The relationship between a “critical mass” of non-executive Black directors on JSE-listed company boards and financial performance: A study of boards in the Mining and Financial Services Sectors

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ABSTRACT

Numerous studies have examined the relationship between a critical mass of women on corporate boards and firm performance. Despite convincing arguments that racially diverse board members contribute positively to the board's management oversight and strategy formulation responsibilities, literature examining race in the boardroom has been very scant and racial minority directors remain persistently under-represented on corporate boards.

The purpose of this study was to examine whether a critical mass of 30% Black directors on boards and audit committees of public companies performed better than companies with less than 30% Black directors. The study was conducted using the mining and financial services companies listed on the Johannesburg Stock Exchange. Quantitative research methodology was utilized to test the financial ratios of ROA, ROE, Tobin's Q, Share Price, P/E Ratio and Dividend Payout with companies that had a minimum of 30% Black directors compared to companies with less than 30% Black directors.

The study revealed that there was no relationship between either a critical mass of Black directors on boards and financial performance or between a critical mass of Black directors on audit committees and financial performance.

Keywords: Boards, Racial Diversity, Critical Mass Theory, Agency Theory, Black Directors, Financial Performance.
DECLARATION

I declare that the research report is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Cheryl Singh

11 November 2013
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This research project is dedicated to the following special people:

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Chapter 1: Problem Definition

1.1 Introduction to the Research Problem

Racial and gender diversity on boards have become focus areas for companies and governments because they are topics of practical commercial importance. (Miller & Triana, 2009). The National Development Plan (2012) states that South Africa remains a racially divided country and the transformation of all levels of the workplace to broaden opportunities for Black people, which was previously distorted by apartheid, is premised on a constitutional, moral and social imperative.

Board diversity has become a matter of priority in the areas of corporate strategy and financial markets. A point in case is the decision by the Securities and Exchange Commission (SEC) in the United States that have made it mandatory for companies to disclose whether diversity was a factor considered in the board selection process (Shin & Gulati, 2011).

The EU Green Paper on the Corporate Governance Framework (2011) points out that diversity in director demographic profiles and backgrounds is critical to guard against agency costs and prevent group-think by creating new perspectives, deliberations, challenges and thinking in the boardroom, which ultimately leads to more effective management oversight. The Commission calls for mandatory minimum targets to enforce board diversity instead of mere diversity policies. The King Report on Governance (Institute of Directors in Southern Africa, 2009), recommends that a board should take cognizance of its demographic and diversity characteristics in determining its effectiveness. Diversity applies to inter alia, race and gender (Institute of Directors in Southern Africa, 2009).

In the US Supreme Court judgement of Regents of University of California v. Bakke, Justice Powell laid down for the first time, a compelling case for diversity and the fact that race was an important factor to be considered in the overall achievement of diversity (Conley, Broome & Krawiec, 2011). He pronounced that the State had an interest in promoting diversity because it
created “an atmosphere of speculation, experiment and creation” (Blasi, 1979, p. 32).

Despite a strong business case being made by several studies for racially diversified boards, large American companies still have very few black (African American) directors on their boards (Rose & Bielby, 2011). The lack of diversity on corporate boards is further illustrated by the fact that of the 3,118 directorships on the top 350 UK companies, only 416 directorships are held by women (Sealy & Vinnicombe, 2013). A study performed on 463 UK listed companies revealed that only 0.2% of the directors were non-white (Brammer, Millington & Pavelin, 2007). Slow progress has been made in the racial transformation of the upper-echelons of South African companies in the private sector as “the majority of the workplaces are still ‘Lily White’ at the top and often male dominated with a few pockets of Black executives” (Department of Labour, 2013) and higher management are ‘snow white’ with a few sprinklings of Blacks (Mayer, 2008). Consequently, the under-representation of black/ethnic directors on corporate boards remains an unrelenting issue (McDonald & Westpal, 2013).

South Africa has been described as “a complex and diverse society, with many available social identities embedded in the societal fabric” with the most significant social identity groups comprising “race, gender, ethnicity and language” (Booysen, 2007, p2). There are eleven official languages and several ethnic groups comprising IsiZulu, isiXhosa, Afrikaans, Sepedi, English, Setswana, Sesotho, Xitsonga, siSwati, Tshivenda and Ndebele (Booysen, 2007).

Colonist and apartheid laws which were fundamentally racist and patriarchal in nature, provided inter alia for separate labour systems which favoured whites and imposed wage differentiations between whites and Blacks (Booysen, 2007). In the Certification of the Constitution of the Republic of South Africa, it was noted that the fundamental tenet of the apartheid system was the denial of participation of the Black majority to socio-political and economic rights by the white minority, and “Race was the basic, all pervasive and inescapable criterion for participation by a person in all aspects of political, economic and social life.”
(Chaskalson & Davis, 1997, p.439). The United Nations (UN) denounced this apartheid system as a repugnant crime against humanity (McGregor, 2011).

The Employment Equity Act, No. 55 of 1998, ("the EE Act") which was introduced to address the deliberate exclusion of Black people from equal participation in the workplace has not yielded much success (Jain, Horwitz & Wilkin, 2012), as is evident from Figure 1 which shows that Black people are still grossly under-represented in positions of authority and decision-making in South African companies.

Figure 1: Population distribution trends (Commission for Employment Equity, 2012/2013, p.9)

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>African</td>
<td>10.0%</td>
<td>11.8%</td>
<td>11.3%</td>
<td>13.6%</td>
<td>12.7%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Coloured</td>
<td>3.4%</td>
<td>3.7%</td>
<td>4.7%</td>
<td>4.7%</td>
<td>4.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Indian</td>
<td>5.5%</td>
<td>5.6%</td>
<td>6.2%</td>
<td>5.9%</td>
<td>6.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td>White</td>
<td>81.5%</td>
<td>78.9%</td>
<td>74.9%</td>
<td>72.8%</td>
<td>73.1%</td>
<td>72.6%</td>
</tr>
<tr>
<td>Foreign national</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>3.1%</td>
<td>2.9%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Figure 1 above shows that in the top management category, whites represent more than six times their work force availability in relation to Black people despite the fact that whites only account for 11.3% of the economically active population (Commission for Employment Equity, 2012/2013).

Minimum quotas for Black board representation is stipulated by the Broad Based Black Economic Empowerment Act No. 53 of 2003 (B-BBEE Act), and it is unclear whether boards are motivated to appoint Black directors due to legal and social pressures, instead of exploiting the commercial value expected from racially diverse boards (Shin & Gulati, 2011). A case in point is that the percentage of Black directors on the JSE listed companies increased by 6.9% to 42.5% in 2012 whereas Black directors on the AltX group of companies remained stagnant at 33.5% (PWC, 2012). The discrepancy can be attributed to the fact that JSE main board listed companies are prone to higher disclosure requirements and scrutiny pertaining to their legal and social obligations which could be acting as a catalyst for the appointment of more Black directors. As
cultural and legal changes play the most significant role in determining and formulating board diversity policies/decisions (Grosvold and Brammer, 2011).

Notwithstanding, the diverse population, the ratio of Black to white directors on the boards of JSE-listed companies demonstrates that corporate South Africa still reflects country’s historical race-based inequality as Black directors remain a minority group on boards. Black and women directors make up less than 18% of the total directorships in South Africa companies (Jain et al, 2012).

A study conducted by Rose and Bielby (2011, p. 846) found that African-American directors were appointed to corporate boards in the United States “in response to institutional pressures emanating from social norms around race” and additionally, they concluded that in industries where institutional pressure to appoint non-white directors was absence, the boards of those companies remained exclusively white. Accordingly, the study found that the distribution of African-American directors were skewed towards one or two directors per a firm, which was attributed to the view from business leaders that one or two black directors in the “club” were sufficient to visibly comply with social pressures. Many decades after diversity became fashionable in America, the upper tiers of corporate American has still remained the stronghold for old white males (Ramirez, 2003).

Directors that form part of a minority group face social exclusion from the dominant majority directors which is referred to as tokenism (Kanter, 1997) or
symbolism (Mahadeo, Teerooven & Hanuman, 2012) which impede the divergent thinking expected from the minority group and according to Westphal and Milton (2000), is counter to the creation of effective boards (Institute of Directors of Southern Africa, 2009), which deliberate with diverse perspectives and insights to avoid the risk of group-think materialising (Abbott, Parker & Presley, 2012). Studies have shown that boards which share a high degree of similar experiences and characteristics are more prone to the dynamic of group-think in their decision making processes as opposed to boards which are culturally diverse (Ramirez, 2003). The board of Enron, the entity which committed the first large-scale corporate scandal, (King, 2006) is a leading example of the dangers of a board plagued by the group-think phenomenon. Homogeneity on the Enron board led to the board favouring politeness instead of asking probing questions and congeniality above learning the truth, finally resulting in all dissenting voices eventually resigning from the board (Sonnenfeld, 2002). The group-think phenomenon poses a real danger to corporate governance as it replaces critical independent thinking, debate and scrutiny with the need to maintain group cohesion and polite relationships (Abbott, 2012). The Permanent Investigation Committee described the board dynamics in Enron as a prime example of group think when every board member testified that the internal board relations were very harmonious with all board votes being unanimous. They were only able to recall two dissenting votes in a period of several years (Gordon, 2002).

The theory of tokenism is based on the premise that due to the disproportionately small numbers in the minority group (number skewedness), the members of the minority group are subjected to negative effects of social isolation, increased performance pressure due to their differentness (heighten boundaries), role encapsulation and exclusion from informal social and professional networks (Kanter, 1977).

The selection and appointment process of minority directors also impacts the ability to function independently as directors are selected from traditional “old boys” networks (Kang, Cheng, & Gray, 2007) which is highlighted by the fact that 63 non-executive directors presently serve on between four and seven JSE listed boards (PWC, 2013) as reflected in the figure below.
Studies conducted by Inoxico (2013) highlighted the extent of multiple directorships in South Africa as the research revealed that on average, South African directors of the top 20 companies also sit on 14 other boards compared to directors in Europe who occupy between six to eight other board positions. The study disclosed the effect of black economic empowerment regulations on multiple directorships and found that ex-ANC treasurer, Mathews Phosa, serves on more than 80 boards and deputy president Cyril Ramaphosa sits on 50 active boards. The study concluded that multiple directorships are more common in South Africa because of the smaller pool of industrialists and the propensity to use networks of family and friends.

The fundamental question remains is what is the appropriate number of Black directors to be appointed to a board, in other words the tipping-point, to counter the tokenism phenomenon. The critical mass theory emanated from the seminal work conducted by Kanter (1977) on minority behaviour and found that a qualitative shift will take place in the status of women in organisations when their numbers reach or exceed a proportion of about 30%. The theory was developed on by Dahlerup (1998) who confirmed that when the representation of women reached 30% in an organisation, a significant change took place in the dynamic of the minority group as it moved from a small to a large minority. Accordingly, the critical mass theory expounds that percentages are important in the effectiveness and influence of the minority group to address the problems associated with tokenism (Dahlerup, 2006). Various studies (Joecks, Puller & Vetter, 2012), (Torchia, Calabro’A & Huse, 2011) and (Konrad, Kramer & Erkut,
2008) confirm that the magic ratio required to achieve a critical mass of women on boards necessary to break the tokenism phenomenon, to be equal to 30%.

Notwithstanding, the critical mass theory has rarely been tested empirically (Joecks et al, 2012), the theory has grown in prominence and in the fact, it has become part of conventional wisdom that there must be at least 30% women representation if women are to make a difference (Dahlerup, 2006). A widespread quota regime of 30% women representation in decision–making positions has been adopted by almost 50 countries and the discourse calling for this critical mass for minority representation of women has been common place (Dahlerup, 2006).

The body of literature revealed that the critical mass theory has only been used to test the influence of a ratio of women on corporate boards and no prior studies have been done to test whether the same critical threshold ratio i.e. 30%, applies to the minority group of Black directors.

1.2 Power of Corporate Boards

Since a company is described as an artificial legal entity, incapable of functioning without human agents, the board is defined as the collective mind of all directors acting together in concert on behalf of the company (Institute of Directors of Southern Africa, 2009) in other words, the board is described as the directing will and mind of the company (Delport and Vorster, 2013). The board of directors are under a positive obligation to either manage or direct the affairs and business of the company and have the full authority to exercise all the powers and perform all functions of the company except to the extent limited by law (Delport and Vorster, 2013). This study into the composition of corporate boards is necessary because the board of directors have substantial power and their decisions are capable of far reaching consequences as highlighted recently by the CEO of the Institute of Directors who stated that “Some companies have a higher turnover than the GDP of some countries. Such economic power should be exercised positively by generating wealth – but it can also be negative, as in the global financial crisis, BP’s Gulf of Mexico oil disaster and the Fidential Scandal in SA.” (Institute of Directors of Southern Africa, 2013). In recognising the dominant role of multinational corporations,
King SC commented that "of the 100 largest economies in the world by gross revenue, 51 are multinational companies and only 49 are governments. The impact that these great multinational companies have on the earth is huge" (Stein, 2011, p. 2) and boards have authority over these powerful organisations "and access to the economic, social and political elite." (Rose & Bielby, 2011, p. 855).

1.3 Role of Audit Committees

The role and function of a strong and independent audit committee has been widely accepted since the Securities and Exchange Commission (SEC) recommended in the 1970's that all public companies must establish an audit committee in order to improve financial oversight and reporting (Lorsch & Simpson, 2009). Iconic corporate scandals such as Enron again stressed the dire economic and social consequences/costs which arise when the audit committee members fail to discharge their legal and fiduciary duties (Rowland, 2002).

The Sarbanes Oxley Act was introduced in the United States which made the establishment of audit committees mandatory in the hope of curbing further governance scandals as it was found that: "Even the bluest of blue companies chip companies, General Electric, was allegedly manipulating its financial statements to smooth its earnings and report numbers that were either too low or too high." (Rowland, 2002, p. 171).

The King III Governance Report (Institute of Directors of Southern Africa, 2009) recommends that a board appoints committees to assist with financial reporting controls by giving focused attention to critical areas. The JSE Listing requirements have made it mandatory for all public companies in South Africa to establish separate audit committees, which is in line with the requirements of the London Stock Exchange and the New York Stock Exchange. (Vorster & Delport, 2013) Hence, public companies listed on the JSE have been selected for this study.

Independent non-executive directors on the audit committee are required to play a critical role in ensuring the credible oversight of the company's financial

16
reporting process (Sharma & Errol, 2012). Given the undeniable position of the audit committee as the most powerful committee of the board, it is imperative that the composition of the audit committee be studied (Ferreira, 2008). According to the Tyson Report (2007), the impact of a range of diversity of skills and backgrounds among audit committee members are also likely to provide the broad mix of relevant experience and will foster the independence of mind, a challenging attitude, and the sound judgement characteristics of effective boardroom cultures and performance.

Research conducted by the Audit Committee Institute (2006) found that financial and accounting expertise was rated as the most important competency for audit committee members to have. In South Africa, most audit committee members possess either financial qualifications or expertise, and a study revealed that the majority of audit committee members are either chartered accountants or possess internal auditing professional qualifications (Ferreira, 2008).

Given the extremely slow rate of transformation in the accounting and auditing profession, where it was reported by the South Africa Internal Audit and Accounting Council (SAICA) that of the 34 600 registered chartered accountants only 20% were African, Indian and Coloured (SAICA, 2013). These recent statistics begs the question whether there is a critical mass of Black directors on audit committees or even whether one can expect to find Black representation at all. A study into the critical mass of Black directors and corporate performance is accordingly required as the presence of Black directors on audit committees is an indication of whether the organisations are serious about the participation of Black/ethnic directors in critical decision-making processes (Kesner, 1988) as opposed to merely appointing Black/ethnic directors to serve as visible tokens (Carter et al, 2010).

1.4 Mining and Financial Services Sectors in South Africa

This study focuses on the mining and financial services sectors as these are significant sectors in South Africa and recently important developments have taken place in both sectors.
The Mining Industry

The unemployment rate in South Africa was unacceptably high at 25% in 2011 and policy makers are looking to the mining sector to provide a solution as this sector shows the potential to grow by approximately 4% annually up to 2020 and thereby creating 300,000 new jobs (OECD, 2013). The mining sector has been a critical component of the economy for the past 130 years and continues to play a key role by accounting for six per cent of GDP and 18% when linked with other industries. The industry also contributes 60% of export revenue and presently provides approximately one million jobs (Office of the Presidency, 2013).

The Business Monitor International (2013) has also forecasted that the stagnation and decline in the South African mining industry which has lingered for the past 10 years is scheduled to end as a number of projects will be coming online in the next 5 years. Furthermore, the country has vast untapped coal resources which are only beginning to attract attention. Notwithstanding the promising potential of this sector, it also poses substantial risks as “2012 was one of the most turbulent years since 1994 as labour unrest in the mining sector crippled production” with the wildcat worker strike in Marikana leaving a total of 44 workers dead in space of a few weeks (OECD, 2013, p. 277).

To further complicated matters, South Africa remains one of the most unequal societies in the world with the highest Gini coefficient of 0.7 (Moneyweb, 2013) and the Mining Sector Charter, those aim was to achieve transformation in the mining industry has failed dismally with only 5.7% Black ownership being recorded on mining companies on the JSE in 2010 (Sorenson, 2011).

The lack of transformation in this industry is further evidenced by the recent statistics released by Commission for Employment Equity (2012/2013) which revealed that the profile of the mining sector’s top management constitutes 66.1% white males. Moreover, it reveals that the representation of white males is more than three times that of African males in the upper echelons of the mining sector.
The failure to achieve transformation in this industry has led to the African National Congress Youth League and the Council of South African Trade Unions demanding the nationalisation of mines (Sorenson, 2011) threats which South Africa can ill afford as this rhetoric could badly deter foreign investment (Business Monitor International, 2013). The mining sector had also recently lost some competitive attractiveness due to national mining legislation and policies (Sorenson, 2011).

The gross lack of transformation in the South Africa mining sector has been attributed to the cultural biasness and institutional prejudices which continues to characterise many mining houses (Esterhuys, 2003) and which results in many Black managers leaving the mining sector because they are unable to fit into the historic culture (Schoeman, 2010). It is difficult for Black managers to be accepted into a white male dominated culture (Booysen, 2007).

According to Foreman (2000), the complexity around race in the mining sector remains an unresolved challenge.

Financial Services Sector

Racial transformation of the upper echelons in the financial services sector in South Africa has been slow as evidenced by the recent employment equity results which show that whites make up 73,2% of top management (Commission for Employment Equity, 2012/2013). Unsurprisingly, the composition of bank board’s in the US remains traditionally “pale, male and stale” (Conley et al 2010, p.20).

The financial services sector is a key growth sector in South Africa and continues to grow fairly rapidly at 9% in 2013 (Business Monitor International, 2013).

Very few studies have examined the performance measurement of board diversity in the banking sector (Hagendorff & Keasey, 2012). Bantel & Jackson (1989) found that the more innovative banks were managed by executive teams that were diverse with respect to occupational diversity. Research conducted by Richard (2000) found that US bank managers perceived a
diverse workforce has being more productive and consequently resulting in value creation for the bank. The recent turmoil in financial markets has led to policy makers calling for less diversity on bank boards, resulting in the banking sector becoming possibly the only sector that is being pressurised to become less, not more diverse in the boardroom (Hagendorff & Keasey, 2012).

As discussed above, the racial/ethnic board diversity in both the mining and financial sectors have not improved in any substantial manner. The lack of existing research in both these sectors provide persuasive arguments for the need to conduct a study measuring the critical mass of Black directors on the mining and financial services sector boards and corporate performance.

1.5 Definitions

Black directors: Refers to the legal definition of designated people as contained in the Broad Base Black Economic Empowerment Act (2003) and includes African, Indians and Coloureds in South Africa. For the purposes of this study, Chinese directors will also be included in this group as a High Court decision ruled that South African Chinese people were also unfairly discriminated against during the apartheid era (Jain et al, 2012).

