effects model assumes there are differences between individual random observations that are selected from a given distribution (Torres-Ryna, 2013). Thus, the model allows for individual variables effects when the differences are constant over time. However, these individual effects are assumed not correlated to the independent variables. The model assume that variables varies across companies (cross- sectionally) and assumes a different intercept for every variable in the model.

3.7.4 Fixed effects (FE) model

The model is well-suited for examining the causes of changes within the companies tested when it is assumed that something within the companies might prejudice or mislead the results of the variables (Wooldridge, 2013). The model accords the overlooked effects to be randomly correlated with the independent variables in each time period (Torres-Ryna, 2013). The model also assumes that the intercept coefficients are constant and do not vary over the independent variables and considers the heterogeneity of the variables in the model.

3.7.5 Redundant fixed effects test

The test was done to determine if heterogeneity needed to be accounted for. This test also helped to choose the best model from the models selected above. The assumption was that all the companies were the same and that the pooled regression model was the appropriate model (dummies are zero). However, that assumption would be rejected if probability value of the cross-section or the period Chi-square was to be below 5%.

3.7.6 Hausman test

According to Kara and Erdur (2015:33), "the Hausman test was applied in order to determine whether the fixed effects model or random effects model is more appropriate in estimating the models established" in the research. The null hypothesis is that the random effects model is the appropriate model whilst the alternative hypothesis is that the fixed effects model is the appropriate model (Wooldridge, 2013). The null hypothesis would be rejected if probability value was below 5%, thus the fixed effects method can be applied.

3.8 DIAGNOSTIC TESTS

Kara and Erdur (2015) argued for the necessity to test the final results of the models for problems of heteroscedasticity, abnormal distribution and serial correlation. Therefore, the normality, serial correlation and Wald tests were run the on the final results of this research.

3.9 RELIABILITY OF DATA

Financial data applied in the study was extracted from the audited annual integrated reports available on individual company websites; this is similar to earlier studies like Tshipa *et al.* (2018abc). The data was reliable and was obtained from sources that were verifiable. This was to ensure the integrity of data. For purposes of this study, it can be concluded that the data was dependable and valid.

3.10 ETHICAL CONSIDERATIONS

Data for the research was recorded accurately and fully without manipulating it into a suitable trend for the research. The research results were documented honestly without any distortion or fabrication.

Full recognition was given to original authors with enough details in citation and in the reference for further reading.

3.11 DELIMITATIONS

The following demarcations have been applied in the study to meet the study objective:

- This study is focused on South African companies listed on the JSE in the construction and building materials sector only.
- During the period of study which is 2011 to 2016 only 12 companies were neither liquidated nor suspended on the JSE listing in the construction and building materials sector. This sample was sufficient to obtain results within the given period of study.

3.12 SUMMARY

To achieve research goals, the procedure of selecting the right research strategy is an important step in carrying out any research. The chapter clarified and validated the research methodology, including the scope, approach, model, method and the instrument of the research. The research followed a quantitative approach to respond to the research questions and meet the research objectives since the data was measurable.

The study used secondary data available, namely, the audited integrated reports available on the individual company websites. A sample of 12 public companies in the construction and building materials sector of the JSE was be tested for the period of 2011 to 2016.

Company performance as the dependent variable was tested against the independent variables as represented by board characteristics whilst the size and leverage of the company was applied as control variables. The pooled ordinary least squares, the random effects and the fixed effects are the panel regression models that were applied as the research model. The panel model has the advantage of controlling for individual heterogeneity.

The ethical considerations were adhered to throughout the study to facilitate accuracy and objectivity of the results. The primary target of the research findings is South Africa as the settings of the study is within the South African context. However, the findings may be used to explain corporate governance issues in similar emerging markets.

Chapter 4 Research findings and interpretation

4.1 INTRODUCTION

The chapter affords a detailed scrutiny, interpretation and explanation of the research findings by answering the research question. As concluded in Chapter 2, literature reviews disclose ambiguous evidence on the influence of board characteristics on company performance. This study identified the board characteristics that are significant in influencing performance of South African public companies in the construction and building materials sector of the JSE during the period of 2011 to 2016.

4.2 PRELIMINARY DATA ANALYSIS

Numerous tests were conducted before the regression analysis (Pamburai *et al.*, 2015; Tshipa *et al.*, 2018c).

4.2.1 Variables descriptive statistics

Descriptive statistics indicate the data distributional properties. It is important to run a descriptive statistic test on the data variables before applying any data modelling technique in order to detect any possible outliers in the data. Table 4-1 below is an illustration of the descriptive statistics for the sample of captured panel data for 12 companies for six years making 72 observations in total. In corporate governance related research, descriptive statistics have been widely used (Meyer & De Wet, 2013; Tshipa *et al.,* 2018abc; Yeung, 2018).

