

**Relationship between Black Economic Empowerment (BEE) scores,
revenue growth and profitability in JSE-listed companies**

by

MOSHUPI VINCENT MOKGOBINYANE

submitted in accordance with the requirements
for the degree of

MASTER OF PHILOSOPHY IN ACCOUNTING SCIENCES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR A A VAN ROOYEN

CO-SUPERVISOR: PROF H C WINGARD

JULY 2017

DECLARATION

Student number: 34786899

I, the undersigned, declare that this dissertation, **Relationship between Black Economic Empowerment (BEE) scores, revenue growth and profitability in JSE-listed companies**, is my own work, and that all the sources I have used or cited have been indicated and acknowledged by means of complete references.



.....

Signature

05 July 2017

.....

Date

ACKNOWLEDGEMENTS

I would like to thank the following people:

- my supervisor, Dr Annelien van Rooyen, for her patience, support, motivation and not forgetting all the smiley faces. Thank you for not giving up on me;
- my co-supervisor, Prof. Christa Wingard, for believing in me and encouraging me throughout;
- Dr Marthi Pohl, for her expert advice on statistics and Ms Meisie Bembe, for the administrative support;
- Ms Mante Rantlha, our librarian, for her support, training, and encouragement; and
- my family for their understanding and for always loving me.

ABSTRACT

Government introduced the Broad-based Black Economic Empowerment Act, No. 53 of 2003 and the Broad-based Black Economic Empowerment Codes of Good Practice ('the Codes') in 2007 to address the economic inequalities in South Africa by incentivising companies to include black people in economic activities. These incentives relate to implementation of preferential procurement, which is meant to favour companies that are BEE-compliant.

Based on the literature and government's intention with BEE policies, an assumption developed that companies with greater BEE compliance, which is measured through a BEE scorecard as per the Codes, would perform better in terms of market share through their revenue and in terms of profits. The main objective of this study was to carry out an in-depth analysis of the relationship between BEE scores and revenue growth and profitability of JSE-listed companies. This was done to determine whether the efforts by government of incentivising companies to be more BEE compliant are effective.

This study was conducted as a two-part model consisting of regression analysis and *t*-test to determine whether there is a relationship between BEE scores and revenue and profitability. The regression analysis focused on the top 100 most black-empowered companies. The *t*-test was a comparison of two data sets, which consisted of companies in the top 100 most black-empowered companies and those that do not fall among the top 100 most black-empowered companies.

The results showed that, at the time of this research, there were no significant relationships between BEE scores and revenue and profitability. The analysis of the research findings collectively demonstrated that for both the tests (regression and *t*-test), the relationship between revenue and profitability could not be established. Hence, the results postulate that BEE compliance does not produce the desired results for the companies, which can be translated into better profitability and market share.

LIST OF ABBREVIATIONS

ANC	-	African National Congress
ANOVA	-	analysis of variance
B-BBEE	-	broad-based black economic empowerment
BEE	-	black economic empowerment
BMF	-	Black Management Forum
dti	-	Department of Trade and Industry
IAS	-	International Accounting Standards
IASB	-	International Accounting Standards Board
ICT	-	information and communication technology
IFRS	-	International Financial Reporting Standards
IoDSA	-	Institute of Directors in Southern Africa
IRBA	-	Independent Regulatory Board for Auditors
JSE	-	Johannesburg Stock Exchange
MDP	-	Management Development Programme
RDP	-	Reconstruction and Development Programme
ROA	-	return on assets
ROE	-	return on equity
SAICA	-	South African Institute of Chartered Accountants
SANAS	-	South African National Accreditation System
SD	-	standard deviation
SPSS	-	Statistical package for the Social Sciences
Stats SA	-	Statistics South Africa
The Codes	-	Codes of Good Practice
Unisa	-	University of South Africa

Keywords: black economic empowerment (BEE), broad-based black economic empowerment (B-BBEE), net profit margin, return on equity (ROE), profitability, market share, revenue, BEE scorecard, Codes of Good Practice, government, BEE compliance, legislation, policies, BEE strategy, transformation.

TABLE OF CONTENTS

Declaration.....	i
Acknowledgements.....	ii
Abstract.....	iii
List of abbreviations.....	iv
Table of contents.....	v
List of tables.....	viii
List of figures.....	ix
CHAPTER 1	1
INTRODUCTION	1
1.1 BACKGROUND.....	1
1.2 BEE STATUS QUO IN JOHANNESBURG STOCK EXCHANGE	2
1.3 PROGRESS MADE SINCE 1994	3
1.4 BEE LEGISLATION AND POLICY	5
1.5 PROBLEM STATEMENT	6
1.6 OBJECTIVE OF THIS STUDY	7
1.7 SIGNIFICANCE OF THIS STUDY.....	9
1.8 METHODOLOGY	9
1.9 LIMITATION OF THIS STUDY	11
1.9.1 Legislation changes.....	11
1.9.2 Limited data published by Empowerdex.....	12
1.9.3 Short-term effect of BEE scores	12
1.9.4 Use of secondary data.....	12
1.10 EXPLANATION OF KEY TERMS.....	13
1.11 CHAPTER LAYOUT	13
CHAPTER 2	15
LITERATURE REVIEW	15
2.1 INTRODUCTION.....	15
2.2 HISTORY AND EVOLUTION OF BLACK ECONOMIC EMPOWERMENT (BEE).....	15
2.3 DEFINITION OF BEE	20
2.3.1 BEE Commission’s definition of BEE.....	20
2.3.2 Strategy for broad-based BEE definition	21
2.3.3 The Broad-based Black Economic Empowerment (B-BBEE) Act definition of BEE	22
2.4 OBJECTIVES OF BEE	22
2.5 THE CODES OF GOOD PRACTICE.....	24
2.6 CHALLENGES WITH BEE	31
2.6.1 Black elite	31
2.6.2 Tenderpreneurs.....	33
2.6.3 BEE deals finance	33
2.6.4 Business unity	34
2.6.5 Unemployment and poverty remain.....	34
2.6.6 Legal enforceability.....	34
2.6.7 Lack of support by stakeholders.....	35
2.6.8 Selling out equity	35

2.7	CHANGES TO LEGISLATION AND CODES OF GOOD PRACTICE	36
2.8	PREVIOUS CONTRIBUTIONS	38
2.9	OVERVIEW OF BEE IN PRACTICE	40
2.10	SUMMARY AND CONCLUSION.....	43
CHAPTER 3	44
	RESEARCH DESIGN AND METHOD.....	44
3.1	INTRODUCTION	44
3.2	HYPOTHESES.....	44
3.3	METHODOLOGY	45
3.3.1	Regression analysis	46
3.3.2	t-test	47
3.4	VARIABLES	48
3.4.1	Revenue.....	48
3.4.2	Profitability measures: Net profit margin and return on equity	49
3.5	CONTROL VARIABLES.....	50
3.5.1	Size	50
3.5.2	Leverage	50
3.5.3	Liquidity	50
3.5.4	Industry type.....	51
3.6	DATA.....	51
3.7	SAMPLING.....	53
3.8	DATA ANALYSIS	54
3.9	RELIABILITY AND VALIDITY.....	55
3.10	ETHICAL CONSIDERATIONS	55
3.11	CONCLUSION	56
CHAPTER 4	57
	ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS.....	57
4.1	INTRODUCTION	57
4.2	DESCRIPTIVE STATISTICS.....	58
4.3	CORRELATIONS	60
4.4	PART 1: REGRESSION ANALYSIS.....	61
4.4.1	Regression results for 2013.....	64
4.4.2	Regression results for 2010.....	68
4.4.3	Regression results for 2007.....	72
4.5	PART 2: T-TEST – COMPARISON OF TWO GROUPS	75
4.5.1	T-test results for 2007.....	78
4.5.2	T-test results for 2010.....	80
4.5.3	T-test results for 2013.....	81
4.6	SUMMARY AND CONCLUSION.....	82
CHAPTER 5	84
	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	84
5.1	INTRODUCTION	84
5.2	OVERVIEW OF THIS STUDY.....	84
5.3	INDUCTIVE ANALYSIS CONCLUSION.....	85
5.4	DEDUCTIVE ANALYSIS CONCLUSION	88
5.4.1	Regression analysis of top 100 most empowered black-owned companies	88
5.4.2	Comparison of two data sets	89

5.5	RESULTS IN THE LIGHT OF THE OBJECTIVES OF B-BBEE ACT, NO. 53 OF 2003	89
5.6	CONCLUSION	91
5.7	RECOMMENDATIONS FOR STAKEHOLDERS.....	92
5.8	OPPORTUNITIES FOR FUTURE STUDIES.....	94
	REFERENCE LIST	96
	ANNEXTURE A.....	103
	LIST OF COMPANIES USED IN THE STUDY	103

LIST OF TABLES

Table 2.1:	Definitions of BEE elements	28
Table 2.2:	BEE scorecard	29
Table 2.3:	B-BBEE procurement recognition levels.....	30
Table 2.4:	B-BBEE status comparison	37
Table 2.5:	Classification of enterprises.....	38
Table 4.1:	Summary of the descriptive statistics for 2013	59
Table 4.2:	Summary of the descriptive statistics for 2010	59
Table 4.3:	Summary of the descriptive statistics for 2007	60
Table 4.4:	Correlation matrix for 2007, 2010, and 2013	61
Table 4.5:	Regression results for 2013 with revenue growth as dependent variable.....	66
Table 4.6:	Regression results for 2013 with net profit margin as dependent variable.....	67
Table 4.7:	Regression results for 2013 with ROE as dependent variable	68
Table 4.8:	Regression results for 2010 with revenue growth as dependent variable.....	70
Table 4.9:	Regression results for 2010 with net profit margin as dependent variable.....	71
Table 4.10:	Regression results for 2010 with ROE as dependent variable	72
Table 4.11:	Regression results for 2007 with revenue growth as dependent variable.....	73
Table 4.12:	Regression results for 2007 with net profit margin as dependent variable.....	74
Table 4.13:	Regression results for 2007 with ROE as dependent variable	75
Table 4.14:	Mean performance values per group of companies for 2007	79
Table 4.15:	Results of the t-test 2007.....	79
Table 4.16:	Mean performance values per group of companies for 2010	80
Table 4.17:	Results of the t-test 2010.....	81
Table 4.18:	Mean performance values per group of companies for 2013	82
Table 4.19:	Results of the t-test 2013.....	82

LIST OF FIGURES

Figure 4.1: Revenue growth regression graph 2013..... 63
Figure 4.2: Net profit margin regression graph 2013 63
Figure 4.3: ROE regression graph 2013..... 64
Figure 4.4: Comparison between average financial performance variables of top 100 most black-empowered companies and non-top 100 most black-empowered companies..... 76
Figure 4.5: Group chart showing differences between average financial performance variables of BEE top 100 companies with non-BEE top 100 companies group 77

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Black economic empowerment (BEE) commenced with the Black Management Forum (BMF) meeting in 1997, which resolved that government should be pressured to come up with a BEE policy (Chabano, Goldstein & Roberts 2006; Natrass & Seekings 2010:31; Tangri & Southall 2008:563). This eventually led to the setting up of the BEE Commission by government in 1998, and ultimately led to the Broad-Based Black Economic Empowerment Amendment Act, No. 53 of 2003 being promulgated in 2003 (Chabano et al. 2006:563; Natrass & Seekings 2010:31; Tangri & Southall 2008:703). The Broad-based Black Economic Empowerment Act, No. 53 of 2003 (the 'B-BBEE Act') is not detailed and only provides a framework for regulation (Department of Trade and Industry [dti] 2003a). It provides the Minister of Trade and Industry with authority to issue Broad-based Black Economic Empowerment Codes of Good Practice ('the Codes') on BEE in the Government Gazette (dti 2003a). The purpose of these Codes is to outline components and elements of BEE and to provide guidelines for the application of the BEE Scorecard (Institute of Directors in Southern Africa [IoDSA] 2009).

The main aim of the B-BBEE Act, No. 53 of 2003 is to ensure that the organs of state and public entities comply with the Codes when:

- issuing licences, concessions or other authorisations;
- developing and implementing a preferential procurement policy;
- selling state-owned enterprises;
- entering into partnerships with the private sector (dti 2003a).

Although the B-BBEE Act, No. 53 of 2003 is binding on public entities, there is no legal requirement for private companies to comply with BEE (dti 2003a). The questions that remain are how far this has assisted in empowering black people, and – more relevant to this study – whether the private companies that do not necessarily have to comply with the BEE legislation could possibly benefit from complying.

Companies have spent a significant amount of money in an attempt to be BEE-compliant (Jack & Harris 2007). Jack and Harris (2007) explain that companies will lose competitive advantage that will affect their cash flow negatively in future. This study sought to investigate whether BEE-compliant companies had competitive advantage by measuring revenue growth and profitability of these companies for 2007 to 2013.

Ellis and Kelley (1992:386) define the outcomes of competitive advantage as sales (revenue), gross profit margins, and net profit margins. For this reason, this study focused on revenue and profitability to measure whether or not high BEE scores (see 2.5) resulted in high revenue and high profitability in the period 2007-2013.

1.2 BEE STATUS QUO IN JOHANNESBURG STOCK EXCHANGE

The BEE status quo, specifically at the Johannesburg Stock Exchange (JSE) is crucial to determine the inroads that BEE policies have made. According to Statistics South Africa (2012), during the 2011 census, black people represented 90.6% of the total population while white people represented 8.9% of the population. This has not changed significantly since the 1996 census, when black people represented 89.1% of the population and white people 10.9% (Statistics South Africa [Stats SA] 2005; Stats SA 2012).

However, according to research done by Empowerdex, a leading company in the B-BBEE industry which, together with the *Financial Mail*, which publishes information on BEE every year, indicates that black people own only 1.6% of the JSE value in the market capitalisation (Ntingi & Hlatshwayo 2010). Empowerdex arrived at 1.6% because they only considered a portion of the ownership without taking into account any portion of shares that are financed through financial institutions (Ntingi & Hlatshwayo 2010). If a portion of the shares financed through financial institutions is ignored, this figure increases to 5.75% (Ntingi & Hlatshwayo 2010). The trade union Solidarity argues that, according to its own research, black people owned 23% of the JSE share value in 2008. This is an increase of only 5% from 1995 (Ntingi & Hlatshwayo 2010).

In addition, the JSE conducted its own research, which revealed that black people owned 17% of the top 100 companies in 2011 (Chandler 2011). Considering that the top 100 companies on the JSE represented 85% of the market capital (Chandler 2011), this figure would not change significantly if all the companies listed on the JSE were included. This information regarding the black ownership percentage of the JSE is in contradiction to research done by Empowerdex and Solidarity.

In addition, Sartorius and Botha (2008:442) indicate that 60% of the JSE-listed companies had transferred at least 10% of their equity to BEE partners by 2008. If this was indeed the case, and the companies maintained the same momentum, ownership by black people should have been significantly higher in JSE-listed companies in 2012. Whichever research is correct, the ownership of the companies listed on the JSE by black people is extremely low considering that black people represent more than 90% of the population in South Africa (Stats SA 2005:16).

1.3 PROGRESS MADE SINCE 1994

Despite the slow pace of transformation of companies in terms of black ownership of companies, in 1993, New Africa Investments Limited became the first black-owned company on the JSE (Jack & Harris 2007). This was the birth of transformation in business and the economy of South Africa.

Although some of the experts and authors disagree on a method of measuring black ownership on the JSE, mainly because of the dispute on what constitutes 'ownership' (Southall 2004:318), the consensus amongst them is that the percentage of black ownership was below 5% before 2001. Kantor (1998:70) believes the value of black-controlled companies listed on the JSE to be 10% of the market value of the JSE at the end of 1997.

The transformation of the JSE in terms of participation of black people seems to be a challenging one. This is evident in the ownership on the JSE by black people, which varied over the years. As Southall (2004:318) explains, black ownership increased to about 10% of the shares on the JSE between 1994 and 1997, but when the stock market crashed in 1997, all those gains were lost and black ownership dropped by between 1% to 3.8% (Southall 2004:318). Chabano et al. (2006:564) also agree, and

point out that after the Asian stock market crash in 1998, the JSE market capitalisation controlled by black people decreased from 9.6% in 1998 to 4.3% in 1999. Figures supplied by Tangri and Southall (2008:703) are slightly different, as they explain that the share ownership by black people decreased from 8% to 4% after the 1998 stock crisis.

Southall (2004:318) explains that in 1999, the value of the BEE ventures went down by R17.6 billion from 1998. This was caused by the share price of most of the black companies falling by more than 50%, resulting in BEE deals significantly dropping at the time (Southall 2004:318).

However, black people's participation began to shape up again around 2001 to 2002. According to Empowerdex, black people owned 10% of the top 115 JSE-listed companies' total share value (Southall 2004:318). According to Nattrass and Seekings (2010:33), black ownership continuously improved but surged significantly from 2003 onwards. By the end of 2006, JSE black ownership transferred stood at between 6% and 10%. Sartorius and Botha (2008:438) also found that only 38 of the JSE-listed companies on the JSE were 25% black-owned, which suggests that progress had been very slow.

Furthermore, Southall (2004:315) found the progress of black capitalism in post-apartheid South Africa to be very slow. This view was supported by the former president of South Africa, Thabo Mbeki, who admitted that black empowerment was moving at a snail's pace (Southall 2004:323). Chabano et al. (2006:557) seem to agree with this view explaining that process had been slow. By 2004, only five out of the top 100 companies were in black control (Chabano et al. 2006:557).

Tangri and Southall (2008:703) are less optimistic about the progress made in black empowerment. They point out that government has done very little to deracialise white-owned companies, while the majority of black South Africans remain marginalised from mainstream economy (Balkaran 2017:109). The reason might be that government is not decisive in implementing BEE. Tangri and Southall (2008:703) continue to argue that black people have in fact become poorer since 1994, despite the small elite of BEE beneficiaries, which include a small number of prominent, politically connected empowered black figures (Tangri & Southall 2008:701).

In a more optimistic finding, Patel and Graham (2012:200) found that 2007 was a peak year for BEE deals, which amounted to R96 billion. This was 71% higher than 2005 and 2006 (Patel & Graham 2012:200). However, these gains slowed down in 2008 and 2009 because of difficulty in raising finance due to strict credit markets (Patel & Graham 2012:200).

1.4 BEE LEGISLATION AND POLICY

When apartheid ended and a new democracy started in 1994, black people had political power for the first time but lacked economic power since white people had more wealth and resources. It is against this backdrop that the policy and regulation of BEE were formulated, especially the Preferential Procurement Policy Framework Act, No. 5 of 2000 (Department of Finance 2000). In essence, according to this Act, government has to favour companies that are BEE-compliant when procuring goods and services (Department of Finance 2000).

According to Jack and Harris (2007), government was forced to intervene in BEE through legislation – although it was not their intention – because the market and private sectors failed to address black people’s participation in the economy (Jack & Harris 2007). Government intervention, amongst other things, started with the Liquid Fuels Charter the Mining Charter and the Department of Trade and Industries Strategy document, which led to the B-BBEE Act, No. 53 of 2003 and the Codes being promulgated (Jack & Harris 2007). The B-BBEE Act, No. 53 of 2003, as part of this government intervention, is supported by the South African Constitution in that section 217 of the Constitution (1996), which deals with procurement, states:

- (1) When an organ of state in the national, provincial, or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system, which is fair, equitable, transparent, competitive, and cost-effective.
- (2) Subsection (1) does not prevent the organs of state or institutions referred to in that subsection from implementing a procurement policy providing for –
 - (a) categories of preference in the allocation of contracts; and
 - (b) the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination.
- (3) National legislation must prescribe a framework within which the policy referred to in subsection (2) may be implemented.

Furthermore, section 9 states, “(5) Discrimination on one or more of the grounds listed in subsection (3) is unfair unless it is established that the discrimination is fair” (Republic of South Africa [RSA] 1996).

1.5 PROBLEM STATEMENT

According to the B-BBEE strategy document, the South African economy is performing below its potential because of the inequalities in the distribution of and access to wealth and income in the country, although government has come up with policies, strategies and programmes to address these inequalities (dti 2003c).

Even after government had introduced the B-BBEE Act, No. 53 of 2003, and the Codes in 2007 to address the economic inequalities mentioned in section 1.3 above, the problems persist. Some companies still resist transformation because they do not see it as beneficial. Another problem may be that the law does not enforce BEE legislation on any company; therefore, BEE transformation remains an option to all companies. Since 1994, there has been an extremely slow transformation in the JSE-listed companies (Jack & Harris 2007). As Jack and Harris (2007) explain, the reason for the slow transformation could be firstly, that some companies believe that the concept is not applicable to them, since they do not supply any goods and services to government. Secondly, some companies believe BEE is reverse discrimination being unfairly forced upon them; hence, the resistance to change (Jack & Harris 2007). Lastly, companies see the need to transform but do so in bad faith as they attempt to score BEE points without changing the status quo by engineering BEE deals, which in substance does not change anything (Jack & Harris 2007).

A review of the current literature on BEE indicated the following research problems:

- Since the introduction of the Codes in 2007, the BEE score has been the key to the success of many companies as they strive to achieve a high score. As Jack and Harris (2007) explain, companies will lose recognition as a preferred supplier if they do not achieve a favourable BEE score, which in turn affects their cash flow negatively. Companies have been on the journey, although difficult, to position themselves as transformed companies not only to earn a competitive advantage, but also to build a good company reputation. The

problem is that there is limited research to support the idea that achieving a higher BEE score results in a competitive advantage in the form of higher revenue and higher profits.

- Various studies have determined that there is a relationship between the level of the BEE score and shareholder value through market performance although these studies are in conflict in terms of it being a positive or negative relationship (Alessandri, Black & Jackson 2011:241; Mehta & Ward 2017; Strydom, Christison & Matias 2009:75; Van der Merwe & Ferreira 2014; Ward & Muller 2010; Wolmarans & Sartorius 2009:189). The challenge is that market performance and share prices only measure external performance of the companies. The theoretical and empirical understanding of how BEE scores and the internal performance measure of companies relate is fairly limited. It is therefore important to bring into this internal financial performance measures such as revenue growth and profitability as they are not influenced by external market factors.
- There is a view that the cost of implementing and maintaining a compliant BEE rating is significant and could be too high to the extent that it outweighs the benefits that come with BEE compliance (Ferreira & De Villiers 2011:36; Mehta & Ward 2017:85). The problem is that this view has not been tested by research.

Considering the above challenges, it would then seem that research on the relationship between BEE scores and revenue growth and profitability of JSE-listed companies would make a significant contribution to the discipline of financial accounting and on the subject of BEE as a whole. The observed results would then be generalised to provide information to companies intending to improve their BEE scores and ultimately improve their revenue and profitability.

Since inadequate research has been done on BEE, available in-depth research is relatively limited and has many shortcomings. This includes limited literature on BEE challenges and factors necessary for BEE to succeed (Krüger 2011:86).

1.6 OBJECTIVE OF THIS STUDY

The main objective of this study was to carry out an in-depth analysis of the relationship between BEE scores and revenue growth and profitability of JSE-listed companies.

The following hypotheses were formulated to be tested concerning the relationship between BEE scores and revenue growth and profitability of JSE-listed companies:

→ **Alternative hypothesis**

JSE-listed companies with high BEE scores benefit more by generating more revenue and profits than JSE-listed companies that are not BEE-compliant.

→ **Second alternative hypothesis**

JSE-listed companies that are BEE-compliant and score high on the BEE scorecard have lower revenue growth and profitability.

→ **Null hypothesis**

BEE compliance and scoring high on the BEE scorecard has no significant effect on revenue and profitability of JSE-listed companies.

In an attempt to achieve the objective of this study, certain objectives were set, namely to –

- determine the extent to which companies benefit financially from complying with BEE policies;
- determine whether there are any financial disadvantages for complying with BEE policies;
- highlight opportunities for companies in terms of BEE compliance;
- determine the extent to which BEE objectives, as outlined in the Strategy of Broad-based BEE (dti 2003c), are achieved; and
- make recommendations on possible ways in which BEE compliance could be improved.

Some companies still resist transformation because they do not perceive it as beneficial to their company. If the benefits of investing in BEE are not realised by these companies, this has the potential of discouraging companies to invest in BEE. This will be detrimental to the country as a whole, as the BEE objectives as discussed in

Chapter 2 (see 2.4), specifically those of growing the economy and getting the majority of the South African people to participate in economic activities may not be achieved.

This study aimed to make recommendations on how these issues of BEE could be addressed to ensure that BEE is successful and achieves government-intended objectives.

