



# The Determinants of CEO Compensation from a Governance Framework

The case of South African firms

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*This Master's Thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.*

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## **Abstract**

In the field of corporate governance, the phenomenon of executive compensation is highly contentious and receives a great deal of attention. CEO's have come under extensive scrutiny with respect to the ever increasing compensation packages which they receive. In fact, this lies at the centre of the Principal-Agent problem where the incentives given to the CEO must be structured in such a way the he or she delivers the maximum possible shareholder value. The value of these incentives are typically well above that of the average worker, which is where all the contention stems from. However, practitioners recognise that being a CEO is a highly demanding job where companies are willing to pay top dollar to attract and retain the best.

The level of CEO Compensation varies depending on region and culture, with much having been documented on the issue in Western societies especially. This paper will veer off the traditional course and instead examine the phenomenon of CEO pay in the South African context. The purpose is to assess how established theories, Western in origin, hold up in an emerging market framework.

Like any researcher, I hope that this will be an insightful experience for myself and that this body of work will contribute meaningfully to the existing body of literature in the field of executive compensation.

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## **Determinants of CEO Compensation in South Africa**

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### *Chapter 1: Introduction*

#### **INTRODUCTION**

South Africa has one of the highest levels of income inequality in the world, and a relatively high level of CEO compensation. Research conducted by P-E Corporate services – a human resources agency which tracks CEO remuneration – suggests that the differential between the highest and the lowest paid workers in a medium-sized company in South Africa is 55:1. The research goes further by stating that South African CEOs enjoy the highest purchasing power parity in the world. (<http://www.fin24.com/Economy/SA-bosses-best-off-in-the-world-20101126>)

For a country that is burdened with such a high level of inequality, excessive CEO compensation is a rather controversial issue. So much so, that in recent weeks the Minister of Economic Development – Ebrahim Patel – has even proposed a cap on executive salaries to rectify imbalances within society. (<http://net-145-057.mweb.co.za/Economy/Business-worried-about-salary-cap-20101124>)

#### **Purpose**

The purpose of this research paper is to tease out the significant factors determining what South African CEOs are compensated. This compensation package includes basic salary, bonuses and equity appropriation. The large body of research on the topic typically cite the following explanatory variables: The structure and composition of the board; characteristics of the CEO such as education and experience; Ownership of the firm (family-owned or not?); and the performance of the firm. These and other variables will be analysed to answer the research question.

#### **Significance of the study**

Since the dawn of democracy in South Africa, the inequality level has risen consistently. 40% of the population is considered to be living in poverty. This is taking place in Africa's largest economy. As stated in the first paragraph, South African CEOs earn exorbitant incomes in this environment. It is thus important to look at why these CEOs earn the incomes that they do and whether it is justified, especially given the societal context. Also, we would like to determine whether government's proposal to cap the salaries is necessarily a good thing.

### Research questions

Primary question:

Which elements of the board significantly affect the level of CEO compensation in South Africa?

### Selection of independent variables

The body of research conducted on the topic of executive compensation cite several variables that may explain the level of compensation. Since the compensation of the Chief Executive Officer (CEO) is determined by the board of directors, the analysis of executive compensation will be largely limited to the board and its mechanisms. As a point of departure, the role of the board will be disaggregated into smaller, more concise functions. From these sub-functions it will then be possible to tease out the relevant explanatory variables for each case. Bøhren and Strøm (2010, 1) identify 3 broad areas of interest with respect to the board of directors. The first of these areas is to ensure that the interests of principals and agents are sufficiently aligned. The Principal-Agent theory will be discussed in Chapter 2. The second purpose of the board is to provide advice with respect to the operations of the firm, and to monitor the actions of the executive team. Thirdly, it is imperative for the board to operate in a manner that promotes effective decision-making. Gender heterogeneity, for instance, could arguably influence the board's ability to find agreement on issues. . Matters pertaining to the board will be discussed in greater detail in Chapter 2. To be clear, the study aims to ascertain which board characteristics are able to explain the level of compensation given to the CEO. Apart from board matters, the

study will determine whether there is a link between the firm's performance and the CEO's remuneration package. The proxy used for firm performance is the Return on Assets (ROA). In addition to the firm's performance, we will also test whether a relationship exists between the size of the firm and CEO compensation. The proxy for firm size is market capitalisation at the end of the end of the financial year.