Table 4-1 below shows the average board size among the selected 12 companies listed in the construction and building materials sector is around 9.28 which fall within the range of ideal board size. As suggested by Yeung (2018), the impeccable size of the board should range from seven to ten members. The average board size as per this study is slightly lower than the results of Tshipa and Mokoaleli-Mokoteli (2015) of 10.28. This may be explained by different industries studied and the length of the study period. Tshipa and Mokoaleli-Mokoteli (2015) studied the top ten industries including the financial services sector on the JSE for a period of ten years from 2002 to 2011. The companies tested improved their boardroom composition during the period of study by increasing the number of board members as well board independence as per below.

During the study period, about 56% of board members were non-salaried directors with no indirect or direct interest in the company. The board independence average (56%) and maximum (90%) follows the third King report principle which recommends that "the majority of board members should be independent non-executive directors" (King Report III, 2009:25). This average board independence was anticipated, as an increasing number of listed companies are becoming acquainted with King Reports principles.

An average of 1% CEO duality from the sample is highly satisfactory and acceptable. It is an indication that companies in the sample are complying with the King recommendations on discouraging CEO duality to promote board independence. However, these results are contrary to the stewardship theory which supports dual roles of the CEO to facilitate an integrated leadership structure that functions effectively through improved coordination and clear-cut channels of command.

The length of time that the CEO was in position averaged around five years, with the lowest being one year and highest being fifteen. The third King report did not specify the length of tenure for CEOs; it only recommends that the board should ensure succession procedures of senior executives including CEO.

In terms of remuneration, the sample recorded an average of R 3.15 million, with the minimum being R479 000 and the maximum being R8.567 million.

Table 4.1 indicates average net profit margin and return on assets as 6% and 4% respectively. Notwithstanding the general increase in corporate governance compliance trends, the average return on equity was zero, indicating that on average the shareholders' wealth was not being maximised. The companies that were unable to make a profit need to familiarise the directors and executive management with King guidelines and to integrate these principles into their operations.

With respect to leverage, the sample figures varied from 0% to 128% with a mean of 56%, indicating that on average the companies were highly financed by debt. This is acceptable as the industry requires large capital outlays.

A positive trend in corporate governance compliance was observed following the introduction of listing rules, challenging public companies on the JSE to report on their corporate governance practices as per the third King report. Moreover, the directors became knowledgeable with King principles and their significance. This observation reveals encouraging prospects for financiers who contemplate corporate governance defiance in public companies in the construction and building materials sector of the JSE.

Table 4-1: Variables' descriptive statistics

Variable	Symbol	Average	Max.	Min.	Standard deviation	Skew-ness	Kurtosis	Observ-ations
Board Independence	BIND	0.56	0.90	0.20	0.17	-0.11	2.08	72
Board Size	BSIZE	9.28	15.00	5.00	2.56	0.33	2.42	72
CEO Duality	CEODUO	0.01	1.00	0.00	0.12	8.31	1.91	72
CEO Tenure	CEOTEN	5.14	15.00	1.00	3.63	0.81	2.82	72
CEO Remuneration	CEOREM	3 150.43	8 567.00	479.00	1 456.06	1.02	4.61	72
Company Size	COSIZE	8.23	10.34	5.55	1.41	-0.41	1.97	72
Company Leverage	LEV	0.57	1.28	0.00	0.25	0.51	3.93	72
Net Profit Margin	NPM	0.06	2.00	-0.41	0.30	5.15	31.56	72
Return on Assets	ROA	0.04	0.52	-0.23	0.09	1.45	14.21	72
Return on Equity	ROE	0.00	0.23	-2.43	0.33	-5.69	40.87	72

Source: Researcher's results from e-Views

4.2.2 Normality analysis

Montgomery, Jennings and Kulahci (2015:266) refer to "skewness as the degree of unevenness which can be used to explain the normality of the data set". Positive skewness is achieved when the mean is higher than the median. This indicates that the probability distribution becomes positively skewed. Brooks (2014) points that the higher the standard deviation of the variable (measured as average distance from the mean), the higher the risk of the variable. Correia, Flynn, Uliana and Wormald (2010:3-2) describe risk as "the chance that an outcome is different from the expected outcome". Table 4.1 shows positive skewness in all other variables except board independence and company size.

4.2.3 Variable inferential statistics

Table 4-2 displays the relationship matrix for the variables. Even though the table displays a number of statistically substantial relationships among the variables, collinearity problems are not imminent as the correlation coefficients are fairly trivial.