1.7 SIGNIFICANCE OF THIS STUDY

According to Fauconnier and Mathur-Helm (2008:1), literature on the transformation in South Africa is limited with many gaps, and does not cover many factors. The current study sought to contribute to one of the gaps in literature, namely the relationship between BEE scores on the one hand and revenue and profitability on the other. This study also sought to address the knowledge gap existing in terms of BEE compliance by companies between investors, other stakeholders and companies listed on the JSE.

Government has implemented BEE policies through the B-BBEE Act, No. 53 of 2003 and the Codes in an effort to encourage businesses in general to participate in transformation of the business environment by offering economic incentives to those who participate. The relevance of this study was to highlight the success or failure of these policies to assist business stakeholders in decision-making relating to BEE strategies.

Sartorius and Botha (2008:439) identify a number of reasons why companies implement BEE initiatives. One of the main reasons is that companies seek to grow market share and their business in general (Sartorius & Botha, 2008:439). The current study sought to measure whether this is realised by the JSE-listed companies by investigating whether revenue growth, including its profitability, relates to the BEE scores. This will contribute to the knowledge base of the benefits of companies investing in BEE as a whole.

1.8 METHODOLOGY

This section explains the research methodology applied to construct a model to meet the research objective of this study. The research methodology was quantitative in nature. All data used was secondary. Data on BEE scores of the Top 100 most black-

empowered companies was obtained from the Empowerdex website from their annual Financial Mail/Empowerdex top empowerment companies survey (Empowerdex 2015). Empowerdex annually compiles the Top Empowerment Companies. The current study ranked the top 100 JSE companies in terms of Broad-Based BEE scores. The *Financial Mail* publishes this information annually (Empowerdex 2015).

Data relating to financial performance measures of all JSE-listed companies was obtained from the INET BFA (previously known as McGregor BFA) database. Other data collected was obtained from the literature review, legislation on BEE, previous research conducted on broad-based BEE and BEE in general, and existing empirical surveys and statistical data, all of which was used to reach conclusions in this study and to make recommendations.

Existing empirical data was used to establish the current statistics including the level of BEE compliance in JSE-listed companies and other comparative data. This data was extracted from the latest statistics available from various documents and previous similar studies.

In the first part of this study, the top 100 most black-empowered companies were ranked according to their BEE scores and analysed to test whether there is any relationship between the BEE scores and revenue growth and profitability. A hierarchical regression analysis processed and analysed through the IBM Statistical Package for the Social Sciences (SPSS) was used to determine whether there is any statistically significant relationship for the above variables.

The second part of this study compared two groups, namely companies among the top 100 most black-empowered JSE companies, and companies that were not among the top 100 most black-empowered companies, to test whether the two groups performed differently in terms of profitability and revenue growth. SPSS was also used to perform the examination and data analysis using the *t*-test.

The following three indicators were used as representative of the financial performance of a company, in comparison with other companies:

- Revenue growth – demonstrates an overall percentage increase in the revenue of a company. In this case, the collected data compared revenue for the previous year with that of the present year.
- Net profit margin – represents a ratio of profit with the total revenue of the company. It represents the amount earned by a company in terms of profits with each rand they get as revenue.
- Return on equity (ROE) – shows the percentage net income of total shareholder equity. It encapsulates the profit earned by the investors over their stakes in the company.

The literature review was undertaken to establish definitions of the theoretical constructs used in this research. The review was done from existing studies reflected in academic journals, books, publications, websites, legislation, government publications, charters and the Codes, existing government-documented speeches and documents, and documents from South African trade unions and legislation.

1.9 LIMITATION OF THIS STUDY

The limitation of this study include the following:

1.9.1 Legislation changes

The B-BBEE Act, No. 53 of 2003 was amended in 2013. The main significant change was to make it compulsory for organs of state and public entities to apply as opposed to just taking into account the Codes when issuing licences, concessions or other authorisations, implementing preferential procurement policy, selling state-owned enterprises, partnering with the private sector, and awarding incentives, grants and investment schemes (dti 2013a). This change makes it a necessity for most companies to comply with B-BBEE. The outcomes of these changes to legislation did not form part of this study as the changes only became applicable from 1 May 2015, and the result of BEE legislation that came into effect 2015 can only be measured in the following year. The current study was concluded in 2016 already.

Another change that was made within the Codes was that the required points of compliance on all B-BBEE status levels have been increased, and the new Codes became more stringent, which might result in companies with high B-BBEE scores

having an even bigger competitive advantage because it became more difficult to comply with the new Codes (Sebata 2015). The scope of this study did not cover the effect of the change, as the amendments were only effective from 1 May 2015.

1.9.2 Limited data published by Empowerdex

There is no national database on BEE scores covering all companies in South Africa, which limited this study to the data published by third parties. The BEE scores of companies listed on the JSE and published by Empowerdex covers only the Top 100 empowered companies, which limited the current study in terms of regression analysis on only these 100 companies, as other companies, which did not fall in this category, were excluded from the sample due to unavailability of their scores.

1.9.3 Short-term effect of BEE scores

In the current study, the correlation between BEE scores and revenue and profit growth effect was tested for only one year following the year of BEE scoring. This test limits the effect of BEE scores to short-term only and does not explore the long-term effects of BEE scores.

1.9.4 Use of secondary data

This study dealt with historical information, such as profits, revenue and BEE scores; therefore, the researcher was limited to using secondary data. There are a few disadvantages using secondary data, which Sachdeva (2009:110) points out. Firstly, the information gathered would not have been gathered for the research dealt with in the current study, and as a result, the data gathered and the data needed for this study may vary. Secondly, the secondary data gathered was not sufficient to address the research question of the current study. In this study, the limitation was – as outlined above – that the data was limited to the scores of the Top 100 companies only as opposed to all companies. Lastly, the data gathered may have been inaccurate or had errors. These were beyond the control of the researcher and it was difficult to evaluate accuracy (Sachdeva 2009:157). The data used was regarded as reliant mainly because Empowerdex is a leading B-BBEE verification company in South Africa.

1.10 EXPLANATION OF KEY TERMS

BEE

BEE (black economic empowerment), which is currently referred to as B-BBEE since the broad-based element was introduced in 2003, is a government policy for advancing black people in business and economy in general (dti 2003a:5).

Revenue

Revenue is defined in International Accounting Standards (IAS) 18 of International Financial Reporting Standards (IFRS) (International Accounting Standards Board [IASB] 1995:1). The present study was done for 2007-2013 at which stage IAS 18 for revenue was applicable. IAS 18 defines revenue income that arises in the normal course of business from sales, fees, interest, dividends and royalties (IASB 1995:1).

Net profit margin

The net profit margin is calculated as a percentage of the net profit over revenue (Totowa 2015:50). It is used to measure the operating efficiency of the company (Totowa 2015:50).

Return on equity

Return on equity (ROE) is the net income as a percentage of shareholders' equity (Mainul 2012:132). It is used to measure the rate at which money invested generates profits for the company (Ahsan 2012:132).

1.11 CHAPTER LAYOUT

The chapter layout of this dissertation is as follows:

CHAPTER 1: INTRODUCTION

This chapter introduced the study and provided background on BEE compliance in South Africa.

CHAPTER 2: LITERATURE REVIEW

This chapter reflects the literature on BEE, BEE compliance, and its influence on financial performance of companies that specifically focus on revenue and profitability. The chapter specifically covers the literature on the history of BEE, and how it evolved over the years. The literature review on objectives of BEE, the definition relating to BEE and its challenges and the way changes to legislation have evolved are dealt with in this chapter. Finally, changes to legislation and previous contributions by other researches will conclude the literature review.

CHAPTER 3: RESEARCH DESIGN AND METHOD

This chapter describes the research methodology that was used in this study.

CHAPTER 4: ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

This chapter presents an interpretation and analysis of the research data collected, and compares it with current theory and literature.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter summarises the research findings. It also summarises the conclusions of the study. The chapter further includes recommendations of further study in BEE and disclosure in the integrated reports.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In Chapter 1, the status quo and progress relating to BEE in terms of companies listed on the JSE were discussed. This chapter reflects the literature on BEE, BEE compliance, and the way BEE influences financial performance of companies with specific focus on revenue and profitability. Specifically, this chapter covers the literature on the history of BEE and how it evolved over the years. The literature review on objectives of BEE (see 2.4), the definition relating to BEE and its challenges (see 2.6) and the way changes to legislation have evolved (see 2.7) are dealt with. Finally, changes to legislation and previous contributions by other researches will conclude the literature review (see 2.8).

2.2 HISTORY AND EVOLUTION OF BLACK ECONOMIC EMPOWERMENT (BEE)

Prior to 1994, South Africa had laws that prevented black people from fully participating in the economy of the country (Hiam, Eshghi & Eshghi 2017:1370). Black people were not allowed to own land or perform business outside of their designated areas, which prevented them from trading on the outskirts of white populated towns and cities. Although some of the prohibitions and restrictions were not legislated, black people were not allowed to own property even within their designated areas (dti 2003a; Jack & Harris 2007). Where business was concerned, black people were restricted to owning single operations within the designated areas (dti 2003a; Jack & Harris 2007). Although the majority of these laws were relaxed in the mid-1980s, some restrictions were still applicable, which implied that the economic growth amongst black people was still limited.

These restrictions and laws led to unrest in South Africa in the 1970s, and the world debated on the appropriateness of the apartheid system, which resulted in economic and political sanctions against South Africa by various countries (Jack & Harris 2007). At that stage, it became clear to the government at the time that apartheid had failed and needed to end (Jack & Harris 2007). Elliott, Hufbauer and Oegg (2008) also

explain that, following the Sharpeville massacre in the 1960s, other countries applied pressure on the former president, Mr FW de Klerk, to release Mr Nelson Mandela from prison. That subsequently led to the beginning of the new democracy in South Africa in 1994 when the African National Congress (ANC) won the national elections (Elliott et al. 2008).

The ANC assumed office with a few challenges on its table after winning the elections, one of them being racial inequality in the country despite economic growth both before and after 1994 (Natrass & Seekings 2010:5). It was clear that the end of apartheid did not immediately result in improved material conditions for the majority of South Africans (Aliber, Kirsten, Maharajh, Nhlapo-Hlope & Nkoane 2006:47). During the apartheid era, the ruling government ensured that only white South Africans had skills, opportunities, and high incomes, whilst many black South Africans lacked skills, faced few opportunities, and remained in poverty (Natrass & Seekings 2010:5). The ANC decided to prioritise deracialisation of business ownership by means of BEE policies to deal with continuing white economic control and income inequalities. This was declared one of the central objectives in the Reconstruction and Development Programme (RDP) in 1994 (Tangri & Southall 2008:699).

The BEE vision of government was mainly based on the Freedom Charter of 1955, which had as one of its objectives meeting the economic needs of the South African people equitably (dti 2003a). According to the Freedom Charter, the country's wealth and resources should be shared amongst people in South Africa, to create a democratic, non-racial, non-sexist and prosperous society in South Africa (Congress of the People 1955). In addition to this, Chabano et al. (2006:562) mention that this objective is further promoted by the country's Constitution, which promotes equality and advances people who were disadvantaged by unfair discrimination.

In the mid-1990s, government decided to introduce a few policies to address the inherent inequalities regarding issues of affirmative action, employment equity, land reform, the establishment of sector education and training authorities, and the introduction of BEE policies (Patel & Graham 2012:194). The specific laws introduced were the:

- Promotion of Equality and Prevention of Unfair Discrimination Act, No. 52 of 2002;
- Extension of Security of Tenure Act, No. 62 of 1997;
- Restitution of Land Rights Act, No. 22 of 1994;
- Employment Equity Act, No. 55 of 1998;
- National Empowerment Fund Act, No. 105 of 1998;
- Competition Act, No. 89 of 1998;
- Telecommunications Act, No. 103 of 1996;
- Preferential Procurement Policy Framework Act, No. 5 of 2000; and
- Minerals and Petroleum Development Act, No. 28 of 2002 (dti 2003a).

BEE started by being mainly self-regulatory (Tangri & Southall 2008:700). These early stages of a self-regulatory environment of the BEE resulted in government not being able to compel white-dominated companies to deracialise the businesses completely (Tangri & Southall 2008:700). Although some of the listed companies had started placing black people voluntarily on their boards of directors and selling some of the equity to them (Hiam et al. 2017:1371), the result was a slow pace of transfer of the corporate sector to black South Africans. Tangri and Southall (2008:700) are of the opinion that the slow pace in the transfer of the corporate sector to black South Africans was the result of government's lack of focus on policies, which supported this view. Instead, government pursued several economic policies simultaneously, including government's persuasion of white-owned business to focus on generating higher rates of economic growth while pursuing policies to get white-owned businesses to transfer equity to black South Africans. Balancing these two policies proved to be difficult for government, which led to the slow implementation of BEE (Tangri & Southall 2008:700). Nattrass and Seekings (2010:8) also support this view explaining the modest attempts by government to promote black-owned business in the mid-1990s, and only acting aggressively in the early 2000s. By then, government introduced the Preferential Procurement Policy Framework Act, No. 5 of 2000 to address the empowerment of black people. Government was taking advantage of being the largest buyer of goods and service to support economic policy objectives of BEE. The Preferential Procurement Policy Framework Act (No. 5 of 2000) was meant to make government tendering accessible to black people and introduced a black empowerment point system in awarding these tenders to targeted groups (dti 2003a).

The biggest initial challenge regarding BEE was the lack of capital amongst black people. To deal with this problem, companies started setting up 'special purpose vehicles' to house financing structures for the BEE deals (dti 2003c). Financial institutions using equity acquired in the companies as collateral to finance black entrepreneurs (Chabano et al. 2006:563). The idea was that, in time, the increase in value of the shares would eventually outweigh the finance cost incurred in acquiring the equity. According to Chabano et al. (2006:563), more than half of the black ownership in the late 1990s was financed through these special purpose vehicles. This created complex structures that left black people who participated in these deals highly indebted (dti 2003a). The high indebtedness was exposed considerably when the market crashed in 1998, as it left many black people with high debts and less value in terms of their shares (dti 2003a). As a result, the control of black-owned companies decreased from 10% to 4.3% between 1998 and 1999 (Chabano et al. 2006:564). The implication was that, effectively – besides a few – black people enjoyed limited benefits from these BEE deals. It was clear at that stage that BEE based solely on ownership was not sustainable (Jack & Harris 2007). According to Sartorius and Botha (2004:437), the stock market crash of 1998 led many critics to question the success of BEE.

As Arya and Bassi (2011:689) explain, at that point, government had to consider that transformation of the corporate world was a monumental task since it involved decades of social and racial imbalances in the economy. As a result, government could not leave the transformation to be purely voluntary and had to include government regulations to motivate and enforce BEE initiatives (Arya & Bassi 2011:689).

According to Chabano et al. (2006:563), at its 1997 conference, the BMF resolved that a BEE Commission should be set up to address BEE issues. The Commission was successfully established in 1998, chaired by Cyril Ramaphosa. They presented a BEE Commission report to former President Thabo Mbeki in 2001 (Chabano et al. 2006:563). At that stage, the BEE Commission reported that since 1994, there had been no significant change in the overall inequality and wealth and, as a result, black people remained poor and marginalised from ownership, control and management of economic activities (BEE Commission 2001:1).

The report further blamed the lack of growth prospects and competitiveness in South Africa on the lack of significant change in transformation of the economic activities in the country (BEE Commission 2001:1). At that stage, government needed to come up with broad-based initiatives that addressed the lower- and middle-income groups of the country, so that they too could take part in the economy of the country (Jack & Harris 2007). The Commission then recommended that the state create black empowering guidelines and regulations, which will compel the state and the private sector to adopt black empowerment policies (Southall 2004:323).

Following the report of the BEE Commission, government contended that the rate of sharing the economic success of the country by all races of South Africa was not satisfactory. What made this worse was also that, even if there was some progress, it was very difficult to quantify (Southall 2004:318), and the Department of Trade and Industry (dti) was of the opinion that government needed to introduce a comprehensive and focused strategy for Broad-based Black Economic Empowerment (B-BBEE) (dti 2003a). This B-BBEE strategy document was drawn up as "South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment" (dti 2003a). This document outlined the broad-based BEE strategy and steps that government needed to take to deal effectively with BEE. Following the B-BBEE strategy document was the promulgation of the B-BBEE Act, No. 53 of 2003.

According to the B-BBEE strategy, government set out to form partnerships and collaboration with the private sector to ensure that BEE is sustainable (dti 2003a). One way government intended to collaborate with the private sector was by encouraging the setting-up of sector and enterprise-based charters (dti 2003a). Various sectors would be allowed to determine ways and targets that would contribute to BEE within parameters of existing legislation (dti 2003a). The strategy on sector charters was supported by the Minerals and Petroleum Development Resources Act, No. 28 of 2002, which has similar regulations. Section 100 of the Minerals and Petroleum Development Resources Act, No. 28 of 2002 requires the development of a Broad-Based Socio-Economic Empowerment Charter that would set the framework and targets to enable historically disadvantaged South Africans to benefit from exploitation of mining and mineral resources (dti 2003b). Section 25 of the Minerals and Petroleum Development Resources Act, No. 28 of 2002 further requires holders of mining rights

and permits to comply with this charter (dti 2003b). According to Jack and Harris (2007), this charter had a significant influence in that there was an increase in BEE deals on the JSE resources sector following the release of the charter.

Financial services followed almost immediately in response to the B-BBEE strategy and mining charter with its Financial Services Charter in October 2003. Tangri and Southall (2008:705) are of the opinion that the Financial Services Charter was released rapidly to pre-empt government intervention.

This intervention came in the form of the B-BBEE Strategy document, which stated:

Government will introduce into Parliament a Broad-Based Black Economic Empowerment Bill to establish an enabling framework for the promotion of BEE in South Africa. In particular, the legislation will allow the Minister of Trade and Industry to issue guidelines and the Codes on BEE, as well as establish a BEE Council to advise the President on the implementation of BEE and related matters (dti 2003c:18).

Government introduced the B-BBEE Act, No. 53 of 2003, which was signed into law in January 2004 (dti 2003a:18). This B-BBEE Act, No. 53 of 2003 was amended in 2013 by the B-BBEE Act, No. 46 of 2013.

2.3 DEFINITION OF BEE

The following sections deal with the definitions of BEE and B-BBEE.

2.3.1 BEE Commission's definition of BEE

The BEE Commission argued that BEE was often defined narrowly by focusing on entry and transaction activities (BEE Commission 2001:1). The consequence thereof was that black people were not included in other economic activities adequately (BEE Commission 2001:1). According to Code 000 Statement 000, section 1 of the Codes, 'black people' means natural persons who are citizens of South Africa by birth, descent or naturalisation before 1994, and who are African, Coloured or Indian by race (dti 2007). The BEE Commission report contended that there was a need to define BEE, since black people were still excluded from financial and economic resources in the country (BEE Commission 2001:2). It further suggested that BEE had to incorporate

comprehensive strategies with the objective of increasing access to productive assets whilst simultaneously ensuring the productivity of those assets. That would ensure that levels of participation in ownership, management and control of economic activities by black people were increased, thereby creating jobs, rural development, alleviating poverty, promoting land ownership, empowering women, and improving education (BEE Commission 2001:2).

The BEE Commission formed a broader BEE definition – considering a sustainable programme – as follows:

[A]n integrated and coherent socio-economic process. It is located within the context of the country's national transformation programme, namely the RDP. It is aimed at redressing the imbalances of the past by seeking to substantially and equitably transfer and confer the ownership, management, and control of South Africa's financial and economic resources to the majority of its citizens. It seeks to ensure broader and meaningful participation in the economy by Black people to achieve sustainable development and prosperity (BEE Commission 2001:2).

2.3.2 Strategy for broad-based BEE definition

Government was in agreement with the BEE Commission in its B-BBEE Strategy document on the definition of BEE that it should not be defined narrowly, as that would limit transfers of corporate assets from black people to white people without being in line with the RDP (dti 2003a). Government however cautioned that a broad definition of BEE would be too general. Government therefore concluded that a balance should be found between the narrow definition and a broad definition (dti 2003a), and has subsequently defined BEE as:

[A]n integrated and coherent socio-economic process that directly contributes to the economic transformation of South Africa and brings about significant increases in the numbers of black people that manage, own and control the country's economy, as well as significant decreases in income inequalities, in the Broad-based BEE Strategy document (dti 2003c).

2.3.3 The Broad-based Black Economic Empowerment (B-BBEE) Act definition of BEE

The B-BBEE Act, No. 53 of 2003 definition of BEE is also broad-based; however, it differs in content from both the BEE Commission and the Strategy for B-BBEE, as it is more detailed and specific. It does not define BEE as is, but defines broad-based BEE. Section 1 of the B-BBEE Act, No. 53 of 2003 (dti 2003a:5) defines B-BBEE as follows:

The economic empowerment of all black people in particular women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies that include, but are not limited to –

- a) increasing the number of black people that manage, own and control enterprises and productive assets;
- b) facilitating ownership and management of enterprises and productive assets by communities, workers, co-operatives and other collective enterprises;
- c) human resource and skills development;
- d) achieving equitable representation in all occupational categories and levels in the workforce;
- e) preferential procurement from enterprises that are owned or managed by black people; and
- f) investment in enterprises that are owned or managed by black people.

Following the definitions by the abovementioned documents, the objectives of BEE are discussed in the next section.

2.4 OBJECTIVES OF BEE

Jack and Harris (2007) present three imperatives on which BEE should be based. The first imperative is a moral issue in correcting imbalances created by apartheid. The second imperative is the social issue of wealth divide, especially in a South African context that is denoted by racial categories. The authors contend that wealth divide is problematic in capitalist societies since it causes various ills in society. The third important imperative is economic growth, since at the time (2007), unemployment was measured at around 30%, which implies that the country was running at only two thirds of its labour potential (Jack & Harris 2007).

As Jack and Harris (2007:15) explain, the main aim of BEE is to drive economic growth by introducing poor people into the mainstream economy and allowing them to enjoy the economic benefits of the capitalist system. Natrass and Seekings (2010:30) compare BEE to the Afrikaner Economic Empowerment of the apartheid government. The aim of BEE and the Afrikaner Economic Empowerment was to alter the distribution of assets and income in the direction of a particular group, in the case of BEE being black people. By driving broad-based BEE from all levels as opposed to waiting for it to happen on a purely free-market basis, Jack and Harris (2007:15) contend that black empowerment will take less time, which will suit the government, since government does not enjoy unlimited time to transform the country politically. The broad-based BEE policy promotes growth instead of pure redistribution through the B-BBEE Act, No. 53 of 2003 and the Codes (Jack & Harris 2007:15).

The BEE Commission captured what they called a fundamental crisis in the economy of South Africa, as black people remain excluded from financial and economic resources of the country (BEE Commission 2001:2). To resolve this problem, the BEE Commission suggested that the B-BBEE strategy should have an objective of increasing access by black people to productive assets without compromising productivity of those assets. Further, B-BBEE strategy should aim to increase participation of black people in business ownership, business management and control of economic activities. The BEE Commission goes on to propose that BEE should be viewed in the context of “job creation, rural development, urban renewal, poverty alleviation, land ownership, specific measures to empower black women, skills and management development, education, meaningful ownership and access to finance for purpose of conducting business” (BEE Commission 2001:2).

A Strategy for Broad-Based BEE then clarifies that the measure of success of the abovementioned objectives for BEE implementation will be evaluated against a significant increase in the following:

- black people who own and control new and existing enterprises;
- number of new black enterprises;
- black-empowered enterprises;
- black-engendered enterprises;
- black executives in enterprises;

- black senior managers in enterprises;
- community broad-based enterprises;
- cooperatives;
- black ownership of land and other productive assets;
- improved access to infrastructure by black people;
- acquisition of skills by black people; and
- participation in productive economic activities by black people (dti 2003a).

The B-BBEE Act, No. 53 of 2003 echoes similar objectives to the BEE Commission and the Strategy for B-BBEE. According to the B-BBEE Act, No. 53 of 2003 (dti 2003a:6), the objectives of BEE are:

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

2.5 THE CODES OF GOOD PRACTICE

In order to achieve the objectives of the B-BBEE Act, No. 53 of 2003, the Act provides the Minister of Trade and Industry with authority to issue the Codes through the Government Gazette (dti 2003a). The Minister of Trade and Industry gazetted the

Codes on 9 February 2007 (Jack & Harris 2007:43). According to section 9 of the B-BBEE Act, No. 53 of 2003 (dti 2003a:8), the Codes may include the following:

- a) the further interpretation and definition of Broad-based Black Economic Empowerment and the interpretation and definition of different categories of black empowerment entities
- b) qualification criteria for preferential purposes for procurement and other economic activities
- c) indicators to measure Broad-Based Black economic empowerment
- d) the weighting to be attached to Broad-Based Black economic empowerment indicators referred to in paragraph (c)
- e) guidelines for stakeholders in the relevant sectors of the economy to draw up transformation charters and the Codes for their sector
- f) any other matter necessary to achieve the objectives of this Act.