1.6 Research motivation

A number of studies allude to a relationship between racial diversity, improved performance and proportionate representation of ethnic directors (Carter et al, 2003, and Erhardt, Werbel & Schrader, 2003) yet none have been able to provide empirical evidence of a correlation link, due to the insufficient number of non-white directors on boards over a sufficiently long period of time (Rose & Bielby 2011).

The aim of this study is to investigate the relationship between the proportion of Black directors on company boards and firm performance. In other words, the study examines whether a critical mass of 30% Black directors will improve financial performance. The lack of empirical evidence provides compelling grounds to conduct a study in this area.
The study makes a theoretical contribution to the agency theory, critical mass theory and board diversity by extending the literature stream to include the ratio of racially diverse board members and financial performance.
Chapter 2: Theory and Literature Review

2.1 Introduction

This section provides a review of the agency and critical mass theories in relation to racial representation on boards and reviews the theoretical framework on racial/ethnic directors.

The board is considered to be the “heart” of corporate governance and responsible for the financial performance of the company (Lawal, 2012, p. 24). The power and influence of the board of directors is clearly evident as opined by Berle and Means (1932, p.15) when they state “the rise of the modern corporation has brought a concentration of economic power which can compete on equal terms which the modern state — economic power versus political — …the future may see the economic organism, now typified by the corporation, not only on an equal plane with the state, but possibly even superseding it as the dominant form of social organisation.”

According to Hillman and Dalziel (2003) the board has two primary roles i.e. provide strategy formulation by bringing resources into the organisation (based on the resource dependency theory) and to exercise control and monitoring over management (based on the agency theory) (Bonazzi & Islam, 2007). The board of directors function as a group of equals in carrying out their responsibilities (Rose & Bielby, 2011) and since the board operates as a team of individuals to conduct complex tasks, co-ordination between the team members is critical for effective performance (Schwartz –Ziv, 2012).

2.2 Review of the Agency Theory

The theoretical support for linking board diversity to company financial performance is rooted in the agency theory as board diversity leads to greater board independence and the introduction of new perspectives and thinking within the board leads to the board being better able to monitor management and meet its agency obligations of protecting the interests of all stakeholders (Carter et al, 2010).
Agency theory was first spoken of by Berle and Means (1932) when they highlighted the ideology of separate control and ownership of the corporation where the shareholders yielded their rights of control in the corporation to the managers. This gave rise to the legal doctrine of the separate legal persona of the cooperation which has a separate identity to the shareholders and managers (Berle & Means, 1991). This theory of the separation of ownership and control, based on the underlying assumption of the separate legal entity doctrine, was expanded on by several writers to become known as the agency theory of corporation (Abbasi, 2009).

The origins of the agency theory is accredited to Jensen and Meckling (Bryant & Davis, 2012) and in essence refers to a set of relationships called agency relationships where one party, the principal, engages the other party, called the agent to perform services on its behalf and delegates decision making powers to the agent and empowers the agent to perform the service. In companies, the shareholder is thought of as the principal and the manager as the agent (Jensen & Meckling, 1976). Agency theory is premised on the assumption that managers are self-serving and opportunist and cannot be relied upon to serve the best interests of the principal (Hillman & Dalziel, 2003).

As a result of the competing interests between the shareholders and the managers, the managers’ behaviour do not necessarily result in shareholder value maximisation and this conflict of interest between shareholders and managers results in what is known as agency costs (Fama & Jensen, 1983). The agency theory postulates that these agency costs can be mitigated by the board of directors who act as an internal control function to protect the interests of the shareholders against the opportunistic behaviour of managers (Hillman & Dalziel, 2003). There is a positive duty on the board of directors to actively monitor and control management to ensure that they act in the interests of the shareholders (Eisenhardt, 1989).

Agency theory provides justification for the board’s key role of monitoring management on behalf of the company’s shareholders and stakeholders. Since managers cannot be trusted to manage the conflict of interest between maximising shareholder value and their own self-serving interests, it is imperative that the board acts as a control mechanism to manage the conflict.
and will only be able to achieve this if it is independent of management's influence (Fama & Jensen, 1993).

Prior research has confirmed that outside directors are in a better position to fulfill their fiduciary duties as they are independent from management (Daily & Dalton, 1994), and are able to control and constrain opportunistic managerial behaviour more effectively (Fama & Jensen, 1983).

A recent study conducted on listed Malaysian companies (Dorcas & Mohamad, 2011) to determine whether a causal link existed between the proportion of independent directors of a company and the likelihood of the company becoming financially distressed, found that an insignificant relationship existed between board independence and the probability of the company becoming financially distressed. The study denotes that board independence was insufficient to curb the agency problems of financial distress due to management dominance over the board, which rendered the board’s independence ineffective. In addition, the board members lacked the knowledge and qualification required to make a proper assessment of financial statements. Accordingly, the internal control mechanisms of merely having a higher proportion of outside directors on the board and audit committee “may not be sufficient to promote effective control between the agent and the principal.” (Dorcas & Mohamad, 2011, p131).

Critics of the agency theory have challenged the assumption that managers are bereft of any moral dimension and are only interested in pursuing their own personal interests. This theory of individualism, where the individual agent is only concerned with satisfying his own desire (hedonism) ignores the social dimensions of individuals and their ability to act collectively for the common good (Fontrodona & Sison, 2006).

Supporters of the agency theory on the other hand, have lauded it for being realistic by taking into consideration the complex nature of relationships between individuals and the firm (Abbasi, 2009). One of the fundamental assumptions of the agency theory is that the conflicts of interests of managers are held in check by the board of directors, however this assumption can be
challenged on the basis that the board members themselves may be conflicted, rendering their monitoring role ineffective (Bryant & Davis, 2012).

It can be argued that other theories such as managerial hegemony and the power perspective place limitations on the agency theory in so far as it relates to the effectiveness and contribution made by independent directors in mitigating agency costs (Abbasi, 2009). Managerial hegemony is premised on the basis that the board is dominated by management and accordingly is only a legal fiction that exhibits passiveness in its monitoring function and merely rubber stamps the decisions taken by management. The board is consequently, powerless and incapacitated to address and solve agency problems (Stiles, 2001). The barriers preventing independent directors from discharging their fiduciary duties are largely attributed to the lack of access to information on the workings of the corporation i.e. information asymmetry (Abbasi, 2009).

Relating to the power perspective theory, it is submitted that there are situations when the CEO is able to trump and veto the authority of the board because organisational power is deemed to be a relative concept which is context specific (Stiles 2001). In circumstances where the CEO is highly influential in the director appointment process or holds both the executive and chairman positions, the CEO will have the structural and relational power to become more authoritative than the board (Westpal & Zajac, 2013).

Writers have also criticised the agency theory’s underlying assumption that the board of directors act as a single unitary mechanism, as a study conducted by Westphal and Milton (2000) which examined demographic minorities on the board of directors, found that their level of influence on the board was mediated by their previous experience on other boards as well as their relationship with other board members. Accordingly, the agency theory should be expanded upon to consider the dynamics of smaller groups on the board and their role in the monitoring and controlling responsibilities of the board because boards, by their very nature, function within a social context (Cohen, Krishnamoorthy & Wright, 2008).
The agency theory remains an important yet controversial theory and "provides unique, realistic and empirically testable perspective on problems of co-operative effort." (Eisenhardt, 1998, p. 57).

2.3 Critical Mass Theory

In heterogeneous boards, minority directors operate as subgroups and individual directors form parts of subgroups that in turn operate within the larger, collective board. These subgroups can be established on different director attributes such as race, gender, work experience etc (Johnson, Schnatterly, & Hill, 2013). The term token was coined by Kanter (1977) who found minorities in a group were seen a “tokens” due to their lack of influence vis-a-vis dominate majority group (Kanter, 1977).

Kanter (1977) "sought to examine, how through her study of ‘Indsco’, numerical group composition could impact on organizational group process." (Lewis & Simpson, 2011, p.143). The critical mass theory is premised on the central claim that there is a connection between group proportions and societal experiences, accordingly changes in the group proportions will have a commensurate effect on the changes in the experiences of the individual members (Lewis and Simpson, 2011).

In a study of women in a large American corporation, Kanter (1977) found that the proportionate representation of the minority groups relative to the majority groups made a significant difference to the dynamics and behaviours of the minority and majority groups. She identified four types of social groups classified on the basis of socially different people i.e. women/men and blacks/whites and differences in their proportional representation. The social groups are divided into uniform, skewed, titled and balanced.

The uniform group consists of only one visible social element i.e. race, gender or ethnicity and although the members develop their own differentiation, with respect to external statuses such as race, the members are all similar. (Kanter, 1977, p. 208).
A skewed group (with the minority being no more than 20%) (Joecks, 2012) is controlled by the numerically dominant's culture who Kanter (1977) refers to as dominates, and the members of the minority group become tokens and are considered symbols of their entire group.

“They are made aware of their differences from the numerical dominants, but then must often pretend that the differences do not exist, or have no implications.” (Kanter, 1977, p. 239). Members of the minority group are alone (Kanter, 1977) are not treated as individuals and attempt to conform by “dissociating from the other of their category” (Kanter, 1977, p. 239). Dahlerup (1988) states that in a skewed group, informal interactions put stress on tokens because they are not protected by properly defined positions and structured interaction. Accordingly, people in token positions are surrounded by structural and personal uncertainty. Accordingly, tokens vis-a-vis the majority or dominants are not able to exert any influence in the collective group, are marginalised and have no significant voice (Kanter, 1977). This reasoning is premised on the fact that there are deep underlying differences between different social groups influenced by their social positions and experiences (Dahlerup, 1988).

In a titled group (with ratios of approximately 20% - 40% minority members) Kanter (1977) opines that the minority members due to their increase in relative numbers, become confident enough to influence the culture of the group and coalitions between minority members become real. The tokens no longer represent their social sub-group and begin to be differentiated from each other on the basis of their individual skills and abilities. The tokens become transformed into a significant minority group (Dahlerup, 1988).

In the balanced group (with a ratio of 40% minority members to 60% majority members) the culture and interaction become balanced and the focus turns to the individual’s skills and abilities other than their demographic characteristics i.e. race or gender (Kanter, 1977).

The concept of the critical mass was first used by Drude Dahlerup to extend Kanter’s theories in the study of female politicians, and she used the analogy from nuclear physics of a critical mass which referred to a quantity needed to
ignite an irreversible chain reaction, resulting in a new situation. Accordingly, when the proportion of women reaches a size of about 30%, a critical mass is obtained which begins the point of acceleration in the influence of the minority.

Kanter (1977) concludes that the token problems associated with women due to their minority position will be encountered by other minority groups such as black minorities. Dahlerup (1988) disagrees with Kanter’s theory and avers that due to the lack of influence of blacks and women outside the organisation, they are likely to encounter greater tokenism challenges than those experienced by white males when in a minority position.

The critical mass theory was applied to board diversity studies by (Konrad, Kramer & Erkut, 2008) who found that the critical threshold number in a minority group is three members before an improvement in governance is seen, and where the group of women reached that threshold i.e. three, their influence on board processes and company innovation improved (Torchia, Calabro, Huse, 2011).

The figure reflects the research model used by Torchia et al (2011) to test various tokenism theories and they demonstrate that when one or two women were appointed on the board, the tokenism reaction towards them prevented the minority women group from interacting and participating effectively on the board. When a third woman joined the minority group, a qualitative change took place in the board interactions which allowed for the minority group to gain influence and contribute to board tasks and ultimately organisational innovation.
In relation to board diversity, the critical theory expounds that women and racial minority groups will not have a voice or impact in the boardroom until their numbers grow beyond a few tokens to become a significant minority on the board (Broome, Conley & Krawiec, 2010), and recent studies have confirmed "when women or non-Caucasians are tokens on a board, we can expect their individual influence to be much smaller than when they reach a critical mass." (Hafsi, & Turgut, 2013, p. 473).

A study conducted by Post, Rahman and Rubow (2011) found that having three women directors on a board as opposed to one, was a critical threshold and had a positive association with corporate social responsibility. Some studies have found a positive relationship between the number of women on boards and firm performance (Carter et al, 2003), Erhardt et al, 2003) and (Mahadeo et al, 2012) whilst some studies have shown no relationship (Shrader, Blackburn & Iles, 1997) and (Rose, 2007), and other studies have found a negative relationship (Adams & Ferreira, 2009) and (Ahern & Dittmar, 2012).

A study conducted by Tuggle Sirmon and Bierman (2012) found that the minority directors' proportion of participation is positively influenced by the relative size of the minority director subgroup. In other words, they found that when the size of the minority subgroup doubled, the level of participation more than doubled. They advocate that the theory of proportional representation i.e. the size of the minority group should be relative to the aggregate size of the board.

2.4 Critique of the Critical Mass Theory

There are no consistent findings in literature which are able to convincingly establish an association between gender and financial performance because these studies are afflicted with the endogeneity and/or reverse causality (Schwartz-Ziv, 2012) such that a positive relation between a proportion/number of women on the board and firm performance could be indicative that women improved the firm performance, alternatively it could be argued that firms with strong financial performance can afford to window-dress by appointing less competent women to satisfy the social/legal pressures faced. Despite the high
acclaim for the critical mass theory, it has rarely been tested empirically (Joels, 2012).

Fitzsimmons (2012) argues that the approach of simply appointing a quota of minority directors to a board ignores the complex issue of board dynamics and assumes that the benefits of board diversity will be automatically achieved. Where minority directors are appointed to comply with a quota, it is assumed that the organisation is forced to appoint those directors or face detrimental consequences. These appointments are made for the wrong reasons i.e. to achieve gender, cultural or racial parity as opposed to improve governance and ultimately performance. Consequently, this leads to token appointments where the diverse ideas and perspectives of the minority representation are ignored irrespective of whether the critical mass is reached (Fitzsimmons, 2012).

Kanter (1993) refers to homosocial reproduction, where new directors are appointed to the board because they look and think very much like the existing group. Rose and Bielby (2011) found that although non-white directors might not look the same as white directors, once the majority white directors are comfortable with the views of the black director, he is allowed to join the fraternity. Whilst boards may seem more diverse as a result of adhering to minimum demographic quotas, the reality is that the minority directors on those boards might not be able to influence the board due to the internal group dynamics (Carter et al, 2010) alternatively, they might not be effective due to a process of socialisation where the minority directors assimilate their thinking to reflect the views of traditional board members and in that way destroy any distinctive quality they might bring (Rose, 2007).

A critical mass of minority representation will only lead to improved performance where a diversity culture is present on the board and the reasons for appointing diverse minorities are not just based on achieving social quotas or begrudging legal compliance (Jain, 2012) but the minorities are fully integrated into the board as a strategic imperative (Konrad et al, 2008).

Lewis and Simpson (2012) criticise Kanter’s critical mass theory for ignoring the effect of post-structuralism on organisational behaviour which in essence holds the view that individuals do not have an inner essence but are rather the
product of social and historic context. Accordingly, in organisations gender (similarly racial) prejudice is commonplace and not irregular.

They further criticise her focus on numerical balance and ratios which overlook the “black box of the boardroom” (Terjesen et al, 2009, p.33) which hide the ever present systems of majority power and privilege. Kanter’s critical mass theory has been criticised for overlooking gender biasness (racial biasness) as being responsible for the underlying cultural advantages in the organisation’s values, processes and systems (Lewis & Simpson, 2012).

Her theory postulates that discrimination against women are biased solely on their “rarity and scarcity rather than their femaleness per se” (Kanter, 1977, p. 207) and when their ratio reaches a particular proportion to the rest of the group the effects of tokenism is reduced. She contends that men will experience the same effect of tokenism if placed in a minority position (Lewis & Simpson, 2012). As stated above, Dahlerup (1988) disagrees with this assertion by arguing that the effects of tokenism is not the same for whites and blacks due to complexities around race in the external social environment. Accordingly, it has been argued that simply increasing the number of minorities will not achieve true equality (Lewis & Simpson, 2012).

2.5 The business case for racially diverse boards

The precise definition of diversity is complex, vague and “hard to pin down” (Shin & Gulati, 2011, p. 1029). Diversity can be classified into either a normative or a descriptive definition (Schuck, 2003). Board diversity represents both demographic differences (observable surface – level differences) and cognitive differences (non-visible differences) such as professional qualifications, industry experience and social networks (Kang et al, 2007) and (Erhardt et al, 2003).

Numerous studies examining the relationship between board diversity and financial performance found positive, negative and no relationships. Accordingly, the body of literature on the effect of board diversity and corporate financial performance remains inconclusive (Lawal, 2012). Ben- Amar, Francoeur, Hafsi and Labelle (2013) argue that despite the extensive research
conducted on board diversity and its effect on firm performance, it remains an unclear and misunderstood issue. They attribute this quandary to the fact that the individual director’s characteristics and demographic diversity of board members are not taken into consideration when conducting board diversity studies. Consequently, this literature review focuses exclusively on the value of board racial diversity.

Racial diversity has been described as an appropriate measure of a group’s heterogeneity with regard to racial phenotype (Shin & Gulati, 2011), who argue that racial diversity is a concept associated with a group of individuals and not based on the attributes of individual members. The literature on racial or ethnic features of the board is scant due to the “low levels of such diversity in the boardroom” (Johnson et al, 2013 p. 239) and (van der Walt & Ingley, 2003). Carter et al (2010) propose that that a properly diversified board is crucial in ensuring corporate fairness and can be considered as a more activist board.

A previous study on ethnic diversity and board performance (Ramirez, 2003) found a positive relationship between board diversity and financial performance in a study of 84 publicly listed companies in South Africa. Carter et al (2010), argues that there are two significant propositions for ethnic diversity on corporate boards; the one being that it is the ethical thing to do and the other, more convincing proposition is that a more diversified board, leads to enhanced shareholder value. Put differently, the value of appointing a racially diverse board is either for instrumental reasons, so that it serves a means to an end and is not valuable within itself or it is non-instrumental in nature and should be pursued because it’s intrinsic value irrespective of the consequences it might produce (Shin & Gulati, 2011).

Unless a realistic business case is presented for the inclusion of ethnic minority directors on boards, it is likely to become a public policy issue and invariably lead to tokenism (Carter et al, 2010). “The business case implies that competent ... ethnic minority directors are not substitutes for traditional corporate directors with identical abilities and talents but qualified ... ethnic minority directors have unique characteristics that create additional value. The business case for board ... ethnic diversity is a subset of the larger issue of good international corporate governance.” (Carter et al, 2010, p. 397). The
business case for organisational diversity and employment equity is based on the presupposition that greater racial diversity is likely to result in higher financial performance and this outcome is used to support the need for diversity to make it more palatable for white managers (Nkomo & Stewart, 2006).

Ethnical/racial minority directors also provide higher quality ideas (Milliken & Martins, 1996) peculiar insights and “information flow, from sources that are not easily accessible to an ethno-centred board” and their distinctive context may result in novel and original thinking which ultimately improves performance. (Hafsi & Turgut, 2013, p.467). Miller and Triana (2009) found a positive relationship between board racial diversity and firm performance which they attributed to the diverse human and social capital which racial minorities brought to the board that supports an innovative strategy. The study also found a positive relationship between board racial diversity and firm reputation which they contribute to the signalling theory, namely having racial minorities on the board increased the firm’s performance by signalling that the board had the right skills to understand the diverse environment in which it operated. The signalling theory can be expanded upon by stating that boards that actively pursue diversity are able to differentiate themselves as socially upstanding in the estimation of stakeholders as opposed to boards who do not value this imperative (Shin & Gulati, 2011).

Empirical studies have found that the board’s racial diversity has a positive association with institutional investor rating, suggesting that the higher proportion of minority directors on the board, the higher the probability of the firm’s image being positively viewed by institutional investors (Zhang, 2012) and sends a positive signal about the social responsibility and social justice values of the value to relevant stakeholders (Broome & Krawiec, 2008) and (Shin & Gulati, 2011).