As per Table 4-2, CEO tenure indicates a moderately negative significant negative correlation with board size. In addition, company size shows moderately direct and statistically substantial correlation with the independence and size of the board. It also displays a moderately inverse and statistically substantial relationship between company size and CEO tenure. Moreover, leverage indicates weak positive and highly substantial correlation with board independence and company size. NPM reveal a weak negative but statistically significant relationship with board independence, however, it shows moderately negative but statistically substantial correlation with leverage. ROA affirms a weak negative and statistically substantial correlation with leverage and shows a weak direct and substantial relationship with NPM. ROE indicates a weak direct and statistically substantial correlation with company size and ROA while indicating a weak inverse and statistically substantial correlation with leverage.

Table 4-2: Correlation of variables

Correlation Probability	BIND	BSIZE	CEODUO	CEOTEN	COSIZE	LEV	NPM	ROA	ROE
BIND	1.000000								

BSIZE	0.176728	1.000000							
	0.1375	-----							
CEODUO	0.095430	0.033747	1.000000						
	0.4252	0.7784	-----						
CEOTEN	-0.024018	-0.448935	-0.136334	1.000000					
	0.8413	0.0001	0.2535	-----					
COSIZE	0.516141	0.571691	0.094938	-0.530416	1.000000				
	0.0000	0.0000	0.4276	0.0000	-----				
LEV	0.367506	0.173905	0.060301	-0.086520	0.326462	1.000000			
	0.0015	0.1440	0.6148	0.4699	0.0051	-----			
NPM	-0.279112	0.041573	-0.012371	-0.025573	-0.127556	-0.419704	1.000000		
	0.0176	0.7288	0.9179	0.8311	0.2856	0.0002	-----		
ROA	-0.111786	-0.009237	0.051393	-0.007154	-0.038936	-0.298396	0.393929	1.000000	
	0.3499	0.9386	0.6681	0.9524	0.7454	0.0109	0.0006	-----	
ROE	0.183730	0.152821	0.058477	0.067951	0.301341	-0.265130	0.205329	0.248354	1.000000
	0.1224	0.2000	0.6256	0.5706	0.0101	0.0244	0.0836	0.0354	-----

Source: Researcher's results from Eviews.

4.3 REGRESSION ANALYSIS

If the intercept was the same during the period of the research, the pooled regression model would be adopted. Moreover, the research executed both fixed and random effect models assuming contrasting intercepts for each company on the sample.

4.3.1 Pooled OLS

Table below presents the effects of board characteristics on the sampled companies' performance. This model may not be the best for the reason that it assumes all 12 companies in the sample are the same and denies the individuality that may exist among the 12 companies (Montgomery *et al.*, 2015). Moreover, this model assumes that the coefficients including intercepts are the same for the dataset variables.

Table 4-3: Pooled OLS - Company performance measured by ROE

Variable	C	BIND	BSIZE	CEO DUO	CEO TEN	CEO REM	COSIZE	LEV	F-stat	R-Sq
Coefficient	-1.1323	0.1080	0.0089	0.2219	0.0035	1.2223	0.1441	-0.6005	4.8266	0.3455
P-value	0.0003	0.692	0.608	0.4483	0.0046*	0.7193	0.0007*	0.0001*	0.0002*	

*Note: * indicate significance at 5% level of confidence*

Source: Researcher's results from e-Views

The F-statistics value of 4.82 with corresponding significant p value (0.0002) of less than 5% shows that altogether, the board characteristics are statistically significant in explaining variations in company performance as represented by ROE under the pooled model. The R-squared coefficient figure of 0.3455 indicates that the board characteristics variables altogether account for 34.55% variation on return on equity in the pooled model.

In addition, a significant inverse relationship exists between leverage and ROE. A direct significant relationship exists between company size and ROE. Moreover, CEO tenure has a substantial direct relationship with ROE.

However, board independence, CEO remuneration, CEO duality and board size have a coefficient with p values that are above 5%, meaning that they are all insignificant in explaining the variations in ROE under the pooled model.

Table 4-4: Pooled OLS - Company performance measured by ROA

Variable	C	BIND	BSIZE	CEO DUO	CEO TEN	CEO REM	CO SIZE	LEV	F-stat	R-Sq
Coefficient	0.072	-0.038	-0.0001	0.050	0.0004	3.73	0.004	-0.107	1.023	0.101
P-value	0.437	0.653	0.971	0.581	0.8973	0.726	0.728	0.012*	0.423	

*Note: * indicate significance at 5% level of confidence*

Source: Researcher's results from e-Views

The F-statistics value of 1.02 with corresponding significant p value (0.423) of more than 5% indicates that altogether the board characteristics are statistically significant in explaining variations in company performance as represented by ROA under the pooled model. The R-squared figure of 0.101 shows that the board characteristic variables altogether account for about 10.1% variation on return on asset in the pooled models.

A significant negative association is present between leverage and return on asset. However, board independence, board size, CEO duality, CEO tenure, company size and CEO remuneration have a coefficient with a probability figure that is above 5%, meaning that they are all insignificant in explaining the variations in return on asset under the pooled model.