The organs of state and public entities are obliged by the B-BBEE Act, No. 53 of 2003 to use the Codes to determine the qualification criteria for issuing licences, sale of state-owned enterprises, developing and implementing preferential procurement policies and setting criteria for entering into partnerships with the private sector (dti 2003a). The key tool that makes BEE useful is that the Preferential Procurement Policy Framework Act, No. 5 of 2000 encourages the organs of state and public entities to give preference to businesses that have high BEE ratings on their BEE level, determined by using the Codes, when procuring their goods and services (Department of Finance 2000). This implies that a company with a high BEE score will more likely meet the qualification criteria and even be preferred in being awarded contracts to supply goods and services to government because of the provisions of the Preferential Procurement Policy Framework Act, No. 5 of 2000 mentioned above.

It must be noted though that, according to the Codes, there is no legal requirement for BEE compliance or even obtaining a certain score according to the Codes; it is rather a commercial incentive (Jack & Harris 2007:44). The benefit is being favoured by procurement policies when government awards contracts (Van der Merwe & Ferreira 2014:548). The companies which are more BEE-compliant would, through this commercial incentive, have a competitive advantage in the form of higher revenue and profitability (Kleynhans & Kruger 2014:5). At the time that the Codes were gazetted, ANC members of Parliament's Trade and Industry Committee were not happy with the

lack of legal enforceability, and regarded the Codes as too soft on companies, and argued that it would prevent the strategy of BEE objectives from being achieved (Tangri & Southall 2008:706).

Although BEE compliance is not a legal requirement, there is an exception in the mining industry. As explained in 2.2 above, the Minerals and Petroleum Development Resources Act, No. 28 of 2002 requires mining houses to comply with the mining charter. This charter has a BEE target that has to be met. One of these targets is that companies need to have 26% black ownership by 2014 or risk losing their mining rights and licences. In her May 2013 budget speech, the then Minister of Mineral Resources, Susan Shabangu, made it clear that the government would not back down and the mining houses would have to meet these targets (Peyper 2013:36).

The Codes attempt to address the lack of legal requirement discussed above. Besides the fact that a higher BEE score benefiting the company from accessing government contracts (Mehta & Ward 2017:85), the Codes have been set up in a way that there is a trickle-down effect on many companies. Preferential procurement elements in the Codes are allocated a specific score. This implies that companies would get specific points if they procure from companies that are BEE-compliant. According to Jack and Harris (2007:45), companies wishing to increase their BEE ratings, would normally procure their goods and services from companies with high BEE ratings. This causes companies to compel one another to comply with BEE without the law enforcing this.

Although it is not clear yet from the B-BBEE Act, No. 46 of 2013 what the new B-BBEE Commissioner would do with the information after receiving it, in section 13G, the Act requires that all JSE-listed companies should report their B-BBEE compliance to the B-BBEE Commissioner (dti 2013a).

Statement 000 of the Codes discusses the framework of broad-based BEE, which states that organisations that are subject to the Codes are all public entities listed in Schedule 2 and 3 of the Public Finance Management Act, No. 1 of 1999, including state trading entities, any company that undertakes business with any organ of state or public entity, and any other company which seeks to be BEE-compliant (dti 2007:04) and which are measured for BEE compliance in the following four categories:

- exempted micro-enterprises, which are companies with a total revenue of R5 million or less;
- qualifying small enterprises, which are companies with a total revenue of not less than R5 million but less than R35 million;
- start-up enterprises, which are companies that are in their first year of being incorporated or formed; and
- generic enterprises, which are companies that have a total revenue of R35 million and above (dti 2007:04).

For purposes of this study, which focused on the JSE-listed companies, the generic enterprises category applied as all companies listed on the JSE had revenue exceeding R35 million between 2007 and 2013 (dti 2007).

Furthermore, Arya and Bassi (2011:678) note the purpose of the Codes as providing the standards, specific targets, and performance measures for purposes of transforming South African businesses and improving companies' social responsibility relating to BEE. Jack and Harris (2007:66) elaborate by explaining the main aim of the Codes as having a standard measurement system that can measure all entities. This standardised system, referred to as 'the Codes' in this instance, has seven elements for generic enterprises as described in Table 2.1:

Table 2.1: Definitions of BEE elements

Element	Purpose
Ownership	Measures the effective ownership of enterprises by black people
Management control	Measures the effective control of enterprises by black people
Employment equity	Measures initiatives intended to achieve equity in the workplace under the Employment Equity Act, No. 55 of 1998
Skills development	Measures the extent to which employers carry out initiatives designed to develop the competencies of black employees
Preferential procurement	Measures the extent to which enterprises buy goods and services from suppliers with strong B-BBEE procurement recognition levels
Enterprise development	Measures the extent to which enterprises carry out initiatives intended to assist and accelerate the development and sustainability of other enterprises
Socio-economic development	Measures the extent to which enterprises carry out initiatives that contribute towards socio-economic development or sector-specific initiatives

Source: dti (2007)

The first four elements in Table 2.1 are mainly internal to the company, since they focus on the company itself in terms of company ownership, its management, employees and their development. The remaining three elements relate to what the company can do for other stakeholders outside of the company, such as other small businesses, other black-empowered businesses, and other organisations that are developing black people economically. The structure of these elements is constituent with recommendations of the Strategy on B-BBEE (Tangri & Southall 2008:706). The Strategy on B-BBEE recommends that BEE should be broad-based and be based on three core elements, namely:

- Direct empowerment through ownership and control, which recommends that the whole process of BEE should ultimately achieve increased levels of ownership and control of assets and enterprises by black people. This should also achieve significant participation of black people in boards of directors and executive management (dti 2003c).
- Human resources development and employment equity, which recommends that black employees of enterprises should be developed and companies should comply with the Employment Equity Act, No. 55 of 1998 in order that

there can be equitable representation of black people at all levels of the organisation (dti 2003c).

- Indirect empowerment, which recommends creation and nurturing of new black-empowered enterprises. This can be achieved through preferential procurement by government. The sub-element of indirect empowerment is investment in black-owned and black-empowered enterprises by giving financial and intellectual support to these enterprises (dti 2003c).

The abovementioned BEE elements are weighed and points are allocated in the form of a scorecard as per Table 2.2.

Table 2.2: BEE scorecard

Element	Weighting
Ownership	20 points
Management control	10 points
Employment equity	15 points
Skills development	15 points
Preferential procurement	20 points
Enterprise development	15 points
Socio-economic development	5 points

Source: dti (2007)

According to the Codes and based on the points scored as per Table 2.2, the measured entity would then receive a B-BBEE status as per Table 2.3, which gives the measured entity a BEE procurement recognition level.

Table 2.3: B-BBEE procurement recognition levels

B-BBEE status	Qualification	B-BBEE procurement recognition level
Level 1 contributor	≥ 100 points on the generic scorecard	135%
Level 2 contributor	≥ 85 but < 100 points on the generic scorecard	125%
Level 3 contributor	≥ 75 but < 85 points on the generic scorecard	110%
Level 4 contributor	≥ 65 but < 75 on the generic scorecard	100%
Level 5 contributor	≥ 55 but < 65 on the generic scorecard	80%
Level 6 contributor	≥ 45 but < 55 on the generic scorecard	60%
Level 7 contributor	≥ 40 but < 45 on the generic scorecard	50%
Level 8 contributor	≥ 30 but < 40 on the generic scorecard	10%
Non-compliant contributor	< 30 on the generic scorecard	0%

Source: dti (2007)

Table 2.3 indicates the level of procurement recognition a company would be able to claim if it were to procure from a company with a certain B-BBEE status. For example, a company procuring from a Level 1 BEE contributor would be able to claim 135% of the amount spent on that company towards its points under the preferential procurement element. Jack and Harris (2007:26) state that preferential procurement is the key driver of the BEE process. This is mainly because the procurement recognition level becomes very important for companies in terms of trading purposes. For companies to maximise their BEE score level, they would need to prefer procuring from companies which have a high BEE score as that would boost their own BEE scores under the preferential procurement element (Jack & Harris 2007:84). By implication, if the argument by Jack and Harris (2007:84) is true, then companies with high BEE scores and therefore high procurement recognition levels, would be preferred suppliers to most companies and therefore would generate more revenue than companies with lower scores.

It is evident from the above that the Codes encourage companies to do the following:

- ownership element: let black people acquire at least 25% of the company’s shares;

- management control: appoint at least 40% of black people in the company's management structures;
- employment equity: employ a majority of black people in various roles and positions;
- skills development: spend at least 3% of the total payroll spend on developing skills of black employees;
- preferential procurement: buy at least most of the raw materials and other products and services from BEE-compliant companies;
- enterprise development: encourage companies to invest in developing small businesses that are black-owned; and
- socio-economic development: spend at least 1% of the profits on socio-economic programmes and organisations on black beneficiaries.

2.6 CHALLENGES WITH BEE

The following sections (see 2.6.1 to 2.6.8) explain some of the challenges of BEE.

2.6.1 Black elite

There is bound to be challenges and criticisms in terms of a significantly game-changing policy, such as BEE. One of the most commonly identified challenges for the BEE policy was the creation of a few wealthy black elite without any significant benefit filtering down to the poor (Sartorius & Botha 2008:437), who especially need to be empowered economically to rise above their poor living conditions. Sartorius and Botha (2008:437) suggest that BEE only benefits politically connected black elite. Tangri and Southall (2008:700) support this view, and confirm that the majority of previously disadvantaged black people do not benefit from the BEE policies. This results in the problems created by apartheid like poverty, unemployment, housing, inequalities and a lack of basic services, remaining challenges in the democratic South Africa (Krüger 2011:212).

It must be noted that the black elite who are benefiting from BEE are no ordinary South African black people. They are described as politically connected individuals, some having been in prison or in exile during the apartheid regime (Chabano et al. 2006:564).

Some are well educated and/or have good working experience abroad (Chabano et al. 2006:564). Some of the names of these individuals are mentioned below:

- Dr Nthatho Motlana – President Nelson Mandela’s personal physician;
- Cyril Ramaphosa – former secretary general of ANC;
- Mzi Khumalo – a prison mate to President Nelson Mandela on Robben Island (Chabano et al. 2006:564);
- Saki Macozoma – ANC spokesperson;
- Patrice Motsepe – whose wife is well connected in the ANC;
- Tokyo Sexwale – premier of Gauteng;
- Mathews Phosa – premier of Mpumalanga and later treasurer of the ANC;
- Popo Molefe – premier of North-West;
- Moss Ngoasheng – former advisor of President Thabo Mbeki; and
- Zwelakhe Sisulu – son of Mr Walter Sisulu (Nattrass & Seekings 2010:30).

South Africans are familiar with these individuals because of their involvement in politics.

One of the reasons why mainly politically connected individuals were the ones benefiting from BEE was the fear by established white-owned businesses that the BEE policies and processes would intrude on their businesses (Tangri & Southall 2008:710). As a result, they ensured that they gave equity to politically connected individuals who served as leaders in the structures of the ANC so that they could in turn protect their assets (Tangri & Southall 2008:710). Conducting business in this way is however a costly exercise, as equity has to be transferred to BEE partners at discounted prices (Nattrass & Seekings 2010:8).

Patel and Graham (2012:201) are of a slightly different view as they argue that, although BEE mainly benefited the few black elite, parts of it benefited designated broad-based groups, such as non-governmental organisations (NGOs), trade unions, company employee structures and educational trusts. The structures mainly consist of poor black beneficiaries. These structures and organisations were given stakes in some of the JSE-listed companies (Patel & Graham 2012:201).

2.6.2 Tenderpreneurs

An extension to the above criticism of BEE is the creation of tenderpreneurs instead of real entrepreneurs. The term ‘tenderpreneur’ is unofficially used in South Africa to describe a person who accumulates wealth solely from doing business with government (Mackenzie-Hoy 2013). These tenderpreneurs have created a culture of entitlement and dependency of the state business (Kruger 2014:98) without becoming real entrepreneurs (Mbeki 2012). In the words of Moeletsi Mbeki (2012):

The second problem with the formula of BEE is that it does not create entrepreneurs. You are taking political leaders and politically connected people and giving them assets, which, in the first instance, they do not know how to manage. Therefore, you are not adding value. You are faced with the threat of undermining value by taking assets from people who were managing them and giving them to people who cannot manage them. BEE thus creates a class of idle rich ANC politicians.

My quarrel with BEE is that what the conglomerates are doing is developing a new culture in SA - not a culture of entrepreneurship, but an entitlement culture, whereby black people who want to go into business think that they should acquire assets free, and that somebody is there to make them rich, rather than that they should build enterprises from the ground.

2.6.3 BEE deals finance

Financing of BEE deals is another challenge. As discussed under the Codes (see 2.5 above), ownership has a significant weighting of points on the BEE scorecard. This implies that in order to earn higher points, companies need to promote equity owned by black people (Southall 2004:319). This, however, poses a challenge, as black people – coming from economically disadvantaged backgrounds – would not have enough capital to buy equity from corporate institutions. This, in turn, forces black investors to acquire the equity with assistance from financial institutions, who keep the equity acquired as security, and investors have to rely on dividends received to finance the interest (Southall 2004:319). The challenge here is that, when equity price appreciation and dividend payouts are lower than the interest rate for these financed deals, the black investors end up falling short on repayments of these loans, which forces the banks to repossess the equity kept as security for the loans. This was

demonstrated when the market crashed in 1998, which left many black people with high debts and less value of their shares (dti 2003c). The other alternative is that the BEE partners are bailed out by the company. This method, however, confuses the international shareholders since whenever the BEE partners are bailed for purposes of keeping the black ownership intact, their shares are diluted (Peyper 2013:39).

2.6.4 Business unity

Nattrass and Seekings (2010:24) argue that, in the same way as during apartheid, BEE policies have undermined business unity between white- and black-owned businesses because the BEE policies favour black owners and business managers over white owners and business managers. Patel and Graham (2012:205) support this view by questioning whether race-based empowerment is fair opposed to the empowerment covering all disadvantaged groups, irrespective of race, which will bring more unity rather than racial division. This view is influenced by the reality that there are some white people who are poor and who also need some form of empowerment. Furthermore, there are white businesses that are struggling in the new South Africa that also need empowerment.

2.6.5 Unemployment and poverty remain

One of the objectives of B-BBEE according to the B-BBEE Act, No. 53 of 2003 is “promoting investment programmes that lead to broad-based and meaningful participation in the economy by black people in order to achieve sustainable development and general prosperity” (dti 2003a:6). Unfortunately, Chabano et al. (2006:574) contend that unemployment and poverty issues remain a challenge despite BEE policies. According to Stats SA (2014), unemployment was 25.4% in the third quarter of 2014 compared to 20% in 1994. This implies that unemployment has worsened since apartheid ended. Sartorius and Botha (2008:437) suggest that BEE has the potential of affecting foreign investment negatively, which could make the challenge of unemployment even bigger.

2.6.6 Legal enforceability

Since BEE policies are not legally enforceable – regardless of the positive intentions thereof – its intended effect is slowed down. This is despite black businesses generally

preferring a more stringent legislative form of BEE policies (Tangri & Southall 2008:715). Jack and Harris (2007) argue that companies in the retail and tourism sectors – especially companies selling large volumes of low-priced items directly to the public – have not embraced BEE, mainly because they have little reliance on government contracts and because BEE is not legally enforceable. The other reason for this is that the general public would not choose where to buy their goods based on BEE scores of any company, but rather based on quality and pricing (Jack & Harris 2007).

2.6.7 Lack of support by stakeholders

For BEE to work, all stakeholders, including government, the private sector, management and employees have to believe in it. This did not prove to be the case in 2010 (Krüger 2011). Krüger (2011:229) found that managers, of whom the majority were black and female, did not believe BEE compliance would improve the performance of the companies that employed them. This was specifically with regard to overall and international competitiveness, service excellence and client satisfaction, quality, productivity, entrepreneurial spirit and innovation, production performance, human development, staff morale, business ethics and transparency, sales and access to markets, and financial performance. Employees and management who should drive the implementation of BEE, make it difficult for companies to implement BEE if they are unconvinced that BEE would benefit the companies that employ them (Krüger 2011).

2.6.8 Selling out equity

To attract black investors, equity is generally sold at a discount, which has a diluting effect on existing shareholders' equity (Prinsloo 2015:1). The challenge with this method of attracting black investors is that there is no guarantee that the black investor would stay invested for a long time. In an article in the *Sunday Times*, Prinsloo (2015:1) indicated that the Chamber of Mines criticised black entrepreneurs in the mining industries for buying shares at discounted prices, and selling them back to the market at a later stage, leaving the companies with less black ownership or back to where the company was in terms of percentage black ownership. To curb this challenge, companies such as MTN had provided BEE equity with the condition that the black

people invested in these shares could sell them to non-blacks, only after six years of owning them (Southafrica.info 2010).

To address some of the challenges discussed (2.6.1 to 2.6.8 above), government amended the B-BBEE Act, No. 53 of 2003 in 2013. This also resulted in the Codes changing in the same year. Significant changes to both the B-BBEE Act, No. 53 of 2003 and the Codes are discussed in the next section.

2.7 CHANGES TO LEGISLATION AND CODES OF GOOD PRACTICE

After 10 years of existence, the B-BBEE Act, No. 53 of 2003 was amended on 27 January 2013 with some significant changes, and published in Government Gazette 37271.

Firstly, organs of state and public entities are now obliged to apply, as opposed to just taking into account as per the B-BBEE Act, No. 53 of 2003, the Codes when issuing licences, concessions or other authorisations, implementing preferential procurement policy, selling state-owned enterprises, partnering with the private sector and awarding incentives, grants and investment schemes (dti 2013b).

Secondly, the B-BBEE Amendment Act, No. 46 of 2013 introduced the establishment of a B-BBEE Commission. The Commission is tasked with a few responsibilities overseeing the B-BBEE Amendment Act, No. 46 of 2013, and ensuring that it is complied with – including the newly introduced anti-fronting laws (contained in B-BBEE Amendment Act, No. 46 of 2013) – which makes it illegal for entities to apply BEE fronting practices (dti 2013a). A fronting practice is a transaction or arrangement where black people are used as tokens without meaningfully participating in core activities of the company in order to benefit the company's BEE scores (Surroca, Tribó & Waddock 2010:692).

Thirdly, the previous B-BBEE Act, No. 53 of 2003, did not oblige any company to report its status of B-BBEE compliance (dti 2003a). The B-BBEE Amendment Act, No. 46 of 2013 now forces public entities, organs of state and all spheres of government to report their B-BBEE compliance in their annual reports. The B-BBEE Amendment Act, No. 46 of 2013 also imposes an obligation on all JSE companies to report their B-BBEE compliance in such a manner as may be prescribed. However, the B-BBEE

Amendment Act, No. 46 of 2013 is not clear on how or where the B-BBEE compliance by these companies should be reported (dti 2013a).

Subsequent to the amendment of the B-BBEE Act, No. 53 of 2003 came the amendment of the Codes, which were gazetted on 11 October 2013, Gazette number 36928. There are also a few significant changes of the new Codes compared to the old ones. The new Codes changed the way the scorecard B-BBEE levels are calculated based on the number of points the company has. Table 2.4 demonstrates the changes, comparing them to the old Codes.

Table 2.4: B-BBEE status comparison

B-BBEE status	As per the Codes of 2007	As per the Codes of 2013
Level 1 contributor	≥ 100 points on the generic scorecard	≥ 100 points on the generic scorecard
Level 2 contributor	≥ 85 but < 100 points on the generic scorecard	≥ 95 but < 100 points on the generic scorecard
Level 3 contributor	≥ 75 but < 85 on the generic scorecard	≥ 90 but < 95 on the generic scorecard
Level 4 contributor	≥ 65 but < 75 on the generic scorecard	≥ 80 but < 90 on the generic scorecard
Level 5 contributor	≥ 55 but < 65 on the generic scorecard	≥ 75 but < 80 on the generic scorecard
Level 6 contributor	≥ 45 but < 55 on the generic scorecard	≥ 70 but < 75 on the generic scorecard
Level 7 contributor	≥ 40 but < 45 on the generic scorecard	≥ 55 but < 70 on the generic scorecard
Level 8 contributor	≥ 30 but < 40 on the generic scorecard	≥ 40 but < 55 on the generic scorecard
Non-compliant contributor	< 30 on the generic scorecard	< 40 on the generic scorecard

Source: dti (2007) and dti (2013b)

By just analysing Table 2.4, a company with a Level 2 rating with 85 points as per the previous Codes, would now be downgraded to Level 4, with the same points. Therefore, it would be more difficult for companies to receive a high B-BBEE rating per the new Codes. Another major change that will make it even more difficult for companies to achieve the desired scores, is the introduction of compliance with priority elements, which have been identified as ownership, skills development, enterprise and supplier development elements. For these three elements, companies would have to

meet a sub-minimum requirement of 40% of the targeted points to avoid their B-BBEE status level being discounted by one level down (dti 2013b).

Another major change in the 2013 Codes is that the seven B-BBEE elements have now been reduced to five elements, namely ownership, management control, skills development, new enterprise and supplier development, and socio-economic development (dti 2013b).

The classification of enterprises has also changed as displayed in Table 2.5. Companies with revenue of less than R10 million are now classified as exempted micro-enterprises compared to less than R5 million revenue per the previous Codes. Companies with revenue of between R10 million and R50 million would be classified as qualifying small enterprises, compared to revenue of between R5 million and R35 million per the previous Codes. Companies with revenue of more than R50 million would be classified as generic enterprises compared to revenue of more than R35 million per the previous Codes (dti 2013b).

Table 2.5: Classification of enterprises

Classification of enterprise	As per the Codes of 2007	As per the Codes of 2013
Exempted micro-enterprises	Companies with revenue of less than R5 million	Companies with revenue of less than R10 million
Qualifying small enterprises	Companies with revenue of between R5 million and R35 million	Companies with revenue of between R10 million and R50 million
Generic enterprises	Companies with revenue of more than R35 million	Companies with revenue of more than R50 million

Source: dti (2007) and dti (2013b)

2.8 PREVIOUS CONTRIBUTIONS

Prior to changes in legislation in 2013, various researchers studied the matter. The first study to be considered is by Strydom et al. (2009:75), who found that investors do not perceive BEE transactions to have a negative effect on the value of the companies. Although the results of their study were not conclusive, they indicated some positive effects on the share prices of the companies when BEE transactions were announced. To support this, Alessandri et al. (2011:241) found that where equity stake for BEE transactions is offered at discount, the shareholders' value is affected significantly and

positively. However, when equity for BEE transactions is offered at a premium, it has the opposite effect, where the shareholders' value is affected negatively. Alessadri et al. (2011:241) attribute these results to a positive signal that discounted shares sends to investors about the corporate social responsibility intentions of the company. Although the study by Akinsomi, Kola, Ndlovu and Motloun (2016:22) focused only on property firms listed on the JSE, the results of their study came to the similar conclusion that the BEE-compliant companies have superior market returns compared to the non-BEE-compliant companies.

Wolmarans and Sartorius (2009:189) concluded that there was a positive influence on shareholders' wealth when announcements in terms of BEE transactions were made. Ward and Muller (2010) came to the same conclusion in their study, which found that shareholders' wealth had returns up to 10% after 180 days of trading. This is attributable to a BEE deal announcement typically attracting a substantial amount of press coverage, which in turn results in positive image enhancement of the companies in question (Mehta & Ward 2017:87).

Both these studies could imply that investors view BEE positively since it adds value to companies. What needs to be investigated, which was not addressed by the previous studies, is whether BEE has any specific financial effect, or whether it adds value to the companies through revenue and profits.

Results by Ferreira and De Villiers (2011:36) were contrary to the results by Strydom et al. (2009:74) and Wolmarans and Sartorius (2009:189). Ferreira and De Villiers (2011) tested the relationship between the BEE scores of JSE-listed companies and market performance and found that there is in fact negative market performance when the BEE scores of companies are higher. It must be noted, however, that the test by Ferreira and De Villiers (2011) was for one year only. Ferreira and De Villiers (2011:36) suggest that the negative effect could be the result of companies overinvesting in BEE and hiring incompetent staff to get higher BEE scores. This could be due to the fact that the cost of implementing and maintaining a compliant BEE rating is significant (Mehta & Ward 2017:85). Limited research to test this has been conducted. Ferreira and De Villiers (2011:36) recommend that further research needs to be done around BEE scores and revenue change. Van der Merwe and Ferreira (2014) subsequently conducted a similar study, this time looking into the relationship between individual

elements of the BEE scorecard and share returns. The study found a significant relationship with three of the elements. The relationship between BEE scores and the management control element of the BEE scorecard was found to be a positive one, with higher BEE score on this element resulting in positive share returns. The other two elements that had a significant relationship with share returns were ownership and preferential procurement; however, this was a negative relationship.