Heterogeneous boards (Abbot et al, 2012) and racially diverse boards have been found to reduce the negative effects of group think on board processes (Krawiec, Conley & Broome, 2013). Janis (1972) defines group think as a way of thinking that people engage in when they are a part of a cohesive in-group and when the members of the in-group aim for unanimity by overriding their ability to realistically appraise alternative courses of action. Group think is a
dangerous impediment to the board fulfilling its fiduciary duties as well as
interferes with optimal board decision-making functions, as board members are
more concerned with maintaining group harmony and cohesiveness than
voicing legitimate trepidations (Esser, 1998). Studies have linked corporate
scandals such as Enron, Tyco, Worldcom and Adelphia to the lack of board
diversity which leads to ‘clubby’ boards where group think is prevalent at the
expense of robust scrutiny, dissent and intellectual though processes
necessary for the achievement of good corporate governance (Ramirez, 2003).

Board diversity literature supports the appointment of directors from racial
backgrounds because this will strengthen the board’s cognitive functioning,
board processes and decision-making (Ramirez, 2003). A study of racial
diversity of college students found that when racial diversity of the group
increased, the group’s interactions increased significantly as a result of the
increased integrated complexity which resulted from the multiplicity of
perspectives and approaches. This multiplicity of perspectives increased critical
thinking when problem - solving which is a critical element in combating the
group think phenomenon (Janis, 1972).

In a global business environment and with increasing internationalisation, the
market is likely to place a higher value on board racial diversity than gender
diversity, as racial minorities are perceived to provide critical information about
the local cultural environment (Richard, 2000) and (Singh, 2007). Racial/cultural board diversity is a valuable resource to a company in gaining
insight and understanding of its culturally diverse customer base (Miller &
Triana, 2009) and in influencing the board to meet the needs of unusual
stakeholders (Hafsi and Turgut, 2013) and (Kang et al, 2009).

One of the numerous advantages of appointing a racially diverse board is that it
encourages the recruitment of employees from different demographics into the
organisation (Ramirez, 2003) and non-whites were found to provide specific
guidance on how to do business with members of the non-white class (Broome,
et al, 2011). As a consequence of the country’s distinct historical past, South
Africans still socialise within separate groups despite the workplace becoming
“the most heterogeneous institution... where contact is made across the lines of
different social identities.” (Booysen, 2007, p. 65). Black director representation
on the boards will assist in creating a culture of diversity in organisations by changing the paradigm from:

"The "West is best" paradigm to "West is just one way, there is also East, North and South to choose from. ...... The "White is right paradigm to "white thinking suits only a group of people in the larger indigenous population of South Africa; there are also African Black thinking, Indian thinking, Coloured thinking to be taken into consideration" (Booysen, 2001, p. 58).

In a study conducted by Broome et al (2011), where 38 corporate directors were interviewed on whether they believed that racial or gender board diversity added value, it was found that with only a few exceptions, most directors were reluctant to attribute value to the demographic categories of race, ethnicity or gender.

The awkwardness to discuss these classifications directly led the researchers to conclude that the interviewees were afraid to argue that diversity matters in a specific way because that would mean ipso facto that "diversity is a proxy for difference" (Broome et al, 2011, p.761), which could suggest that the interviewees were opening themselves up for being criticised for engaging in stereotyping or discriminatory comparisons. Members of the minority group did not want to be judged as being inferior or in need of assistance and members of the majority group do not want to risk being accused of treating minority group members as if they are all alike. It was precisely this conundrum that led the researchers to conclude that the categories of race, ethnicity and gender were elusive and dangerous categories to openly discuss.

Robertson & Park (2007) conducted empirical studies which revealed a positive relationship between company leader racial diversity and firm performance. The study confirmed that in firms with few racial minority leaders in top management positions experienced decreases in financial performance as such individuals may be operating as tokens. They confirm that as the proportionate representation of racial minorities increased, the barriers of social interaction between leaders decreased, resulting in firms being able to leverage of the diversity as a unique resource in strategic thinking and problem solving. This consequently led to higher company performance.
Research has also revealed that there are costs associated with board diversity (Hagendorff & Keasey, 2012) as moderate levels of racial diversity could have the negative effect of subgroup or coalition formation (Lau & Murnighan, 1998) based on racial group memberships and could result in conflict and lack of cooperation within the larger group (Murnighan & Brass, 1991). Furthermore, different points of view on homogenous boards could negatively impact group cohesion and affect decision-making (Forbes & Milliken, 1999).

2.5.1 Race as a social construct

Academic literature on the racial and ethnic aspects of board demographics is scant and this has been attributed to low levels of race and ethnic diversity in the boardroom (van der Walt & Ingleby, 2003) and (Johnson et al, 2013), and since ethnic diversity on boards is “in its infancy”, it is customary for non-Caucasian directors to operate as tokens (Hafsi & Turgut, 2013, p. 474). Cox and Nkomo (1990, p. 420) speak of the “general neglect of race as a variable in the published research.”

There are serious difficulties associated with the definition of race (Shin, 2009) and race in South Africa primarily refers to the inherited apartheid racial categories, those characteristics continue to structure this society. Colour is closely connected with the social construction of race and ethnic origin refers to a group of people sharing a common descent cultural heritage and/or a territorial base (Posel, 2001).

South African history is characterised by racial dividedness caused first by the simultaneous dominant rule of two powerful colonisers (English and Dutch), followed by the entrenchment of the widely condemned apartheid system. The apartheid system was “based on a system of racial categorization and separation dividing the population into whites which include Afrikaners and the English, Africans, Asians and coloureds” (Littrell, & Nkomo, 2005, p.563). The Constitutional Court in the case of Minister of Finance v Van Heerden defined the previous racial discriminatory regime as “The policy of apartheid systemically discriminated against black people in all aspects of social life. … the most visible and vicious pattern of discrimination has been racial … . The
deep scars of this appalling programme are still visible in our society." (MacGregor, 2011).

The Supreme Court in Moller v Keimos School Committee described the early racial history of South Africa as one where the coloured, predominately African people were considered as belonging to an inferior race and the public opinion of the Dutch was that these natives were not fit to rule over themselves, nor should they be entitled to social or political equality. The Court took judicial notice of the fact that the Dutch viewed the blacks as uncivilised due to their racial condition and these "prejudices, have not died out, and are not less deeply rooted at the present day among the Europeans in South Africa, whether of Dutch or English or French descent (McGregor, 2011 p.123).

Colonisation of Africa led to all things associated with Africans being considered negative and all things associated with Europeans were suggested as positive. A review of anti-colonial literature undertaken by Nkomo (2011, p. 368) found that structure and implementation of the colonisation system "was designed to socialise Africans to despise their history, culture and themselves – their very blackness. Black people were represented as a race not fit to be members of the civilised world."

Racial discrimination has been legally eradicated in South Africa (MacGregor, 2011) and most parts of the world, however whilst blatant racism is no longer permissible, it has been replaced with a subtle, covert form of racism known as aversive racism (Hite, 2006). Whilst studies have shown that overt racism has weakened, the lack of trust of Black people suggests that Black people still continue to fare badly in economic terms (Hauhart, 2012). In exploring the pervasive perceptions and influence of race that inhibit black women from entering the dominant power structures in organisations, Hite (2006) found that aversive racism, white privilege and white identity played a critical role.

Aversive racism manifested mainly in white individuals who held strong self-images of non-prejudicial and egalitarian ideals but unconsciously held deep beliefs and value systems based on negative racial perceptions, ironically whilst simultaneously sincerely believing that they were colour-blind (Dovidio, 1993).
Greenwald & Krieger (2006) confirm that this form of implied or unconscious cognitive biasness during a study of the implicit bias test which found that Americans had an attitudinal preference of Caucasians over African Americans. Accordingly, the aversive racist is capable of simultaneously valuing equality and committing unintentional acts of racial discrimination especially in situations which are difficult to defect. The covert nature of aversive racial biasness makes it difficult to defect, oppose and consequently it acts as an effective barrier to black representation in the upper echelons of organisations (Hite, 2006).

Social identity posits that individuals' understand that he/she belongs to a particular social group and identifies with the value significance of being a member of that particular group (Booysen, 2007). Theory on white racial identity is premised on the grounds that at the pseudo-independent stage of identity development, whites recognise and then reject racism but in actual fact they end up contributing to racism because they remain unaware at an individual level how their behaviours and attitudes contribute to racism. At an organisational level it is also not appreciated how the policies and procedures subtly add to racial discrimination (Thompson & Carter, 2013). At this stage of identity development, whites belief that racism is only committed by unethical whites however whilst they acknowledge racial group membership, whites are only interested in assimilating blacks into becoming more like whites (Helms, 1994).

White privilege is defined as "the invisible package of unearned assets" that accrued to whites as an advantage of their racial standing in society vis-a-vis the other racial groupings (McIntosh, 2002, p.120). It remains challenging for whites to accept this concept, especially in the workplace as it means that their success, promotions, achievements and/or rewards were not earned on merit but was given to them because of their belonging to the white racial group (McIntosh, 2002).

This discrepancy is still dominating the workplace as most employees of colour are of the opinion that they need to perform at a higher level than their white counterparts in order to be seen as credible, and must consistently perform beyond expectation to be considered successful (Hite, 2006). The diagram
below depicts how the influence and combination of aversive racism, white privilege and white identity create the perception or illusion of workplace equality which have a powerful effect on ignoring the negative workplace experiences and barriers faced by black people (Hite, 2006). As is evident from Figure 5, whites will only be able to connect in a meaningful way with Blacks when whites are consciously aware of the biasness and prejudices which influence their thinking and judgements of their Black colleagues (Hite, 2006).

Figure 5: Perceptions of racism model (Hite, 2006, p 212)

Kenny & Briner (2010) argue that institutional racism are used as barriers to prevent ethnic minorities from progressing to the more senior structures of organisation through either covert or overt means of reinforcing individual prejudices by including them in the organisation's policies, procedures, operations and culture. The writers argue that since institutional racism is a part of the organisation's structure or culture, it is difficult for minority ethnic groups "to receive fair treatment and fully advance their careers." (Kenny & Briner, 2010, p. 349) and institutional racism plays a key role in discouraging ethnic minorities from aspiring to senior positions in the organisations' hierarchy. This form of racial discrimination also leads to the stereotype threat which suggests that the ethnic minority individual will be adversely labelled by the perceptions that exist of the ethnic group which perform a particular task poorly (Kenny & Briner, 2010). Hegemonic corporate culture, a constellation of discriminatory attitudes and institutional biasness together lead to structural injustice (Young, 1990) being committed against minority Black/ethnic directors. Racial biasness amounts to structural injustice because it follows a pattern of "systemic social
and cultural attitudes and behaviours, evolved over time routinised through repetition." (Browne, 2013, p 12).

In four comprehensive experiments conducted by Rosette, Leonardelli and Philips (2008) it was found that there was a relationship between race and business leadership prototypes. Leadership prototype referred to a typical leadership standard that observers developed and those that fitted into the standard or prototype where evaluated more positively. The researchers found that being white was an attribute of the business leader prototype and that white leaders were rated as being more effective and having more leadership potential than non-white candidates. Accordingly, race was found to be a critical factor in leader categorisation and accounted for the differences in the evaluation outcomes between white and non-white leaders.

The perpetuation of a long tradition of racial exclusion from the American boards facilitated through power structures and American apartheid has led to corporate boards resembling a club-like atmosphere with management being prone to stock boards with members who can be described as replicates or clones. American corporate boardrooms have a long history of "racial half-life" and this entrenched exclusivity is "structurally embedded at the pinnacle of American corporate governance" (Ramirez, 2003, p. 857).

Booysen (2007) argues that an exclusionary elitist white-male dominated organisational culture which maintains the racial fault lines in the power structures is unlikely to experience significant racial transformation of the upper echelons and even if they do appoint senior Black leadership, the expectation is that these leaders should assimilate into historical culture of the old boy’s clubs, consequently Black leaders become prone to tokenism and window dressing. Selby and Sutherland (2006) support the findings that black people are excluded and alienated by being expected to conform to the mono-cultural white values.

Therefore, organisational racial discrimination, whether overt or covert, reinforces the tokenism phenomenon and prevents Black leaders from participating in a meaningful way in key decision-making processes. The literature is congruent with the examples cited by Broome et al (2011, p785)
when they quote an African American director who mentioned an incident when the white directors all went out for dinner the night before the board meeting to discuss board issues and take key decisions. He recalled that he was specifically never invited to these informal meetings and was effectively excluded from the white "gated-community".

Despite the business imperatives to increase board diversity, research studies in the area of social psychology continue to reveal that disapproving attitudes towards members of racial minority groups as "pervasive, persistent, and very often imperceptible to the very people who possess them." (Broome et al, 2011, p.1019). Institutionalisation refers to the behaviour where firms create structural buffers to counteract proper compliance with social pressures and/ or affirmation action legislation which in effect mean that whilst racial minorities are appointed to boards for compliance purposes, they are prevented from meaningful participation in the firm’s actual decision-making groups (Rose & Bielby, 2011). The combination of dominate corporate cultures, structural injustice and institutional biasness have led less diverse corporate boards (Browne, 2013).

A recent study performed by (McDonald & Westpal, 2013) confirmed that the persistent underrepresentation of racial minority directors could be attributed to the fact that racial minority first-time directors receive far less mentoring and guidance from their incumbent board colleagues on board participation processes and the prevailing norms in the corporate elite circle than their white male counterparts, because the racial minority directors are viewed as the out-group. Racial minority directors are therefore afflicted with social discrimination in the boardroom and are prone to in-group biasedness.

McDonald and Westpal (2013) found that there was more willingness to mentor white male first-time directors and less engagement and motivation from incumbent directors to mentor racial minority novice directors. This practice had the impact of racial minority directors being less aware about specific normative mannerisms of participation in the boardroom, appropriate topics that should be raised in formal board meetings and how they should ask questions that avoid directly challenging the CEO.
The lack of mentoring ultimately manifests in the novice racial minority director not being invited to sit on other boards and consequently impedes his/her entry into the corporate elite leadership circle (McDonald & Westpal, 2013).

2.5.2 Do Black directors add any distinct value to the board?

The historical hegemony of whites in South Africa has had specific effects on corporate leadership (Lee, 2011) since prior to the dismantling of apartheid in 1994, the corporate culture was predominately Eurocentric (white) and cast in an Anglo-Saxon mould (Booysen, 2001). Nkomo (2011, p.371) found that African leadership and management characteristics are invisible in literature and “theories of leadership and management have omitted the voice of the racial ‘Other’ whether it is African or other non-Western perspectives” and leadership theories are founded mainly on the American leadership benchmark which is premised as being of universal applicability.

Nkomo’s (2011) review of post-colonial African literature found that there were advantages of African leadership which were distinct from European and/or Western leadership, which included effective management through indigenous knowledge systems, complex administrative procedures that allowed for the undertaking and completion of large-scale projects, ensuring that leaders are trained in social sensitivity and human orientation. Studies also revealed marked differences between Western and African management as Western management focused on Eurocentrism and individualism whereas African management concentrates on welfare of the community, co-operation and teamwork (Mutabazi, 2002).

Homogenous western leadership is not adequate to manage the internationalisation and globalisation challenges and complexities of business today which requires leaders of diverse backgrounds and perspectives (Booysen, 2001). Furthermore, board members who have both demographic and social homogeneity, namely white male dominated boards whose members attended the same educational intuitions and have similar social networks pose a serious risks of systemic biasness in their assumptions on the issues affecting the company which can be avoided by the ethnic directors who bring alternate cultural expertise and knowledge to challenge the traditional
assumptions (Tuggle et al, 2012). Social categorisation results in groups being divided into in-groups and out-groups based on perceptions around shared similarities and differences which results in members of the out-group being alienated and excluded (Nielsen & Huse, 2010).

Due to the lack of literature of the effect of race in the boardroom, borrowing from organisational management literature, it is evident that there are fundamental differences in leadership characteristics and behavioural patterns of managers based on racial demographics (Mayer & Louw, 2011). In a study of 216 managers conducted by Booyse (2001), she examined the differences in behaviour of white and Black managers and found that white managers displayed Eurocentric management behaviour whereas Black managers were more Afro-centric in their leadership style (Littrell & Nkomo, 2005). Since ethnic board members do not come from traditional backgrounds, they have been found to increase the independence of the board (Carter et al, 2010) which plays a critical role in addressing agency costs and they offer different cognitive viewpoints from the dominant white boards, which has an impact on company level outcomes (Johnson et al, 2013).

The system of apartheid resulted in very different personal life experiences and identities of Black and white leaders and the demise of apartheid led to a radical change in the power relations which caused material social identity transformations for all race groups (Booyse, 2007).

The difference between white and Black Managers is highlighted in the table 1 below:
Table 1: Management Implications of the cultural differences between white & black managers (Littrell and Nkomo, p567)

| MANAGEMENT IMPLICATIONS OF THE CULTURAL DIFFERENCES BETWEEN WHITE AND BLACK MANAGERS |
|---------------------------------|---------------------------------|
| **WHITES**                      | **AFRICAN BLACKS**              |
| High uncertainty avoidance      | Average uncertainty avoidance   |
| • More worry about the future   | • Greater readiness to live for the day |
| • Tendency to stay with the same employer | • Less hesitation about changing employers |
| • Loyalty to employer is seen as a virtue | • Loyalty to employer is not seen as a virtue |
| • More emotional resistance to change | • Less emotional resistance to change |
| • Less risk-taking              | • More risk-taking               |
| • Managers must be experts in the field they manage | • Managers need not be experts in the field they manage |
| • Initiative of subordinates should be kept under control | • Delegation to subordinates can be complete |
| • Rules should not be broken    | • Rules may be broken for pragmatic reasons |
| • Planning is important         | • Planning is not seen as so important |

<table>
<thead>
<tr>
<th>High assertiveness</th>
<th>Low assertiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Direct and aggressive</td>
<td>• Less direct and more face saving</td>
</tr>
<tr>
<td>• Dominant</td>
<td>• Shows subordination</td>
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<table>
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<tr>
<th>High future orientation</th>
<th>Low future orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emphasis on planning for the future</td>
<td>• Immediate gratification and less emphasis on planning</td>
</tr>
<tr>
<td>• The dominant temporal horizon is the future</td>
<td>• The dominant temporal horizons are the present and past</td>
</tr>
<tr>
<td>• Time is tangible and divisible</td>
<td>• Time is flexible and intangible</td>
</tr>
<tr>
<td>• Due dates, schedules and promptness are important</td>
<td>• Due dates, schedules and promptness are relative</td>
</tr>
<tr>
<td>• Time is money</td>
<td>• Relationships are more important than time</td>
</tr>
</tbody>
</table>

2.5.3 Can a single Black director be effective on a homogenous board?

In a study conducted by Wang and Clift (2009) it was found that no significant relationship existed between gender or racial diversity on boards and financial performance. The writers attributed the results to the low levels of racial minorities and women directors surveyed and found that token representation is likely to have an adverse effect on decision making as a single minority director is unlikely to challenge the conventional thinking and would in any event experience difficulty in having his/her opinion respected should they go against the general consensus.

Borrowing from the literature on gender diversity (Nielsen & Huse, 2010) it is trite that Black directors are not a homogenous group as each director has unique skills, qualification, backgrounds, levels of knowledge and expertise that affects his effectiveness on the board. It is his individual makes –up that affects his ability to discharge his agency obligations (Hillman & Dalziel, 2003). A caveat should be placed on the essentialism argument that all women and (a parallel can be drawn to Blacks) share the same characteristics simply because
on a visible level they are women or people of colour (Torchia et al, 2011). Ramirez (2003) argues that diversity is not about skin colour but rather about increasing the organisation’s cultural, experiential and perspective capacities.

The status characteristics theory postulates that any director, even a Black director, that has high social ranking and class will have greater power and influence on the board dynamics than a director without these prestigious characteristics. Accordingly, a Black director with elite social standing will be afflicted by the tokenism phenomenon (Tuggle et al, 2012).