Table 4-5: Pooled OLS - Company performance measured by NPM

Variable	C	BIND	BSIZE	CEO DUO	CEO TEN	CEO REM	CO SIZE	LEV	F-stat	R-Sq
Coefficient	0.262	-0.233	0.019	0.069	0.001	-1.890	0.008	-0.469	2.525	0.2164
P-value	0.376	0.391	0.274	0.0812	0.905	0.576	0.836	0.0019	0.023	

Note: * indicate significance at 5% level of confidence

Source: Researcher's results from E-Views

The table above F-statistics value of 2.52 with corresponding significant p value (0.023) of less than 5% indicates that altogether the board characteristics are statistically significant in explaining variations in company's performance as represented by NPM under the pooled model. The R-squared figure of 0.2164 shows that the board characteristics in sum account for about 21.64% variation on net profit margin in the pooled models.

Moreover, a significant negative association exists between leverage and net profit margin. However, board independence, CEO remuneration, CEO duality, CEO tenure, company size and board size have a coefficient with probability figure that are above 5% meaning that they are all insignificant in explaining the variations in net profit margin under the pooled model.

4.3.2 Fixed effects model

The model considers differences in the 12 companies tested and allows each dataset variable to have its intercept value (Montgomery *et al.*, 2015). As an alternative to the LSDV model the fixed effects model was run. This model consents for cross-sectional properties and is time invariant. This model aims to preserve the number of degrees of freedom. It was chosen because of its superior functions to the LSDV model (Brooks, 2014).

Table 4-6: Fixed Effects Model - ROE, ROA and NPM

Variable coefficients	ROE	ROA	NPM
Constant	2.7465	-0.1107	3.2196
Bind	0.2844	-0.0056	-0.5056
Bsize	-0.0207	0.0050	-0.0024
CEOduo	0.0113	0.0017	-0.0073
CEOrem	1.1423	2.442*	6.0723
CEOten	0.0562*	-0.0006	0.0521*
COsize	-0.3307*	0.0234	-0.267*
Leverage	-0.5479	-0.2813*	-0.126*
R-squared	0.5514	0.4563	0.5754
F-statistics	2.5656	1.7516	2.828
P-value of F statistics	0.0029*	0.0499*	0.0011*
Note: * indicate significance at 5% level of confidence			

Source: Researcher's results from E-Views

The F-statistic values of 2.57, 1.75 and 2.83 for ROE, ROA NPM respectively with a p-value of less than 5% indicate that the board characteristic variables in sum are substantial in clarifying changes in the company performance variables.

Adjusted R-Squared of 55%, 46% and 58% for ROE, ROA and NPM respectively describe the percentage changes in company performance that are brought about by the application of corporate governance principles as represented by the board characteristics tested.

CEO tenure and company size have a coefficient with p values that are less than 5%, meaning that they are all significant in explaining the variations in ROE under the fixed effects model. CEO remuneration and leverage have a coefficient with p values that are less than 5%, meaning that they are all significant in explaining the variations in ROA under the fixed effects model. CEO tenure, leverage and company size have a coefficient with p values that are less than 5%, meaning that they are all significant in explaining the variations in NPM under this model.

4.3.3 Redundant fixed effects test

To determine whether the individuality of the 12 companies tested needed to be accounted for, the redundant fixed effects test was performed, facilitating the choice for the finest model between the pooled regression model and the fixed effects model (Brooks, 2014). The null hypothesis was that all the companies were the same and that the pooled regression model was the appropriate model. An alternative hypothesis was that the companies are different, and the fixed effects model was the appropriate model. The null hypothesis is rejected if the probability value of the cross section or the period Chi-square is below 5%.

- ROE: Chi-square was 3.93% which is below 5% and considered significant.
- ROA: Chi-square was 0.27% which is below 5% and considered significant.
- NPM: Chi-square was 0.02% which is below 5% and considered significant.

For all performance measures, the null hypothesis was therefore rejected, meaning that heterogeneity in the 12 companies needed to be accounted for over time. That indicates that variations in the board characteristics and performance exist among the 12 companies over time hence the fixed effects model was chosen over the pooled model.