In order to establish a coherent framework for the explanatory variables, they shall be classed into the following categories:

➤ **Independence and Incentives**

*H<sub>1</sub>: CEO COMPENSATION IS INVERSELY RELATED TO PERCENTAGE OF NON-EXECUTIVE DIRECTORS IN THE COMPENSATION COMMITTEE*

*H<sub>2</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF INDEPENDENT DIRECTORS INCREASES*

*H<sub>3</sub>: WHEN CHAIRPERSON IS EXECUTIVE, CEO COMPENSATION IS HIGHER*

*H<sub>4</sub>: WHEN CHAIRPERSON IS FOUNDER, CEO COMPENSATION IS LOWER*

*H<sub>5</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO CHAIRPERSON COMPENSATION*

*H<sub>6</sub>: IF THE CHAIRPERSON HAS PREVIOUSLY OCCUPIED THE POSITION OF CEO, CEO COMPENSATION WILL BE HIGHER*

➤ **Performance**

*H<sub>7</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE FIRM'S RETURN ON ASSETS*

*H<sub>8</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE SIZE OF THE FIRM*

➤ **Board composition and diversity**

*H<sub>9</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF FEMALE DIRECTORS INCREASES*

*H<sub>10</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF BLACK DIRECTORS INCREASES*

*H<sub>11</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE AVERAGE AGE OF THE BOARD*

*H<sub>12</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO BOARD SIZE*

*H<sub>13</sub>: CEO COMPENSATION INCREASES AS THE PROPORTION OF FOREIGN DIRECTORS INCREASES*

*H<sub>14</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO PERCENTAGE OF FOREIGN DIRECTORS IN THE COMPENSATION COMMITTEE*

*H<sub>15</sub>: CEO COMPENSATION IS LOWER WHEN THE CHAIRPERSON IS SOUTH AFRICAN*

### Purpose

The purpose of this research paper is to tease out the significant factors determining what South African CEOs are compensated. This compensation package includes basic salary, bonuses and equity appropriation. The large body of research on the topic typically cite the following explanatory variables: The structure and composition of the board; characteristics of the CEO such as education and experience; Ownership of the firm (family-owned or not?); and the performance of the firm. These and other variables will be analysed to answer the research question.

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### Research questions

Primary question:

Which elements of the board significantly affect the level of CEO compensation in South Africa?

Secondary question:

What is the relationship between firm performance and CEO compensation?

## Research Methods

The research will be conducted using primary data from annual reports of listed South African companies over a five-year period. It will be quantitative in nature and regression analysis will be performed using SPSS. The unit of analysis is CEO compensation. Correlations will be determined amongst the independent and dependent variables.

A literature review will also be conducted using journals and relevant secondary sources to provide a better understanding of the topic. This section is ideal for teasing out research questions and possible explanatory variables.

## Outline of thesis

CHAPTER ONE:	Introduction
CHAPTER TWO:	2.1..... Agency Theory
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CHAPTER FOUR:	Research Methodology
CHAPTER FIVE:	Regression Analysis
CHAPTER SIX:	Summary and Conclusion



## **Determinants of CEO Compensation In South Africa**

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### *Chapter 2: Theoretical Framework*

#### **2.1 Agency Theory**

Agency Theory is widely used in financial economics. The theory deals with the clash of interests among people with dissimilar interests regarding the same assets. The most common conflict that can occur is between the shareholders and managers of a company. More than often it happens when a company is forced to make such strategic decisions that are seemingly damaging for the shareholders. Agency theory deals with such issues. Another common conflict of interest is between the shareholders and debt holders. A riskier approach that can produce higher returns for the company can be beneficial for the shareholders but would be detrimental to the debt holders. This is because of the reason that a risky strategy will increase the risk of default on debt but as the debt holders are given a fixed return only, they would not be able to avail the higher returns.