In a more recent study, Mehta and Ward (2017) used data for the period 2009 to 2015. Their study had to determine whether there is a relationship between the BEE scores of JSE-listed companies and share returns. This study found that, in the short-term, when a company's BEE score improves, the share returns are positive. In contrast, when the company's BEE score declines, the share returns are affected negatively. Mehta and Ward (2017) advanced the following possible reason for these findings: the positive returns could be influenced by a signal that a company with a high BEE score could be sending to the investors that this company has good management, good corporate governance and transparency and that it has a good chance of obtaining government contracts (Mehta & Ward 2017:95). The same study further found that, when looking at the long-term performance share returns, the results are an inverse of the short-term ones. Higher BEE scores resulted in negative share returns and vice versa. The long-term results are consistent with those advanced by Ferreira and De Villiers (2011:36).

2.9 OVERVIEW OF BEE IN PRACTICE

The B-BBEE Act, No. 53 of 2003 has good objectives, which, if achieved would create better living conditions for black people. Government intended to achieve the following:

- promote meaningful participation of black people, including black women, in the economy;
- achieve change in the way companies in South Africa are owned and managed;
- increase broader community ownership and management in enterprises, and give them access to economic activities, infrastructure and skills training;
- promote investment programmes that promote black people's participation in the economy;

- give access to economic activities, land, infrastructure, ownership and skills to rural and local communities; and
- enable black people to access finance for BEE (dti 2003a).

This will only be attained if B-BBEE is supported by all sectors of business, which will ultimately result in sustainable and economic growth that benefits all South Africans (Dukander 2014:30). Further to that, if companies successfully implement BEE, it will result in promotion of the social good and economic competitiveness in the country (Patel & Graham 2012:195). Akinsomi et al. (2016:4) agree that it is generally considered that companies that are BEE-compliant are those companies that are also socially responsible.

It has been more than 20 years since apartheid ended and the beginning of democracy in South Africa. The question is whether there has been progress in terms of transformation of the South African economy. According to President Jacob Zuma and the Minister of Trade and Industry, Minister Rob Davies, the pace of progress of BEE is not satisfactory. This opinion was expressed by both of them at the National Summit on B-BBEE held in October 2013 (De Wet 2013:54).

There are; however, some scholars who previously held a different view than the president and the minister. According to Tangri and Southall (2008:700), there has been some progress in terms of BEE in business. More BEE deals have been concluded over the years, and more black people are becoming members of boards of directors and senior managers in companies (Tangri & Southall 2008:700). Also supporting the same view of progress is SAICA's survey, which points out that in 2014, 25% of the directors of the top 400 JSE-listed companies were black (South African Institute of Chartered Accountants [SAICA] 2014) compared to 8% in 1997 (Jack & Harris 2007:231) and 20% in 2004 (Tangri & Southall 2008:700). Dukander (2014:30) is also of the opinion that there has been some progress in BEE, and an increase in the number of companies that are beginning to realise the significance of BEE and its effect on long-term success.

De Wet (2013:54) contends that the time has arrived for South African businesses to take transformation seriously and give it the necessary attention, otherwise businesses might lose market share. This contention is similar to the conclusion reached by Krüger

(2011:230) following a survey where employees of various companies were interviewed to establish whether they believed that adoption of BEE practices would affect business performance in terms of turnover and financial performance. The results of his survey were negative since these employees believed that BEE compliance would not make a significant difference (Krüger 2011:230).

To achieve BEE compliance, companies and their management in general would have to be convinced that compliance would benefit the company (Ferreira & De Villiers 2011:24). This would also be beneficial to investors in decision-making to determine whether it is at all beneficial to invest in companies with high BEE ratings.

In practice, BEE compliance should benefit companies in terms of revenue, and therefore other financial indicators as intended by the Preferential Procurement Policy Framework Act, No. 5 of 2000. Van der Merwe and Ferreira (2014:548) agree that benefits of BEE compliance should be access to government contracts and new market opportunities (Van der Merwe & Ferreira 2014). As discussed under in 2.4 above, the key tool that makes BEE useful is that organs of state and public entities are encouraged by the Preferential Procurement Policy Framework Act, No. 5 of 2000 to give preference to businesses that have high BEE ratings on their BEE level, determined by using the Codes, when procuring their goods and services (Department of Finance 2000). This study sought to investigate the validity thereof and whether companies with high BEE ratings benefit from it through higher revenue and better financial performance.

There are, however, companies that believe BEE compliance would benefit their companies. According to Sartorius and Botha (2008:444), about 50% of companies believe that implementing BEE would grow their business and improve their market shares. However, about a third believed that they would lose market share if they do not comply with BEE. The current study attempted to test this theory to determine how market share and company performance are affected by compliance to BEE. In addition – even though it could very well be just a public relations exercise – the disclosure of BEE compliance in annual reports of listed companies has improved (Ntim & Soobaroyen 2013:134), which means that some companies are adamant to be BEE-compliant.

2.10 SUMMARY AND CONCLUSION

The literature review revealed how the apartheid system created the inequalities with which the new government after 1994 had to deal (see 2.2). The government has formally introduced BEE as a policy in 2003 to address these inequalities. The objectives of BEE were mainly to incentivise companies to include black people in businesses to participate meaningfully in the economy of the country (see 2.4). The literature review also reflected the various challenges that came with implementation of BEE policies (see 2.6). These challenges included challenges regarding BEE policies benefiting only a few people instead of the broader population as intended. Other challenges involved difficulties around a lack of legal enforceability of these BEE policies and the way various stakeholders resisted BEE.

The literature review also discussed changes in legislation. With the changes in the B-BBEE Act, No. 53 of 2003 and the Codes as discussed (see 2.9), it is going to be more challenging to have high B-BBEE compliance in the future. Companies may have to spend more money to score high in B-BBEE status levels, which implies that the incentive to comply will have to be definite if companies are going to be spending more on BEE. The objective of this study was to investigate whether there is an incentive to score high in B-BBEE ratings. The next chapter presents the research design and methodology for this research.

CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

Chapter 2 reported the literature on BEE including its history and evolution. The research design and method are outlined in Chapter 3, by presenting the hypotheses of this study followed by the methodology that was used when conducting this study. The types of variables and the control variable used as part of the data are then discussed. Statistical analysis techniques on how secondary data was analysed and interpreted together with the sources of secondary data used to test the hypotheses in this study are also presented. The data used, the sampling method and the way data was analysed in this study are presented. This chapter ends with a discussion of the reliability and validity and ethical considerations.

3.2 HYPOTHESES

This quantitative study sought to investigate the relationship between BEE scores and revenue generation and profitability of the JSE-listed companies. The term ‘hypothesis’ is defined by Weathington, Cunningham and Pittenger (2012:42) as a specific prediction of a relationship between two variables based on prior knowledge and existing theories on the subject.

Weathington et al. (2012:46) categorise hypotheses into four main types, namely estimation of population characteristics, correlation among variables, differences among two or more populations, and cause and effect. For purposes of this study, two types were used, namely:

- correlation among variables, where a hierarchal regression analysis on 100 companies was used; and
- differences between two groups, where the *t*-test was used for testing the top 100 most black-empowered companies against companies that were not among the top 100 most black-empowered to determine whether there is a meaningful difference between these groups in terms of profitability and revenue growth.

The two opposing hypotheses for this study were as follows:

Alternative hypothesis: JSE-listed companies with high BEE scores benefit more by generating more revenue and profits than JSE-listed companies that are not BEE-compliant.

Second alternative hypothesis: JSE-listed companies that are BEE-compliant and score high on the BEE scorecard have lower revenue growth and profitability than companies that are not BEE-compliant.

Null hypothesis: BEE compliance and scoring high on the BEE scorecard have no significant effect on revenue and profitability of JSE-listed companies.

In order to reject or confirm the null hypothesis, there had to be no statistical difference in terms of the revenue growth and profitability of the JSE-listed companies with high BEE scores and the JSE-listed companies with low BEE scores. If the null hypothesis were rejected, the alternative hypothesis would be accepted. The hypothesis testing was non-directional; therefore, a two-tailed test was used in this study (Field 2013:117).

3.3 METHODOLOGY

The research method and design outlined the way in which this study was conducted. The research design involves a plan or blueprint from which a researcher conducts an investigation that provides all the guidelines on how the researcher would collect data relevant to what the researcher is attempting to achieve (De Vos, Delpont, Fouché & Strydom 2011:143; Sachdeva 2009:77). The research design describes what the researcher will do with the data collected, and how the data assists in reaching a conclusion and in addressing the research problem. Sachdeva (2009:78) explains research design further as a tool to structure the research, and shows how all major parts of the research come together, including samples, groups, measures, treatments and methodology, with the objective of addressing the research question in the study.

The methodology followed in the current study was quantitative in nature. Quantitative research comprises a formal, objective, systematic, empirical investigation in which statistical, mathematical or computational techniques are used to obtain information or

estimate future events or quantities as they claim (Park & Park 2016:4). Research that follows quantitative methods is more advantageous as it is less labour-intensive than other methods in terms of analysing data, and a researcher is able to draw conclusions on a wide population because big sample sizes can be used (Cameron & Price 2009:213). Sampling is discussed in section 3.7 below.

3.3.1 Regression analysis

This study was a two-part study. The first part of this study comprised testing of the relationship between BEE scores and profitability and revenue growth of 100 top black-empowered JSE-listed companies. This relationship was tested through correlation (see 4.3) and hierarchical regression analysis (see 4.3). Correlations are used to determine the bi-directional relationship between BEE scores and revenue growth, and profitability of these companies.

Hierarchical regression analysis was used to determine the relationship between BEE scores, as an independent variable, and revenue growth and profitability, as dependent variables (see 3.4). Leverage, market capitalisation, liquidity, and type of industry were added as control variables (see 3.5) to strengthen the analysis. The dependent variable was the key variable in this case, since it was a variable this study hoped to explain, describe and predict as opposed to the independent variable which this study hoped would cause or account for the change in the dependent variable (Weathington et al. 2012:45). This regression analysis was in a form of:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

The variables are explained as follows:

- X_1 represents the BEE score of the company;
- X_2 represents the size of the company;
- X_3 represents the leverage of the company;
- X_4 represents the liquidity of the company;
- X_5 represents the industry of the company; and
- Y represents the revenue growth and profitability of the company.

The results of the regression analysis were generated by using the SPSS software package and are summarised in the Table 4.4. The value of R square has been extracted from the results from SPSS. R^2 represents coefficient of determination to measure the strength of the linear regression.

To determine the correlation between BEE scores and profitability and revenue growth, this study utilised a correlation coefficient to estimate whether there was a linear relationship between these variables (Table 4.4). This correlation coefficient indicated the degree to which changes in BEE scores corresponded with changes in profitability and revenue growth.

Pearson's r was used for the correlation coefficient and to measure the strength of the linear relationship between BEE scores and profitability and revenue growth (Table 4.4). A positive correlation coefficient indicated that the variables related positively. As BEE scores increased the profitability and revenue growth of the companies increased. A negative correlation coefficient indicated that the variables related negatively. As BEE scores increased, the profitability and revenue growth of the companies decreased. A correlation coefficient of zero implied that there was no relationship between the two variables at all, while a correlation coefficient of +1 or -1 meant there was a perfect linear relationship between the two variables (Field 2013:137). For the purposes of this study a correlation coefficient of between 0.5 and 1 was acceptable to indicate that there was a strong relationship between the variables being tested (Field 2013:117).

3.3.2 *t*-test

The second part of this study was done using a *t*-test. A *t*-test is a statistical test that tests whether two means from two groups are statistically different (Polonsky & Waller 2011:214). JSE-listed companies on the Empowerdex top 100 most black-empowered companies were tested against companies that did not fall into the top 100 most black-empowered companies. A *t*-test is used widely in social and behavioural studies (Weathington et al. 2012:272). This results in the mean of two groups being tested using the *t*-test, which provides a *t*-statistic, which is tested to see whether it is statistically significant or not. The conceptual formula used (Weathington et al. 2012:272) in this study was:

$$t = \frac{\text{Difference between group means}}{\text{Standard error of the difference between group means}}$$

The difference between the two means of the two groups, those that fell among the top 100 most black-empowered companies and those that did not, was the numerator in this case. The denominator in this case, which was the standard error of the difference between group means, was used to estimate the variability of scores within these two groups.

3.4 VARIABLES

Trudel and Cotte (2009:1309) recommend the use of more than one financial performance measure when studying relationships due to two main benefits. These benefits are mitigation of deficiencies inherent in using only one financial performance measure, and that each financial performance measure may reveal completely different results, which may assist in interpreting the results (Trudel & Cotte 2009:1309). The following independent variables were used in this study to determine the financial performance of the companies:

3.4.1 Revenue

Companies listed on JSE are obliged to apply the IFRS in presenting their annual financial statements (Baboukardos & Rimmel 2016). This implies that revenue recognised in the annual financial statements of these companies would be as defined in International Accounting Standards (IAS) 18, now revised as IFRS 15. The current study was done for 2007-2013 when IAS 18 for revenue was applicable. IAS 18 defines revenue as “Revenue is income that arises in the course of ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interest, dividends and royalties” (IASB 1995:1). Besides market capitalisation, total assets and number of employees, revenue plays an important role in a company as it is also used to measure the size of the company (Wagenhofer 2014).

Wagenhofer (2014) contends that revenue is one of the most important financial performance measures as it provides information on business activities as a whole. This is an important measure because it serves as a basis to calculate key performance measures, such as gross profit, net income, earnings before interest and

tax and other measures. Wüstemann and Kierzek (2005) agree with Wagenhofer (2014) on importance of revenue and its usefulness as a measure of performance. Investors utilise revenue as part of the decision-making process as they use it to evaluate past performance and to predict future cash flows and growth trends of the business (Wüstemann & Kierzek 2005; Zhang 2005). Another role of revenue as pointed out by Christine and Martiano (2015) is that it is used as one of the benchmarks for management performance in running the business as it partly represents results of the business operations.

3.4.2 Profitability measures: Net profit margin and return on equity

Profitability reflects the achievements and success of the business as it is one of the primary goals of most companies (Nuryaman 2013:116). This view is supported by Duvenhage and Kruger (2017) who point out that, for profit-driven businesses, profit is a key measure of their success. Profitability is seen as a good measure of success of the business because it has been observed that companies which attract more investments are those with high profitability (Kleynhans & Kruger 2014). As a measure of profitability in this study, net profit margin and ROE were used. This is because ROE, return on assets (ROA) and net profit margin are traditionally amongst the basic ratios that are widely used to evaluate the profitability of companies (Şamiloğlu & Akgün 2016). The study excluded the ROA as a profitability measure because ROE is highly correlated with ROA, and ROE is considered a better profitability measure compared to ROA (Raza & Farooq 2017).

Net profit margin is calculated as a percentage of net profit over revenue. According to Totowa (2015:50), net profit margin measures operating efficiency of the company. It also represents the ability to create profit for the company (Nuryaman 2013:119). ROE is defined as net income as a percentage of shareholders' equity (Mainul 2012:132). According to Monteiro (2006:1), ROE measures the rate at which money invested generates profits for the company. ROE is one of the most widely used ratios to measure financial performance as it links the income statement (representing financial performance) and the balance sheet (representing the financial position of the company) (Ahsan 2012:132; Sur, Mitra & Maji 2014:3). Anarfi, Boateng and Adu-Ababio (2016) also maintain that ROE is one of the key profitability measures that evaluates profitability in relation to the company's book value of its shareholder equity.

The current study used ROE as part of the measure of financial performance mainly because it is considered the most important ratio to investors since it measures how management adds value to the owners of the business (De Wet & Du Toit 2007:60).

3.5 CONTROL VARIABLES

The following control variables were used to avoid research bias.

3.5.1 Size

Market capitalisation was used to measure the size of the company. As explained by Ward and Muller (2010:34), the extent to which companies benefit from BEE varies according to the size of the company. Small companies benefit more from being BEE-compliant by getting an increased turnover and higher margin as high BEE rating gives them access to state contracts (Ward & Muller 2010:34).

Kodongo, Mokoaleli-Mokoteli and Maina (2015) agree with the argument that the size of the company matters. Small companies rely on greater economic activity to improve revenue and profitability. In contrast, with large companies, greater economic activities have no significant bearing on the revenue and profitability (Kodongo et al. 2015).

3.5.2 Leverage

Leverage, which determines the amount of capital that is financed by debt portion, is calculated as a ratio of borrowed funds to total assets (Arranz-Garcia & Vicente-Lorente 2014:192). As Trudel and Cotte (2009:1310) point out, it is important to use a debt ratio as a control variable in financial performance as debt in the company influences the behaviour of management in terms of how they explore new opportunities. Trudel and Cotte (2009:1310) further point out that debt imposes discipline on managers. Both these factors have an influence on the profits of the company. Kodongo et al. (2015) further contend that leverage affects profitability of companies significantly.

3.5.3 Liquidity

Companies with low liquidity tend to perform financially better than companies with high liquidity (Martínez-Ferrero & Frías-Aceituno 2015:33); hence, liquidity was

included as one of the control variables. Liquidity, which determines the ability of the company to finance its operations in the short-term, is calculated as a ratio of current assets and current liability (Martínez-Ferrero & Frías-Aceituno 2015:33).

3.5.4 Industry type

Industry type has an influence on financial performance of the companies due to cultural traits that are different in various industries (Surroca et al. 2010:473). To incorporate industry into this model, a dummy variable was created for the following industries: basic materials, consumer goods, customer services, financials, health care, industries, technology, and telecommunications.

3.6 DATA

A literature review was performed to establish and learn about prior research and theories in order to understand the topic being researched. De Vos et al. (2011:134) explain that the purpose of a literature review is to contribute to the understanding of the nature and meaning of the problem identified in this study. Cameron and Price (2009:175) define a literature review as an extensive and critical discussion that brings together all the strengths and limitations from different sources.

The data used in this study came mainly from secondary sources of information. According to Cameron and Price (2009:175), secondary data represents facts obtained. Cameron and Price (2009:292) further explain that when secondary data is used, the researcher has to engage a wide range of sources of literature in order for him or her to present a comprehensible case. This is the reason why data was collected from various sources, such as published books, journals, publications, reports, magazines, Internet searches, and the annual reports of companies. In addition, government reports and documents such as the Codes, Government Gazette, policy documents, charters and legislation were studied. All the data collected from these sources was used as evidence to support the hypotheses as all data used in this study was secondary data gathered by others (Cameron & Price 2009:209).

Information on BEE scores was obtained from the Empowerdex website (Empowerdex 2015). Empowerdex is a company that performs B-BBEE ratings, and was founded in 2001 by its current directors Vuyo Jack and Chia-Chao Wu (Empowerdex 2015). Vuyo

Jack is co-author of a book called *Broad-based BEE: the complete guide* (Jack & Harris 2007) that is used by the University of South Africa (Unisa) and the University of Witwatersrand for the B-BBEE Management Development Programme (MDP) (Jack & Harris 2007). The MDP is a compulsory requirement for any registered auditor who wishes to register with the IRBA as an approved B-BBEE-registered auditor who performs B-BBEE compliance audits and issues BEE certificates (Unisa 2017). Empowerdex is a leading company in the B-BBEE industry. They were part of the team that was involved in developing the Codes for B-BBEE. Other projects Empowerdex where was involved are the Department of Communication's Information and Communication Technology (ICT) sector charter, the Department of Environmental Affairs and Tourism's tourism sector charter and the Wine and Liquor Industry's BEE industry charter (Empowerdex 2015).

Data on BEE scores of the top 100 BEE companies are from Empowerdex's annual Financial Times/Empowerdex top empowerment companies survey (Mail & Guardian 2013). Empowerdex annually compiles a list of the top 100 most black empowerment companies. This list ranks the top 100 JSE companies in terms of broad-based BEE. This information is published by the *Mail & Guardian* in April of every year (Mail & Guardian 2013). In this Empowerdex survey, participants are invited to submit their BEE certificates, which have been verified by verification agencies, accredited by the South African National Accreditation System (SANAS) or by an approved B-BBEE registered auditor with the Independent Regulatory Board of Auditors (IRBA) (Mail & Guardian 2013). Independent professionals verify the scores, which adds reliability to the scores used. The ratings are based on the financial year preceding the ratings year (Van Heerden 2011:22); therefore, 2008 ratings reflect the 2007 financial year, 2011 ratings reflect the 2010 financial year, and 2014 ratings reflect the 2013 financial year.

Data relating to revenue and profitability of all JSE-listed companies was obtained from the INET BFA database. INET BFA is a leading provider of financial data in Africa, such as information on share prices, company information, annual reports, and other company financial information. The company has been in existence since 1965 (INET BFA 2015).

Data relating to BEE scores was available only for the top 100 most black-empowered companies as Empowerdex only publishes the top 100. It is for this reason that the

regression analysis was done only on these top 100 most black-empowered companies to test whether there is any significant relationship between the BEE scores and profitability and revenue growth. These top 100 most black-empowered companies covered all industries. The population tested was limited due to unavailability of revenue and profitability data. The companies with this missing information were therefore excluded from the test. This resulted in 70 companies for 2007, 81 companies for 2010, and 77 companies for 2013 being tested.

For companies that were tested using the independent group *t*-test, the whole population was tested, excluding companies where the profitability and revenue information could not be found. Companies on the Empowerdex top 100 empowered companies were tested against the companies that did not fall amongst these top 100 empowered companies. It was assumed that these companies had lower B-BBEE scores than the companies among the top 100.

In this study, a measure for profitability was net profit margin and ROE for the financial years ending 2008, 2011 and 2014. This net profit margin (Omnamasivaya & Prasad 2016:25) was calculated as:

$$\text{Net profit margin} = \frac{\text{Net profit for the year}}{\text{Revenue for the year}}$$

Net profit for the year is net profit before tax, while revenue for the year is total revenue as presented in the annual financial statements (Omnamasivaya & Prasad 2016:25).

ROE (Omnamasivaya & Prasad 2016:25) was calculated as:

$$\text{Return on Equity} = \frac{\text{Net profit for the year}}{\text{Shareholders' equity}}$$

3.7 SAMPLING

This study was done only on JSE-listed companies on the main board. This study tested the profitability and revenue change of the year after obtaining the score, because if the company would benefit from revenue and profitability increases, this would happen in the 12 months following the verification date. It should be noted that a B-BBEE certificate is valid for a period of 12 months following the issue date of the

certificate (dti 2007). In order to test not only one year, which carries the risk of the results of study being biased, the study was spread from the year of introduction of the Codes (i.e. 2007) to the year whose data was available at the time of this study (i.e. 2013). The study was then split into intervals of three years.

The sample relating to the first part of this study (see 3.3.1) was the top 100 empowered companies on JSE-listed companies. Regression analysis was performed on these companies. The question whether testing 100 companies as a sample is appropriate is answered by Cameron and Price (2009:226), who highlight that many novice researchers regard 100 as an appropriate number for a sample size.

The second part of this study (see 3.3.1) entailed testing the top 100 empowered companies against the companies that are assumed to have scored lower than the companies on the list of top 100 empowered companies. This therefore tested all the companies listed on the JSE by comparing those among the top 100 empowered companies with those that are not. For 2008, 238 companies were identified, 242 for 2011, and 253 for 2014. As explained by Cameron and Price (2009:175), a bigger sample is always better than a smaller sample in terms of validity of the results; therefore, this study tested all companies listed on the JSE on the *t*-test research. Another reason for testing all the listed companies was that this study sought to analyse the results beyond a group of companies listed, and to probe further down to the industry type and size of the companies.

Companies that entered or exited the JSE listing during the periods under review were excluded to avoid distorting the data. Once the testing on the companies tested had been done, generalisation could be done to suggest whether companies with high or low B-BBEE scores were more or less profitable and generated more or less revenue.

3.8 DATA ANALYSIS

Cameron and Price (2009:468) point out that when association between two variables has been tested and found to exist, this association has to be tested whether or not it is by chance. This study used the size of the *p*-value as a measure of level of significance of the association. A *p*-value of less than 5% was considered statistically significant. A *p*-value of less than 5% was used because this is usually found

acceptable by various experts as statistically significant (Cameron & Price 2009:469; Field 2013:115).