It is also worth noting Justice Powell’s decision in the Bakke case which examined whether the imposition of racial quotas to achieve diversity was unconstitutional. Whilst arguing that a colour-blind standard cannot be used to reject racial classification programmes aimed at redressing past racial discriminatory practices in the United States, he went on to state that preferring one group of people over the other for no other reason other than race i.e. treating racial diversity proportionality as the sole differentiating factor is not likely to achieve genuine diversity (Blasi, 1979).

The key feature of this judgment was that the benefits of a heterogeneous body will only be realised if the consideration of race is deemed to be only one of a vast array of elements that must be considered in achieving real diversity. He endorsed a system that treated each applicant has an individual (Blasi, 1979).

2.6 Director appointment and selection process

The appointment of a director on a board has an impact on the reputation of the firm (Hillman & Dalziel, 2003) and consequently, directors are selected on the basis of their personal reputations (Useem, 1984). Despite the recommendation that directors must be selected and appointed by an independent nomination committee (Institute of Directors of Southern Africa, 2009), in reality the process is still dominated by either the chairman or CEO with the symbolic consultation of the board, consequently despite an effort to make the appointment process open and transparent, the old boys network still play an influential role in the process (Gay, 2001). Furthermore, the nomination committee receives less attention than any other committee on the board (Gay,
2001) and some researchers have argued that that the nomination committee has had little impact on increasing the talent pool for new director appointments. In fact, the creation of the nomination committee has being nothing more than a governance tick-box exercise without making any meaningful changes to the traditional director appointment process (Pye and Camm, 2003).

Various studies have confirmed that there is a prevailing tendency to appoint known individuals from interlocking director networks (Pye, 2005). Gaughan (2011) found that individuals who wished to make their first appointment onto a FTSE 100 board had to first establish personal relationships and build a network of contacts that could vouch for their reputations to the chairman of the board.

The critical deciding factor was the social interview process which vetoed the appointment process (Gaughan, 2011) and studies have confirmed that potential directors were more likely to come from the upper social echelons, a phenomenon referred to as the integration of the upper capital class (Useem, 1984). In a recent review of the director selection process, Withers, Hillman and Cannella (2012) found that boards with higher status usually appoint directors with the same higher status and directors who engage in pleasing behaviour towards peer directors have a higher probability of being appointed to subsequent boards when compared to directors who display monitoring and control behaviours (Westphal and Stern, 2006).

Westphal and Stern (2007) found that the social discrimination and attribution bias exerted by the majority while directors on the ethnic minority group resulted in the minority group not receiving equal treatment in the director appointment process and prevented them from attaining a central position in the board interlock network. Demographic minorities are punished more severely for displaying positive behaviours of control and monitoring by being discriminated against in the director selection process and experiencing a reduced likelihood of receiving additional board seats in other companies, what the authors refer to as aversive racisms i.e. where racial discrimination persists in relatively subtle forms (Westphal and Stern, 2007).
The director selection and appointment process are matters of concern especially in determining as argued by Shin & Gulati (2011) the true intention of the company when appointing racially diverse board members. In other words, the process will demonstrate whether the company is interested in exhibiting diversity through touting their black board members on company websites and/or in promotional material so that the relevant stakeholders are able to associate the black director with the company and are less interested in whether the black director actually enjoys parity amongst his peers or whether the company is truly concerned with achieving proper diversity. Shin and Gulati (2011, p.1053) warn that “The hiring of minority personnel to visible positions for their showcase value “trophy hiring” will become the norm if practiced on a continuously basis and is likely to result in adverse reputational consequences.

Carcello, Neal, Palmrose and Scholz (2011) opine that factors such as audit committee members’ independence and expertise can only be effective in carrying out the functions of the audit committee if the CEO does not play a role in the director selection process. The underlying reasoning is that a director is not able to function independently and objectivity if he is afraid to answer tough questions or to properly monitor management due to his economic and psychological ties to the CEO (Carcello & Neal, 2000). Furthermore, powerful CEO’s tend to prefer the appointment of a homogenous board (Carcello et al, 2011). Maharaj (2009) is of the view that simply appointing board candidates based on rigid rules and processes do not yield effective governance because such an appointment process ignores the politics and dynamics of boardroom behaviour.

According to Natividad (2006) the director selection and appointment process is still an informal referral arrangement that allows directors on the board to choose members that are in their own image, a behavioural characteristic that Zajac and Westpal (1996) refer to as self-cloning and what Kanter (1977) calls homo-social reproduction. The fact that the majority of boards are governed by white males who come from the same backgrounds, cultures and circles of influence (Stephenson, 2004), suggest that this form of director selection process has not undergone any fundamental change. Young (1990, p. 250) argues that these appointment criteria and evaluation practices ensure “the reproduction of the existing relations of privilege, hierarchy and subordination"
which translate into structural biasness which in turn results in a lack of genuine diversity. Without diversity, it is impossible to create a genuine meritocratic system (Philips, 1995).

2.7 Black directors and external directorships

In the watershed study by Useem (1984) it emerged for the first time that there was an existence of a director community and the study found that these board members shared very similar attitudes and beliefs and were extremely conscious of themselves as a separate and distinct community with commonly shared values. Notwithstanding, the increased formalisation of the director appointment process, individuals who are known to the board or are part of the elite membership have a better chance of being appointed (Pye, 2000).

Terjesen et al (2009) opined that the board is an elite closed group of directors with their own set of accepted standards and shared ways of thinking. They proposed and endorse directors to join other boards provided these directors fit the existing mould. Davis (1993) found that since directors are appointed on the basis of their reputations, it was more likely that directors would be appointed to a new board if they already held several other directorships in other firms. Newman, Storgatz and Watts (2001) found that directors who held multiple directorships often served on boards with other directors who themselves sat on many other boards, an effect referred to as homophily or in other words “like goes with like.” (Durbach & Parker, 2009, p. 23).

Interlocking directorates or multiple directorships is defined as occurring when a person serves on the board of more than one entity and accordingly creates a link or interlocks between companies (Pombo & Gutierrez, 2011) and (Renneboog & Zhao, 2011). O’Neal and Thomas (1995) postulate that interlocking directorates link companies in three fundamental ways:

- ownership (where one board controls two companies);
- direct interlocks (where two companies share one or two common directors: and
- Indirect interlocks (here two directors from two companies serve jointly on the board of a third company).
The director selection and appointment process in South Africa is impacted by the B-BBEE Act. The management control element of the B-BBEE Act is designed to achieve the participation of Blacks in executive management by enjoining firms to appoint 40% to 50% qualified Blacks into senior management positions (Ntim & Soobaroyen, 2012).

Black economic empowerment (BEE) policies have been criticised because it has benefitted only a few politically connected individuals to the exclusion of the mass of previously disadvantaged members of society (Tangri & Southall, 2008). B-BBEE has also been criticised as establishing an elite group of politically well-connected ANC supporters and this elite group has become structurally embedded in society (Freund, 2007). Patel and Graham (2012) argue that B-BBEE has evolved in South Africa around the elite approach which postulates that policy is shaped by a group of influential individuals that share common values and assumptions which are reflected in policy decisions.

Secondly, Black Economic Empowerment is also shaped through the corporatist theory which postulates that policy is developed through society's elite who are not culturally integrated with the rest of society but are influential as a result of corporate power structures. A small, closed Black elite group, with powerful political connections to the ruling party has been established through the implementation of empowerment deals (Patel and Graham, 2012) and (Tangri and Southall, 2008). In contrast, Sartorius and Botha (2008) argue that BEE has positively changed the face of Black directorship on publicly listed companies on the JSE.

In an analysis of corporate board networks of publicly-listed firms in South Africa, Durbach and Parker (2009) found that the network of directors in South Africa can be classified as small world, i.e. all individual directors belong to groups and there is a high degree of director clustering. Small world is defined as "a surprisingly short chain of intermediaries that connects two people who had previously never met (Durbach and Parker, 2009, P. 17). The study found that the average distance between two directors in the South African director network was a mere 4,3 moves which was attributed to the fact that the network was relatively small.
Hillman et al (2002) found that women and racial minorities holding multiple board seats displayed different patterns in joining boards than directors from non-exclusionary categories. The study revealed that women or minority directors with two board seats joined subsequent boards at a faster rate than white male directors.

Fama and Jansen (1983) argue that directors who serve on several boards are able to enhance their reputation and experience and are advantageous to the boards they serve on by providing higher quality thinking and monitoring and strategic knowledge. Directors who have been able to prevent financial failures become highly demanded by other companies to serve on their boards compared to directors who lose board positions when the companies those boards they serve on restate their financial statements (Srinivasan, 2005). Accordingly, the counter argument to Fama and Jansen (1983) is that directors who serve on multiple boards are very interested in protecting their individual reputations and reducing the risk of losing their present and future board positions and therefore these directors with multiple directorships who serve on audit committees are more likely to not accept an auditor’s restatement of the financials because they are more focused on maintaining their standing and less concerned about accounting transparency (Hunton and Rose, 2008). There is growing public policy resistance against directors holding multiple board positions given the increasing number of corporate scandals from Enron to the recent Citigroup case, with the view being that directors with multiple board seats are not able to robustly and adequately monitor and oversee management (Sharma and Enslin, 2012) and directors who are committed to their fiduciary responsibilities would limit the number of boards they serve on (Linck, Netter & Yang 2009).

Due to the conflicting interests inherent in holding multiple directorships, it has the potential of either improving or weakening the effectiveness of the audit committee (Hunton and Rose, 2008). The one view is that directors who serve on several boards are able to facilitate a better relationship between the audit committee and the external and internal auditors. They are also more experienced and are better able to challenge management with the resultant effect being that financial restatement is reduced (Srinivasan, 2005). The
criticism of holding several board seats is that director becomes too busy due to a heavy workload resulting in ineffective monitoring of management which increases agency costs (Carpenter and Westphal, 2000).

In the present commercial and governance environment, the members of the audit committee are expected to demonstrate increased oversight responsibilities and diligence in examining management, "internal audit function, internal controls, financial reporting issues, auditor selection, determination of audit and non-audit fees, evaluating auditor independence, and dealing with whistle-blowers." (Sharma & Enslin, 2012, p.154). Therefore, multiple directorships could result in the directors being spread too thinly.

Multiple directorships could also result in directors avoiding their responsibilities which could result in financial misreporting (Srinivasan, 2005) furthermore, in instances where there is conflict between the board and the CEO, the CEO would prefer to appoint directors who are known for poor monitoring, as in the case of directors holding multiple directorships which end up increasing financial misreporting (Hermalin & Weisbach, 1998). Sharma and Enslin (2012) found that multiple directorships adversely affected the effectiveness of the audit committee and resulted in increased financial restatements.

2.8 Size of Black directors groups on Audit Committees

Board committees are a critical structure of the board and are integral to the company's governance structure (Billimoria & Piderit). Kesner (1988) opines that the four most significant committees are audit, compensation, nomination and executive. These committees are critical to the functioning and effectiveness of the board in the monitoring and oversight role.

Accordingly, a director's participation on any of these committees allows him/her to make a significant contribution to and influence the board decision-making and diminishes the tokenism phenomenon (Zhu, Small, & Flaherty, 2010). The audit committee is considered as the gatekeeper for the financial reporting monitoring, protection of public interest and monitoring over management. (Agrawal and Chadha, 2005) and many critical decisions are made at the audit committee which impacts the performance of the company.
(Carter, et al, 2010). The significant role to be played by the audit committee was emphasised by the chairman of the Securities and Exchange Commission just after the Cendant and Sunbeam accounting scandals in the United States where he stated that "... qualified, committed, independent audit committees represent the most reliable guardians of the public interest (Felo and Solieri, 2009). There is no shadow of doubt that the audit committee has become the most powerful committee of the board.

Kersner (1988) argues that membership to this committee is a good indication if a minority director has been appointed to the board for his contribution or as a token. Carter et al (2010) conducted a study on the relationship between ethnic directors on a major board committee and financial performance and found no significant relationship which was attributed to the low levels of ethnic minority presence on board committees.

After a number of corporate scandals in the UK, the Cadbury Report proposed that audit committees be established to improve the credibility of financial statements and to strengthen the independence of the board (Hemraj, 2003). In the aftermath of the devastating Enron and WorldCom corporate scandals, the lawmakers in the United States were convinced that legal and not mere regulation was required to strengthen the role and effectiveness of the audit committee to restore investor confidence in the financial reporting and oversight process (Felo & Soliero, 2009). The Sarbanes – Oxley Act (2002) stipulated a number of requirements for the audit committee i.e. all audit committee members must be independent and at least one member of committee must be financial expert. These requirements for audit committees are being mirrored in Australia, Canada, Hong Kong, Mexico, United Kingdom, France, Japan, China, Germany and Brazil, albeit not as stringently as the United States (Tafara, 2006).

In South Africa, it is a statutory requirement that the members of the audit committee be appointed by the shareholders and Delport and Vorster (2013) opine that this requirement has elevated the status of the audit committee above a board committee and it has become a committee on its own.
According to Deport and Vorster (2013) the responsibilities of the audit committee are as follows:

I. Overseeing the integrated reporting by considering any factors that may lead to an incomplete or misleading picture being presented of the company’s position, performance or sustainability;

II. Responsible for the integrity of the integrated report and for recommending the approval of the annual financial statements to the board for approval;

III. Evaluating the material judgements and reporting decisions;

IV. Consider the need for restatement of the financial statements in light of new evidence;

V. Assess the key drivers of forward – looking at goals to ascertain whether statements made by the company as to forward-looking financial or sustainability statements are achievable;

VI. Provide comment on the company’s financial statements, the accounting practices, internal financial controls and any other information necessary to provide a balanced view of the company’s performance;

VII. Be aware of any disagreements between the external auditors and management;

VIII. Assist the board in making an assessment and statement on the going concern status of the company;

IX. Advise the board in providing credible disclosure of sustainability issues in the integrated report;

X. Ensure that the combined assurance model is applied in a coordinated approach;

XI. Be satisfied that the company’s finance function has the appropriate expertise, resources and experience;

XII. Ensure that the company’s internal audit function is independent and has the necessary resources to discharge its obligations;

XIII. Approve the internal audit plan;

XIV. Oversee the company’s risk management function and satisfying itself that the financial reporting risks, internal financial controls, fraud risks and IT risks are appropriately addressed;

XV. Recommend to the shareholders the appointment and removal of the external auditors based on their expertise, effectiveness, independence and resources;

XVI. Approve the external auditor’s remuneration and terms of engagement;
XVII. Assess the effectiveness, performance and independence of the external auditors and determine under which circumstances the independence of the external auditors may have been prejudiced;

XVIII. Determine the scope of non-audit services;

XIX. Consider the notice of reportable irregularities and ensure proper disclosure of such matters is made in the financial statements;

XX. Review and approve the external audit plan; and

XXI. Report and be accountable to shareholders at the company’s annual general meeting on how it fulfilled its statutory duties during the financial year.

In terms of the Companies Act (2008) at least one third of the audit committee members must have qualifications or experience in either economics, law, corporate governance, finance accounting, commerce, industry, public affairs or human resource. This provision is somewhat of a departure from the recommendation of the Blue Ribbon Report on Improving the Effectiveness of Corporate Audit Committee which state that members of the audit committee should be financially sophisticated (Xie, Davidson, DaDalt, 2002) and that at least one member of the audit committee should possess either financial or accounting expertise (Felo & Soleri, 2009). Financial literacy is defined as the ability to understand the basis of financial statements and accounting expertise may be determined by employment experience in financial and accounting, or being employed a position as CEO or CFO, or as a senior official with financial oversight responsibilities.

Studies have found that as the number of financial experts on the audit committee increases, the likelihood of financial control weaknesses decreases (Krishnan & Visvanathan, 2007). The effectiveness and success of the audit committee is highly dependent on the composition of its members who should have a combination of diverse experience, race, gender, age and nationality (Ferreira, 2008). In contrast, Hansell (2003) points out that the Enron scandal happened under the watch of board members that were considered exceptionally experienced and experts in the areas of complex structured finance, derivatives and sophisticated investments.
According to Epstein et al (2002) the key determinants of audit committee performance relates to the inputs which are in essence the composition of the audit committee i.e. individual members skills, diverse backgrounds, experience and qualification.

Notwithstanding SAICA’s stance as an institution free of racial biasness, efforts to increase the number of Black accounting graduates proved unsuccessful as in 1990 there were only 25 African chartered accountants in South Africa (Hawsley, 1990).

Transformation of the accounting and auditing profession in post-apartheid South Africa has been slow with 92.4% of partners remaining white (Boshoff & Carstens, 2003). Studies have cited a number of reasons for the gross lack of transformation of the profession such as:

- The general opinion of the corporate environment is that Blacks/Africans are stupid and incompetent, a situation that will not be improved upon irrespective of the amount of money spent on training;
- Non-white accounting clerks experience racial intolerance, racial and cultural stereotyping and insensitivity towards their adaption difficulties;
• Blacks are expected to assimilate into the rigid culture of auditing firms as cultural conformity is the norm and precedes cultural diversity;

• Black professionals have to struggle with tokenism, hostility, cultural isolation, mistrust, continuous undermining and low expectations;

• Actual experience and development is skewed in favour of white trainees; and

• The dire shortage of Black chartered accountants can be attributed to the fact that the requirements of qualifying can be exceptionally traumatic for the individual (Boshoff & Cartens, 2003).

The small number of qualified non-white chartered accountants in the United States was also attributed inter alia to reasons of racial discrimination, limited upward mobility and lack of strong affirmation action programmes (Sadler, 2003).

2.9 Board Diversity and Company Performance

Accordingly to Kang et al (2007), the board of directors is a critical internal governance mechanism in the company and where the board discharges its agency responsibility in a proper manner; higher company performance is likely to result. A number of studies investigated the relationship between board diversity and company performance, using various different company performance measures (Carter et al, 2010).

The following accounting and market performance measures are used in this study to determine whether a critical mass of Black directors will lead to higher company performance:

2.9.1 Return on Assets (ROA)

ROA is an accounting measure that gives an indication of the firm's ability to produce revenue in excess of actual expenses and is often used in governance studies as a measure of performance (Carter et al, 2010).

2.9.2 Return on Equity (ROE)
In a recent study investigating the relationship between a critical mass of women on boards and firm performance, Joecks et al (2012) preferred using ROE as a performance measure which they described as being more robust than Tobin’s Q.

2.9.3 Tobin’s Q

Accordingly to Carter et al (2010), Tobin’s Q is commonly used in governance studies as a performance measure and “Because Tobin’s Q is a market based measure to some degree, the metrics embodies a forecast of future cash flows produced by the firm and a market assessment of the investment opportunity set of the firm” (Carter et al, 2010, p. 403) and accordingly the researchers consider Tobin’s Q to be a more complex than ROA which is an accounting based performance measure. Tobin’s Q is a forward looking financial performance indicator.

2.9.4 Share Price

Bauer, Frijns, Otten and Tourani – Rad (2008) found that companies that were properly managed by the board of directors resulted in significantly higher share prices than badly managed companies.

2.9.5 P.E Ratio

Jaiporn, Kim and Kim (2010) found a positive relationship between diminished agency costs and higher dividend pay-out.

2.10 Conclusion

The monitoring and oversight role of the board of directors is rooted in the agency theory which postulates that since managers are self-serving and engage in corporate opportunism, the board has a positive duty to safeguard the interests of shareholders (Fama & Jensen, 1983). Carter et al (2010) opine that board diversity leads to greater board independence and the introduction of new thinking/perspectives which in turn leads to the board being in a position to better fulfil its agency obligations. Given the concentration of economic
power in companies and their dominant position in society (Berle & Means, 1932) board composition has become a pressing issue (Miller & Triana, 2009).

One of the criticisms levelled against the agency theory is that the underlying assumption is premised on the belief that the board operates as a single unitary mechanism and discounts the level of influence experienced by demographic minority board members (Wesphal & Milton, 2000). To be effective, the agency theory should take into account the dynamics of smaller groups on the board (Cohen et al, 2008).