Agency theory is expressed using many different approaches. Barney and Ouchi (1986) wrote that the agency theory defines the affect of capital markets upon a company. This implies that..... Jensen and Meckling (1972) insisted that organizations should be considered as a set of implicit and explicit contracts with associated rights. Companies cannot be operated without following internal or external agreements. In the contracts and agreement, the rights and obligations of associates are defined. In managerial power theory, it is defined that directors support the CEOs salaries on the basis of internal factors but not on the external factors. The forecasted connection between power and pay is mostly supported. However, the relation between power and firm performance has mixed support, suggesting that, while the managerial power theory has relevance in explaining the relation between power and pay, the scope of power needs to be broadened for better understanding of how managerial power affects firm performance (Ashley M. Guidroz, Lindsey M. Kotrba, and Daniel R. Denison, 2008).

Fama (1980) studied the way to control and direct the individual executive opportunism. He emphasized the use of managerial labor market for this purpose. The problems among agency relationships are due to the combination of self assumed autonomy and motivation. The principal hires agents to serve their interests, eventually the principals feel that their own interest and that of the agents are diverging. In the corporate world, the shareholder of a company is considered the principal. The principals hire executives and directors to serve as agents of the company. According to Berle and Means (1932) the principal can ensure that his agents serve the shareholders interests rather than their own, by separating ownership from control. This theory is more focused on the interests of those people who are directly linked with the company.

In context of this research, the agency problem between the shareholders and the executives of a company is relevant here. The interests of a company's shareholders lie in lower expenses and higher profits for the company while the board offers evermore increasing salaries and benefits for the executives, thus increasing the overhead expenses of the company. This phenomenon creates a gap between two integral parts of a company namely the shareholders and the executives. According to Jared Harris (2006) the concept that managers should be offered generous incentives in order to enhance a company's prospect for success has a long history and its prevalence reflects that it is a good practice. Jensen and Murphy (1990) called for increased CEO compensation via stock options to better align the incentives of executives in an attempt to induce a higher level of performance. In the 20 years that have passed since this suggestion was made, the concept that executives should be offered high incentive compensations has increased in popularity and the ideas behind it is that the earnings of executives should be tied to the performance of the company's share price; this is considered the best way to align the interests of shareholders and executives. Within all facets of the business process, the shareholder is always exposed to the greed and self interest of the executives unless some contingency steps are taken. According to John Roberts (2004) certain agency costs must be accepted by the shareholders in the form of incentives and sanctions to align the interests of executives with the shareholders. Walsh and Seward (1990) say that in recent decades these assumptions have translated into techniques and practices designed to control the performance of executives both inside and outside. Executives can be controlled by the board internally by firing them or giving them incentives like stock options, performance bonuses, and long-term incentive plans. The board must monitor the performance of the executives and decide upon the future strategy impartially

and independently without any prejudice. The members of the audit, remuneration and nomination committees should be independent non-executives. Only then are the committee members in a position to ensure adequate monitoring of the executives' performance and decision-making. The company should be transparent to the outside world in financial, social and environmental performances. According to Fama (1980) the intention is to inform the stock market about the company's performance so that the market is better informed about the company standing to correctly judge the stock price. Myners (2002) claims that in recent years the shareholders have shown concern that they themselves might take responsibility as owners in the form of institutional investors. This shows that there is a competition for corporate control in the company.