4.3.4 Random effects model

Table 4-7: Random Effects Model - ROE, ROA and NPM

Variable coefficients	ROE	ROA	NPM
Constant	-1.1395*	0.0726	0.1624
Bind	0.0763	-0.0385	-0.0233
Bsize	0.0092	-0.0001	0.0192
CEOduo	0.1851	0.0506	0.0069
CEOrem	-0.5601	0.7302	-1.8900
CEO Tenure	0.0383*	0.0004	0.0014
COsize	0.1413*	0.0044	0.0083
Leverage	-0.5829*	-0.1077*	-0.4696*
R-square	0.3032	0.1006	0.2164
F-statistics	3.9795	1.023	2.5259
P-value of F statistics	0.0011*	0.4234	0.0233*
Note: * indicate significance at 5% level of confidence			

Source: Researcher's results from e-Views

The F-statistic values of 3.97 and 2.52 for ROE and NPM respectively with p-value of less than 5% indicating that board characteristics are jointly statistically substantial in explaining changes in the company performance variables under the random effects model. Therefore, adjusted R-Squared of 30% and 22% for ROE and NPM respectively describes the percentage changes in company performance that are brought about by the application of corporate governance principles as represented by the board characteristics tested.

However, the ROA F-statistic had a p-value bigger than 5%, signifying that that the board characteristic variables were jointly statistically insignificant in explaining changes ROA under the random effects model. Only CEO tenure, leverage and company size had a coefficient with p values that were less than 5%, meaning that they were all significant in explaining the variations in ROE under the random effects model. Only leverage had a coefficient with p values that were less than 5%, meaning that they were all significant in explaining the variations in NPM under this model.

4.3.5 Hausman test

The Hausman test was conducted to select the most suitable model between the fixed and random effects models. The random effects model was preferred as per the null hypothesis whilst the alternative hypothesis was that the fixed effects model would be more suitable.

- ROE: Chi-square was 16.15% which is greater than 5% and considered insignificant. Therefore, the null hypothesis was not rejected hence the random effects model was deemed suitable.
- ROA: Chi-square was 2.44% which is below 5% and considered significant.
- NPM: Chi-square was 0% which is below 5% and considered significant.
- However, for ROA and NPM, the null hypothesis was rejected hence the fixed effects model was deemed appropriate.

Two out of the three dependent variables had a significant chi-squared p-value; therefore, the null hypothesis was rejected, as was the random effects model. The fixed effects model was therefore chosen as the final model.

4.3.6 Final model (fixed effects model)

The Hausman test concluded that the fixed effects model was the most suitable. The final model included only the significant variables, namely, CEO tenure, company size, CEO remuneration and leverage.

Table 4-8: Final fixed effects model

Variable coefficients	ROE	ROA	NPM
Constant	2.3260	-0.0545	3.561091
CEOREM	0.1200	0.5205*	-0.4005
CEOTEN	0.0610*	-0.0011	0.0472*
COSIZE	-0.2753	0.0202	-0.3478*
Leverage	-0.6782*	-0.2555*	-0.2363*
R-square	0.5440	0.4535	0.5634
F-statistics	3.0427	2.1166	3.2911
P-value of F statistics	0.0007*	0.0161*	0.0003*
Note: * indicate significance at 5% level of confidence			

Source: Self-constructed from e-Views

The F-statistic values of 3.04, 2.12 and 3.29 for ROE, ROA NPM respectively, with a p-value of less than 5%, indicating that the board characteristics were jointly statistically substantial in explaining changes in the company performance variables in this fixed effect final model.

The adjusted R-Squared of 55%, 45% and 56% for ROE, ROA and NPM respectively describe the percentage changes in company performance that were brought about by application of corporate governance principles as represented by the board characteristics tested. These R-Squared values were less than the Durbin-Watson statistics for all performance measures, indicating that the fixed effects model was the best final model.

CEO tenure and leverage had a coefficient with p values that were less than 5%, meaning that they were all significant in explaining the variations in ROE under the fixed effects final model. Holding all other variables constant, a one-unit change in CEO tenure and leverage would cause a 6.10% increase in ROE and a 67.8% decrease in ROE. This means an increase in leverage would significantly reduce the return to shareholders. Moreover, an increase in CEO tenure with the company would slightly increase the return to shareholders.

CEO remuneration and leverage had a coefficient with p values that were less than 5%, meaning that they were all significant in explaining the variations in ROA under the fixed effects final model. Holding other variables constant, a one-unit change in CEO remuneration and leverage would cause a 52% increase in ROA and a 26% decrease in ROA. This means an increase in leverage would considerably reduce the return on assets. Moreover, an increase in CEO guaranteed remuneration would increase the return on assets.

CEO tenure, leverage and company size had a coefficient with p values that were less than 5%, meaning that they were all significant in explaining the variations in NPM under the fixed effects final model. Holding all other variables constant, a one-unit change in CEO tenure, company size and leverage would cause a 4.72% increase in NPM and a 34.7% and 23.6% decrease in NPM. This means an increase in leverage would significantly reduce the net profit margin. Moreover, an increase in CEO tenure with the company and an increase in the size of the company would increase net profit margin.