3.9 RELIABILITY AND VALIDITY

According to Cameron and Price (2009:215), data is good only if it is “relevant, valid, reliable and/or replicable and representative”. Data used, especially if it is secondary data, has to be trustworthy data (Cameron & Price 2009:215). Having trustworthy data enables the researcher to generalise the conclusions of the data analysis. The B-BBEE scores were obtained from the Empowerdex website on information that is publicly available. Empowerdex, in association with the *Mail & Guardian* (previously *Financial Mail*), publishes this information annually in April in the widely read *Mail & Guardian* newspaper. The Empowerdex Top 100 Empowered Companies supplement of the *Mail & Guardian* is a highly respected and widely read publication in the private and public sectors (Mathura 2010:36); therefore the information published by them was considered to be reliable for purposes of this research.

As previously noted (see 1.8), data relating to revenue and profitability was obtained from the INET BFA database, which is a leading provider of financial data in Africa. Since both data sets from the dependent and independent variables were publicly available information, the risk of using biased and discrepant information was therefore mitigated.

The data used also had to be valid. Data can be said to be valid if it measures what it purports to measure (Cameron & Price 2009:291). “Where secondary data based research seeks to compare different organisations, it is vital to ensure that the comparable data is available for all the organisations involved” (Cameron & Price 2009:291). The data on all companies that was tested was available at the time of this research.

3.10 ETHICAL CONSIDERATIONS

Ethical issues were taken into consideration to ensure that it was within acceptable boundaries and parameters to avoid any harm or negative effect on any party affected. When conducting research, it is important for researchers to be sensitive to and mindful of moral principles and ethical reasoning by being considerate in terms of the ethical

implications of a study, and consequences of one's actions, doing no harm to others and being considerate to the welfare of others (Weathington et al. 2012:24). For the purpose of this study, all information used was public information. It was published on websites and databases in the public domain; therefore, there was no need to obtain any permission from the subjects in this study. However, the providers of information are credited for the information provided.

3.11 CONCLUSION

This chapter discussed the nature of this study, the hypotheses, the research design, and the method for conducting this study. A two-part study was conducted using hierarchical regression analysis and a *t*-test. BEE scores were tested as an independent variable, against the three dependent variables, revenue, net profit margin and ROE. This chapter also discussed how size, leverage, liquidity and industry were utilised as control variables. This chapter further outlined data utilised, sampling size and methods and data analysis techniques. The methodology discussed in this chapter was expected to achieve the set goal of this study, which was to establish whether there is a significant relationship between BEE scores, revenue growth and profitability for JSE-listed companies. The next chapter presents an analysis and discussions of the research findings of this study.

CHAPTER 4

ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

4.1 INTRODUCTION

In Chapter 3, the research design and method were outlined. This chapter starts by outlining the hypotheses of this study followed by the methodology that was followed when conducting this study. The types of variables and control variable inputs as part of the data are then discussed. Statistical analysis techniques on how secondary data was analysed and interpreted together with the sources of secondary data used to test the hypotheses in this study are also presented. The data used, sampling method and the way data was analysed in this study are presented. The chapter ended by discussing the reliability, validity and ethical considerations of the study.

The research, holistically seen, revolved around probing and validating the efficacy of the Codes promulgated by the B-BBEE Act, No. 53 of 2003, by benefiting BEE-compliant companies. This chapter contains the findings from the data collected and analysed in an attempt to address the research objectives in this study. This chapter aims to show the statistical findings that are easy to understand; therefore, various approaches have been taken for good and effective visualisation of data in order to enhance an understanding of the outcomes.

The research findings are broadly divided into two parts. The first part focuses on the data of the top 100 most black-empowered companies (see 3.3) to interpret the efficacy of the BEE framework in terms of its financial benefits to the compliant companies, Pearson's r correlation method along with hierarchical regression modelling was used. The aim was to comprehend the relationship between the BEE score (as independent variable) and the financial performance variables: revenue growth, net profit margin and ROE (as dependent variables).

The second part (see 3.3) focused on the interpretation of comparative statistics in which the two groups, the top 100 most black-empowered companies and companies

that were not among the top 100 most black-empowered companies, are compared in order to show differences between the profitability and revenue growth of the companies in these groups. To test the hypothesis statistically, a *t*-test was used which compared the means of both groups as base variable.

4.2 DESCRIPTIVE STATISTICS

In Tables 4.2 and 4.3, **BEE score** represents the BEE score as provided in the annual Empowerdex ranking of the top 100 most black-empowered companies for the respective years (see 3.6). **Revenue growth** represents year-on-year percentage growth in revenue of the companies tested (see 1.8). **Net profit margin** represents the annual net profit margin for the financial years being tested (see 3.4.1). **ROE** represents ROE as a measure of profitability of the company (see 3.4.2). **Size** represents market capitalisation at the end of the financial year of each company tested (see 3.5.1). **Liquidity** represents the current ratio of the companies in the respective years being tested (see 3.5.3). **Leverage factor** presents the leverage ratio for the financial years being tested (see 3.5.2). A higher BEE score listed as independent variable translates into better compliance of the company with the Codes, while a lower score postulates lower compliance of the company with the Codes (Van Heerden 2011:5). Each sample in the three data sets (Tables 4.2 and 4.3) is represented by three construct variables: independent variable, financial performance measure and control variable. The data is divided into three individual groups depending on the year of acquisition of the variables: 2007, 2010 and 2013.

Table 4.1 provides minimum, maximum, median, mean and standard deviation (SD) of all the variables used in this study for 2013.

Table 4.1: Summary of the descriptive statistics for 2013

Variables	N	Minimum	Maximum	Median	Mean	Standard deviation (SD)
BEE score	73	48.91	93.98	76.86	74.58	10.32
Revenue growth	73	-50.00	53.00	9.00	10.10	14.34
Net profit margin	73	-26.70	48.07	4.97	7.75	10.43
ROE	73	-46.99	91.41	16.78	17.06	17.90
Size (millions)	73	38	409 240	12 534	36 773	66 986
Liquidity	73	0.20	3.17	1.38	1.40	0.57
Leverage	73	-12.76	26.06	1.33	1.70	3.89

Source: SPSS results

From the summary output in Table 4.1, the minimum value for BEE scores was 48.91, the median 76.86, the mean 74.58, and the maximum value, 93.98. The mean was 10.10 for revenue growth, 7.75 for net profit margin, and for ROE, 17.06.

Table 4.2 provides minimum, maximum, median, mean and SD of all the variables used in this study for 2010.

Table 4.2: Summary of the descriptive statistics for 2010

Variables	N	Minimum	Maximum	Median	Mean	SD
BEE score	80	31.00	88.00	66.00	63.03	12.98
Revenue growth	80	-30.00	59.00	6.00	7.24	14.76
Net profit margin	80	-44.59	72.49	5.60	9.34	17.01
ROE	80	-79.08	67.49	16.48	14.00	21.84
Size (millions)	80	59	270 900	6 191	21 965	47 218
Liquidity	80	0.22	4.99	1.33	1.47	0.80
Leverage	80	-34.75	42.56	1.19	1.66	6.75

Source: SPSS results

From the summary output in Table 4.2, the minimum score for BEE was 31.0, the median was 66.0, the mean 63.03, and the maximum score was 88.0. For revenue growth, the minimum score was -30.00, the median 6.00, the mean 7.24, and the maximum score, 59.00. For net profit margin, the minimum score was -44.59, the

median 5.60, the mean 9.34, and the maximum score, 72.49. The minimum score for ROE was -79.08, the median 16.48, the mean 14.00, and the maximum value, 67.49.

Table 4.3 provides the minimum, maximum, median, mean, and SD of all the variables used in this study for 2007.

Table 4.3: Summary of the descriptive statistics for 2007

Variables	N	Minimum	Maximum	Median	Mean	SD
BEE score	70	20.00	73.00	43.50	44.17	14.05
Revenue growth	70	-16.00	105.00	16.00	20.54	22.56
Net profit margin	70	-107.54	104.72	7.27	10.34	23.74
ROE	70	-70.16	384.03	22.84	26.83	49.18
Size (millions)	70	13	202 680	5 927	17 424	35 131
Liquidity	70	0.31	10.20	1.30	1.70	1.38
Leverage	70	-3.85	27.37	1.34	2.89	4.94

Source: SPSS results

From the summary output in Table 4.3, the minimum value was 20.0 for the BEE scores, the median 43.5, the mean 44.17, and the maximum score was 73.0. The minimum value was -16.0 for revenue growth, the median 7.27, the mean 10.34, and the maximum value was 104.72. The minimum value was -70.16 for ROE, the median 22.84, the mean 26.83, and the maximum value, 384.03.

4.3 CORRELATIONS

As discussed in section 3.3, a Pearson’s correlation analysis was undertaken to determine the correlations between BEE score and financial performance measures: revenue growth, net profit margin and ROE. At this stage, this study was only testing a bidirectional relationship between two variables at a time. Pearson’s correlation coefficient (*r*) was used to measure the significance of the correlation. The closer this is to zero, the weaker the correlation, and the closer it is to one, the stronger the correlation (Field 2013:137). A negative value of Pearson’s *r* depicts a negative relationship between the two variables being tested, meaning the higher the BEE score, the lower the financial performance measure with which it is being compared (Field 2013:137). A positive value of Pearson’s *r* depicts a positive relationship

between the two variables being tested, meaning the higher the BEE score, the higher the financial performance measure with which it is being compared (Field 2013:303).

Table 4.4 shows a correlation matrix for 2007, 2010 and 2013, and also the correlation between BEE scores and financial performance measures: revenue growth, net profit margin and ROE. The correlation coefficient, *r* with a value ranging from 0.5 to 1 or -0.5 to -1, shows a strong correlation in the variables. It is evident from Table 4.4 below that none of the relationships showed significance in any of the three years. The value of Pearson’s *r* is also below the acceptable value of 0.5 of all the variable relationships.

Table 4.4: Correlation matrix for 2007, 2010, and 2013

		Revenue growth	Net profit margin	ROE
BEE score – 2007	Pearson’s correlation	0.090	-0.107	-.012
	Sig. (2-tailed)	0.436	0.354	0.919
BEE score – 2010	Pearson’s correlation	0.000	0.015	0.042
	Sig. (2-tailed)	0.998	0.896	0.711
BEE score – 2013	Pearson’s correlation	0.086	-0.011	-0.027
	Sig. (2-tailed)	0.477	0.925	0.822

Source: SPSS results

The correlation coefficients provided insight into the strength and direction (positive or negative) of the relationship between BEE scores and the three financial performance measures: revenue growth, net profit margin and ROE. However, this study aimed to investigate the relationship between BEE scores as independent variable, and revenue growth and profitability respectively as dependent variables. In addition, the relationship had to be tested by additionally controlling for industry type and other relevant financial performance measurements. In order to accomplish this requirement, hierarchical regression was used.

4.4 PART 1: REGRESSION ANALYSIS

The aim of this section, as described earlier, is to describe the relationship between BEE score and financial performance measures. A regression analysis was conducted on the data to find the relationship and support the alternate hypothesis, namely JSE-

listed companies with high BEE scores benefit more by generating more revenue and profits than JSE-listed companies that are not BEE-compliant.

The results of the regression analysis were tested for their significance using the p-value. If the observed p-value is below 0.05, it means that the null hypothesis will be rejected (postulating that there exists a significant correlation between the variables) and vice versa.

In order to simplify the results interpretation, a detailed analysis of the complete statistical reports of one data set (2013) is elaborated in graphs (Figures 4.1-4.3). The graphs show the results of a linear regression carried out by considering the BEE score as the independent variable (given on the x-axis) and the dependent variables (net profit margin, revenue growth and ROE) (given on the y-axis). Figure 4.1 reflects an attempt to carve out the linear regression line relationship between the dependent and independent variables. As can be extrapolated from Figure 4.2, there is a negative trend between BEE score and net profit margin which does not comply with the established alternative hypothesis constructed in the light of the literature review. This suggests that a higher BEE score will translated into a better profit margin given that the BEE score corresponds to BEE compliance. The constructed linear equation for the relationship is given as $y = -0.1617x + 21.137$, whereas the R-squared value is 0.011. However, the linear regression graph of the BEE score with revenue growth (Figure 4.1) shows a slight upward trend, which appears to be in favour of the alternative hypothesis, but it was noted that the value of R-squared ($R^2 = 0.0008$) was not significant; hence, showing that the trend cannot be considered a consistent interpretation of the alternative hypothesis. The null hypothesis is further supported by the trend line shown by the graph of the BEE score with ROE (Figure 4.3), as the linear regression is slightly negative and there is no consistent correlation of any sort.

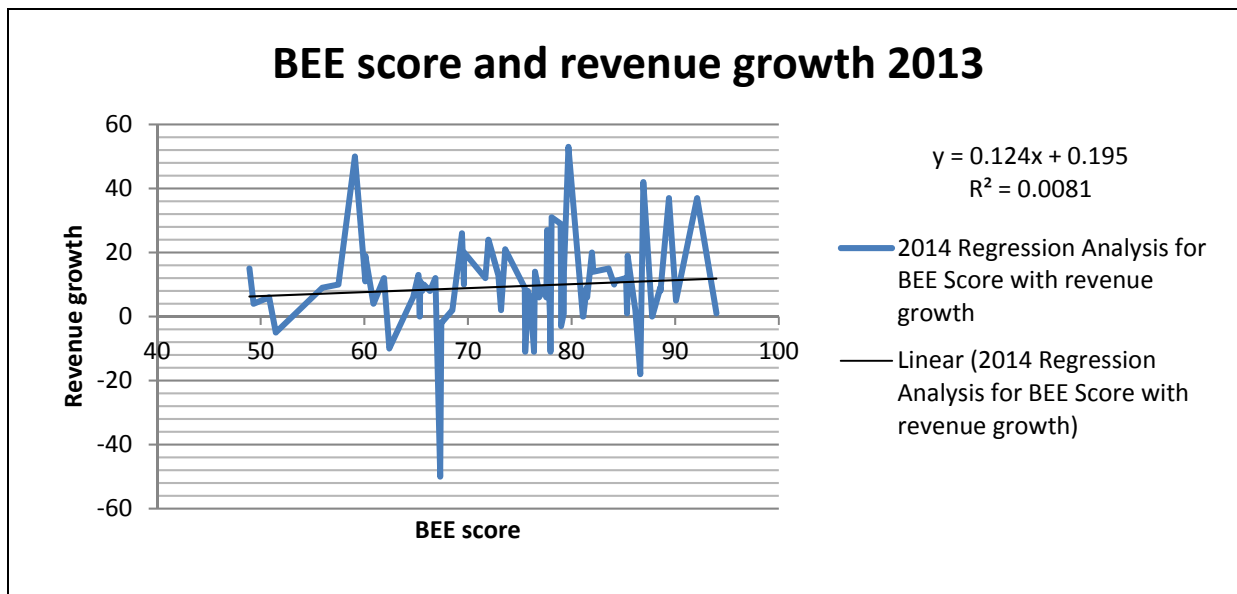


Figure 4.1: Revenue growth regression graph 2013

Source: Author

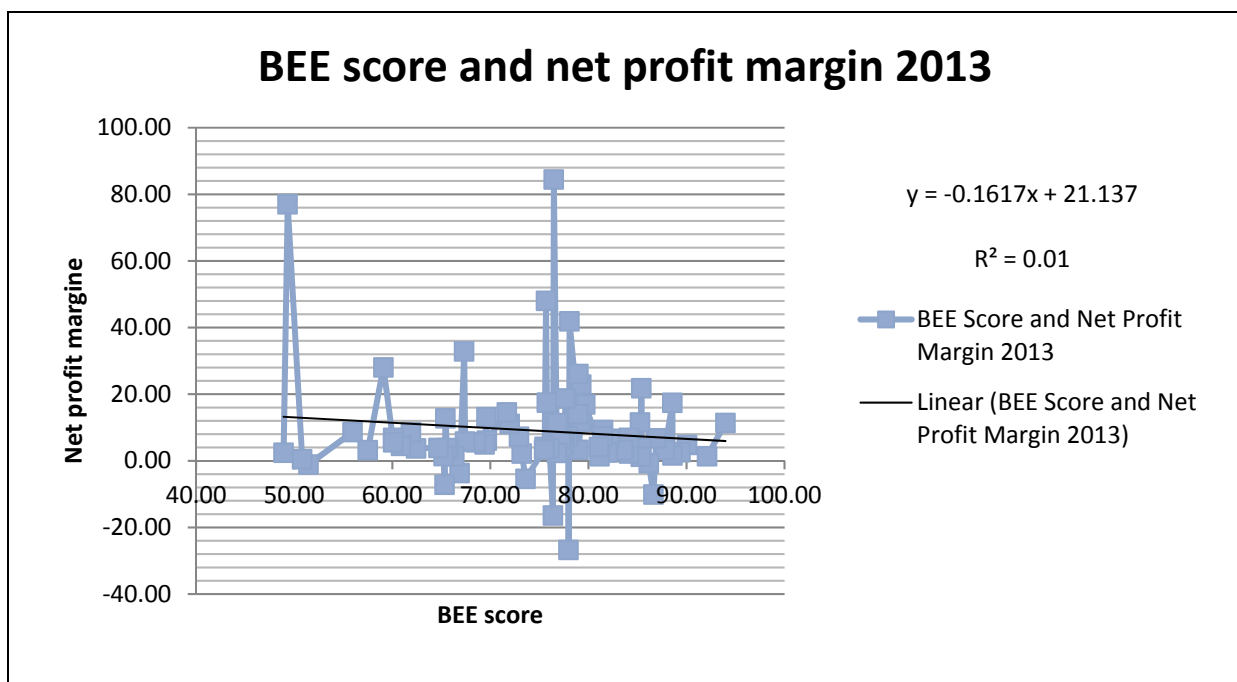


Figure 4.2: Net profit margin regression graph 2013

Source: Author

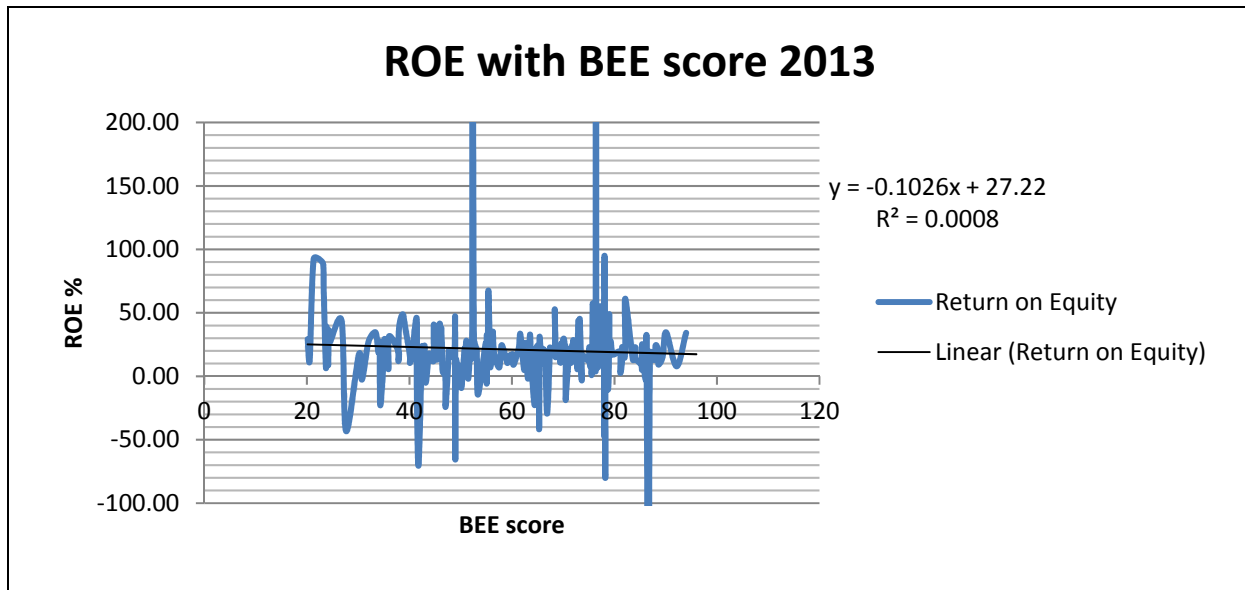


Figure 4.3: ROE regression graph 2013

Source: Author

In order to check the consistency of the correlation and its significance to support the alternative hypothesis, a hierarchical regression model was applied to the data using SPSS. Firstly, the dependent variable was selected to be revenue growth of the top 100 most black-empowered companies. The dependent variable was then analysed for relationship and its significance using analysis of variance (ANOVA) testing. Furthermore, to analyse hidden factors or relationships at play in depth, analysis was carried out inducting all constructs using the control variables (market capitalisation, liquidity, leverage and industry). The p-values as given in the results (see Tables 4.4-4.12) were used to define the significance of the relationship constructed. In order to reject the null hypothesis, the p-value had to be less than 0.05, which translates into a significant correlation.

4.4.1 Regression results for 2013

Below are the results of the regression analysis, which are presented by year. The results are presented starting with revenue growth, followed by net profit margin, and ROE as dependent variables for 2013.

4.4.1.1 Revenue growth as dependent variable – 2013

The results of the regression analysis were generated by the software SPSS and are summarised in the Table 4.5. The value of R^2 was extracted from the results from

SPSS. R^2 represents the coefficient of determination, which is used to measure the strength of the linear regression.

For the purpose of this study, hierarchical regression modelling was used. For the first model, the dependent variable was revenue growth with the BEE score as the independent variable. The result of the F-test as shown in Table 4.5, indicated that this statistical model was not statistically significant as its p-value was greater than 0.05 ($F=0.613$; $p=0.436$). Although the results show that there was a positive relationship between revenue and the BEE score (see Table 4.5), with a standardised beta coefficient value of 0.090, the relationship between these variables was not statistically significant. R^2 , which in this case measured the percentage change of financial performance movements that can be explained by movements in BEE scores, was also very low. R^2 for model one was 0.008, which implied that less than 1% of the movement in revenue growth could be explained by movements in BEE scores.

For the second model (see Table 4.5), the predictors liquidity, leverage and market capitalisation were added to the regression. Again, the results of the F-test show that this statistical model was not statistically significant as the p-value was above 0.05 ($F=1.812$; $p=0.136$). Consistent with model one, the results of R^2 did not improve significantly for model two as the value was 0.091, which means only 9% of the movement in revenue growth could be explained by movements in BEE score. Again, the results show that there was a positive relationship between revenue and BEE score. With a standardised beta coefficient value of 0.078, the relationship between these variables was not statistically significant.

All other constant variables were added in the third model. The results of the F-test are consistent with the first and second models, which showed a similar trend that the statistical model was not significant as the p-value was greater than 0.05 ($F=1.493$; $p=0.176$). There was a slight improvement with R^2 for model three ($R^2=0.149$), however it remained insignificant. This means only 15% of the movement in revenue growth could be explained by movements in BEE score. The results are still showing a positive relationship between revenue and BEE score with a standardised beta coefficient value of 0.052; however, the relationship between these variables is still not statistically significant. Therefore, in this case, the null hypothesis could not be rejected and was accepted as the outcome for the relationship between the BEE score and revenue

growth of the top 100 most black-empowered companies considering the results of all three models.

Table 4.5: Regression results for 2013 with revenue growth as dependent variable

	Model 1	Model 2	Model 3
BEE score	.090	.078	.052
Liquidity		-.032	.014
Leverage		.216	.200
Market capitalisation		.195	.223
Basic materials industry			-.231
Consumer services industry			.008
Financial industry			-.028
Industrial industry			.054
R ²	.008	.091	.149
F (p-value)	.613 (.436)	1.812 (.136)	1.493 (.176)
<i>Note: Standardised beta coefficients are presented. *p < 0.05, **p < 0.01</i>			

Source: SPSS results

4.4.1.2 Net profit margin as dependent variable – 2013

Table 4.6 shows the standardised coefficients for the dependent variable net profit margin. The standardised coefficient for the first model with BEE score as the independent variable was -0.107 which showed a negative relationship; however, the results demonstrate an insignificant relationship due to the p-value which is less than 0.05 (p=0.354). R² was also very low at 0.011, which implied that only 1.1% of variations in net profit margin could be explained by changes in BEE scores. The results are also confirmed by the result of the F-test as shown in Table 4.6, namely that this statistical model was found to be not significant as its p-value was less than 0.05 (F=0.870; p=0.354).

Models two and three had F-test results that showed significant statistical models (F=2.895; p=0.028) and F=5.129 (p=0.000). Despite the significant F-test results, there was no significance with the p-values for the standardised coefficients for both models two and three, the p-values were below 0.05 (p=0.244 for model two and p=0.148 for model three). R² for both models two and three also supported the conclusion at

$R^2=0.139$ and $R^2=0.376$. With revenue growth, the null hypothesis relating to net profit margin could not be rejected.