## **2.2 Theoretical View on CEO Compensation**

The analysis of CEO Compensation can be governed by strict ethics of distributive justice because CEOs should receive the pay according to their skills, size of company and the economic condition of the country. In spite of the existence of an underlying principle for the declaration of salaries of employees among the corporate world, it is given by officials of the company to the all the authorities which are higher than CEOs. The information about compensation of CEOs is to be shared because it will help in informing to the society and other people about fair or wrong method of CEOs compensation. When the information about CEOs compensation will be communicated to the stakeholders that include society, it provides a fair chance to each person to do accountability in between performance and compensations. It will answer to the question that does that figure make justice with the economic figures of that country. Does that figure is justifiable as per the company's salary scales. According to an S&P 500 report for the year 2007 CEO's in USA have compensations approximately 344 times more than the wage of an average worker. This ratio is much less in South Africa where a CEO earns approximately fifty times more than an average employee.

The compensation or income of the chief executive officer of a company is a topic of great debate nowadays. CEO's level justifies high pay scale because they give their years of experience to make profits for the company but it is the right of common people to protest

against the right estimation of their salaries. There is a need to tackle the issue by theoretical study and research of the matter. The general picture of managerial power theory is that the pay-setting procedure is influenced by the CEO and salary contract leads in favor of CEO at the expense of outside shareholders.

We have to draw accurate and justifiable lines in between the salary figures of top to low level of management in any company. We have to make certain rules that can stop this influence. There should be no any he differences. The compensation of a CEO is not just the salary that he gets monthly. The six basic factors of compensation are the basic salary, the periodic bonuses, long-term incentive plans, insurance, paid perquisites and profit sharing in the form of stock options. In order to define the compensation of CEO according to the economic condition of the country, it can be better to do an analysis through distributive justice or rather an interesting critique? It should be done for satisfying the other employees like a low wage worker. The role of society as well as acting government becomes more important to create this justice among salary figures. It should not be skyrocketing. Jared Harris (2006) in his research writes about the three theories regarding the distributive justice for executive compensation. John Rawls' theory of justice as fairness (1971) defines two codes of justice to establish distributive justice. The first principle is the liberty principle which declares that "each person has an equal claim to a fully adequate scheme of equal basic rights and liberties". Rawls(1971) declared the second principle as the equality principle which states: "Social and economic inequalities are to be arranged so that they are both: (a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and (b) attached to offices and positions open to all under conditions of fair equality of opportunity." The high pay scale of CEOs is considered as a wasted expense for the company. Others believe in the trickle-down effect of the CEO compensations. Jared Harris (2006) debates about both of these opinions while considering the second point of the Rawls' research. According to Harris (2006) proper incentives for the CEO will have a good effect on the performance of the company, thus increasing profits and rewarding the stakeholders. This is an important factor in favor of better CEO compensations. Aside from this there is no real proof of trickling down of the profits; hence there is a high probability that the profits might be consumed by the high level employees of the company. According to a research by Jared Harris (2006) many studies have been unsuccessful in linking the executive incentive with better performance of the company. Yes, it is true that the main power is CEO and he has the power to make fair pay

scale through the legitimate power that he/she possess but CEOs get the benefit of their influence over the boards instead of performance. He named Murphy (1999), Mishra et al. (2000) and Blasi & Kruse (2003) as the researchers who were unsuccessful in establishing the link. Harris further writes that Blasi and Kruse (2003) have shown a worsened performance for the company when the executive incentives were increased. From 1993 to 2001 the companies that gave their managers the smallest shares of options got a 31.3 % annual return while the shareholders that gave a lot of incentives to their executives received only 22.5% return. Yermack (2004) researched that the CEOs that use company maintained aircraft for their personal affairs were damaging the profits of the company hence the lowering the stock prices in the market.

Another point here worth mentioning is that the Rawl's second point also discusses about the fair equality of opportunity. This claims that the position of the CEO should be an open position that is not restricted or reserved to a few chosen people. There should be a motive among the company's board of directors that the position of Chief executive officer must be filled by the most talented person, who will then be able to perform in the best possible way. This behavior will truly boost the performance of the company due to the fact that a talented CEO will benefit every stakeholder of the company even the least well off stakeholder.