The critical mass theory opines that there is a connection between the size of the minority group and the experiences and influences of the individual minority members within the minority sub-group (Lewis & Simpson, 2011). The critical mass theory is founded on the premise that only when a minority group reaches a particular proportion i.e. 30%, is it possible for the minority group members to overcome the influence of tokenism and participate as real members of the group (Kanter, 1977) and (Dahlerup, 1998).

A number of studies have examined the effect of the critical mass theory on women minority board members (Torchia et al, 2011), (Konrad et al, 2008), (Postman et al, 2011), (Shardey et al, 1997), (Broome et al. 2010), (Hafsi & Turgut, 2013), (Schwartz-Ziv, 2012), (Tuggle et al, 2011), (Jeoeks et al, 2012), (Mahadeo et al, 2012) and (Matebos de Cabo et al, 2011).

No prior studies have been done to examine the relationship between the critical mass theory and Black directors even though Black/ethnic minority directors remain persistently under-represented (McDonald & Westpal, 2013) on corporate boards.

Previous studies have confirmed that racially diverse boards add value by improving financial performance (Carter et al, 2010), providing higher quality thinking (Miliilen & Martins, 1996), generating novel and original thinking (Hafsi & Turgut, 2013), increasing board social capital and leading to innovative strategies (Miller & Triana, 2009), increasing institutional investor ratings (Zhang, 2012), reducing the board’s propensity to engage in group-think by adding a multiplicity of perspectives which strengthened critical thinking.
(Ramirez, 2003). Notwithstanding, the business case for appointing racially diverse boards, companies only appear to appoint Black /ethnic minority directors to boards to meet legal compliance requirements (Jain et al, 2012) whilst putting structural buffers in place to ensure Black/ethnic minority directors do not engage in active board decision making (Rose & Biebly, 2011). Minority directors appointment to powerful board committees such as the audit committee is an indication of whether the minority director is appointed for this contribution or as a token (Kersner, 1988) and (Zhu et al, 2010).

Race presents a complex social construct (Shin, 2009) and within the boardroom context is influenced by institutional racism (Kenny & Killner, 2010), racial leadership prototyping (Rosette et al, 2008), racial socialisation (Booysen, 2007) and historical social and corporate hegemony (Lee, 2011) and (Browne, 2013). A Black/ethnic minority directors’ ability to participate independently and equally in boardroom discussions is influenced by the director appointment process and the reasons behind appointing racial board members (Shin & Gulati, 2011) and (Rose & Biebly, 2011).

In summary, the literature presents that the application of the critical mass theory to female representation on boards has become globally accepted as the mechanism necessary to overcome the social barriers and tokenism challenges afflicted on female minority directors (Dahlerup, 2006). Black directors due to their minority status face similar challenges and proportionate representation of Black directors on corporate boards could similarly lead to genuine diversity being achieved and benefits realised.
3 Chapter 3: Research Questions

3.1 Introduction

The purpose of this study was to investigate empirically whether a relationship existed between the number of Black directors on the company boards and financial performance. According to Blumberg, Cooper, and Schindler (2008) a research question is a chosen hypothesis which is used to properly articulate the purpose of the research study.

Based on the review of literature as detailed in Chapter Two, the following research questions were formulated:

Research Question 1: Do companies in the mining and financial services industries with a minimum of 30% Black directors perform better than those with less than 30% Black directors?

Research Question 2: Do companies in the mining and financial services industries with a minimum of 30% Black directors on the audit committees perform better than those with less than 30% Black directors?
4 Chapter 4: Research Methodology

4.1 Introduction

The first aim of this study is to investigate the relationship between the proportion of Black directors on company boards and firm performance. In this case, two variables are assessed, namely proportion of Black directors on boards and financial performance.

The second aim of the study is to investigate the relationship between company performance and proportion of Black directors on audit committees. Similarly, there are two variables that are assessed, that is, the percentage of Black directors on audit committees and company performance.

This study will further look at differences in company performance between companies with less than 30 percentage representation on boards (or audit committees) and companies with more than 30 percentage representation on boards (or audit committees). Finally, industry differentials will then be looked at to establish if there are any diversions across two selected industries.

4.1.1 The dependent Variable

In this study, financial performance is the dependent variable. There are a number of financial ratios that can be used to measure financial performance. The table below, (Marx et al, 2005) illustrates the ratios grouped according to broad categories of business performance;

<table>
<thead>
<tr>
<th>Table 2: Industry average ratios</th>
<th>Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
</tr>
<tr>
<td>Liquidity ratios</td>
<td>• Current ratio</td>
</tr>
<tr>
<td></td>
<td>• Quick ratio</td>
</tr>
<tr>
<td>Asset management ratios</td>
<td>• Inventory turnover</td>
</tr>
<tr>
<td></td>
<td>• Average collection period</td>
</tr>
<tr>
<td></td>
<td>• Average payment period</td>
</tr>
<tr>
<td></td>
<td>• Total asset turnover</td>
</tr>
<tr>
<td>Debt management ratios</td>
<td>• Total debt ratio</td>
</tr>
<tr>
<td></td>
<td>• Debt equity</td>
</tr>
<tr>
<td></td>
<td>• Times interest earned</td>
</tr>
<tr>
<td>Profitability ratios</td>
<td>• Gross profit margin</td>
</tr>
</tbody>
</table>
In this study, financial performance will be measured using profitability ratios "Return on Assets" (ROA), "Return on Equity" (ROE) and the ratio Tobin’s Q. These measurements of financial performance have been used in previous studies examining the relationship between board diversity and company financial performance (Joecks et al, 2012) and Carter, et al, 2010). The study performed by Joecke et al (2012) revealed a positive relationship between the critical mass of women on boards and ROE. Carter et al (2010) conducted a study of the number of ethnic directors on boards and ROA over a five year period and found a positive relationship between the number of ethnic directors on the boards and ROA.

Profitability ratios show the combined effect of liquidity, asset management and debt management on operating results and can be taken as indicators of financial performance (Marx et al, 2005). High ratios are preferred and taken as indicators of good financial performance (Marx et al, 2005).

Investor ratios, Earnings per share (in this case Dividend per Share) and Price per earnings (referred to as P: E ratio) are also used as measures of financial performance. Share price is also used as a measure of company performance. (Carter et al, 2010), (Bauer et al, 2008) and (Jaiporn et al, 2010).

4.1.2 Return on investment (ROA)

ROA measures the profitability of the firm as a whole in relation to the total assets employed. (Marx et al, 2005). The higher it is the better.

\[
\text{ROA} = \frac{\text{Profit after tax}}{\text{Total assets}}
\]
4.1.3 Return on Equity (ROE)

R.O.E is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. According to Marx et al. 2005, R.O.E can be calculated as follows:

\[
ROE = \frac{\text{Profit after tax}}{\text{Shareholders' equity}}
\]

4.1.4 Tobin's Q

Tobin's Q, is the ratio of the market value of a firm's assets (as measured by the market value of its outstanding stock and debt) to the replacement cost of the firm's assets (Tobin, 1969). The rationale behind is that, if a firm is worth more than its value based on what it would cost to rebuild it, then excess profits are being earned.

If Tobin's Q (the ratio of the market valuation of assets to the replacement cost of assets) is above 1, the firm is earning a rate of return higher than that justified by the cost of its assets. These profits are above and beyond the level that is necessary to keep the firm in the industry. The advantage of using Tobin's Q is that the difficult problem of estimating either rate of return or marginal costs is avoided (Carlton et al, 2010). The study conducted by Carter et al (2010) on the major US firms listed on the S&P 500 index, found no relationship existing between the number of ethnic minority directors on the board and Tobin's Q.

In this study, instead of using or calculating profit margins Tobin's Q is used as a measure of profitability. Tobin's Q is measured by the sum of market value of stock and the book value of debt divided by the book value of total assets.

\[
Q = \frac{\text{Stock (Market)} + \text{Debt (Book)}}{\text{Total Assets}}
\]
Or simply,

\[
Q \text{ ratio} = \frac{\text{Total Market Value of Firm}}{\text{Total Asset Value}}
\]

For the financial ratios, the primary source of the data is McGregor BFA. For the Tobin’s Q, information on the total value of the firm and total assets was also collected from McGregor BFA.

The following market ratios were used to measure shareholder returns:

- **Dividend pay-out**: Annual dividend per share divided by earnings per share;
- **Company share price**;
- **P: E Ratio**: defined as the share price divided by the earning per share (EPS).

Dividend pay-out was used as a financial measure to assess the quality of company governance (Jaipom et al, 2010) and prior studies (Bauer et al, 2008) used share price performances.

4.2 The independent variables

There are two independent variables in this study.

a) Proportion of Black directors on boards of directors. To measure this we used the following:

\[
\text{"Proportion of Black Directors on Boards"} = \frac{\text{Total number of Black directors on board of directors}}{\text{Total number on board of directors}}
\]

b) Proportion of blacks on audit committees

\[
\text{"Proportion of Black directors on audit committees"} = \frac{\text{Total number of Black directors on audit committee}}{\text{Total number of directors on audit committee}}
\]

The primary source of this data is the company websites and/or annual reports.
4.3 Research Design

One of the aims of this study is to examine whether there is a link between a critical mass of Black directors (independent variable) and company performance (dependent variable). The study is therefore an explanatory study which is designed to be quantitative due to the nature of the financial data to be collected and analysed.

In this study, we intend to argue that there is a correlation between company performance ($Y=$ dependent variable) and the critical mass of black directors ($X=$ independent variable).

Figure 7: Graphic representation between the dependent and independent variables

![Diagram of critical mass of Black directors vs Company Performance]

We therefore intend to examine the relationship(s):

a) "Company performance" = $\beta_0 + \beta_1 \text{ "Percentage of Black directors on board"}"

This is assuming that a simple linear relationship exists between company performance and percentage of Black Directors. This part of the research can also be classified as "Correlation Research". According to Salkind (2012), correlation research describes the linear relationship between two or more variables without any suggestion of attributing the effect of one variable on another. A correlation coefficient can be used to assess the degree of relatedness of two variables. If a relationship exists, then the coefficient of determination (or R-sq) is then used to indicate the amount of variance in one variable that is accounted for by the other.

b) "Company performance" = $\beta_0 + \beta_1 \text{ "Percentage of Black directors on board"}^2$

If a relationship exists, the data is then analysed to check if the theory of critical mass applies.
This part of the study can also be classified as quantitative research as according to Creswell (1994), quantitative research is said to be an inquiry based on testing a theory measured and analysed using statistical procedures in order to determine whether the predictive generalizations of that theory are accurate.

To link the research design and the research methodology we follow the “Research design cheat sheet” as proposed by Salkind, 2012.

Figure 8: Research design "cheat" sheet (Salkind, 2012, p. 16)

From the diagram above, we can deduce that we use Correlational Research for the first part of the study i.e. when we are assessing if there is a relationship between company performance and proportion of Black directors on the board, and Quasi-type of experiment for the second part, when we looking at performance between groups.
4.4 Research Method

The objective of this study is to examine whether a relationship exists between racially diverse boards and company performance. There are compelling reasons to examine the business case for black representation on boards given that the employment equity legislation has been in operation for more than 12 years, and blacks are still highly underrepresented in top management categories (Jain et al, 2012).

To examine if this relationship exists, there are two possible forms that this relationship can take. Either it is linear or it is quadratic. Firstly, we obtain the Pearson correlation coefficients and the p-values between the independent variables and the dependent variables.

Secondly, scatterplots with regression lines are done. This is done for each measure of company performance against the independent variables. The correlation coefficient is also obtained in this analysis.

In both models, we used Ordinary Least Squares, assuming the usual regression assumptions. For both models, the Correlational Research method is applicable.

4.4.1 Relationship between the variables

A correlation coefficient is used as the standard measure to assess the relationship between two variables in other words, the higher the correlation coefficient, the higher the degree of relatedness between the variables.

In this study, Pearson product moment correlation was used to measure the relationship between company performance and percentage of Black directors on company boards. To calculate this correlation, we need to have two sets of data for the sampled companies i.e. data on company performance and data on the percentage of Black directors on boards.

In this case, data collected is in the form of financial ratios and percentage of Black directors on boards, which are both numeric. The financial ratios are
already expressed as percentages i.e. on McGregor BFA the ratios are already expressed as percentages. A correlation coefficient can therefore be calculated for the two sets of data.

4.4.2 The coefficient of determination method

The coefficient of determination, \((r^2)\), is computed by squaring the correlation coefficient. This value is the amount of variance accounted for in one variable by the other. This value lies in the range \([0:1]\).

A value close to 0 means that a very small percentage of the variance of one variable is explained by the other variable while a value close to 1 means that the variance of one variable is almost explained entirely by the other variable.

After fitting a regression, a coefficient of determination close to 1 means that almost all the observations “lie” on the fitted regression line, while \((r^2)\) close to 0 means that almost none of the observations “lie” on the fitted regression line.

The SAS statistical software used in the data analysis provides both \(r\), the Pearson Correlation Coefficient and \((r^2)\), the coefficient of determination.

To exhaust all possibilities of relationships, each measure of financial performance was examined individually against the explanatory variable.

The next aim of this study is two-fold. First the study assesses the differences in company performance between companies that have a proportion of 30% or more Black directors on the board of directors and companies that have less than 30% Black directors on the board of directors. To assess this, a research question was formulated:

4.4.3 Research question: Differences in company performance

Do companies in the mining and financial services industries with a minimum of 30% Black directors perform better than those with less than 30% Black directors?
If we let:

\[ P_{\geq 30} \] be performance of companies with a minimum proportion of 30% Black directors
\[ P_{<30} \] be performance of companies with less than 30% Black directors

Then we can describe the above question as a directional research question by the following equation:

\[ H_1 : P_{\geq 30} > P_{<30} \]

To test this difference in performance, a 95% significance level was used. “A significance level is the risk associated with not being 100% confident that the difference is caused by what you think and may be due to some unforeseen factor.” (Salkind, 2012).

So, in this study we are assessing that the difference in the company performance is due to number of Black directors on company boards, at 95% confidence. This significance level is important as it will assist us in specifying the \( p \)-value, which in this case is 0.05. This approach of specifying the significance level in advance enables the use of \( p \) only to determine whether or not the research question can be rejected at the stated significance level.

A difference in means test was then conducted to examine if there is a difference between the performances of the two groups. Student t-test was used to do the analysis.

The other part of the study requires testing if there is a difference between the performances of companies with 30 per cent or more Black directors on audit committees perform better than companies with less than 30 per cent Black directors on audit committee. A similar research design was formulated and similar tests conducted.
4.5 Scope of study

The scope of this study is to investigate the relationship between a “Critical Mass” of outside Black directors on JSE-listed company boards and financial performance in the mining (basic materials) and financial services industries.

4.6 Population

“A population is any complete group with at least one characteristic in common.” In this study, the population are companies listed on the JSE main board during the 2007 to 2012 financial years. The entire population of JSE listed companies as at June 2013 was 418. This, however, included duplications, subsidiary companies, traded notes and schemes. These were then taken out of the study population and a total of 401 companies remained. This population was chosen because most progress in racial representation in the market has taken place in the public sector Moleke (2006) and the private sector is likely to provide a sample with disproportionate number of Black directors on boards to make a fair comparison.

4.7 Unit(s) of Analysis

Due to the nature of the study there are two units of analysis;
1. The board of directors.
2. The audit committees.
4.8 Sampling method and size

Two separate samples were drawn for this study. These were based on the independent variables:

Sample 1: Based on the percentage of Black directors on board of directors.
Sample 2: Based on the percentage of Black directors on the audit committee (See figure 9 below).

Figure 9: Sampling procedure based on the percentage of Black directors on the board of directors

The diagram above illustrates the sampling procedure used in this study. The following steps were followed in drawing up the sample:

- A master sampling frame which consists of all 121 JSE listed companies in the Basic Materials and Financials sectors was created;
- Data on the independent variables “Percentage of Black directors on boards on board” and “Percentage of Black directors on audit committees” were collected for all the companies;
- A random sample was then drawn from each of the industries stratified by percentage of Black directors on boards; and
- The table below summarises the “response” or success rate of collection, the sample size for each stratum.
Table 3: Success rate of collection

<table>
<thead>
<tr>
<th>Companies</th>
<th>Number</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stratum 1: &gt; 30 % Blacks on board</td>
<td>53</td>
<td>40</td>
</tr>
<tr>
<td>Stratum 2: &lt; 30 % Blacks on board</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td>Total available for selection</td>
<td>107</td>
<td>80</td>
</tr>
<tr>
<td>&quot;Response&quot; : Success Rate</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

Non-probability purposive judgement sampling methods were employed to divide the population into sampling frames of companies that are racially diverse with 30% or more Black representation and companies where the boards have less than 30% Black representation.

This leads to stratified random sampling where we split the sampling frame into two strata or groups i.e. those with greater than 30% Black directors on boards and those with less than 30% Black directors on boards. Once the strata have been obtained, simple random sampling was used to select sufficiently large samples (40 companies) from each stratum.

For the first part of the research, the entire group of 80 companies was used to assess if a relationship exists between the "Percentage of Black directors" and "Company performance". Similarly, the second sample was drawn but this time the independent variables percentage of Black directors on audit committees was used. To test the difference in performance, we then used the two different strata to test the research question.

A longitudinal study was used over a period of five years from 2007 to 2012, so that permanent and temporary changes in the dependant variables could be identified (Zikmund, 2003). The purpose of selecting a longitudinal study was to counter the effects brought on by off-once market events such as the global economic crisis in 2008 and to test the relationship between the variables over a sufficiently lengthy period of time.
4.9 Data Collection

Secondary data was used in this study. Data was collected from company websites, published annual reports of the JSE-listed entities and from McGregor BFA.

All listed companies are required to comply with the Stock Exchange disclosure requirements and are required to include the director profiles in the published annual reports. Data on percentage of Black directors on boards (and audit committees) were collected from the company websites and annual reports. The website of each of the JSE listed companies was visited. On some of the websites the Board of Directors was directly under “About Us” and on some websites it was under “Investor Relations”. Either way a list of Black directors and their photos were displayed. In cases where the website did not have the board membership, the integrated annual reports would be downloaded.

In this study, we use the definition of Black as stipulated on the B-BBEE Act (2004). Blacks include people from the following racial demographic groups:
- African;
- Coloured; and
- Indian.

In the case where a “Black person” was having a “white” name or vice-a-versa, we would take the physical appearance to classify the person as either Black or white.

Financial data was collected from McGregor BFA. Standardized financial ratios were obtained for the period 2007 to 2012. These are readily available for the website for all JSE listed companies. These were then averaged out to give an overall measure of the company performance in the 2007 to 2012 period.
4.10 Reliability of the data

The secondary data that was collected is objective and quantifiable. The ratio and profile of directors on the JSE is contained in the audited annual reports and is easily verified. The financial data was sourced from the balance sheets of companies' audited annual financial statements which are reliable.
Chapter 5

5.1 Overview

This chapter presents the findings of the research study. Firstly, the actual average values of ROA, ROE, Tobin's Q, Dividend per Share, Share price and PE ratios are presented. The data is shown for all companies analysed against the percentage of Black directors on boards and the proportion of Black directors on audit committees. The second part of this section shows the relationships between company performance and the different measures of company performance. Correlation matrices are used to show the Pearson Correlation Coefficient for each of the company performance measurements against the proportion of Black directors on boards and audit committees. The last part of the section focuses on the findings related to the research questions, that is, the difference in company performance between companies with more than 30% Black directors on boards and audit committees and those with less than 30% Black directors on boards and audit committees.

5.2 Findings from the data

Appendix A (attached) shows the calculated average values for ROA, ROE, Tobin’s Q, Dividend per Share, Share Price and P:E ratios for companies with less than 30% Black directors on the board of directors and the comparative group with more than 30% Black directors on the board of directors. A similar table, Appendix B (attached), presents companies with less than (and more than) 30% Black directors on the audit committees.

5.3 Findings from statistical analysis

The first part of this section presents the symbols and variables used in the analysis. A detailed description and explanation of each variable has been discussed in Chapter 4.
The next section then presents the statistical analyses that were done separately for the proportions of Black directors on the board of directors and proportion of Black directors on the audit committees. The same techniques were applied in both cases.