4.3.7 Post-estimation diagnostic tests

After the panel regression analysis was conducted, several checks were performed to confirm the validity of the findings. The probability value of the Jarque-Bera was 10% which is above 5% and considered insignificant. The null hypothesis was not rejected, thereby indicating that residuals of the random effects model were normally distributed. The random effects model also did not have serial correlation, since the Breush-Pagan LM Statistic probability value was 11% which is above 5% and considered insignificant, therefore the null hypothesis was not rejected.

4.4 CONCLUSION

The objective of this study was to examine, through empirical evidence, the influence of the board of directors' characteristics on performance of public companies lon the JSE in the construction and building materials sector for the period of 2011 to 2016.

The research indicates no significant relationship between board independence, board size and CEO duality whilst a direct significant relationship between CEO tenure and CEO remuneration and company performance. The research also found a statistically significant inverse relationship between leverage and company size and company performance.

Chapter 5 Summary, conclusion and recommendations

5.1 INTRODUCTION

In South Africa, corporate governance came to prominence following the promulgation of the King I report in 1994 (Smit, 2015). Since then, the boards and managers of South African public companies have been following the guidelines as recommended by the successive King reports to improve their companies by abiding to corporate governance principles (Tshipa *et al.*, 2017). The level of corporate governance awareness and practise in South Africa by public companies has considerably improved.

However, the King recommendations have been criticised for promoting a "tick-box compliance mentality" (Mans-Kemp & Viviers, 2015:275). Moreover, compliance was time-consuming and costly to introduce and implement, which in turn could impact on investors' opinions of corporate governance as they may view it as a superfluous overhead that hinders the company's capacity to pursue lucrative prospects that increase investors' returns.

Whilst some investors are mainly worried about whether or not they will achieve a return on their investment, others consider investment prospects by taking into account non-financial factors like compliance with corporate governance. Investors who look at corporate governance compliance are presumably concerned with 'doing well by doing good' and not merely potential risk and return of an investment (Mans-Kemp & Viviers, 2015). Investors with a similar view have the prospect of paying more for investments in well-governed organisations as they expect a bigger return. Thus, the question remains whether investors could be compensated for investing in companies that are highly governed after considering risk and return into account.

The effect of governance compliance and in particular, board characteristics, on company performance has remained mixed and inconclusive as per previous literature (refer to section 2.8). Therefore, the question is whether corporate governance compliance, and particularly board characteristics, is related to the financial performance of South African public companies in the construction and building materials sector of the JSE during the period 2011 to 2016.

This research is an examination of the relationship between corporate governance board characteristics (as represented by independence and size of the board, CEO duality, CEO tenure and CEO remuneration) and company performance (as represented by ROA, ROE and Net Profit Margin) of JSE listed companies in the construction and building materials sector for the period of 2011 to 2016. Corporate governance principles espoused by the third King Report were applied to explore the association of board characteristics and performance as the timeframe of the study coincided with the period when King III was in force. This section summarises the findings, makes recommendations for future studies and outlines the study limitations. The contribution of the study is then highlighted, followed by the conclusion.

5.2 RESEARCH OVERVIEW

The research aimed to explore the relationship between board characteristics and performance. Public companies on the JSE's construction and building materials sector were sampled for this study. A panel regression instrument was used for the analysis as it was deemed best suited for time series data that is cross-sectional. The fixed effects model was selected as the final model from three potential models which included the pooled OLS model and the random effects model. To ensure validity and accuracy of the final model section, the redundancy and the hausman tests were conducted to select the final model.

5.3 DISCUSSION AND INTERPRETATION OF RESULTS

This section summarises the empirical findings presented in Chapter 4 insofar as they address the research question. The findings are then discussed in relation to corporate governance theories and previous literature identified in the study.

5.3.1 Board independence and financial performance

No relationship exists between board independence and company performance as represented by ROE, ROA and NPM during the period of 2011 to 2016 for the South African public companies on the construction and building materials sector of the JSE. This finding is similar to those of studies by Zakaria *et al.* (2014), Johl *et al.* (2015), Smit (2015), Abdullah, (2016), Muchemwa *et al.* (2016) and Detthamrong *et al.* (2017). According to Muchemwa *et al.* (2016), a greater ratio of independent, non-salaried directors is considered by the agency theory to reduce agency costs. This would be achieved by board independence acting as a tool "to monitor management on behalf of shareholders", which could enhance company performance (Nuhu & Hussani, 2017:164). On the contrary, however, the findings of this research do not support this view.

Similarly, the resource dependence theory views a greater ratio of independent, non-salaried directors as a source of resources that contributes to improved company performance. However, the findings of this research do not lend credence to this view (Ntim, 2013).