Table 4.6: Regression results for 2013 with net profit margin as dependent variable

	Model 1	Model 2	Model 3
BEE score	-.107	-.129	-.144
Liquidity		-.193	-.052
Leverage		.238	.357
Market capitalisation		.223	.207
Basic materials industry			.025
Consumer services industry			.059
Financial industry			.541
Industrial industry			.014
R^2	.011	.139	.376
F (p-value)	.870 (.354)	2.895 (.028)	5.129 (.000)
<i>Note:</i> Standardised beta coefficients are presented. * $p < 0.05$, ** $p < 0.01$			

Source: SPSS results

4.4.1.3 ROE as dependent variable – 2013

The results for the regression analysis conducted on the data for 2013 with ROE added as a dependent variable are shown in Table 4.7. The results for the ROE are slightly different from the results of the other financial performance measures in that the F-test results show a significance in the statistical model for model two ($p=0.000$) and model three ($p=0.000$). Only the F-test results of model one show results that are not significant for the statistical model as p-value was above 0.05 ($p=0.919$). R^2 for model two ($R^2=0.564$) and model three ($R^2=0.590$) was also very high, which implies that a high percentage (over 50% for both models) of the variation in ROE can be explained by the changes in the set of variables in each of those models. Although the F-test and R^2 results are significant, the results of the standardised coefficient with its associated significance indicate that the relationship between ROE and the three models is not significant with p-values for model one ($p=0.919$), two ($p=0.782$) and three ($p=0.867$) being above 0.05. Therefore, it is evident that the BEE score was not a statistically significant predictor of ROE in 2013 results.

Table 4.7: Regression results for 2013 with ROE as dependent variable

	Model 1	Model 2	Model 3
BEE score	-.012	-.022	-.013
Liquidity		-.027	.035
Leverage		-.748	-.728
Market capitalisation		.002	.017
Basic materials industry			.004
Consumer services industry			.141
Financial industry			.165
Industrial industry			.074
R ²	.000	.564	.590
F (p-value)	.010 (.919)	23.288 (.000)	12.236 (.000)
<i>Note: Standardised beta coefficients are presented. *p < 0.05, **p < 0.01</i>			

Source: SPSS results

4.4.2 Regression results for 2010

Below are the results of the regression analysis presented by year. The results are presented starting with revenue growth, followed by net profit margin and ROE as dependent variables for 2010.

4.4.2.1 Revenue growth as dependent variable – 2010

The 2010 hierarchical regression modelling (Table 4.8) show similar results as for 2013, as follows. For the first model, the dependent variable was revenue growth with the BEE score as the independent variable. The result of the F-test as shown in Table 4.8 below, indicated that this statistical model was not statistically significant as its p-value was greater than 0.05 (F=0.000; p=0.998).

Although the results show that there was a positive relationship between revenue and BEE score (see Table 4.8), with a standardised beta coefficient value of 0.000, the relationship between these variables was not statistically significant. R², which in this case, measured the percentage change in financial performance movements that can be explained by movements in BEE scores, was also very low. R² for model one was 0.000, which implies that none of movements in revenue growth could be explained by movements in BEE scores.

For the second model (see Table 4.8 below), the predictors liquidity, leverage and market capitalisation were added to the regression. Again, the results of the F-test as shown in Table 4.8, show that this statistical model was not statistically significant as the p-value was above 0.05 ($F=1.251$; $p=0.297$). Consistent with model one, the results of R^2 do not show a significant improvement for model two as the value was 0.062, which means only 6% of movement in revenue growth could be explained by movements in BEE score. Again, the results show that there was a positive relationship between revenue and BEE score (see Table 4.8). With a standardised beta coefficient value of 0.051, the relationship between these variables was not statistically significant.

All other constant variables were added in the third model. The results of the F-test were consistent with the first and second model, which showed a similar trend to this model in that the statistical model was not significant as the p-value is greater than 0.05 ($F=1.054$; $p=0.405$). The R^2 for model three ($R^2=0.105$) was also low and remained insignificant. This means only 10% of the movement in revenue growth could be explained by movements in BEE score after including all variables. The results still showed a positive relationship between revenue and BEE score with a standardised beta coefficient value of 0.038; however, the relationship between these variables was not statistically significant. Therefore, in this case, the null hypothesis could not be rejected and was accepted as the outcome for the relationship between the BEE score and revenue growth of the top 100 most black-empowered companies, considering the results of all three models.

Table 4.8: Regression results for 2010 with revenue growth as dependent variable

	Model 1	Model 2	Model 3
BEE score	.000	.051	.038
Liquidity		.096	.138
Leverage		-.176	-.136
Market capitalisation		.136	.117
Basic materials industry			.013
Consumer services industry			.061
Financial industry			.140
Industrial industry			-.118
R ²	.000	.062	.105
F (p-value)	.000 (.998)	1.251 (.297)	1.054 (.405)
<i>Note:</i> Standardised beta coefficients are presented. *p < 0.05, **p < 0.01			

Source: SPSS results

4.4.2.2 Net profit margin as dependent variable – 2010

Table 4.9 shows the standardised coefficients for the dependent variable net profit margin. The standardised coefficient for the first model with BEE score as the independent variable was 0.015, which showed a positive relationship; however, the results demonstrated an insignificant relationship as the p-value was less than 0.05 (p=0.896). R² was also very low at 0.000, which implied that none of variations in net profit margin could be explained by changes in BEE scores. These results are confirmed by the result of the F-test as shown in Table 4.8, namely that this statistical model was found to be not significant as its p-value was less than 0.05 (F=0.017; p=0.896). Model two showed similar results with F-test results of F =2.467 and p=0.052.

Model three had F-test results that showed a significant statistical model (F=3.917; p=0.001). Despite the significant F-test results, there was no significance with the p-values for the standardised coefficients as the p-value was below 0.05 (p=0.812). R² for model three also supported the conclusion at 0.303. With revenue growth, the null hypothesis relating to net profit margin could not be rejected.

Table 4.9: Regression results for 2010 with net profit margin as dependent variable

	Model 1	Model 2	Model 3
BEE score	.015	.057	.024
Liquidity		.271	.394
Leverage		-.013	.044
Market capitalisation		.185	.194
Basic materials industry			-.054
Consumer services industry			.091
Financial industry			.420
Industrial industry			-.079
R ²	.000	.115	.303
F (p-value)	.017 (.896)	2.467 (.052)	3.917 (.001)
<i>Note:</i> Standardised beta coefficients are presented. *p < 0.05, **p < 0.01			

Source: SPSS results

4.4.2.3 ROE as dependent variable – 2010

The results for the regression analysis conducted on the data for 2010 with ROE added as a dependent variable are shown in Table 4.10. The results for the F-test results showed a significance in the statistical model for model three (p=0.038), and no significance for model one (p=0.711) and model two (p=0.367). R² for all three models was low, with model one at (R-square=0.002), model two at (R-square=0.054) and model three at (R-square=0.196). This implies that for the three models, less than 20% of the variation in ROE could be explained by the variation in BEE scores. Although the F-test results for model three were significant, the results of the standardised coefficient with its associated significance indicated that the relationship between ROE and model three variables was not significant with a p-value of less than 0.05 (p=0.769). Therefore, it was evident that the BEE score was not a statistically significant predictor of ROE in the 2010 results.

Table 4.10: Regression results for 2010 with ROE as dependent variable

	Model 1	Model 2	Model 3
BEE score	.042	.081	.032
Liquidity		.102	.207
Leverage		-.089	-.023
Market capitalisation		.175	.152
Basic materials industry			-.112
Consumer services industry			.243
Financial industry			.091
Industrial industry			-.218
R ²	.002	.054	.196
F (p-value)	.138 (.711)	1.092 (.367)	2.189 (.038)
<i>Note:</i> Standardised beta coefficients are presented. *p < 0.05, **p < 0.01			

Source: SPSS results

4.4.3 Regression results for 2007

Below are the results of the regression analysis, which are presented by year. The results are presented starting with revenue growth, followed by net profit margin, and ROE as dependent variables for 2007.

4.4.3.1 Revenue growth as dependent variable – 2007

Table 4.11 demonstrates the results of the 2007 hierarchical regression modelling. The result of the F-test as shown in Table 4.11 indicated that all three statistical models were not statistically significant as their p-values were greater than 0.05. The F-test results are (F=0.512, (p=0.477)) for model one, (F=0.503, (p=0.734)) for model two, and (F=0.576, (p=0.840)) for model three.

With the 2013 and 2010 results – although the results show that there is a positive relationship between revenue and BEE score from Table 4.11, with a standardised beta coefficient values of 0.086, 0.079 and 0.093 for model one, two and three respectively – the relationships between these variables are not statistically significant, as p-values for all three models are more than 0.05. R² for all three models, are also very low. R² for model one is 0.007, 0.030 for model two and 0.098 for model three.

This implies that movements in BEE scores for all three models can explain less than 10% of movements in revenue growth.

Table 4.11: Regression results for 2007 with revenue growth as dependent variable

	Model 1	Model 2	Model 3
BEE score	.086	.079	.093
Liquidity		-.004	.021
Leverage		-.098	-.055
Market capitalisation		.110	.053
Technical industry			-.076
Industrial industry			.107
Financial industry'			-.042*
Basic materials industry			.175
Consumer services industry			-.054
Consumer goods industry			.062
Health care industry			.129
R ²	.007	.030	.098
F (p-value)	.512 (.477)	.503 (.734)	.576 (.840)
<i>Note:</i> Standardised beta coefficients are presented. *p < 0.05, **p < 0.01			

Source: SPSS results

4.4.3.2 Net profit margin as dependent variable 2007

Table 4.12 demonstrates the results of the 2007 hierarchical regression modelling for net profit. The result of the F-test as shown in Table 4.12, indicated that all three statistical models were not statistically significant as its p-values were greater than 0.05. The F-test results are (F=0.009, (p=0.925)) for model one, (F=2.272, (p=0.071)) for model two, and (F=1.214, (p=0.306)) for model three.

The standardised beta coefficient values are -0.011, 0.004 and 0.037 for model one, two and three respectively. The relationships between these variables are not statistically significant as p-values for all three models are more than 0.05. R² for all three models, are also very low. R² for model one is 0.000, 0.123 for model two and 0.137 for model three. This implies that movements in BEE scores for all three models can explain less than 14% of movements in revenue growth.

Table 4.12: Regression results for 2007 with net profit margin as dependent variable

	Model 1	Model 2	Model 3
BEE score	-.011	.004	.037
Liquidity		.351	.371
Leverage		.056	.071
Market capitalisation		.095	.103
Basic materials industry			.089
Consumer services industry			.107
Financial industry			.028
Industrial industry			.139
R ²	.000	.123	.137
F (p-value)	.009 (.925)	2.272 (.071)	1.214 (.306)
<i>Note: Standardised beta coefficients are presented. *p < 0.05, **p < 0.01</i>			

Source: SPSS results

4.4.3.3 ROE as dependent variable 2007

Table 4.13 demonstrates the results of the 2007 hierarchical regression modelling for ROE. The result of the F-test as shown in Table 4.13, indicated that statistical models were not statistically significant for model one and as its p-values were greater than 0.05. The F-test results for these two models are (F=0.051, (p=0.822)) for model one, (F=1.312, (p=0.275)) for model two. F-test results for model three was significant (F=2.125, (p=0.047)).

The standardised beta coefficient values are -0.027, -0.031 and 0.003 for model one, two and three respectively. The relationships between these variables are not statistically significant as p-values for all three models are more than 0.05. R² for all three models, are also very low. R² for model one is 0.001, 0.075 for model two and 0.218 for model three. This implies that movements in BEE scores for all three models can explain less than 22% of movements in revenue growth.

Table 4.13: Regression results for 2007 with ROE as dependent variable

	Model 1	Model 2	Model 3
BEE score	-.027	-.031	.003
Liquidity		.012	.012
Leverage		.265	.358
Market capitalisation		-.056	-.022
Basic materials industry			-.041
Consumer services industry			.253
Financial industry			-.239
Industrial industry			.011
R ²	.001	.075	.218
F (p-value)	.051 (.822)	1.312 (.275)	2.125 (.047)
<i>Note:</i> Standardised beta coefficients are presented. *p<0.05, **p<0.01			

Source: SPSS results

After the regression analysis of the three datasets (2007, 2010 and 2013), it could be concluded that the alternative hypothesis (JSE-listed companies with high BEE scores benefit more by generating more revenue than JSE-listed companies that are not BEE-compliant, and score low on the BEE scorecard) can be safely rejected, since there was no strong correlation found in the results. This finding indicated that the null hypothesis had to be accepted (stating that the financial performance of the company does not depend on its BEE score).

4.5 PART 2: T-TEST – COMPARISON OF TWO GROUPS

The objective of this test was to determine whether statistically significant differences existed between the financial performance of the companies that were among the top 100 black-empowered companies at the time and companies that were not among the top 100 most black-empowered companies at the time.

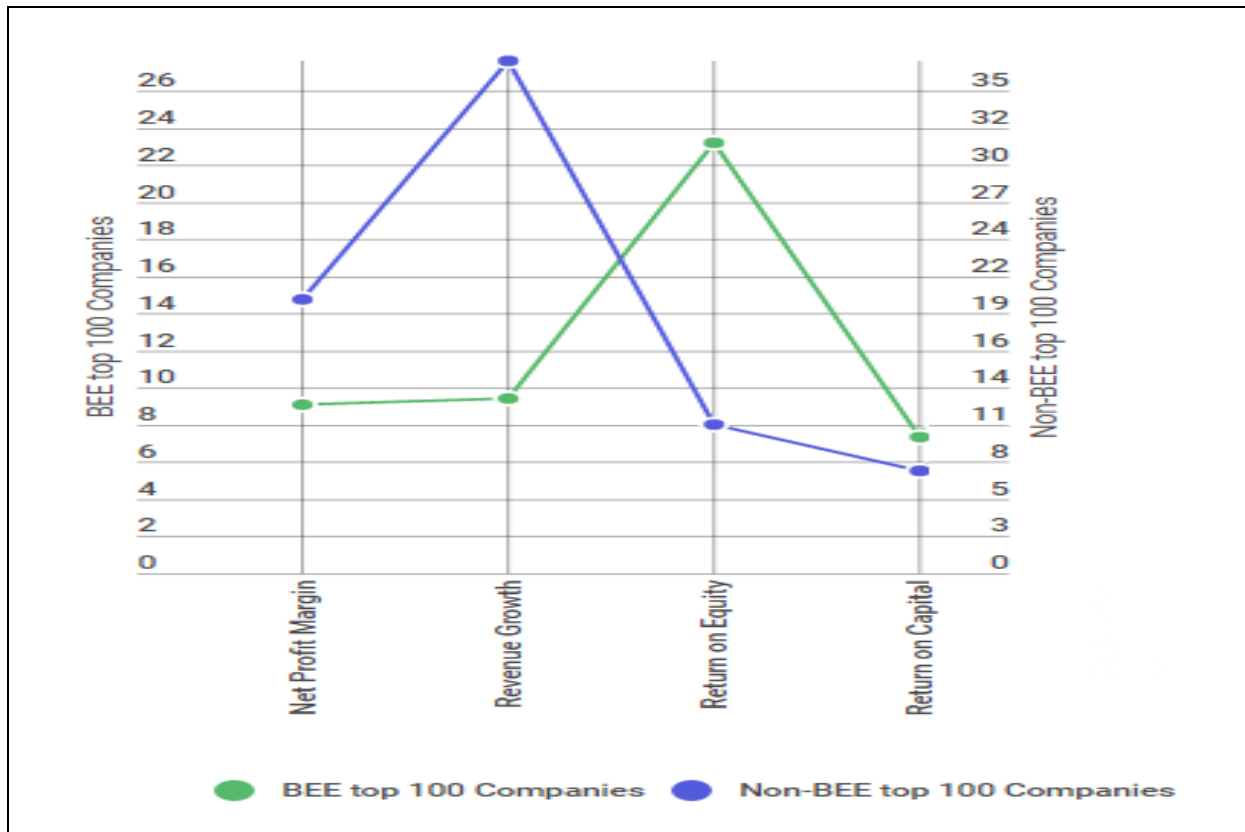


Figure 4.4: Comparison between average financial performance variables of top 100 most black-empowered companies and non-top 100 most black-empowered companies

Source: Author

The line chart in Figure 4.4 describes the dataset in terms of the two groups that were studied (top 100 most black-empowered companies and non-top 100 most black-empowered companies). The graph shows the average values of financial performance measures corresponding to the companies of the two groups. It further shows that the top 100 most black-empowered companies had lower net profit margins and revenue growth on average as compared to the others. On the other hand, the ROE was significantly higher. It can be concluded from the graph that BEE compliance results in higher ROE; however, the compliance reduces profit margins and revenue growth. In order to obtain conclusive results, a detailed statistical analysis on the cleaned data was conducted, as reported in sections 4.5.1-4.5.3.

The hypothesis that was tested was:

JSE-listed companies with high BEE scores benefit more by generating more revenue and profits than JSE-listed companies that are not BEE-compliant.

During the second part of this study, the above hypothesis was tested by attempting to determine whether there was a statistically significant difference in financial performance between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies. To give a general idea of the difference between the means of the two groups (top 100 and non-top 100), the grouped column chart (Figure 4.5) demonstrates the comparison comprehensively. In the chart, the average values of the measure of financial performance of both the groups are compared from a single perspective, and interesting trends are visualised. The chart aims to capture the essence of the *t*-test, which is otherwise hard to visualise.

Although it was evident that there existed a significant difference of means in the financial performance measures, the statistical significance could only be established using the *t*-test.

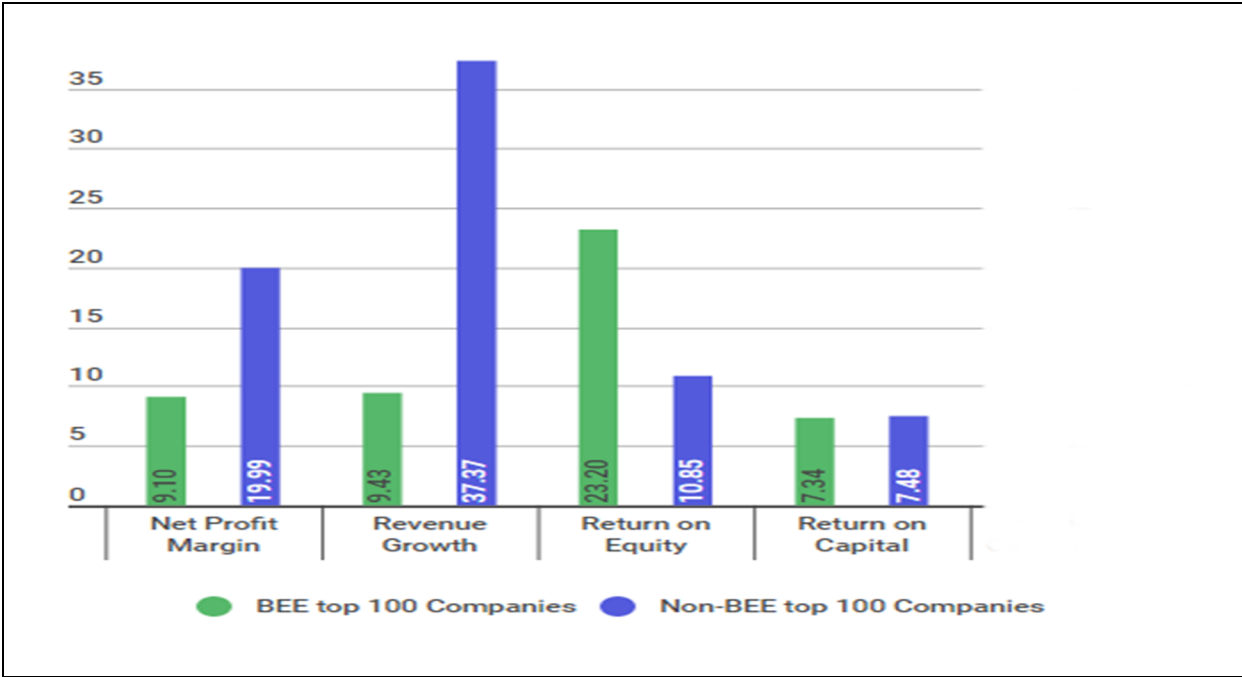


Figure 4.5: Group chart showing differences between average financial performance variables of BEE top 100 companies with non-BEE top 100 companies group

Source: Author

According to the alternative hypothesis, a significant difference existed in the means of the two groups compared. If the significant difference between the two groups cannot be established, the null hypothesis cannot be rejected.

The *t*-test was conducted for each dataset (2007, 2010 and 2013) using SPSS, and the results are given in the standard tabular form in Tables 4.13-4.18. A 5% level of significance was used. The following measures for financial performance were used: revenue growth, net profit margin, and ROE for 2007, 2010 and 2013.

The results from the 2007 group and construct from them were examined to set the base for the following years. The group statistics (see Table 4.13) enumerate the difference in mean for all the variables used in the test for the two groups along with other characteristics of the distribution. However, to check the significance of the test results, in order to probe whether the difference was deducted through chance or if the whole population was showing the same difference, we needed to test the results at two levels. First, the difference in variance of the two groups was measured to decide which type of test had to be conducted, e.g. equal variance assumed or equal variance not assumed. In the results (see Table 4.14), the independent samples test, two different test results can be deduced: firstly, the one where equal variance is assumed, and secondly, where equal variance is not assumed. For equal variance to be assumed, the significance (p-value) should be above 0.05. As it can be seen from Table 4.14, the significance for the revenue growth distribution in terms of equal variance assumed was below 0.05, which means equal variance could not be assumed, while for other variables, the p-value was above 0.05, showing that equal variances could be assumed.

After deciding on the type of variances assumed, the significance of the deducted difference in mean was extrapolated as demonstrated. This significance value corresponded to the column 'sig. (2-tailed)' of Table 4.14. This significance value was tested as corresponding to the type of variance used.

4.5.1 T-test results for 2007

For revenue growth, the null hypothesis of equal variances assumed was rejected ($p < 0.05$) and we could thus not assume equal variances because the variances were significantly different. The *t*-test results (Table 4.15) indicated that with regard to revenue growth at the 5% level of significance, no statistically significant difference ($p=0.100$) existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

For net profit margin, the null hypothesis of equal variances assumed could not be rejected ($p > 0.05$) and we could thus assume equal variances because the variances were not significantly different. The *t*-test results (Table 4.15) indicated that with regard to net profit margin at the 5% level of significance, no statistically significant difference ($p=0.917$) existed between the top 100 most black-empowered companies, and companies that were not among the top 100 most black-empowered companies.

For ROE, the null hypothesis of equal variances assumed could not be rejected ($p > 0.05$) and we could thus assume equal variances because the variances were not significantly different. The *t*-test results (Table 4.15) indicated that with regard to ROE at the 5% level of significance, no statistically significant difference ($p=0.259$) existed between the top 100 black-empowered companies and companies that were not among the top 100 black-empowered companies.

Table 4.14: Mean performance values per group of companies for 2007

Performance measure	Group	N	Mean	SD
Revenue growth	Top 100	70	20.543	22.5605
	Non-top 100	173	29.549	62.2376
Net profit margin	Top 100	70	10.282	23.5722
	Non-top 100	173	5.974	346.0947
ROE	Top 100	70	26.830	49.1829
	Non-top 100	173	12.659	99.9846

Source: SPSS results

Table 4.15: Results of the t-test 2007

		Levene's test for equality of variances		t-test for equality of means		
		F	Sig.	t	Df	Sig (2-tailed)
Revenue growth	Equal variances assumed	9.557	.002	-1.179	241	.240
	Equal variances not assumed			-1.654	239.017	.100
Net profit margin	Equal variances assumed	1.384	.241	.104	241	.917
	Equal variances not assumed			.163	175.909	.871
ROE	Equal variances assumed	.234	.629	1.131	241	.259
	Equal variances not assumed			1.475	232.216	.142

Source: SPSS results

4.5.2 T-test results for 2010

The same analysis for *t*-test interpretation was conducted on the dataset for 2010. The results below show that the null hypothesis of equal variances assumed could not be rejected ($p > 0.05$) and we could thus assume equal variances because the variances were not significantly different. This analysis is applicable to revenue growth, net profit margin and ROE.

For revenue growth, the *t*-test results (Table 4.17) indicated that no statistically significant difference ($p=0.196$) with regard to revenue growth at the 5% level of significance existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

For net profit margin, the *t*-test results (Table 4.17) indicated that no statistically significant difference ($p=0.582$) with regard to net profit margin at the 5% level of significance existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

For ROE, the *t*-test results (Table 4.17) indicated that no statistically significant difference ($p=0.997$) with regard to ROE at the 5% level of significance existed between the top 100 black-empowered companies and companies that were not among the top 100 black-empowered companies.