5.3.1 Variables in the analysis

The table below shows the variables used in the statistical analysis and the industries used in the research.

Table 4: Description of variables and industrial sectors in the research

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pbob</td>
<td>Proportion of Black directors on board of directors</td>
</tr>
<tr>
<td>Pac</td>
<td>Proportion of Blacks directors on audit committees</td>
</tr>
<tr>
<td>R.O.A</td>
<td>Return on assets</td>
</tr>
<tr>
<td>R.O.E</td>
<td>Return on equity</td>
</tr>
<tr>
<td>Q</td>
<td>Tobin's Q</td>
</tr>
<tr>
<td>Dps</td>
<td>Dividend per share</td>
</tr>
<tr>
<td>SP</td>
<td>Share Price</td>
</tr>
<tr>
<td>P:E Ratio</td>
<td>Earnings per share</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industrial Sectors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BM</td>
<td>Basic Materials (Mining Sectors)</td>
</tr>
<tr>
<td>Financials</td>
<td>Financials</td>
</tr>
</tbody>
</table>

5.3.2 Proportion of Black directors on company boards

This section presents the results of the data analysis done on the measurements of financial performance on all companies based on the proportion of Black directors on boards. The aim is to find if there are any relationships between the percentage of Black directors on boards and company performance.

5.3.2.1 Relationship between the different measures of company performance against the percentage of Black directors on boards.

The correlation matrix below shows the Pearson Correlation Coefficients indicating the strength of the relationship between the different measures of company performance against the percentage of Black directors on boards.
Table 5: Pearson Correlation Coefficients for Pbob

<table>
<thead>
<tr>
<th></th>
<th>Pbob</th>
<th>R.O.A</th>
<th>R.O.E</th>
<th>Tobin’s Q</th>
<th>Dividend per share</th>
<th>Share Price</th>
<th>P:E Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pbob</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.O.A</td>
<td>0.01554</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.9242</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.O.E</td>
<td>0.03313</td>
<td>0.34018</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.8392</td>
<td>0.0317</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.10106</td>
<td>0.05325</td>
<td>0.12103</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.5349</td>
<td>0.7442</td>
<td>0.4569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend per share</td>
<td>0.09103</td>
<td>0.02222</td>
<td>0.03831</td>
<td>0.2276</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.5868</td>
<td>0.8947</td>
<td>0.8194</td>
<td>0.1694</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Price</td>
<td>0.11091</td>
<td>0.0099</td>
<td>0.03694</td>
<td>0.15515</td>
<td>0.92561</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.4957</td>
<td>0.9516</td>
<td>0.821</td>
<td>0.3391</td>
<td>&lt;.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P:E Ratio</td>
<td>0.03314</td>
<td>0.08736</td>
<td>0.27788</td>
<td>0.12017</td>
<td>-0.08283</td>
<td>0.06994</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.8392</td>
<td>0.5919</td>
<td>0.0825</td>
<td>0.4602</td>
<td>0.621</td>
<td>0.668</td>
<td></td>
</tr>
</tbody>
</table>

The Pearson Correlation Coefficient is discussed in detail in Chapter 4. Table 5 above shows the correlation coefficients lying between (0.03314 and 0.11091) for all measures of performance against Pbob. These indicate a very weak relationship between company performance and proportion of Black directors on the board of directors. The p-values lie between 0.4957 and 0.9242. All the p-values are greater than α = 0.05 meaning that there is no statistical evidence to suggest that a relationship exists between the measures of company performance and proportion of Black directors on the board of directors.
5.3.2.2 Graphical representation of the relationship between the different measures of company performance against the percentage of Black directors on boards.

Figure 10: Relationship between Pbob and ROA

Figure 10 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and ROA. It can be seen from the scatterplot that there is no relationship between the proportion of Black directors on the board and ROA. The correlation coefficient $r^2$ here is 0.012 as compared to 0.016 in the correlation matrix; both indicate a very weak relationship between Pbob and ROA.

Figure 11: Relationship between Pbob and ROE

Figure 11 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and ROE. It can be
seen from the scatterplot that there is no relationship between the proportion of Black directors on the board and ROE.

The correlation coefficient $r^2$ here is 0.0272 as compared to 0.033 in the correlation matrix; both indicate a very weak relationship between Pbob and ROE.

Figure 12: Relationship between Pbob and Tobin’s Q

Figure 12 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and Tobin’s Q. The scatterplot shows that there is no relationship between the proportion of Black directors on the board and Tobin’s Q. The correlation coefficient $r^2$ here is 0.0021 as compared to 0.1010 in the correlation matrix; both indicate a very weak relationship between Pbob and Tobin’s Q.
Figure 13 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and dividend per share. The scatterplot shows that there is no relationship between the proportion of Black directors on the board and dividend per share. The correlation coefficient $r^2$ here is 0.0025 as compared to 0.091 in the correlation matrix; both indicate a very weak relationship between $P_{bob}$ and dividend per share.

Figure 14 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and share price. The scatterplot shows that there is no relationship between the proportion of Black directors on the board and share price. The correlation coefficient $r^2$ here is
0.0025 as compared to 0.091 in the correlation matrix; both indicate a very weak relationship between Pbob and share price.

Figure 15: Relationship between Pbob and PE ratio

Figure 15 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the board and P: E ratio. The scatterplot shows that there is no relationship between the proportion of Black directors on the board and P: Ratio. The correlation coefficient $r^2$ here is 0.0025 as compared to 0.091 in the correlation matrix; both indicate a very weak relationship between Pbob and P: E ratio.

Summary of findings

The Pearson Correlation Coefficients show that there are very weak relationships between percentage of Black directors on board and any one of the measures of company performance.

All the p-values are greater than $\alpha = 0.05$ suggesting that there is no relationship between the percentage of Black directors on board and any one of the measures of company performance.

The scatterplots with regression lines and the coefficients of determination all show that there is no relationship between the percentage of Black directors and any one of the measures of company performance.
5.3.3 Proportion of Black directors on the audit committees

This section presents the results of the data analysis done on the measures of performance on all companies based on the proportion of Black directors on the audit committees. The aim is to find if there are any relationships between the percentages of Blacks directors on the audit committees and company performance.

5.3.3.1 Relationship between the different measures of company performance against the percentage of Black directors on the audit committees

The correlation matrix below shows the Pearson Correlation Coefficients indicating the strength of the relationship between the different measures of company performance against the percentage of Black directors on the audit committees.

Table 6: Pearson Correlation Coefficients for Pbac

<table>
<thead>
<tr>
<th></th>
<th>Pbac</th>
<th>R.O.A</th>
<th>R.O.E</th>
<th>Tobin's Q</th>
<th>Dividend per share</th>
<th>Share Price</th>
<th>P:E Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pbac</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.O.A</td>
<td>0.19006</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.2401</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.O.E</td>
<td>0.0524</td>
<td>0.64675</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.7481</td>
<td>&lt;.0001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>0.13295</td>
<td>0.01926</td>
<td>0.05121</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.4134</td>
<td>0.9061</td>
<td>0.7536</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend per share</td>
<td>0.30829</td>
<td>0.15849</td>
<td>0.09867</td>
<td>0.11452</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0562</td>
<td>0.3352</td>
<td>0.5501</td>
<td>0.4876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Price</td>
<td>0.29277</td>
<td>0.16308</td>
<td>0.09621</td>
<td>0.11527</td>
<td>0.97338</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0668</td>
<td>0.3147</td>
<td>0.5548</td>
<td>0.4788</td>
<td>&lt;.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P:E Ratio</td>
<td>0.12057</td>
<td>0.05324</td>
<td>0.19304</td>
<td>0.09747</td>
<td>0.03645</td>
<td>0.08305</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.4587</td>
<td>0.7442</td>
<td>0.2327</td>
<td>0.5496</td>
<td>0.8256</td>
<td>0.6104</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 above shows that the correlation coefficients lie between (0.0524 and 0.30829). According to table 6 these indicate a very weak relationship between company performance and proportion of Black directors on the audit committees.

The p-values lie between 0.0562 and 0.7481. All the p-values are greater than α = 0.05 meaning that there is no statistical evidence to suggest a relationship
between any of the measures of company performance and proportion of Black directors on audit committees.

5.3.3.2 Graphical representation of the relationship between the different measures of company performance against the percentage of Black directors on audit committees.

Figure 16: Relationship between Pbac and ROA

Figure 16 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the audit committees and ROA. The scatterplot shows that there is no relationship between the proportions of Blacks directors on audit committees and ROA. The correlation coefficient r2 here is 0.0068 as compared to 0.19006 in the correlation matrix; both indicate a very weak relationship between proportion of Black directors on the audit committees and ROA.
Figure 17: Relationship between Pbac and ROE

Figure 17 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the audit committees and ROE. The scatterplot shows that there is no relationship between the proportion of Black directors on the audit committee and ROE. The correlation coefficient r² here is 0.0225 as compared to 0.0524 in the correlation matrix; both indicate a very weak relationship between the proportion of Black directors on the audit committee and ROE.

Figure 18: Relationship between Pbac and Tobin’s Q

Figure 18 shows the scatterplot with a regression line depicting the relationship between the proportion of Black director on the audit committee and Tobin’s Q. The scatterplot shows that there is no relationship between the proportion of
Black directors on the audit committee and Tobin's Q. The correlation coefficient $r^2$ here is 0.0015 as compared to 0.13295 in the correlation matrix; both indicate a very weak relationship between the proportion of Black directors on audit committee and Tobin's Q.

Figure 19: Relationship between Pbac and dividend per share

![Graph showing relationship between Pbac and dividend per share](image)

Figure 19 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on audit committee and dividend per share. The scatterplot shows that there is no relationship between the proportion of Black directors on the audit committees and dividend per share. The correlation coefficient $r^2$ here is 0.0017 as compared to 0.30829 in the correlation matrix; both indicate a very weak relationship between the proportion of Black directors on audit committee and dividend per share.
Figure 20: Relationship between Pbac and share price

Figure 20 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the audit committee and share price. The scatterplot shows that there is no relationship between the proportion of Black directors on the audit committee and share price. The correlation coefficient r here is 0.0000743 as compared to 0.29277 in the correlation matrix; both indicate a very weak relationship between the proportion of Black directors on the audit committee and share price.

Figure 21: Relationship between Pbac and PE ratio

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Figure 21 shows the scatterplot with a regression line depicting the relationship between the proportion of Black directors on the audit committee and P:E ratio. The scatterplot shows that there is no relationship between the proportion of Black directors on the audit committee and P:E ratio. The correlation coefficient r² here is 0.000586 as compared to 0.12057 in the correlation matrix; both indicate a very weak relationship between the proportion of Black directors on the audit committee and P:E ratio.

**Summary of findings**

The Pearson Correlation Coefficients show that there are very weak relationships between percentage of Black directors on audit committees and any one of the measures of company performance.

All the p-values are greater than \( \alpha = 0.05 \) suggesting that there is no relationship between the percentage of Black directors on audit committees and any one of the measures of company performance.

The scatterplots with regression lines and the coefficients of determination all show that there is no relationship between the percentage of Black directors on audit committees and any one of the measures of company performance.
5.3.4 Research questions

5.3.4.1 First research question

Do companies with a minimum of 30% Black directors on boards perform better than companies with less than 30% Black directors?

<table>
<thead>
<tr>
<th>Code</th>
<th>N Obs</th>
<th>Variable</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R.O.A (%)</td>
<td>20.14</td>
<td>29.83</td>
<td>0.44</td>
<td>192.31</td>
<td>14.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R.O.E (%)</td>
<td>31.44</td>
<td>35.52</td>
<td>2.86</td>
<td>151.82</td>
<td>15.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobin’s Q (%)</td>
<td>17.10</td>
<td>19.15</td>
<td>0.78</td>
<td>63.15</td>
<td>7.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividend per Share</td>
<td>114.87</td>
<td>217.22</td>
<td>0.50</td>
<td>1,036.25</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Share Price</td>
<td>2,397.16</td>
<td>4,240.77</td>
<td>2.00</td>
<td>22,862.67</td>
<td>763.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P:E Ratio</td>
<td>81.37</td>
<td>126.85</td>
<td>0.00</td>
<td>535.66</td>
<td>15.84</td>
</tr>
<tr>
<td>Less than 30 %</td>
<td>40</td>
<td>R.O.A (%)</td>
<td>15.80</td>
<td>33.30</td>
<td>0.30</td>
<td>192.30</td>
<td>6.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R.O.E (%)</td>
<td>24.10</td>
<td>36.81</td>
<td>0.42</td>
<td>189.14</td>
<td>13.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobin’s Q (%)</td>
<td>19.52</td>
<td>17.96</td>
<td>0.74</td>
<td>89.45</td>
<td>16.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividend per Share</td>
<td>220.00</td>
<td>435.36</td>
<td>4.73</td>
<td>2,479.08</td>
<td>60.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Share Price</td>
<td>4,747.38</td>
<td>8,136.84</td>
<td>2.00</td>
<td>36,488.67</td>
<td>922.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P:E Ratio</td>
<td>138.24</td>
<td>296.72</td>
<td>0.00</td>
<td>1,338.67</td>
<td>17.99</td>
</tr>
</tbody>
</table>

The table above presents a summary of the data. There were 80 companies in total in the analysis. The standard deviation shows that there is huge variance in the data. The means and the median for the data are far apart which can indicate non-Gaussian data. But since the sample size is greater than 30 we can assume a Normal distribution and apply parametric statistical tests.

Table 7 above shows that when using ROA, companies with less than 30% Black directors on board actually performed better at 20.14 as compared to companies with more than 30% Black representation. Using ROE, it can also be observed that the performance of companies with less than 30% Black directors on boards was higher at 31.44 per cent as compared to 24.10 for the other group.
Tobin's Q showed that companies with less than 30% black directors on board have an average ratio of 17.10 which is lower than 19.52 for those companies with more than 30% black directors on boards. Both have a high Q (greater than 1) which implies that a firm’s stock is more expensive than the replacement cost of its assets, which implies that the stock is overvalued. This measure of stock valuation is the driving factor behind investment decisions in the Tobin's Q model.

This means that the stock for companies with more than 30% blacks on board is more overvalued than the stock for companies with less than 30% Black directors.

To analyse the research question, 'difference of means tests' was conducted. The table below gives a statistical output showing the results of the analysis.

Table 8: t-test for percentage of Black directors on boards

<table>
<thead>
<tr>
<th>Company performance measure</th>
<th>Test statistic</th>
<th>Null Hypothesis</th>
<th>Alternative hypothesis</th>
<th>Method</th>
<th>Results (t)</th>
<th>p-value</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{30} &gt; P_{&lt;30}</td>
<td>Pooled</td>
<td>0.61</td>
<td>0.541</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>0.61</td>
<td>0.541</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td>ROE</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{&lt;30} &gt; P_{&gt;30}</td>
<td>Pooled</td>
<td>0.91</td>
<td>0.3663</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>0.91</td>
<td>0.3663</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{&lt;30} &gt; P_{&gt;30}</td>
<td>Pooled</td>
<td>-0.58</td>
<td>0.5617</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-0.58</td>
<td>0.5617</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td>Dividend per share</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{&lt;30} &gt; P_{&gt;30}</td>
<td>Pooled</td>
<td>-1.34</td>
<td>0.1847</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-1.36</td>
<td>0.1793</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td>Share Price</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{&lt;30} &gt; P_{&gt;30}</td>
<td>Pooled</td>
<td>-0.69</td>
<td>0.4899</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-0.69</td>
<td>0.4899</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
<tr>
<td>P/E Ratio</td>
<td>t(one tailed)</td>
<td>P_{30} = P_{&lt;30}</td>
<td>P_{&lt;30} &gt; P_{&gt;30}</td>
<td>Pooled</td>
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<td>0.3228</td>
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<td>Don't reject H0</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>1</td>
<td>0.3258</td>
<td>No</td>
<td>Don't reject H0</td>
</tr>
</tbody>
</table>

The rule of thumb is that, for small t (-2.0 < t > 2.0) and large p-value (>0.05), there is no statistical significance and therefore fail to reject the null hypothesis. In this case, all the statistics are small and the p-values are high which implies that, using any of the company performance measures, there is no difference in the performance between companies with less than 30% Black directors on boards and those with more than 30% Black directors on board.

Now, using Pbob as the independent variable we explain each of the dependent variables;
Company performance as measured by ROA

The table above shows that for ROA, the t statistic is small at 0.61 and the p-value is greater than alpha = 0.541, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on boards and companies with greater than 30% of Black directors.

Company performance as measured by ROE

The table above shows that for ROE the t statistic is small at 0.91 and the p-value is greater than alpha = 0.3663, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on board and companies with greater than 30% Black directors.

Company performance as measured by Tobin's Q

The table above shows that for Tobin's Q the t statistic is small at -0.58 and the p-value is greater than alpha = 0.5617, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Blacks on board and companies with greater than 30% Black directors.

Company performance as measured by Dividend per share

The table above shows that for dividend per share the t statistic is small at -1.34 and the p-value is greater than alpha = 0.1847, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Blacks on board and companies with greater than 30% Black directors.

Company performance as measured by share price

The table above shows that for share price the t statistic is small at -0.69 and the p-value is greater than alpha = 0.4899, therefore there is not enough statistical evidence that there is a significant difference in financial performance
5.3.4.2 Second research question

Do companies with a minimum of 30% Black directors on the audit committees perform better than companies with less than 30% Black directors?

<table>
<thead>
<tr>
<th>Code</th>
<th>N Obs</th>
<th>Variable</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30%</td>
<td>40</td>
<td>R.O.A</td>
<td>5.25</td>
<td>16.50</td>
<td>53.49</td>
<td>48.54</td>
<td>8.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R.O.E</td>
<td>10.93</td>
<td>41.63</td>
<td>96.99</td>
<td>99.11</td>
<td>10.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobin’s Q</td>
<td>17.40</td>
<td>17.17</td>
<td>0.61</td>
<td>63.15</td>
<td>12.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividend per share</td>
<td>165.12</td>
<td>419.86</td>
<td>0.50</td>
<td>2,520.75</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Share Price</td>
<td>4,222.79</td>
<td>10,772.53</td>
<td>2.00</td>
<td>64,509.83</td>
<td>621.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P:E Ratio</td>
<td>71.16</td>
<td>185.49</td>
<td>(116.26)</td>
<td>898.72</td>
<td>8.49</td>
</tr>
<tr>
<td>Greater than 30%</td>
<td>40</td>
<td>R.O.A</td>
<td>4.67</td>
<td>48.47</td>
<td>192.30</td>
<td>192.31</td>
<td>5.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R.O.E</td>
<td>(21.17)</td>
<td>227.44</td>
<td>1,393.36</td>
<td>151.82</td>
<td>10.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobin’s Q</td>
<td>18.02</td>
<td>19.69</td>
<td>0.40</td>
<td>89.45</td>
<td>11.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dividend per share</td>
<td>174.68</td>
<td>452.10</td>
<td>3.95</td>
<td>2,479.08</td>
<td>7.00</td>
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<td></td>
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<td>Share Price</td>
<td>3,865.28</td>
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<td></td>
<td></td>
<td>P:E Ratio</td>
<td>69.07</td>
<td>196.48</td>
<td>206.09</td>
<td>996.00</td>
<td>7.00</td>
</tr>
</tbody>
</table>

Table 9 above shows that when using ROA, companies with less than 30% Black directors on the board actually performed at the same levels at 5.25 with companies with more than 30% Black representation at 4.67.

However, using ROE, it can also be observed that the performance of companies with less than 30% Black directors on the boards was high at 10.93 per cent as compared to negative 21.17 for the other group.

On the other hand, Tobin’s Q showed the almost the same levels of performance at 17.40 for companies with less than 30% Black directors on audit committees and 18.02 for companies with more than 30% Black directors on audit committees. The PE ratios are also almost the same for the two groups at 71.16 and 69.07 respectively.
To analyse this research question, 'difference of means tests' was also conducted. The table below gives a statistical output showing the results of the analysis.