Other possible reasons for the evidence found in this research may exist. It is probable that certain constrictions may be present, limiting the enhancement of company performance. According to Bhagat and Bolton (2008), directors disclosed as independent in the integrated reports may perhaps not be fully independent of the company and its executives. In a similar view, Muchemwa *et al.* (2016) note that these directors may be independent in appearance but may not be well acquainted with company activities or they may be incompetent. It is also possible that are overly deferring to the CEO and senior executives, which may compromise their independence in 'view'.

Bhagat and Bolton (2008) further point out that although a large ratio of non-salaried directors is independent, they are likely to be well-known, high-profile figures and as such, they would hold directorships of a number of companies. Thus, 'spreading themselves too thin' could render these directors ineffective in enhancing company performance.

Muchemwa *et al.* (2016) point to improper director rotation procedures as another possible reason for the results found in this research. According to King Report III (2009) "at least a third of the non-executive directors should be rotated each year". The independent directors may be ineffective if rotation is not done adequately and effectively so that certain talents, skills, knowledge and experience are not adequately retained in the company to enhance company performance. In this regard, Bhagat and Bolton (2008) suggest that entrenched independent directors who have worked for the company for a lengthy tenure are likely to be become lax in their monitoring function, which makes their contribution to company performance less effective.

Muchemwa *et al.* (2016) also contend that when hiring independent, non-salaried directors it is necessary to contemplate if the knowledge and experience they hold matches company needs and how the benefits that they may bring can be harnessed to increase company performance, as hypothesised in the resource dependency view.

This research is restricted to the net effects of the relationship between board independence – in terms of actual numbers – and company performance. Based on the evidence found, additional research exploring the strength of causal effects beyond the net effects is recommended.

5.3.2 Board size and company performance

The results show no evidence of a significant relationship between the size of the board and company performance. These results concur with those of Van Ness *et al.* (2010), Wintoki *et al.* (2012) and Detthamrong *et al.* (2017) who hold the view that the size of the board has no relationship with company performance.

The resource dependency theory posits a direct relationship between the size of the board and financial performance, proposing that large and diversified boards may provide the necessary external resources needed for company sustainability and performance (Meyer & De Wet, 2013). However, the findings of this research do not support this view.

Stakeholder theory supports bigger board sizes insofar as this factor drives company value creation and enhanced performance through the diversity that comes with larger board sizes (Meyer & De Wet, 2013). Thus, stakeholder theory hypothesises a positive relation between board size and company performance. In contrast, however, the findings of this research do not support the view.

The agency theory views large boards as increasing agency costs, which affects company performance. In this view a negative relationship is hypothesised (Meyer & De Wet, 2013). However, the findings of this research do not support this view either.

There are possible explanations for these results as per the resource dependency theory and agency theory. Larger boards are prone to divisions and alliances which may lead to conflict, poor communication, poor coordination and an ineffective supervisory function which may result in delay and indecision in emergency situations. Coalition problems can lead to CEOs free-riding and dominating the board (Muchemwa *et al.*, 2016). It may also create diverse interests among the board which may not coincide with stakeholders' interests, thereby making the board ineffective in enhancing company performance.

5.3.3 CEO duality and financial performance

The study findings reveal that CEO duality is not significantly related to company performance as represented by ROE, ROA and NPM. These results are in line with view held by Abbasi *et al.* (2012), Adekunle and Aghedo (2014), Arora and Sharma (2016), Detthamrong *et al.* (2017) and Ayari and Regaieg (2018) who purport that CEO duality has no effect on company performance..

The results of this study are contrary to the agency view which hypothesises a negative relationship between CEO duality and company performance. According to agency theory, CEO duality weakens the independence of the governing body and may lead to a lack of effective oversight. It may also result in the abuse of power when the CEO and the chairman of the board is one individual.

The study results are also contrary to the stewardship theory which supports that responsibilities of CEO and chairman of the board be occupied by a sole individual. The advocates of the stewardship theory argue that “it facilitates monitoring and implementing control throughout the company by increasing the speed of decision-making and impacts positively on a company’s overall performance” (Nath *et al.*, 2015:108).

In the sample of companies tested in this research, there was only one occasion where the responsibilities of the chairman and CEO were occupied by single individual; this finding is therefore not conclusive.

5.3.4 CEO tenure and financial performance

This study provides evidence of a direct significant relationship between CEO tenure and company performance as represented by ROE and NPM. These results agree with research findings by Dikolli *et al.* (2014) and Cornelli and Karakas (2015) who maintain that CEO tenure has a direct significant effect on the performance of the company.

This finding is contrary to the agency theory view that hypothesised a statistically significant inverse relationship between CEO tenure and company performance. According to agency theory, CEOs engaged by the company for a lengthy period tend to adopt a more conventional attitude to risk tolerance so as to diminish overexposure to company-specific risk. This is in juxtaposition to their shareholder counterparts who are more concerned with maintaining their status quo. Affording CEOs longer tenure gives them substantial freedom to entrench their positions and enhances CEO power within the company, consequently leading to pursuit of personal interests that may not necessarily be aligned with those of stakeholders (Su & Sauerwald, 2018). Moreover, long tenured CEOs may also affect board independence (Conte, 2018).