Table 4.16: Mean performance values per group of companies for 2010

Performance measure	Group	N	Mean	SD
Revenue growth	Top 100	81	6.914	14.9543
	Non-top 100	173	36.723	206.6786
Net profit margin	Top 100	81	9.1931	16.95594
	Non-top 100	173	101.5440	1505.16538
ROE	Top 100	81	13.7009	21.86706
	Non-top 100	173	13.4421	647.83808

Source: SPSS results

Table 4.17: Results of the t-test 2010

		Levene's test for equality of variances		t-test for equality of means		
		F	Sig.	t	Df	Sig (2-tailed)
Revenue growth	Equal variances assumed	3.758	.054	-1.295	252	.196
	Equal variances not assumed			-1.887	175.821	.061
Net profit margin	Equal variances assumed	2.578	.110	-.552	252	.582
	Equal variances not assumed			-.807	172.093	.421
ROE	Equal variances assumed	1.187	.277	.004	252	.997
	Equal variances not assumed			.005	172.836	.996

Source: SPSS results

4.5.3 T-test results for 2013

The same analysis for *t*-test interpretation was conducted on the dataset for 2013. The results below (Table 4.19) show that equal variances could not be assumed for revenue growth and net profit margin, as both their p-values for the equal variance test were below 0.05 ($p=0.015$ for revenue growth and $p=0.000$ for net profit margin). For ROE, equal variance could be assumed as p-value was more than 0.05 ($p=0.059$).

For revenue growth, the *t*-test results (Table 4.19) indicated that a statistically significant difference ($p=0.040$) with regard to revenue growth at the 5% level of significance existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

For net profit margin, the *t*-test results (Table 4.19) indicated that a statistically significant difference ($p=0.007$) with regard to net profit margin at the 5% level of significance existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

For ROE, the *t*-test results (Table 4.19) indicated that no statistically significant difference ($p=0.116$) with regard to ROE at the 5% level of significance existed between the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies.

Out of the three dependent variables, revenue growth and net profit margin showed significance for 2-tailed results, which had p-values of 0.040 and 0.007 respectively (which were below 0.05). The results (Table 4.18) show that the difference in means of the variable revenue growth was significant with a mean difference of -27.943 (9.429 - 37.372). The results also show a significant difference in means for net profit margin with a mean difference of -10.889 (9.097 - 19.986).

Table 4.18: Mean performance values per group of companies for 2013

Performance measure	Group	N	Mean	SD
Revenue growth	Top 100	77	9.429	14.532
	Non-top 100	156	37.372	167.465
Net profit margin	Top 100	77	9.097	15.925
	Non-top 100	156	19.986	44.339
ROE	Top 100	77	23.202	94.468
	Non-Top 100	156	10.848	18.528

Source: SPSS results

Table 4.19: Results of the t-test 2013

		Levene's test for equality of variances		t-test for equality of means		
		F	Sig.	t	Df	Sig (2-tailed)
Revenue growth	Equal variances assumed	6.058	.015	-1.460	231	.146
	Equal variances not assumed			-2.068	159.689	.040
Net profit margin	Equal variances assumed	16.192	.000	-2.088	231	.038
	Equal variances not assumed			-2.731	216.452	.007
ROE	Equal variances assumed	3.589	.059	1.576	231	.116
	Equal variances not assumed			1.137	78.900	.259

Source: SPSS results

4.6 SUMMARY AND CONCLUSION

The two-part model comprising regression analysis (see 4.4) and *t*-test (see 4.5) was used with the aim to determine whether there was a relationship between financial performance and the BEE score of the JSE-listed companies. The analysis started with the results of the regression analysis where three financial measures, revenue growth, net profit margin and ROE were tested against the BEE scores as reflected in Tables 4.5.1-4.5.3. Although the regression analysis results showed a significant relationship with p-values of below 0.05 for both ROE and net profit margin for both 2013 and 2010,

the correlation coefficient of those relationships was way below 0.5, which implied an extremely weak correlation between the variables. Concerning revenue growth, its relationship with the BEE score was found to be not significant for the relevant years tested. With these results, the null hypothesis could therefore not be rejected. This implied that this study could not conclude that there is a strong relationship between BEE scores and financial performance for companies listed on the JSE based on regression results.

It was evident from the results of the *t*-test as presented in sections 4.5.1, 4.5.2 and 4.5.3, that in 2007 and 2010, there proved to be no relationship at all between all the financial performance measures and BEE scores. This is because all the *p*-values were below 0.05. What needs to be highlighted, however, is that in later years – in this case, 2013 – a significant relationship between the two financial performance measures, revenue growth and net profit margin, and BEE score was determined. The *p*-values for these two measures were below 0.05. The *t*-test results however showed a negative relationship. The results showed that companies that were not among the top 100 most black-empowered companies performed better concerning revenue growth and net profit margin. The next chapter presents the conclusions of this study.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter contained the results of the analyses and discussions on the research findings. In this chapter, the summary, conclusions and recommendations for further studies are outlined. This chapter starts with an overview of this study to discuss the background of the study. The overview is followed by conclusions argued inductively and deductively, followed by a discussion of how this study affects the B-BBEE Act, No. 53 of 2003 objectives as set out in the first chapter (see 1.6). Finally, conclusions and recommendations of possible future studies are discussed.

5.2 OVERVIEW OF THIS STUDY

As discussed in Chapter 1 of this study, the B-BBEE Act, No. 53 of 2003 was promulgated to address the economic differences, which were caused by policies of the previous apartheid government. The B-BBEE Act, No. 53 of 2003 was set to achieve various objectives with the main aim of improving black people's lives and increasing their participation in the mainstream economy of the country. The B-BBEE Act, No. 53 of 2003 empowered the Minister of Trade and Industry to issue the Codes, aimed to incentivise companies to include black people in their economic activities. The incentives refer to means of preferential procurement and other dealings with the state and state entities. The aim of these incentives was to reward companies: the more such companies comply, the more advantage they would gain over other companies. The research question this study raised, was whether these incentives were significant enough to affect the financial performance of companies that participate in terms of BEE compliance.

In Chapter 2, an argument was presented that the more companies participated in BEE, the more the whole country would benefit economically, and for companies to participate meaningfully in BEE compliance, they would somehow have to benefit

financially. This study sought to test that financial benefit. The alternative hypothesis was constructed around the relationship between the BEE score and financial performance of companies listed on the JSE. (JSE-listed companies with high BEE scores benefit more by generating more revenue and profits than JSE-listed companies that are not BEE-compliant.)

In order to construct the premise and test the hypothesis fully, the results and analysis in Chapter 4 probed deep into the data using multiple statistical inferences. The results section capitalised on an inductive approach first, in order to demonstrate possible trends using exploratory data analysis for both datasets: the top 100 most black-empowered companies and the non-top 100 most black-empowered companies. The inductive approach was further aided with a deductive analysis for testing the hypothesis in the light of available literature and intelligent speculations.

In an attempt to comprehend the dynamics of both data sets, multiple inferential techniques were employed to spot hidden trends, using subsets within the acquired raw datasets. The aim was to exploit trends that might undermine the process of hypothesis probing in the deductive statistical test results. Below, the conclusion starts with the inductive analysis.

5.3 INDUCTIVE ANALYSIS CONCLUSION

The first part of the analysis focused on the top 100 most black-empowered companies. It was analysed using exploratory analysis, and it was found that there was no linear trend regarding the relationship of the BEE score and the three measures of financial performance: net profit margin, revenue growth and ROE. The BEE score, as established in the literature review, is a measure of the extent of compliance of companies towards the Codes promulgated in the B-BBEE Act, No. 53 of 2003, and announced by government in 2007 and 2013. Hence, a higher BEE score represents a higher compliance of a corporate company with the guidelines of the B-BBEE Act, No. 53 of 2003 and the Codes. The aim of the B-BBEE Act, No. 53 of 2003 is to construct an amiable environment for the companies to adapt to the practices of black economic involvement in the mainstream market. We refer to previous chapters where the three imperatives of BEE were outlined by Jack and Harris (2007). These were firstly, moral issues referring to correcting racial imbalances; secondly, social issues,

referring to the racial wealth divide; and thirdly, the economic growth issue referring to addressing the economic issues of previously disadvantaged groups.

The first two aspects of BEE could not be measured empirically, so any empirical and data-based findings were limited to the third imperative, which encapsulated the economic aspects of BEE compliance. As the inferential data analysis showed in the first part of the findings for the dependence of financial performance of a company on its BEE score, it was clearly established that there was no correlation between the two quantities, which showed that, from an inferential point of view and using compounded data, the null hypothesis could not be eliminated. Hence, the results showed that the Codes might be inadequate and inefficient in enhancing the financial performance of a company on its own. On the other hand, it was found in the literature that the aims of introducing BEE policies are not solely concentrated on improving the financial performance of a company. The main aim of the practices is to establish economic prosperity by helping black people and making a viable economic environment for their growth and participation.

A multifaceted conclusion could be drawn from the initial inferential findings. Firstly, the efficacy of designed Codes is low in extending the financial performance of a compliant company. Secondly, the extent of compliance, measured as the BEE score, is based upon the social and moral influences a company creates in its internal and external environment. Thirdly, it appears that the evidence of advantages to a company of the compliance with Codes and the scoring index is not conclusive.

As noted in the literature review, the Strategy for B-BBEE clarifies that a measure of success for BEE implementation is evaluated against a significant increase in the following:

- black people who own and control new and existing enterprises;
- the number of new black enterprises;
- black-empowered enterprises;
- black-engendered enterprises;
- black executives in enterprises;
- black senior managers in enterprises;
- community broad-based enterprises and cooperatives;

- black ownership of land and other productive assets;
- improved access to infrastructure by black people;
- acquisition of skills by black people; and
- participation in productive economic activities by black people (dti 2003c).

The stated BEE compliance criteria show that if a company completely complies with the Codes, it does not solely increase its financial value, but the focus is also on introducing a soft image and being more socially responsible by reflecting their eagerness to be a part of a social and economic campaign. The availability of empirical data on the other hand was restricted to the extent of financial growth of a company and its financial performance in a year. Hence, an inductive inference could be made that, given that the Codes are aimed at accentuating the moral and social character of a company, it is not viable to comprehend the positive influences of BEE compliance solely through financial performance.

The constructed predicament in favour of the null hypothesis was elaborated through the comparison of the two data sets: the top 100 most black-empowered companies and the non-top 100 most black-empowered companies. The exploratory data analysis showed no consistent inverse correlation between the two sets of companies. In light of the constructed alternative hypothesis, it was speculated that the BEE-compliant companies will outrun the non-BEE-compliant companies in terms of financial performance, but the inferential analysis showed a darker picture. ROE for BEE-compliant companies was considerably higher than for non-compliant companies; however, this finding could not be declared conclusive due to statistical insignificance (see 3.6). On the other hand, the non-compliant companies had much higher net profit margins and revenue growth compared to the compliant companies. As established in the previous chapter (see 4.5.3), this could not be conclusive as there was statistical significance only in 2013. This could indicate that BEE compliance turns to be a costly exercise that does not necessarily translate into profits. Alternatively, this could indicate that the costs of BEE compliance outweigh the benefits of compliance in terms of financial performance. The deductive analysis conclusion follows.

5.4 DEDUCTIVE ANALYSIS CONCLUSION

The first part of the data analysis (see 4.4) focused on the data of the top 100 most black-empowered listed companies. To interpret the efficacy of the BEE framework, in terms of its financial benefits to the compliant companies, Pearson's R regression method along with linear regression analysis was used. The aim was to comprehend the relationship between the BEE score and the financial performance variables: net profit margin, ROE and revenue growth.

The second part of data analysis (see 4.5) focused on the interpretation of comparative statistics in which the two groups: the top 100 most black-empowered companies and companies that were not among the top 100 most black-empowered companies, were compared in order to establish differences between profitability and revenue growth of the companies in the groups. To test the hypothesis statistically, the *t*-test was used, which compared the means of both groups as base variable.

The deductive analysis was designed to test the data in two distinct ways in order to accept or reject the null hypothesis. The focus of the first deductive test was to demonstrate the regression between financial performance indicators of the company: net profit margin, revenue growth and ROE. An alternative hypothesis was constructed in the light of the literature, which stated that BEE scores are a predictor of company performance; hence, a company with a better BEE score should have better financial performance. The aim here was to test the efficacy and eligibility of BEE guidelines and the Codes in promulgating company performance. Stakeholder interest was also served by providing vital information about a company based on its BEE score.

5.4.1 Regression analysis of top 100 most empowered black-owned companies

According to the results of the regression analysis illustrated in Chapter 4 (see 4.4), there was no strong statistically significant relationship found between any of the performance indicators of the companies and their respective BEE scores. The results highly aligned with the results of the inductive data analysis above. In the light of the extracted results from the regression tests, it is clear that the null hypothesis could not be rejected, and there was no correlation between BEE score and company performance in general. The results illustrated that the financial capabilities of a company cannot be judged by its BEE score, and companies that are more compliant

with the Codes do not get their desired returns. The deductive findings, however, showed the limitations of the approach, given that BEE guidelines in general are not solely focused on improving a company's financial performance. The empirical analysis lacked consistency due to the use of ranked companies without probing deep into the industrial groups.

5.4.2 Comparison of two data sets

The analysis of the research findings collectively demonstrated that the null hypothesis for both the tests (regression and *t*-test) could not be rejected. Hence, the results postulated that BEE compliance does not produce desired results for the companies that can be translated into better profitability and market share. The results were significantly in favour of the null hypothesis.

5.5 RESULTS IN THE LIGHT OF THE OBJECTIVES OF B-BBEE ACT, NO. 53 OF 2003

The results showed that the BEE guidelines and implementation have not been sound enough to achieve the objectives of the B-BBEE Act, No. 53 of 2003. Hence, each objective was assessed in the light of the results of the deductive analysis and a conclusion was made if those objectives have been achieved (section 2.4).

Objective 1:

Promoting economic transformation in order to enable meaningful participation of black people in the economy (dti 2003a:4).

The results of this study showed that, although the compliant companies were able to increase the participation of black people, the overall economic atmosphere lacked the transformation to make the participation meaningful. Meaningful participation would mean that the companies that inducted more black people were gaining increased returns and higher net profit margins. However, the *t*-test showed that the compliant companies were not accruing additional profits or an enhancement in the financial performance of the companies. Therefore, the BEE Commission failed to promote enabling environments for companies to use black people as lucrative assets to such an extent that their cost into the company's atmosphere could be justified. This objective can, however, be said to be progressing to a point of being achieved since

there was an improvement in the BEE scores of the listed companies over the years since 2007. The increase in BEE scores were achieved because of black participation in these companies.

Objective 2:

Achieving a substantial change in the racial composition of ownership and management structures and in the skilled occupations of existing and new enterprises (dti 2003a:4).

The second objective was achieved to some extent, given that a considerable number of companies had embraced BEE guidelines, and were willing to participate in the transformation. The companies were trying to adhere to the stipulated guidelines, given that they were encouraged by the potential benefits. However, the trend might not continue, given that the BEE Commission has not been able to fulfil their promises with regard to BEE initial strategy.

Objectives 3 and 5:

Increasing the extent to which communities, workers, cooperatives and other collective enterprises own and manage existing and new enterprises and increasing their access to economic activities, infrastructure and skills training; and promoting investment programmes that lead to broad-based and meaningful participation in the economy by black people in order to achieve sustainable development and general prosperity (dti 2003a:4).

The results of the *t*-test showed that black people who were inducted and who participate in the companies did not bring enough value to the company, which could be viewed as an indication that there could be a lack of sufficient skills and knowledge to bring financial value to these companies. On the other hand, a change was sensed from the adaptation of many companies of the BEE guidelines. Therefore, the B-BBEE strategy was effectively changing the participation dynamics of managerial and black people of many companies, but the results of the *t*-test showed that the change was not enough to create a level playing field for all companies, such that BEE-compliant companies may accrue expected profits from their better compliance.

Objectives 4, 6 and 7:

Increasing the extent to which black women own and manage existing and new enterprises, and increasing their access to economic activities, infrastructure and skills training; empowering rural and local communities by enabling access to economic activities, land, infrastructure, ownership and skills; and promoting access to finance for black economic empowerment (dti 2003a:4).

For these three objectives, it would be difficult to measure success or failure using the data analysis from this study as the study used the overall BEE score without zooming in on the gender of those empowered, the rurality and locality of the communities empowered and the extent of finance of those empowered. Where the BEE scores of companies are improving over the years, it may very well mean that some of these objectives have been met, but the extent to which they were achieved needs to be measured.

5.6 CONCLUSION

The extrapolated information gave a significant insight into the influence of BEE compliance. It can be said that BEE-compliant companies trade their financial performance for BEE compliance. This inference can be based upon the premise that when a company complies with the standard protocols of the Codes, it has to spend a considerable amount on extending its social and moral influence by hiring more black people and training them in their early years. This leaves the profits of such company stunted for a certain period because of spending on transition phases.

This phenomenon can be explained by the advantages a compliant company gets in terms of its better treatment from governmental agencies. It was established in the literature that, in addition to other advantages, BEE-compliant companies are especially favoured by government for tender placements and public-private partnerships.

As discussed in Chapter 2, the unsatisfactory performance of companies compliant with the Codes could be mainly due to the non-legal requirement for BEE compliance since it is rather a commercial incentive only. It is evident from the deductive results that companies with less BEE compliance are performing financially better than companies with more BEE compliance, based on the average mean of financial

performance measures used for the *t*-test. This is the result of a non-level playing field in which, due to BEE compliance, some companies have to invest more as a result of inducting and training black employees, socio-economic projects that benefit black people, and issuing shares at discounts to black participants while other get a free pass. Such imbalance resulted in weaker performance of compliant companies and they tend to lose the share of profits. The commercial incentive on the other hand seems to be much less than the setback to the compliant companies due to unbalanced economic field.

Although significant relationships could not be established through regression analysis of the BEE scores and financial performance measures, this does not necessarily mean that BEE scores have no effect at all on the revenue and profits of a company. This is because there are many other factors that influence revenue and profitability of businesses. Another factor to take into consideration is that, whilst some companies are investing in BEE compliance, others are investing in marketing and research that could influence revenue and profitability significantly.

As discussed in previous chapters, the B-BBEE Act, No. 53 of 2003 that was amended in 2013 made it compulsory for organs of state and public entities to apply, as opposed to taking into account, the Codes, when issuing licences, concessions or other authorisations, implementing preferential procurement policy, selling state-owned enterprises, partnering with the private sector and awarding incentives, grants and investment schemes. The expectation is that BEE will affect more companies and make it a necessity for them to comply with BEE legislation. What needs to be highlighted, however, is that the new Codes have become more stringent than the old Codes and therefore more costly than the old Codes. Therefore, it remains a possibility that the cost of compliance with the new Codes may outweigh the benefits government is attempting to implement.

5.7 RECOMMENDATIONS FOR STAKEHOLDERS

Even though the results of this study are not positive in terms of benefits that companies derive from the BEE compliance, companies should still view the improvement in BEE scores as good social responsibility, since empowerment of the disadvantaged communities of the society could benefit the whole country.

The results of similar studies to this one have a potential of discouraging companies to invest meaningfully in BEE. Government should, therefore, consider increasing the incentives for BEE compliance to ensure that the benefits would surpass the costs of compliance.

Government should consider implementing penalties for companies that are not BEE-compliant instead of making it an option. The main reason being that there are companies that do not have any dealings with government therefore they have a low appetite for BEE compliance because there is no direct benefit for them to be BEE-compliant. This will level the playing fields since those that do not wish to comply would pay penalties that could be ploughed back into promotion of BEE. Finally, this would ensure that BEE affects all those who are in business regardless of the type or industry where the company is.

Government policymakers need to ensure that all members of society understand how BEE benefits them to deal with the perception that it only benefits the elite and politically well-connected individuals.

Government also needs to create a central database with BEE scores of all listed companies that is publically accessible to increase transparency relating to black empowerment. This will reveal the level of social responsibility of companies to stakeholders and customers. By making this information publically available, researchers could study the trends in BEE, and advise policymakers accordingly.

The Minister of Trade and Industry should create a measurement tool that could track the success of the BEE policy implementation with clear key performance indicators and targets. This way government would be able to determine how far they need to accelerate the implementation of these policies. Success can only be established if there is a measure and timeline.

Finally, unemployment in the country is still at alarming rates, poverty is still a factor, and economic growth is currently very low, even in comparison to other developing countries. These negative factors affect mainly the black population of this country and perhaps the government and policymakers need to think beyond BEE to address the economic challenges of the country.

5.8 OPPORTUNITIES FOR FUTURE STUDIES

An opportunity exists for a regression analysis of BEE scores per industry, because some industries probably need to be more BEE-compliant than others. For example, there is no real incentive for the retail industry to be BEE-compliant, since they sell directly to the public as opposed to industrial companies whose customers may require them to be BEE-compliant to improve their own BEE scores.

BEE legislation has changed, with the main change being criminalisation of fronting and making BEE compliance more stringent. These changes will make BEE compliance costlier as the requirements have been increased. It would be an interesting study to see how these legislation changes affect the BEE scores and financial performance of companies.

Most of the BEE studies focused on JSE-listed companies. The recommendation is that a study of unlisted companies be undertaken. This is because the financial performance challenges of unlisted companies may be completely different to the financial performance challenges of listed companies, since listed companies have more access to financial support and, because of their size, they may survive even if their revenue or profitability do not grow significantly.

A study focusing on how BEE legislation and policy have changed or improved the economic lives of black people in general from both the business involvement and employment point of view is recommended.

Investment in BEE compliance could be a long-term project to accommodate activities such as training black employees to equip them with the appropriate skills, grooming black management, issuing shares at a discount and maintaining black interest to ensure that the company benefits for a longer period.

A study, which tracks the financial performance of companies over a period of five years or longer would be beneficial as some of the benefits of BEE investment may only be realised in later years as opposed to a year or two succeeding the investment in BEE compliance.

A few studies (Ferreira & De Villiers 2011; Van der Merwe & Ferreira 2014) found that there is a negative relationship between financial performance and level of BEE

compliance. A study focusing on cost versus benefits of BEE compliance would assist in gathering knowledge on this subject.

REFERENCE LIST

- Ahsan, A.F.M. 2012. Can Roe be used to Predict Portfolio Performance? *Economics, Management & Financial Markets*, 7(2):132-148.
- Akinsomi, O., Kola, K., Ndlovu, T. & Motlounge, M. 2016. The performance of the broad-based black economic empowerment compliant listed property firms in South Africa. *Journal of Property Investment & Finance*, 34(1):3-26.
- Alessandri, T.M., Black, S.S. & Jackson, W.E. 2011. Black economic empowerment transactions in South Africa: Understanding when corporate social responsibility may create or destroy value. *Long Range Planning*, 44(4):229-249.
- Aliber, M., Kirsten, M., Maharajh, R., Nhlapo-hlope, J. & Nkoane, O. 2006. Overcoming underdevelopment in South Africa's second economy. *Development Southern Africa*, 23(1):45-61.
- Anarfi, D., Boateng, K.A. & Adu-Ababio, K. 2016. Determinants of return on equity for a sustainable growth of the manufacturing industry in the Czech Republic. *European Journal of Business Science and Technology*, 2(1):43-52.
- Arranz-Garcia, J.D. & Vicente-Lorente, J.D. 2014. Exploring the link between managerial outcomes and investment performance of entrepreneurs. *Serbian Journal of Management*, 9(2):183-202.
- Arya, B. & Bassi, B. 2011. Corporate social responsibility and broad-based black economic empowerment legislation in South Africa: Codes of good practice. *Business & Society*, 50(4):674-695.
- Baboukardos, D. & Rimmel, G. 2016. Value relevance of accounting information under an integrated reporting approach: A research note. *Journal of Accounting and Public Policy*, 35(4):437-452.
- Balkaran, S. 2017. Radical economic transformation – government prioritising state resources for Small Business Development (SBD). *Journal of Management & Administration*, 2017(1):105-128.
- BEE Commission (Black Economic Empowerment Commission). 2001. *BEE Commission final report*.
- Cameron, S. & Price, D. 2009. *Business research methods: A practical approach*. Leicester: McGraw-Hill.