<table>
<thead>
<tr>
<th>Company performance measure</th>
<th>Test statistic</th>
<th>Null Hypothesis</th>
<th>Alternative hypothesis</th>
<th>Method</th>
<th>Results (t)</th>
<th>p-value</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>0.07</td>
<td>0.9422</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>0.07</td>
<td>0.9423</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td>ROE</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>0.88</td>
<td>0.3827</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>0.88</td>
<td>0.385</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>-0.15</td>
<td>0.8823</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-0.15</td>
<td>0.8823</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td>Dividend per share</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>-0.1</td>
<td>0.9227</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-0.1</td>
<td>0.9227</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td>Share Price</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>0.16</td>
<td>0.8752</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>0.16</td>
<td>0.8752</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td>P-E Ratio</td>
<td>t(one tailed)</td>
<td>$P_{330} = P_{330}$</td>
<td>$P_{330} &gt; P_{330}$</td>
<td>Pooled</td>
<td>-1</td>
<td>0.3205</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Satterthwaite</td>
<td>-1</td>
<td>0.3236</td>
<td>No</td>
<td>Don't reject $H_0$</td>
</tr>
</tbody>
</table>

Using the same decision rule as used in the previous section, the measures of financial performance are all not significant. This means that there is no significant difference in the performance of companies with more than 30% Black directors on the audit committee and those companies with less than 30% black directors on the audit committee.

**Company performance as measured by ROA**

Table 10 above shows that for ROA, the t statistic is small at 0.07 and the p-value is greater than alpha at 0.9422, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on audit committees and companies with greater than 30% of Black directors on audit committees.
Company performance as measured by ROE

The table above shows that for ROE, the t statistic is small at 0.88 and the p-value is greater than alpha at 0.3827, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on audit committees and companies with greater than 30% Black directors on audit committees.

Company performance as measured by Tobin’s Q

Table 10 above shows that for Tobin’s Q, the t statistic is small at -0.15 and the p-value is greater than alpha at 0.8823, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on audit committees and companies with greater than 30% Black directors on audit committees.

Company performance as measured by Dividend per share

The table above shows that for dividend per share price, the t statistic is small at -0.10 and the p-value is greater than alpha at 0.9227, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on audit committees and companies with greater than 30% Black directors on audit committees.

Company performance as measured by share price

Similarly, Table 10 above shows that for share price, the t statistic is small at 0.16 and the p-value is greater than alpha at 0.8752, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Black directors on audit committees and companies with greater than 30% Black directors on audit committees.

Company performance as measured by P:E ratio

The table above shows that for P:E ratio, the t statistic is small at -1.00 and the p-value is greater than alpha at 0.3205, therefore there is not enough statistical evidence that there is a significant difference in financial performance between
companies with 30% Black directors on audit committees and companies with greater than 30% Black directors on audit committees.

Summary of findings

The statistical tests suggest that there are no significant differences between the performance of companies with less than 30% Black directors on audit committees and those with more than 30% Black directors.

However, the descriptive statistics reveal the following:

1. Companies with less than 30% Black directors on audit committees have a slightly higher return on assets than companies with more than 30% Black directors;
2. Companies with less than 30% Blacks on audit committees have a higher return on equity than companies with more than 30% Black directors. This implies that management in companies with less than 30% Black directors on audit committees utilize their equity base more efficiently than companies with more than 30% Black directors. However, care should be taken when interpreting this negative ROE as it might be because of high capital expenditure which can be good for the industry; and
3. Companies with more than 30% Black directors on audit committees have a slightly higher Tobin’s Q than companies with less than 30% Black directors. This implies that the stock for companies with more than 30% Black directors on audit committees is more expensive than the replacement cost of its assets as compared to companies with less than 30% Black directors.

5.3.5 Company performance across the Financial and Basic Materials (Mining) industrial sectors.

5.3.5.1 Using the percentage of Black directors on board of directors

This section looks at the difference in company performance between the Financial Services and Basic Materials (Mining) industries using the sample of the percentage of Black directors on boards.

Firstly, the numbers of Black directors on boards are presented for both the Financial Services and Basic Materials industries. Thereafter, the difference in
company performance between the Financial Services and Mining industries is shown. The next section will then show the difference in company performance for companies with less than 30% Black directors on boards between the industries. Lastly, the difference in company performance for companies with more than 30% blacks on board is presented.

| Table 11: Number of Black and white directors on board of directors by industry |
|---------------------------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|
|                                 | Less than 30% | Greater than or equal to 30% | Total          | Less than 30% | Greater than or equal to 30% | Total          | Less than 30% | Greater than or equal to 30% | Total          |
| Black                           | 25           | 37        | 62    | 112          | 109       | 221   | 137        | 146        | 283   |
| white                           | 170          | 147       | 317   | 126          | 126       | 252   | 296        | 273        | 569   |
| Total                           | 195          | 184       | 379   | 238          | 235       | 473   | 433        | 419        | 852   |

Table 11 above shows that there were a total of only 62 Black directors on board for companies which had less than 30% Black directors on their boards.

Most companies had no Black directors at all on their boards hence the low totals in the sample. From the other sample there was significantly higher number of Black directors on their boards in companies with more than 30% Black directors. There were almost half as many Black directors on their boards compared to white directors in this sample.

Overall, there are almost twice as many white directors on audit committees as their Black counterparts.

![Figure 22: Board of Directors Racial Profile per Industry](image)
Figure 22 above shows that there are close to half as many Black directors on boards of directors as their white counterparts, in both sectors. The Basic Materials sector has 146 Black directors as compared to 273 white directors.

The Financial Services sector has 137 Black directors as compared to 296 white directors. In total there are 283 Blacks on boards of directors as compared to 569 white directors in the sample. There were a total of only 13 Black directors on audit committees for companies which had less than 30% Black directors on audit committees. This is because most of the companies had no Black directors at all on the audit committees hence the representation in the sample.

Table 12: Number of Black and white directors on audit committees by industry

<table>
<thead>
<tr>
<th></th>
<th>Less than 30 percent</th>
<th>Greater than or equal to 30 percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Financials</td>
<td>Basic Materials</td>
<td>Total</td>
</tr>
<tr>
<td>Blacks</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Non-blacks</td>
<td>65</td>
<td>30</td>
<td>104</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>47</td>
<td>117</td>
</tr>
</tbody>
</table>

As evident from Table 12 above, there were a significantly high number of Black directors on audit committees in companies with more than 30% black directors on their boards. This actually equalled 75 which is the same number of white directors in the same category. However, overall there are almost twice as many white directors on audit committees as their Black counterparts.
Figure 23 above shows that there are close to three times as many white directors than Black directors on audit committees in the financial sector.

The Basic Materials sector has almost double the number of white directors on audit committees than Black directors. In total, Black directors are 49% of the total number of directors on the audit committees.

In general, for the Financial Services Sector and Basic Materials sectors there are almost the same numbers of Black directors on the audit committees as white directors.

5.4 Summary of Overall Findings

With regard to research question one, the tests revealed that companies in the mining and financial services industries with a minimum of 30% Black directors do not perform better than those with less than 30% Black directors.

Similarly, with regard to research question two, the tests revealed that companies in the mining and financial sectors with less than 30% Black directors on audit committees performed better than those with a minimum of 30% Black directors on audit committees.
Chapter 6: Discussion of Results

6.1 Introduction

The purpose of this study was to examine the relationship between a critical mass of Black directors on boards and audit committees and financial performance using empirical evidence. The analyses of the results are important given the fact that the critical mass theory has rarely been empirically tested (Joecks et al, 2012).

This chapter reviews the findings of each research question and looks at the proportion of Black directors on the boards and audit committees of companies in the financial services and mining sectors. The last part of the chapter considers the proportion of Black directors on the boards and audit committees of the two sectors separately and provides overarching explanations for the findings.

6.2 Research Question One

Do companies in the mining and financial services sectors which have a minimum of 30% Black directors on their boards, perform better than companies with less than 30% Black directors?

6.2.1 Critical mass of Black directors and ROE & ROA

ROE and ROA are accounting based performance measures which provide reliable and objective analysis of the company’s performance based on historical data (Ryan & Haslam, 2005).

When measuring ROA, the study found that companies with less than 30% Black directors on their boards actually performed better at 20.14 as compared to companies with more than 30% Black representation on their boards. Similarly, when measuring ROE, the study found that the performance of companies with less than 30% Black directors on their boards was higher at
31.44% as compared to 24.10% for companies with more than 30% Black directors on their boards.

The t tests performed for ROA and ROE indicate that there is not enough statistical evidence to suggest that there is a significant difference in the financial performance between companies with less 30% Black and companies with greater than 30% of Black directors.

The results of this study are consistent with the study performed by Zahra and Stanton (1998) who found no relationship between the percentage of ethnic minority directors and ROA and ROE. On the other hand, the findings of this study is inconsistent with the study performed by Erhardt et al (2003) who found a significant positive relationship between the percentage of ethnic minorities on the board and ROA and ROE when using a sample of firms in the United States. Similarly, Carter et al (2010) conducted a study of the number of ethnic directors on boards and ROA over a five year period and found a positive relationship between the number of ethnic directors and ROA.

The differences in findings could be explained by the fact that when examining board diversity and its effects, various institutional and cultural contexts could have an influence and should therefore be taken into consideration (Joecks et al., 2012) and (Grosvold et al., 2007). The findings can be explained by the arguments that there are costs associated with diversity such as different points of views on less homogenous boards can lead to coordination problems in the collective board (Forbes & Milliken, 1999). Furthermore, diversity can potentially erode group cohesion and lead to the formation of racially classified sub-groups which can lead to conflict on the main board and impede effective decision-making (Lau & Murnighan, 1998). Board diversity studies are also subject to the influence of the unique cultures and historical contexts in each country (Carter et al, 2010). This is relevant to the present study, as previously stated, South Africa has a particularly unique historical past where the non-participation/restricted access of Black directors on corporate boards had the force of law. Whilst the constitutional and labour laws have overhauled unfair discriminatory practices against Black directors, the prevailing historical organisational culture and hegemony, are powerful powers restricting the equal participation of Black directors on boards.
between companies with 30% Black directors and companies with greater than 30% Black directors.

**Company performance as measured by P: E ratio**

The table above shows that for P: E ratio the t statistic is small at 1.00 and the p-value is greater than alpha = 0.3228, therefore there is not enough statistical evidence that there is a significant difference in financial performance between companies with 30% Blacks and companies with greater than 30% Black directors.

**Summary of findings**

The statistical tests suggest that there are no significant differences between the performance of companies with less than 30% Black directors and those with more than 30% Black directors.

However, the descriptive statistics reveal the following:

1. Companies with less than 30% Black directors have a higher return on assets (ROA) than companies with more than 30% Black directors. This implies that companies with less than 30% Black directors are earning more on their investments as compared to companies with more than 30% Black directors;

2. Companies with less than 30% Black directors have a higher return on equity (ROE) than companies with more than 30% Black directors. This implies that management in companies with less than 30% Black directors utilize their equity base more efficiently than companies with more than 30% Black directors; and

3. Companies with more than 30% Black directors have a higher Tobin’s Q than companies with less than 30% Blacks on board. The implication of this finding is that the stock for companies with more than 30% Blacks directors is more expensive than the replacement cost of its assets as compared to companies with less than 30% Black directors. Although the difference is not statistically different, the data shows that companies with less than 30% Black directors perform slightly better than companies with more than 30% Black directors.
6.2.2 Critical mass of Black directors and Share price, Tobin’s Q, PE Ratio and Dividend Pay out

The remaining performance measurements (share price, Tobin’s Q, PE ratio and dividend pay-out) represent market-based measurements which reflect an indication of the company’s ability to be successful in the future and are accordingly forward-looking.

The statistical analysis revealed that when comparing share price, Tobin’s Q, PE Ratio and dividend pay-out, all the t statistics were small and the p-values are high, which implied that when using these performance measures, there were no difference in the performance between companies with less than 30% Black directors compared to those with more than 30% Black directors.

The findings of this study also revealed that companies with more than 30% Black directors had higher Tobin’s Q than companies with less than 30% Black directors, although the findings were not statistically significant. This study is inconsistent with the study conducted by Carter et al (2003) who found a significant positive relationship between the percentage of ethnic minority directors on the board and Tobin’s Q.

The results of this study pertaining to Tobin’s Q is consistent with the research carried out by Carter et al (2010) who conducted a study on the major US firms listed on the S&P 500 index and found no relationship existing between the number of ethnic minority directors on the board and Tobin’s Q. The authors contend that the value that ethnic directors bring to the board may be adversely impacted by “the social psychological dynamics of the board such as exclusion and conflict” which may suppress creative and innovative thinking in board decision making (Carter et al, 2010, p. 411). The authors also explain the results through the contingency framework because ethnic minority directors may have a positive, negative or neutral effect on financial performance depending on the distinct circumstances existing at a particular point in time and this effect may be nullified by examining several firms over many years (Carter et al, 2010).
The findings on the relationship between a critical mass of Black directors earning per share and dividend pay-out are constant with study conducted by Zahra and Stanton (1998) found no relationship between the percentage of ethnic directors on the boards and earnings per share and dividends.

6.3 Research Question Two

Do companies in the mining and financial services industries with a minimum of 30% Black directors on their audit committees perform better than companies with less than 30% Black directors?

As previously discussed in Chapter 2, the audit committee is the most important/powerful subcommittee of the board and accordingly audit committee membership provides a better and stronger link between board diversity (in this case race) and company performance (Klein, 1998). In addition, a director’s participation on the audit committee allows him/her to make significant contribution to and influence the board decision-making process (Zhu et al, 2010) and allows minority directors to overcome the effects of tokenism namely polarization and social categorization (Kanter, 1977).

The statistical analysis revealed that there was not enough statistical evidence to show a significant difference in the financial performance (ROA, ROE, Tobin’s Q, Share price, PE Ratio, and Divided pay-out) between companies with less than 30% Black directors on their audit committees and companies with greater than 30% of Black directors on their audit committees. The findings of this study is consistent with the finding of Carter et al (2010) who found that there was no significant relationship between the ratio of ethnic directors and ROA or Tobin’s Q due to the smaller sample of ethnic directors on audit committees. Unlike the Carter (2010) study, the samples in this study, of less than 30% Black directors and more than 30% Black directors both consisted of other 40 companies and accordingly the sample sizes were not too small.

Carter et al (2010) explain the results of finding no link between the number of ethnic directors and firm performance, by stating that factors such as board behaviour and/or group conflict can influence the relationship between ethnic
directors on the audit committee and present or future firm performance. Accordingly, studies on components of board diversity should not be done in isolation.

Furthermore as previously discussed in Chapter two, the financial expertise and experience between Black and white audit committee members within the South African context vary due to the persistent unequal audit training opportunities and qualification practices which to date have resulted in a low percentage of qualified Black chartered accountants as compared to their white counterparts. Moreover, the history of the auditing profession as resulted in white audit committee members have significantly more years of auditing and financial experience than Black audit committee members. As postulated by (Boshoff & Carstens, 2003) transformation in the accounting and auditing profession in post-apartheid South Africa has been very slow with the vast majority of audit partners remaining white. The ability of Black audit committee members to participate in audit committee discussions on an equal basis with other committee members is likely to be impacted by these factors.

One of the limitations of this study is that the financial expertise and experience of Black audit committee members were not taken into consideration, which could provide another explanation as to why no link was found between the ratio of Black audit committee members and company performance.

Minority director representation on audit committees provides clear evidence of the board’s willingness to properly empower and recognise minority directors (Carter et al, 2010). Overall, this study revealed a limited presence of Black directors on audit committees in the financial services and mining industries as compared to the presence of white male directors which is consistent with the study conducted by (Nyirenda, 2010) which confirmed the hypothesis that the composition of audit committees on the JSE are more likely to consist of white directors than black directors. Also aligned to the (Nyirenda, 2010) study, the results showed that the distribution of black directors on audit committees did not follow a normal distribution but was rather haphazard. Furthermore, instances where there was critical mass representation of Black directors on audit committees, those companies happened to be Black owned and managed. Most traditional white owned firms did not have 30% Black representation on their audit committees.
The lack of a normal distribution of Black directors on audit committees in indicative of the structural buffers that companies put in place to appear to comply with affirmative action legislature whilst at the same time ensuring that Black directors are not placed in a significant decision – making position (Rose & Biehly).

As previously discussed, another possible explanation for finding no relationship between a critical mass of Black directors on audit committees and company performance, could be attributed to the fact that Black directors are given audit committee seats because they represent BEE partners. BEE representative directors are likely to hold multiple directorships on listed companies on the JSE (Patel & Graham, 2012).

Although firms are able to signal to the market that they are transforming with the appointment of the Black audit committee members, these appointed directors are unlikely to be sufficiently independent or to participate in a meaningful way in audit committee discussions. In addition, they are unwilling to risk their future appointments and/or reputations by properly discharging their audit committee fiduciary duties and robustly scrutinising the firm’s performance (Rose & Hunton, 2008).

6.4 Critical Mass of Black directors on boards and audit committees across the Financial Services and Basic Materials (Mining) Industries

6.4.1 Critical mass of Black directors on boards

The study revealed that the sample of boards with less than 30% Black directors were very small with a total of only 62 Black directors on boards for companies with less than 30% Black directors on their boards. The companies with less than 30% Black directors on their boards had either no Black directors on their boards or had only a single Black directors. It is possible that these companies were not as pressurised as other companies to appoint Black directors as they were possibility not dependent on Government tenders for the sustainability of their business. Interestingly, the study found that where companies in the Financial Services and Mining Industries had a critical mass
of 30% or greater Black representation on their boards, the proportionate split between Black and white directors were almost 50/50.

The study also revealed that overall there was almost half as many white directors on the board of directors in both the Financial Services and Mining industries than Black directors. The Basic Material sector had 146 Black directors on boards as compared to 273 white directors.

The Financial Services sector has 137 Black directors on boards compared to 569 white directors. The possible reasons for the finding have been explained above.

The p-values indicate that there was not enough statistical evidence to suggest that there was a significant difference in performance between the two industries as measured by ROA, ROE, Tobin’s Q and share price with less than 30% Black directors on boards.

These findings are contradictory to Richard (2000) who conducted a study on the relations between racial diversity and firm performance in the banking industry and confirmed that racial diversity together with a firm’s growth strategy, improved productivity and resulted in value creation.

6.4.2 Critical mass of Black directors on audit committees

The study revealed that there are almost twice as many white directors on audit committees in the Financial Services and Mining Sectors than Black directors. Furthermore, there were three times as many white directors on audit committees in the financial services sector than Black directors. The Mining sector had twice as many white audit committee members than Black audit members.

The p-values reveal that there was no significant difference in the performance of both industries when comparing financial performance against the proportion of Black directors on the audit committees. In other words, there is no relationship between a minimum of 30% Black directors on audit committees and company performance in either sector.
6.5 Further explanations for the Results

a) Theory of Tokenism

Despite a critical mass of Black directors being achieved, the results revealed that this critical mass did not counter the tokenism theory of social barriers, polarization and assimilation as postulated by Kanter (1977).

One possible reason for this is that as the minority group increased, their differentness becomes more visible and they become susceptible to increased hostility. According to Cox (1993), the high visibility of minority groups, because of their distinctiveness, often results in them being treated as tokens as they are viewed as representatives of their broader cultural groups instead of individuals in their own right. Heighten attention is focused on the differentness of the minority group because they are seen as the out-group which ultimately results in polarizations and social isolation by the in-group (Cox, 1993) and it is customary of non-Caucasian directors to operate as tokens (Hafsi et al, 2013) irrespective of the numbers/ ratios present.

b) Organisational Culture

As previously highlighted, significant racial transformation at the upper echelons such as on the boards, are unlikely to take place because the exclusionary elitist white-male dominated organisational culture maintains the racial fault lines in the organisational power structures which neutralises the participation of Black directors by coercing them into assimilating into the ‘old boys clubs’ so that these directors operate primarily as tokens instead of equal decision makers (Booysen, 2007). Black directors may also be sceptical to disagree with their white co-directors because they are expected to conform to the prevailing mono-cultural white values (Selby & Sutherland, 2006) or they face exclusion from the white private parties (Broome et al, 2011). Black directors are accordingly appointed to fill a racial compliance need (Rose & Biebly, 2011) and not because of their different characteristics, perspectives and thinking.
The historical organisation culture or corporate hegemony creates an expectation that Black directors should assimilate into the prevailing culture (Booysen, 2007). Since context uncertainty is most profound at the top leadership levels of organisations, trust is most needed in and amongst this group (Kanter, 1993).