5.3.5 CEO remuneration and financial performance

This study provides evidence of a direct substantial relationship between CEO guaranteed remuneration and performance as represented by ROA. These observations are consistent with research by Ismail *et al.* (2014) in Malaysia and Ndayisaba and Ahmed (2015) in Australia, who propose that CEO remuneration has a direct significant relationship with the performance of the company.

These results are not, however, consistent with a similar study conducted by Bussin and Nel (2015) who investigated South African companies in consumer goods sector. They found a significant inverse relationship between ROE and CEO remuneration. According the agency view, the findings of Bussin and Nel (2015) may be attributed to managerial power and the incapability of remuneration committees to direct an effective remuneration policy that will attract, retain and inspire CEOs. The agency theory hypothesised an inverse relationship between CEO remuneration and company performance. According to this view, CEOs are more likely to prioritise their own remuneration and benefits, even if this is at the expense of the company in the long run (Meyer & De Wet, 2013; Pamburai *et al.*, 2015). This leads to information asymmetry and conflict of interest, thereby creating agency problems.

5.3.6 Leverage and financial performance

This study observed a significant inverse relationship between leverage and performance as represented by ROE, ROA and NPM. Similar results were found by Pamburai *et al.* (2015).

This indicates that growth in debt will result in a significant reduction in company performance. This may be explained by the high interest rates prevalent in South Africa. The construction and building materials industry is capital-intensive and the sample companies were highly indebted, therefore creating inflexibility in obtaining funding for future operations with the possibility of improving performance in addition to the prospect of insolvency costs and loss of control by shareholders as debt suppliers may impose restrictive covenants.

5.3.7 Company size and financial performance

The study observed an inverse significant relationship between the size of the company and performance as represented by NPM. This finding suggests that smaller companies are performing well than their bigger counterparts.

This study finding is contrary to evidence by Pamburai *et al.* (2015) in South Africa, who found a positive and substantial effect of company size on company performance. The findings of this study supports the argument that larger companies may be prone to inefficiencies such as poor communication, delayed decision-making and internal conflict which may result in poor performance.

5.4 CONTRIBUTION OF THE STUDY

This study provides greater insight on how the structure of boards can improve company performance through the practice of good corporate governance.

Specifically, this study:

- Provides valuable information to South African companies listed in the construction and building materials sector to identify those board characteristics which have an impact on company performance. This will afford an opportunity for the King Committee to introduce corporate governance reforms that aim to fill the gaps identified in the study to improve company performance.
- Supports the King Committee in improving corporate governance principles to eliminate corporate scandals that are crippling economies globally. This is because these corporate failures have been attributed to ineffective corporate governance structures.
- Reveals the unique characteristics applied by South African companies in their governing body structures and the standards they hold which, has the potential to improve company performance and attract foreign investors.
- Adds to a pool of existing literature on the subject. This study is expected to assist academics with additional insights and recommendations for further research on the subject or other related topics.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

In existing literature, most studies investigated the influence of corporate governance on company performance, in developed markets. Within South African context, there is only limited research on this topic and the results of these studies are contradictory. This justifies further research such as:

- Qualitative research on intangible characteristics surrounding board structures, as recommended by the King Reports.
- Quantitative research among young, growing companies on the stock market and their governance structure to see whether they differ from older listed companies.
- A similar study on companies which have not yet been listed on the JSE.
- A similar study across other sectors of the JSE and for a longer period so as to ascertain if the effect of board characteristics on company performance can be applied to all sectors of the JSE.
- Quantitative research profiling the South African construction industry – through surveys to examine the industry board characteristics and determine whether or not they meet the principles of the fourth King report.

The conclusions from outside South Africa may not be comparable to this research and other local findings due to differing socio-political and economic circumstances. Nonetheless, the findings of this study are still important.

5.6 FINAL REMARKS

Conclusions from literature review indicates an increase in the evidence suggesting a significant relationship between the companies' practice of good governance and their performance. However, there are still reservations as to whether this relationship is due to other elements and simply reveals that better countries and better companies have healthier performance and improved corporate governance practices. The South African background is different from that of other countries. Therefore, additional evidence indicating the proficiency of well-managed governance structures in improving company performance is vital.

Companies in South Africa are nonetheless encouraged to abide by the recommendations of the King IV Report on board structures even though this does not always transform into financial benefits but meets the social and community needs of various stakeholders for economic growth. Compliance with governance principles is based on the argument that the South African construction and building materials sector is critical for the nation's economic growth. Thus, such compliance with corporate governance principles will yield rewards for the whole economy.

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