- Chabano, N., Goldstein, A. & Roberts, S. 2006. The changing face and strategies of big business in South Africa: More than a decade of political democracy. *Industrial & Corporate Change*, 15(3):549-577.
- Chandler, T. 2011. *JSE black ownership analysis presentation*. JSE. Retrieved from www.jse.co.za/About-Us/Media/Press-Releases/Full-Story/11-10-05/JSE_releases_second_study_on_Black_ownership_on_the_Exchange.aspx [Accessed 10 November 2012].
- Christine, D. & Martiano, F. 2015. Review of the revenue recognition in accordance with statement of financial accounting standard (PSAK) no. 23/2010 at Damri Corporation. *International Journal of Scientific & Technology Research*, 4(8):373-379.
- Congress of the People. 1955. *The Freedom Charter*. Retrieved from www.anc.org.za/show.php?id=72 [Accessed 8 May 2013].
- Department of Finance. 2000. *Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000)*. Pretoria.
- De Vos, A., Delport, C., Fouché, C.B. & Strydom, H. 2011. *Research at grass roots: A primer for the social science and human professions*. Pretoria: Van Schaik.
- De Wet, A. 2013. B-BBEE's changing landscape and the role of the CA(SA). *Accountancy SA*, 1 December: 54-55.
- De Wet, J. & Du Toit, E. 2007. Return on equity: A popular, but flawed measure of corporate financial performance. *South African Journal of Business Management*, 38(1):59-69.
- dti (Department of Trade and Industry). 2003a. *Broad-based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003)*. Pretoria.
- dti (Department of Trade and Industry). 2003b. *Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)*. Pretoria: Department of Minerals and Energy.
- dti (Department of Trade and Industry). 2003c. *South Africa's economic transformation: A strategy for broad-based black economic empowerment*. Pretoria.
- dti (Department of Trade and Industry). 2007. Broad-based Black Economic Empowerment Codes of Good Practice. *Government Gazette*, 29617. Pretoria.
- dti (Department of Trade and Industry). 2013a. *Broad-based Black Economic Empowerment Amendment Act, 2013 (Act No. 46 of 2013)*. Pretoria.

- dti (Department of Trade and Industry). 2013b. Broad-based Black Economic Empowerment Codes of Good Practice. *Government Gazette*, 36928. Pretoria.
- Dukander, Y. 2014. Driving better reporting by embedding B-BBEE into your corporate strategy. *Accountancy SA*, 1 September: 30-33.
- Duvenhage, A. & Kruger, A. 2017. Retail format selection: Occupancy cost and profitability. *Journal of Economic and Financial Sciences*, 10(2):356-375.
- Elliott, K.A., Hufbauer, G.C. & Oegg, B. 2008. Sanctions. In *The Concise Encyclopedia of Economics*. Retrieved from www.econlib.org/library/Enc/Sanctions.html [Accessed 8 May 2013].
- Ellis, B. & Kelley, S.W. 1992. Competitive advantage in retailing. *International Review of Retail, Distribution and Consumer Research*, 2(4):381-396.
- Empowerdex. 2015. Empowerdex credentials. Available at: www.empowerdex.com/about-us/empowerdex-credentials (accessed on 2/01/2015).
- Fauconnier, A. & Mathur-Helm, B. 2008. Black economic empowerment in the South African mining industry: A case study of Exxaro Limited. *South African Journal of Business Management*, 39:1-14.
- Ferreira, P. & De Villiers, C. 2011. The association between South African listed companies' BEE scores and market performance: An introductory study. *Meditari Accountancy Research*, 19(1/2):22-38.
- Field, A. 2013. *Discovering statistics using IBM SPSS statistics*. Fourth edition. London: Sage.
- Hiam, C.M., Eshghi, G. & Eshghi, A. 2017. Business impact of the black economic empowerment in South Africa: A critical review of four case studies. *Journal of Research in Business, Economics and Management*, 8(2):1370-1380.
- IASB (International Accounting Standards Board). 1995. *International financial reporting standards: International Accounting Standard 18*. London: IASC Foundation Publication Department.
- INET BFA. 2015. *Company milestones*. Retrieved from <http://www.inetbfa.com/company/our-pedigree/> [Accessed 9 May 2015].
- IoDSA (Institute of Directors in Southern Africa). 2009. *King Code of Governance for South Africa*. Parklands.
- Jack, V. & Harris, K. 2007. *Broad-based BEE: The complete guide*. Northcliff: Frontrunner.

- Kantor, B. 1998. Ownership and control in South Africa under black rule. *Journal of Applied Corporate Finance*, 10(4):69-78.
- Kleynhans, E.P. & Kruger, M.C. 2014. Effect of black economic empowerment on profit and competitiveness of firms in South Africa. *Acta Commercii*, 14(1):1-10.
- Kodongo, O., Mokoaleli-Mokoteli, T. & Maina, L.N. 2015. Capital structure, profitability and firm value: Panel evidence of listed firms in Kenya. *African Finance Journal*, 17(1):1-20.
- Krüger, L.P. 2011. The impact of black economic empowerment (BEE) on South African businesses: Focusing on ten dimensions of business performance. *Southern African Business Review*, 15(3):207-233.
- Krüger, L.P. 2014. South African managers' perceptions of black economic empowerment (BEE): A 'sunset' clause may be necessary to ensure future sustainable growth. *Southern African Business Review*, 18(1):80-99.
- Mackenzi-Hoy, T. 2013. Rise of the pre-tenders. *Fin24*. Retrieved from <http://www.fin24.com/entrepreneurs/opinions-and-analysis/rise-of-the-pre-tenders-20130925> [Accessed 23 May 2015].
- Mail & Guardian*. 2013. The art and science of measuring empowerment. Retrieved from www.mg.co.za/article/2013-03-15-00-the-art-and-science-of-measuring-empowerment [Accessed 23 May 2015].
- Mainul, M.A. 2012. Can ROE be used to predict portfolio performance? *Economics, Management & Financial Markets*, 7(2):132-148.
- Martínez-Ferrero, J. & Frías-Aceituno, J.V. 2015. Relationship between sustainable development and financial performance: International empirical research. *Business Strategy and the Environment*, 24(1):20-39.
- Mathura, A. 2010. The impact of broad-based black economic empowerment on the financial performance of companies listed on the JSE. Unpublished MBA thesis. University of Pretoria, Pretoria.
- Mbeki, M. 2012. Wealth creation. *BusinessDay*. Retrieved from www.bdlive.co.za/articles/2011/02/10/wealth-creation [Accessed 2 January 2015].
- Mehta, U. & Ward, M. 2017. The relationship between a black economic empowerment score and shareholder returns in Johannesburg Stock Exchange-listed companies. *Southern African Business Review*, 21(1):85-97.
- Monteiro, A. 2006. A quick guide to financial ratios. *The Citizen, Moneyweb Business*.

- Nattrass, N. & Seekings, J. 2010. *State, business and growth in post-apartheid South Africa*. Research Programme Consortium for Improving Institutions for Pro-poor Growth discussion paper series 34.
- Ntim, C. & Soobaroyen, T. 2013. Black economic empowerment disclosures by South African listed corporations: The influence of ownership and board characteristics. *Journal of Business Ethics*, 116(1):121-138.
- Ntingi, A. & Hlatshwayo, B. 2010. Blacks own less than 2% of JSE. *Fin24*, 28 March. Retrieved from www.fin24.com/Business/Blacks-own-less-than-2-of-JSE-20100328 [Accessed 10 November 2012].
- Nuryaman, A.R. 2013. The effect of corporate social responsibility activities on profitability and stock prices. *Journal of Global Management*, 6(1):113-124.
- Omnamasivaya, B. & Prasad, M.S.V. 2016. The influence of financial performance on environmental accounting disclosure practices in India: Empirical evidence from BSE. *IUP Journal of Accounting Research & Audit Practices*, 15(3):16.
- Park, J. & Park, M. 2016. Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought*, 3(1):1-7.
- Patel, L. & Graham, L. 2012. How broad-based is broad-based black economic empowerment? *Development Southern Africa*, 29(2):193-207.
- Peyper, L. 2013. Judgement Day approaches for BEE. *Finweek*: 36-39.
- Polonsky, M.J. & Waller, D.S. 2011. *Designing and managing a research project: A business student's guide*. London: Sage.
- Prinsloo, L. 2015. Ramatlhodi to crack BEE whip. *Sunday Times*.
- Raza, A. & Farooq, U. 2017. Determinants of return on equity: Evidence from the cement industry of Pakistan. *KASBIT Journal of Management & Social Science*, 10(1):106-119.
- RSA (Republic of South Africa). 1996. *Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)*. Pretoria: Government Printers.
- Sachdeva, J. 2009. *Business research methodology*. Himalaya.
- SAICA (South African Institute of Chartered Accountants). 2014. *Survey reveals that transformation in the CA(SA) profession contributes positively to the transformation of listed company directors under the age of 40*. Retrieved from <http://www.saica.co.za/News/NewsArticlesandPressmediareleases/tabid/695/itmid/4729/language/en-ZA/Default.aspx> [Accessed 1 November 2015].

- Şamiloğlu, F. & Akgün, A. 2016. The relationship between working capital management and profitability: Evidence from Turkey. *Business & Economics Research Journal*, 7(2):1-14.
- Sartorius, K. & Botha, G. 2008. Black economic empowerment ownership initiatives: A Johannesburg Stock Exchange perspective. *Development Southern Africa*, 25(4):437-453.
- Sebata, I. 2015. New B-BBEE codes can stimulate competition and innovation. *Finweek*. Retrieved from <http://finweek.com/2015/04/29/business-new-b-bbee-codes-can-stimulate-competition-and-innovation/> [Accessed 25 May 2015].
- Southafrica.info. 2010. *MTN announces R8bn BEE deal*. Retrieved from www.southafrica.info/business/trends/empowerment/mtnbee-150710.htm#.VOGC252Ud8F [Accessed 16 January 2015].
- Southall, R. 2004. The ANC & black capitalism in South Africa. *Review of African Political Economy*, 31(100):313-328.
- Stats SA (Statistics South Africa). 1998. *Unemployment and employment in South Africa*. Pretoria: Statistics South Africa.
- Stats SA (Statistics South Africa). 2005. *Census 2001: Achieving a better life for progress between Census '96 and Census 2001*. Pretoria.
- Stats SA (Statistics South Africa). 2012. *Census 2011: Statistical release (30 October 2012)*. Pretoria.
- Stats SA (Statistics South Africa). 2014. *Quarterly Labour Force Survey*. Pretoria: Statistics South Africa.
- Strydom, B., Christison, A. & Matias, J. 2009. An empirical investigation of the effect of black economic empowerment transactions on share prices: 1996 to 2006. *African Journal of Accounting, Economics, Finance & Banking Research*, 5(5):67-76.
- Sur, D., Mitra, S. & Maji, S.K. 2014. Disintegrating return on equity using the DuPont Model: A case study of Tata Steel Ltd. *Journal of Management Research in Emerging Economies*, 2(2):1-82.
- Surroca, J., Tribó, J.A. & Waddock, S. 2010. Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5):463-490.
- Tangri, R. & Southall, R. 2008. The politics of black economic empowerment in South Africa. *Journal of Southern African Studies*, 34(3):699-716.

- Totowa, J. 2015. Exploring the correlation between selected performance measurement tools for individual investors in South Africa. Unpublished MPhil thesis. University of South Africa, Pretoria.
- Trudel, R. & Cotte, J. 2009. Does it pay to be good? *MIT Sloan Management Review*, 50(2):61.
- Unisa (University of South Africa). 2017. Management Development Programme. Retrieved from <http://www.unisa.ac.za/static/sbl/Content/docs/slp/BBBEE-brochure.pdf> [Accessed 16 January 2017].
- Van der Merwe, C.M. & Ferreira, P. 2014. The association between the seven elements of the black economic empowerment score and market performance. *South African Journal of Economic and Management Sciences*, 17(5):544-556.
- Van Heerden, J.H. 2011. Contribution of broad-based black economic empowerment to the financial performance of companies listed on the JSE during a recession. Unpublished MBA thesis. University of Pretoria, Pretoria.
- Veloso, V.V. 2008. The impact of broad-based black economic empowerment on foreign direct investment inflows into South Africa. Unpublished MBA thesis. University of Pretoria, Pretoria.
- Wagenhofer, A. 2014. The role of revenue recognition in performance reporting. *Accounting and Business Research*, 44(4):349-379.
- Ward, M. & Muller, C. 2010. The long-term share price reaction to black economic empowerment announcements on the JSE. *Investment Analysts Journal*, 39(71):27-36.
- Weathington, B.L., Cunningham, C.J. & Pittenger, D.J. 2012. *Understanding business research*. NJ: Wiley.
- Wolmarans, H. & Sartorius, K. 2009. Corporate social responsibility: The financial impact of black economic empowerment transactions in South Africa – corporate governance. *South African Journal of Economic and Management Sciences*, 12(2):180-193.
- Wüstemann, J. & Kierzek, S. 2005. Revenue recognition under IFRS revisited: Conceptual models, current proposals and practical consequences. *Accounting in Europe*, 2(1):69-106.
- Zhang, Y. 2005. Revenue recognition timing and attributes of reported revenue: The case of software industry's adoption of SOP 91-1. *Journal of Accounting and Economics*, 39(3):535-561.

ANNEXTURE A

LIST OF COMPANIES USED IN THE STUDY

ABE Construction Chemicals Ltd	Avusa Ltd
Accelerate Property Fund Ltd	Awethu Breweries Ltd
Acucap Properties Ltd	Barloworld Ltd
Adaptit Holdings Ltd	Barnard Jacobs Mellet Holdings Ltd
Adcock Ingram Holdings Ltd	Basil Read Holdings Ltd
Adcorp Holdings Ltd	Bauba Platinum Ltd
Adrenna Property Group Ltd	Beige Holdings Ltd
Advtech Ltd	Blue Label Telecoms Ltd
AECI Ltd	Bonatla Property Holdings Ltd
Afgri Ltd	Bowler Metcalf Ltd
African & Overseas Enterprises Ltd	Brikor Ltd
African Bank Investments Ltd	Brimstone Investment Corporation Ltd
African Brick Centre Ltd	Buildmax Ltd
African Equity Empowerment Ltd	Business Connexion Group Ltd
African Media Entertainment Ltd	Cadiz Holdings Ltd
African Oxygen Ltd	Cape Empowerment Ltd
African Rainbow Minerals Ltd	Capital Property Fund Ltd
Afrimat Ltd	Capitec Bank Holdings Ltd
Afrocentric Investment Corporation Ltd	Cargo Carriers Ltd
AG Industries Ltd	Cashbuild Ltd
Ah-Vest Ltd	Caxton And Ctp Publishers Ltd
Allied Electronics Corporation Ltd	Ceramic Industries Ltd
Amalgamated Appliance Holdings Ltd	Cipla Medpro South Africa Ltd
Amalgamated Electronic Corporation Ltd	City Lodge Hotels Ltd
Andulela Investment Holdings Ltd	Clicks Group Ltd
Anglo American Platinum Ltd	Clientele Ltd
Anglogold Ashanti Ltd	Clover Industries Ltd
ARB Holdings Ltd	Cognition Holdings Ltd
Arcelormittal South Africa Ltd	Comair Ltd
Argent Industrial Ltd	Combined Motor Holdings Ltd
Arrowhead Properties Ltd	Command Holdings Ltd
Ascendis Health Ltd	Compu-Clearing Outsourcing Ltd
Ascension Properties Ltd	Conduit Capital Ltd
Aspen Pharmacare Holdings Ltd	Consolidated Infrastructure Group Ltd
Assore Ltd	Control Instruments Group Ltd
Astral Foods Ltd	Coronation Fund Managers Ltd

Astrapak Ltd	Country Bird Holdings Ltd
Attacq Ltd	Crookes Brothers Ltd
Aveng Ltd	Cullinan Holdings Ltd
AVI Ltd	Curro Holdings Ltd
Datacentrix Holdings Ltd	Holdsport Ltd
Datatec Ltd	Hosken Consolidated Investments Ltd
Delta EMD Ltd	Hospitality Property Fund Ltd
Delta Property Fund Ltd	Howden Africa Holdings Ltd
Dialogue Group Holdings Ltd	Hudaco Industries Ltd
Digicore Holdings Ltd	Hulamin Ltd
Dipula Income Fund Ltd	Hyprop Investments Ltd
Discovery Ltd	IFA Hotels & Resorts Ltd
Distell Group Ltd	Iliad Africa Ltd
Distribution And Warehousing Ltd	Illovo Sugar Ltd
Don Group Ltd (The)	Impala Platinum Holdings Ltd
Dorbyl Ltd	Imperial Holdings Ltd
Drdgold Ltd	Infrasors Holdings Ltd
Ecsponent Ltd	Ingenuity Property Investments Ltd
Efficient Group Ltd	Insimbi Refractory And Alloy Ltd
ELB Group Ltd	Intertrading Ltd
Ellies Holdings Ltd	Investec Property Group
ENX Group Ltd	Invicta Holdings Ltd
EOH Holdings Ltd	ISA Holdings Ltd
Eqstra Holdings Ltd	Italtile Ltd
Esor Ltd	Jasco Electronics Holdings Ltd
Eureka Industrial Ltd	JD Group Ltd
Evrax Highveld Steel And Vanadi Ltd	JSE Ltd
Excelerate Holdings Ltd	Kagiso Media Ltd
Exxaro Resources Ltd	Kairos Industrial Holdings Ltd
Fairvest Property Holdings Ltd	Kap Industrial Holdings Ltd
Famous Brands Ltd	Kaydav Group Ltd
Finbond Group Ltd	Keaton Energy Holdings Ltd
Fortress Income Fund Ltd	Kelly Group Ltd
Foschini Group Ltd (The)	Kumba Iron Ore Ltd
Fountainhead Property Trust Ltd	Labat Africa Ltd
Freeworld Coatings Ltd.	Lewis Group Ltd
Gijima Group Ltd	Liberty Holdings Ltd
Gold Fields Ltd	Litha Healthcare Group Ltd
Grand Parade Investments Ltd	M Cubed Holdings Ltd
Grindrod Ltd	Masonite (Africa) Ltd
Group Five Ltd	Massmart Holdings Ltd
Growthpoint Properties Ltd	Master Drilling Group Ltd
Hardware Warehouse Ltd	Mazor Group Ltd

Harmony Gold Mining Company Ltd	Mediclinic International Ltd
Datacentrix Holdings Ltd	Holdsport Ltd
Datatec Ltd	Hosken Consolidated Investments Ltd
Delta EMD Ltd	Hospitality Property Fund Ltd
Delta Property Fund Ltd	Howden Africa Holdings Ltd
Dialogue Group Holdings Ltd	Hudaco Industries Ltd
Digicore Holdings Ltd	Hulamin Ltd
Dipula Income Fund Ltd	Hyprop Investments Ltd
Discovery Ltd	IFA Hotels & Resorts Ltd
Distell Group Ltd	Iliad Africa Ltd
Distribution And Warehousing Ltd	Illovo Sugar Ltd
Don Group Ltd (The)	Impala Platinum Holdings Ltd
Dorbyl Ltd	Imperial Holdings Ltd
Drdgold Ltd	Infrasors Holdings Ltd
Ecsponent Ltd	Ingenuity Property Investments Ltd
Efficient Group Ltd	Insimbi Refractory And Alloy Ltd
ELB Group Ltd	Intertrading Ltd
Ellies Holdings Ltd	Investec Property Group
ENX Group Ltd	Invicta Holdings Ltd
EOH Holdings Ltd	ISA Holdings Ltd
Eqstra Holdings Ltd	Italtile Ltd
Esor Ltd	Jasco Electronics Holdings Ltd
Eureka Industrial Ltd	JD Group Ltd
Evraz Highveld Steel And Vanadi Ltd	JSE Ltd
Excellerate Holdings Ltd	Kagiso Media Ltd
Exxaro Resources Ltd	Kairos Industrial Holdings Ltd
Fairvest Property Holdings Ltd	Kap Industrial Holdings Ltd
Famous Brands Ltd	Kaydav Group Ltd
Finbond Group Ltd	Keaton Energy Holdings Ltd
Fortress Income Fund Ltd	Kelly Group Ltd
Foschini Group Ltd (The)	Kumba Iron Ore Ltd
Fountainhead Property Trust Ltd	Labat Africa Ltd
Freeworld Coatings Ltd.	Lewis Group Ltd
Gijima Group Ltd	Liberty Holdings Ltd
Gold Fields Ltd	Litha Healthcare Group Ltd
Grand Parade Investments Ltd	M Cubed Holdings Ltd
Grindrod Ltd	Masonite (Africa) Ltd
Group Five Ltd	Massmart Holdings Ltd
Growthpoint Properties Ltd	Master Drilling Group Ltd
Hardware Warehouse Ltd	Mazor Group Ltd
Harmony Gold Mining Company Ltd	Mediclinic International Ltd
Merafe Resources Ltd	Pick n Pay Holdings Ltd
Merchant & Industrial Properties Ltd	Pick n Pay Stores Ltd

Metair Investments Ltd	Pinnacle Holdings Ltd
Metmar Ltd	Pioneer Food Group Ltd
Metorex Ltd	PPC Ltd
Metrofile Holdings Ltd	Premium Properties Ltd
Micromega Holdings Ltd	Prescient Ltd
Miranda Mineral Holdings Ltd	Primeserv Group Ltd
MIX Telematics Ltd	Protech Khuthele Holdings Ltd
Mmi Holdings Ltd	PSG Group Ltd
Mondi Ltd	Purple Group Ltd
Morvest Group Ltd	Putprop Ltd
Mpact Ltd	Quantum Foods Holdings Ltd
Mr Price Group Ltd	Queensgate Hotels and Leisure Ltd
MTN Group Ltd	Racec Group Ltd
Murray & Roberts Holdings Ltd	Rand Merchant Insurance Holding Ltd
Mustek Ltd	Raubex Group Ltd
Mvelaserve Ltd	RCL Foods Ltd
Nampak Ltd	Rebosis Property Fund Ltd
Naspers Ltd	Redefine Properties International Ltd
Netcare Ltd	Remgro Ltd
New Bond Capital Ltd	Resilient Property Income Fund
Nictus Ltd	Reunert Ltd
Niveus Investments Ltd	Rex Trueform Clothing Company Ltd
Northam Platinum Ltd	Rhodes Food Group Holdings Ltd
Nu-World Holdings Ltd	Rolfes Holdings Ltd
Oceana Group Ltd	Royal Bafokeng Platinum Ltd
Octodec Investments Ltd	SA French Ltd
O-Line Holdings Ltd	SA Corporate Real Estate Fund
Omnia Holdings Ltd	Sallies Ltd
Onelogix Group Ltd	Sanlam Ltd
Optimum Coal Holdings Ltd	Santam Ltd
Orion Real Estate Ltd	Santova Ltd
Palabora Mining Company Ltd	Sanyati Holdings Ltd
Paladin Capital Ltd	Sappi Ltd
Pangbourne Properties Ltd	Sasol Ltd
Paracon Holdings Ltd	Sea Kay Holdings Ltd
Peregrine Holdings Ltd	Securedata Holdings Ltd
Petmin Ltd	Sentula Mining Ltd
Phumelela Gaming and Leisure Ltd	Sephaku Holdings Ltd
Set Point Group Ltd	Trans Hex Group Ltd
Shoprite Holdings Ltd	Transaction Capital Ltd
Sibanye Gold Ltd	Transpaco Ltd
South African Coal Mining Holdings Ltd	Trematon Capital Investments Ltd

South Ocean Holdings Ltd	Trencor Ltd
Sovereign Food Investments Ltd	Truworths International Ltd
Spanjaard Ltd	Tsogo Sun Holdings Ltd
Spescom Ltd	TWP Holdings Ltd
Spur Corporation Ltd	UCS Group Ltd
Stefanutti Stocks Holdings Ltd	Universal Industries Corporation Ltd
Steinhoff International Holding Ltd	Value Group Ltd
Stella Vista Technologies Ltd	Verimark Holdings Ltd
Stellar Capital Partners Ltd	Village Main Reef Ltd
Sun International Ltd	Vividend Income Fund Ltd
Super Group Ltd	Vodacom Group Ltd
Sycom Property Fund Ltd	Vox Telecom Ltd
Synergy Income Fund Ltd	Vukile Property Fund Ltd
Taste Holdings Ltd	Vunani Ltd
Telkom Sa Soc Ltd	Wescoal Holdings Ltd
Texton Property Fund Ltd	Wilson Bayly Holmes - Ovcon Ltd
Thabex Ltd	Winhold Ltd
The Bidvest Group Ltd	Woolworths Holdings Ltd
The Spar Group Ltd	Workforce Holdings Ltd
Tiger Brands Ltd	York Timber Holdings Ltd
Times Media Group Ltd	Zaptronix Ltd
Tongaat Hulett Ltd	Zeder Investments Ltd
Tower Property Fund Ltd	Zurich Insurance Company South Ltd
Tradehold Ltd	