For that reason the majority white directors will only appoint a new ethnic director if they are highly comfortable that the new appointment will fit into the board fraternity/ boardroom club because the white directors are not comfortable with the Black directors’ differentness (Rose & Biebly, 2011). Once a level of comfort is gained by the white directors that the Black director is able to successfully fit into the prevailing board culture, the Black director is likely to be invited to join other boards (Hillman et al, 2002) and this cultural assimilation of Black directors into the majority white thinking boards, could possibly explain why, despite having a critical mass of Black directors on boards, the benefit of their diverse and distinct leadership attributes and different perspectives are not realised.

**Social Quotas and Institutional pressure**

The low number of a critical mass of Black directors on boards could be attributed to the fact that companies add one or two Black directors to boards to comply with institutional pressures coming from social norms around race and the result is that Black directors are not randomly distributed, the numbers are instead skewed towards one or two directors per firm (Rose & Biebly, 2011).

Another possible explanation for the results could be attributed to the Neo – institutional theory which postulates that firms who are faced with external pressure to comply with social norms adjust their behaviour so that they comply with environmental pressure but at the same time are able to retain access to resources (Scott, 1995). Firms tend to view compliance with affirmative action legislation regarding race as an impediment to business efficiency and as an irrational business practice, accordingly they develop symbolic responses to compliance pressure while ensuring that real impactful change is not allowed to take place (Edelman, 1992) so a few token Black directors are appointment to achieve symbolic compliance.
Firms create corporate structural buffers to deliberately limit the active participation of Black directors in actual decision making processes so that they comply with the letter of the law and at the same time limit any substantive difference Black directors can make in the decision making processes (Rose & Bielby, 2011). Consequently, these structural buffers are implemented through the use of formal structures which allow companies to counteract the need to comply with the social pressures and legislative quotas by silencing the diverse voices of racial minorities appointed on boards (Rose & Bielby, 2011).

c) Cultural Assimilation

Social categorisation results in groups being divided into in-groups and out-groups based on perceptions around shared similarities and differences which results in members of the out-group being alienated and excluded (Nielsen & Huse, 2010). According to Helms (1994), whites are only interested in assimilating Blacks into becoming more like whites. In explaining why there was no significant relationship between gender diversity and Tobin’s Q, (Rose, 2007) opined that minority boards may assimilate into the traditional ‘old boys club” and accordingly destroy any distinct characteristic or quality that they may otherwise bring to the board.

d) Aversive Racism

The convert nature of aversive racial biasedness makes it difficult to defect, oppose and allows it to act as an effective barrier to Black representation in the upper echelons of organisations (Hite, 2005). Notwithstanding, business imperatives to increase board diversity, the disapproving attitudes towards members of racial minority groups continue to prevail and these sentiments are often unnoticeable to the very people who possess them (Broome et al, 2011) making it that much more difficult to detect and address.

Race was found to be a critical factor in leadership categorisation and as a result white leaders were rated as being more effective and having more potential than Black candidates (Rosette et al, 2008). Accordingly, despite achieving a critical mass of Black directors on boards, the perception that they are ineffective leaders could negatively influence their ability to participate on the board as equal members. The persistence of a majority of white directors on top corporate boards “suggests a durable categorical inequality” which
makes it difficult for a few Black directors to counter and contribute to
boardroom debates on the same standing as their white counterparts (Rose &
Bielby, 2011, p. 855). Furthermore, Tilly (2005) suggests that the majority
white group will use their relative group position to hoard their power and
privilege by preventing Black members from equal participation in the group.

e) Black directors and external directors

The director network in South Africa is described as small world with a high
degree of directors serving on more than one board (Durbach & Parker, 2009).
The implementation of B-BBEE has also resulted in directors being appointed
to serve the interests of their nominating shareholders at the expense of their
fiduciary responsibilities and independence to the company (Patel & Graham,
2012). Accordingly, the results of this study could be attributed to Black
directors serving on multiple boards which could potentially have resulted in
reduced director effectiveness due to either director busyness (Sharma &
Enslin, 2012) or due to the director placing his personal reputation above his
fiduciary duties of oversight and monitoring (Hermalin & Weisbach, 1998).

f) Board Selection Process

Despite governance changes that have pressurised companies into engaging
in more transparent and open director appointment process, the ‘old boys club’
is still very influential and able to side step the nomination committee in
ultimately deciding which directors make it onto the board (Gay, 2001).

The director selection and appointment process is concerning as companies
are often practising appointing racial board members to achieve “trophy hiring”
instead of achieving proper boardroom diversity which results in the benefits of
diversity not being realised (Shin & Gulati, 2011).

The director selection process is still an informal referral arrangement that
allows directors on the board to choose members in their own image
(Natividad, 2006) and since a board operates as an elite club with restricted
access, directors arrange for their co-directors to join other boards only if they
are satisfied that these directors are able to fit in with the prevailing culture and
will not question the status quo (Terjesen et al, 2009). Furthermore, due to the
limited number of board seats available every year, ethnic minority directors

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tend to get re-cycled and new directors are selected and vetted by old existing directors (Rose & Bielby, 2011) which creates a barrier to increasing the pool of Black directors who are able to bring diverse thinking, attributes and perspectives to the board.

g) Criticisms of Critical Mass Theory

Another possible reason for not finding a relationship between a critical mass of Black directors on boards and financial performance could be attributed to the fact that the critical mass theory is heavily focused on achieving proportionate representation of minority members and ignores the argument that other factors could also impact the participation and effectiveness of a critical mass of minority directors such as the complex issue of internal board dynamics and culture (Fitzsimmons, 2012). In stances where the board culture suppresses the distinctiveness of minority directors, it is unlikely that they will be involved in a meaningful way in board discussion irrespective of whether or not a critical mass of minority directors has been reached (Fitzsimmons, 2012) and (Jain, 2012).

This study did not take into consideration the “black box of the boardroom” (Terjesen et al, 2009, p.33) which is a limitation as the workings of the board take place away from public view (Rose & Biebly, 2011) and accordingly the non-transparent systems of power and privilege could have an impact on Kanter’s critical mass theory of balance and ratios (Lewis & Simpson, 2012).

Where minority directors (Black directors) are appointed to the board solely to achieve social quotas or begrudging legal compliance, a culture of diversity is plainly absent (Jain, 2012) and irrespective of the number of minority directors appointed it is unlikely that they will be allowed to fully integrate into the board as a strategic imperative, a prerequisite for director performance (Konrad et al, 2008).

The findings of this study is consistent with the argument by Lewis and Simpson (2012) that the critical mass theory does not take into consideration the complexities around minority discrimination (whether gender or race) and that simply increasing the number of the minority group will not automatically achieve true equality (Lewis & Simpson, 2012). This argument is not new and was echoed in the Bakke case that treating racial diversity proportionality as

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the sole differentiating factor is not likely to achieve genuine diversity, as a number of other factors must be considered (Blasi, 1979). According, a seat at the table does not guarantee a minority director a voice in the discussion (Tuggle et al, 2012).

This study looked at minority Black directors solely on the bases of surface racial demographics and did not treat each director as an individual as recommended in the Bakke case (Blasi, 1979). The essentialism theory postulates that ethnic minority directors are likely to share the same characteristics imply because on a visible level they are people of colour, a theory which is criticised by (Fitzsimmons, 2012) and (Torchia et al, 2011) for failing to take into consideration the non-visible differences between minority ethnic directors such as experience, professional qualification and background.

Consequently, the findings of the study could be attributed to the fact that all Black directors were treated as sharing the same characteristics and did not test the differences between professional qualification, experience and background of Black directors.

6.6 Conclusion

This study found that there is no relationship between a critical mass of Black directors on company boards and/or audit committees and financial performance which is consistent with the findings of Carter et al (2010). The possible explanations for the findings are detailed in paragraph 6.5 which reveal a common trend that racial minority directors have not attained equal social status on boards which has impeded their ability to actively participate in the board decision-making processes. Furthermore, Black directors are appointed to meet compliance purposes instead of for their inherent value and they accordingly remain on the peripheral of the board in-groups and still not accepted into the elite leadership circles. The persistent under-representation of Black directors on boards and audit committees is clearly indicative of the fact that racial minority challenges are still prevalent within board structures.
Chapter 7: Conclusion

7.1 Purpose and Findings of the Study

The purpose of this study was to investigate the relationship between the proportion of Black directors on company boards and firm performance. In other words, the study examined whether a critical mass of 30% Black directors on company boards or audit committees improved financial performance.

Accounting and market based measurements i.e. ROA, ROE, Tobin's Q, P:E Ratio, Share price and Dividend payout were used as indicators of financial performance. The literature review revealed that studies on the critical mass theory were inconclusive and that despite heavy reliance being placed on the magic ratio of 30%, the theory has rarely been tested empirically (Joels, 2012). The literature on racial diversity in the boardroom is negligible and referred to as invisible (Cox & Nkomo, 1990).

Findings of the study suggest that there is no significant relationship between a critical mass of 30% Black directors on either company boards or audit committees and financial performance. The possible reasons for the results have been outlined in Chapter 6.

7.2 Significance of the studies

According to Miller and Triana (2009) racial diversity on boards has become a pressing issue for companies and governments because they are of commercial importance. Slow progress has been made in the racial transformation of the upper-echelons of South African companies in the private sector and top management remain 'snow white' with a few sprinklings of Blacks (Mayer, 2008). The under-representation of ethnic minority directors on corporate boards are also of global concern as African American directors on boards remains a persistent challenge (McDonald & Westpal, 2013).

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Despite the commercial and moral imperatives to increase the number of Black directors on boards, few studies have examined the racial composition of boards and its effect on company performance. This is contrasted with the numerous studies which have been conducted to investigate the relationship between gender representation on boards and company performance (Terjesen et al, 2009), (Adams & Ferreira, 2009), (Campbell & Minguez-Vera, 2007), (Rose, 2007) and (Carter et al, 2003).

The findings of this study contribute to the scant literature on racially diverse boards.

7.3 Implications for Stakeholders

The King Report on Governance (Institute of Directors in Southern Africa, 2009) recommends that given the far-reaching impact of the modern company on society and the environment, an inclusive stakeholder approach should be adopted where the interests of all legitimate stakeholders should be taken into consideration when making business judgement calls. This is echoed in the Companies Act (2008) which states that one of the primary purposes of the company is that is it used as a means of achieving both economic and social benefits.

In light of the evolving role of the company vis-à-vis the society in which it operates, board decision-making processes and composition is of relevance to all material stakeholders.

The findings are therefore of importance to the following stakeholders:

**Shareholders:** Board and audit committee members are ultimately appointed by shareholders by passing an ordinary resolution at a general meeting of company shareholders.

The results of this study suggest that if shareholders wish to fully realise the benefits of a truly diverse board, they should therefore take a closer look at the Black directors they appoint in terms of their functional backgrounds, educational levels, experience, ages, etc instead of relying only on the director’s racial classification.
**Government/ Regulators:** The findings are of relevance to governments and regulators who are responsible for setting policy around board composition and structures. Of particular importance to these stakeholders is that despite achieving a critical mass on boards and committees, Black directors are not influencing company performance suggesting that the formulation and implementation of diversity laws and policies need to be revisited. Transformational policies around directors appointments should not only focus on achieving quotas but should look at realising genuine diversity based on merit (Browne, 2013).

The JSE is responsible for maintaining a well-governed and disciplined market with the objective of attracting foreign investment into the South African private sector. Recently, in response to concerns from the JSE that the pool of directors on listed companies is too narrow, the Institute of Directors in Southern Africa launched the Chartered Directors Program which allows professionals from a wide spectrum of society to be placed on national director register upon successful completion of a director evaluation process. Publicly listed companies on the JSE are then able to select from his wider pool of directors, whose suitability and competency have been independently appraised (Institute of Directors in Southern Africa, 2013). Institutions similar to the JSE and IOD would benefit from the findings of this study which would assist them in motivating that more formal initiatives be established so that the full value of a diverse and transformed board can be realised.

**Employees/Trade Unions:** These stakeholders would derive value from the study as the implications of the study points to the fact that the Black directors on boards are not able to influence board decisions. Employees and trade unions may wish to play a role in the board appointment process to monitor whether Black directors are being appointed because they are able make meaningful contributions to the board or because they form a part of the Black director network. These stakeholders may also wish to be consulted in the board appointment process so that they are able to consider the independence of the Black candidates as well as whether there is any potential conflict of interest if the director serves on a number of other boards.

**Companies:** The results of the study are of relevance to companies given the aggressive competitive environment, as it is in the best interest of companies to be appointing boards that are truly diverse and are able to discharge their
agency and resource dependency obligations in a meaningful way. Moreover, given the global economy in which companies compete and the growing diverse customer base, organisations should be carefully re-considering board appointment processes to ensure that the board’s human capital and social capital is fully optimised. They should go beyond merely appointing directors based on surface demographic differences or traditional referrals from the ‘old boy networks’ and consider making board appointments based on merit.

**Investors:** The implication of this study for investors is that the number of Black directors on boards is not an automatic indication of a diversified and transformed board. Furthermore, it would be of interest for investors to note that Black directors are not empowered to influence company performance.

**Public:** In light of the recent evidence that companies are growing in power and stature that exceed governments, the nature and profile of the people who lead these companies i.e the board of directors is in the public interest. Merely appointing Black/ethnic directors onto boards does not translate into improved governance or performance nor is it an indication of a transformed society. Given the influence companies have over the national economy, environment and societal issues, the public may in the future wish to play a more active role in understanding the ‘black box’ of the boardroom.

### 7.4 Research Limitations

It is important to note the following research limitations of this study:

- The study only focused on JSE listed companies in the Financial Services and Mining sectors and accordingly inferences cannot be made across other sectors;
- The study was conducted over a five year period from 2007 to 2012;
- Other board committees such as the nominations, remunerations and the newly established social and ethics committees were not included in the study;
- The differences between Black male and female directors were not included in this study; and
- The study was quantitative in nature and therefore only able to explain the results of the findings based on a review of existing literature.
7.5 Recommendations for Future Research

Given the limited research undertaken on ethnic minority directors and financial performance despite its commercial and societal significance, it is recommended that future research focus on the following:

- Exploring the characteristics of Black/ethnic directors beyond visible surface differences, to include differences in respect of professional qualification, commercial experience, backgrounds, and other similar competencies and to determine whether these characteristics of Black directors impact company performance;
- The relationship between the number of external directorships held by Black directors and its impact of their individual director effectiveness;
- The director appointment process pertaining to Black/ethnic minority directors and future research should investigate whether board members value racial diversity and how these perceptions influence the selection process;
- There is merit in future studies considering non-financial measures of performance and racially diverse boards to ensure that other stakeholder interest indicators are also encompassed;
- Future research should also consider how Black directors are selected and appointed to certain board committees, since committee membership can either enhance or diminish a racial minority director’s voice in strategic decision making;
- The reasons for the persistent under-representation of Black directors on boards should be explored;
- A qualitative study on the applicability of the tokenism challenges experienced by Black minority directors will result in a more comprehensive study and will provide valuable insights into the behind the scenes functioning of the board. This future study should also examine the effects of boardroom dynamics and the hegemony of corporate culture on minority Black directors; and
- The research stream will benefit by a study that is able to establish causality between Black directors and financial performance.
7.6 Conclusion

The body of literature reveals that the critical mass theory has only been used to test the influence of a ratio of women on corporate boards (Torchia et al, 2011), (Konrad et al, 2008), (Postman et al, 2011), (Sharder et al, 1997), (Broome et al. 2010), (Hafsi & Turgut, 2013), (Schwartz-Ziv, 2012), (Tuggle et al, 2011), (Joecks et al, 2012), (Mahadeo et al, 2012), (Ahern & Dittmar, 2012), (Rose, 2007) and (Matebos de Cabo et al, 2011) whilst no prior studies have been done to test whether the same critical threshold ratio i.e. 30%, applies to the minority group of Black directors. This study is distinct in that contributes to the existing critical mass theory by expanding the literature stream to include Black minority directors.

Notwithstanding, the results showing no relationship between the variables, it should be noted that there is no indication of a negative relationship either. The implications are that the business case for appointing a critical mass of Black directors to boards and audit committees should be further explored; using different measurements, particularly in light of the prevailing literature on the value contribution Black/ethnic minority directors bring to the boardroom.
### Appendix A: Company performance and percentage of Black directors on the board of directors

<table>
<thead>
<tr>
<th>Company</th>
<th>Pbob</th>
<th>R.O.A</th>
<th>R.O.E</th>
<th>Tobin’s Q</th>
<th>Dividend per share</th>
<th>Share Price</th>
<th>P:E Ratio</th>
</tr>
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<td><strong>Companies with less than 30% blacks on the board of directors.</strong></td>
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<td>23.27</td>
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<td>15.53</td>
<td>643.51</td>
<td>22,862.67</td>
<td>14.56</td>
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<td>9.70</td>
<td>9.00</td>
<td>2.00</td>
<td>-</td>
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<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
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<td>1.08</td>
<td>7.00</td>
<td>577.00</td>
<td>292.00</td>
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<td>7.69</td>
<td>55.34</td>
<td>7.00</td>
<td>93.67</td>
<td>7.65</td>
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<tr>
<td>Fairvest Property Hldgs</td>
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<td>3.31</td>
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<td>R.O.E</td>
<td>Tobin's Q</td>
<td>Dividend per share</td>
<td>Share Price</td>
<td>P/E Ratio</td>
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Companies with more than 30% of Black directors on the board of directors.
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<th>R.O.E</th>
<th>Tobin's Q</th>
<th>Dividend per share</th>
<th>Share Price</th>
<th>P/E Ratio</th>
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**Appendix B: Company performance and percentage of Black directors on the audit committees**

Companies with Less than 30% Blacks in the audit committees:

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<tr>
<th>Company Long Name</th>
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<th>R.O.A</th>
<th>R.O.E</th>
<th>Tobin's Q</th>
<th>Dividend per share</th>
<th>Share Price</th>
<th>P/E Ratio</th>
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Companies with more than 30% Black directors on the audit committees:

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<td>Miranda Mineral Hldgs Ltd</td>
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<td>Randgold &amp; Exp Co Ltd</td>
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Bibliography


Going beyond the surface. Corporate Governance: An International Review, 18(2).
136-148.

Hardy, C. and Nord, W. (Eds), Handbook of Organizational Studies, 2nd ed.,

and management in organizational studies : tensions, contradictions and possibilities.

Ntim, C. G. & Soobbaroyen, T. (2012). Black Economic Empowerment Disclosures by
South African Listed Corporations : The Influence of Ownership and Board
Characteristics. Journal of Business Ethics. Downloaded from DOI 10.1007/s10551-
012-1446-8.

NPC (2012). National Development Plan: Vision for 2030. Downloaded from

Nyirenda, M. (2010). Board composition in companies listed on the
Johannesburg Securities Exchange. MBA dissertation, University of Pretoria,
18563C/

http://dx.doi.org/10.1787/eco_surveys-zaf-2013-e.

O’Neal, D. & Thomas, H. (1995). Director Networks/Director Selection : The Board’s

Patel, L. & Graham, L. (2012). How broad-based is broad-based black economic


PricewaterhouseCoopers. (2013). Non-executive directors’ Practices and fees trends report. Downloaded from www.pwc.co.za