Considering the Rawls' statements in mind and examining the current scenario of the market, it is easily understandable that the companies face tough challenges in devising a strategic plan that can tackle these problems efficiently. Hence companies often face random and irregular environment. This kind of environment creates unpredictability. This unpredicted flow of profits is forcing the companies and government to adopt regulations to restrict and control the cash flow among all the stake holders of the company.

In South Africa the King III report was released in February 2009. This report lays out a plan for how the remuneration committee should assist the board in developing remuneration policy. Only with the approval of the shareholders can the policy come into effect. The policy for remuneration should be justified and fairly compensate the employees of the company. In the long term scenario, the focus of the policy should be to enhance the shareholder value. The policy should define the company's strategic objectives and the implementation path, annual salaries and bonuses and other incentives offered to the employees. The performance of executive should be measured accurately and incentive schemes should be reviewed regularly.

The stock options incentives and other long-term incentives should be linked with the performance of the executives. The executives should participate in the enhancement of shareholder value commensurate with the benefits and perks of the job.

### **2.3 The Board and its Sub-Committees**

The board of directors is a group of people whose job is to manage the activities of a company. The board of directors, sometimes referred to as just the board, are responsible to uphold the interest of the company and its stakeholders. The members of the board are usually called directors who are elected by the shareholders of the company on pre- allotted terms. The elected directors can be the owners themselves, the company's managers or any other person. Directors who are owners are usually referred to as the insiders and the directors who are managers are called executive directors. The norm in South Africa with respect to board regulation is the use of a rotating system for the members of the board, which assists in the avoidance of any hostile takeovers. The phenomenon of hostile takeovers has since dissipated. The CEO's have historically used their influence to set their own salaries by interfering in the salary-setting process. This exposes only a few members of the board for election at any given time so it is virtually impossible to change the entire board at the same time. The number of directors can vary in different companies according to the company size.

The Board of Directors the governing body tasked to supervise and guide the vision of the firm. It is usually stipulated that the majority of board members be non-executive members of the firm. It is one of the mechanisms employed to shape a company's value system. (Kakabadse & Morsing, 2006: 44). Without the board the preservation of a company's assumed good name will be left solely in the hands of the CEO and executive managers. The roles and responsibilities of directors can vary according the type of company they are associated with. Usually it is the responsibility of the board to evaluate and approve the Compensation of the CEO. Other than this, the board's typical duties are as follows:

- Establish company policies and objectives;
- Select, appoint, support and review the performance of the CEO;
- Ensure the accessibility to sufficient financial resources;
- Approve budgets;

- Report the organization's performance to the stakeholders.

Many companies have an audit committee of the board that is responsible to supervise the task of accurately producing the financial statements and reports of the company. There is also compensation committee that is responsible for allotting base compensations, stock options, bonuses and other incentives to the company's executives. The boards follow a strict strategic plan for the allocation of salaries and incentives for the CEO and other executives. Many companies offer high compensations and benefits for CEOs, hence expect improved performance from the CEO every fiscal year.

The directors of the board have controlling power over the company. They are answerable to the shareholders about the performance of the company; hence they are given the rights to make decisions collectively for the betterment of the company. The board members exercise their powers in boards meetings in which the allotted quorum must be present. The directors must abide by the rules of the company and act in good faith for the benefit of the shareholders.

The director and the shareholder share a relationship where the interest of both should be same. It is the duty of the directors to ensure that their interests do not conflict with the interests of the shareholder. This reduces the probability of the agency problem from occurring. The conflict of interest can never be avoided completely because of the fact that wherever a director involves himself in a transaction with the company, theoretically the interests of director and the company become conflicted. Theoretically the transaction is in favor of the director, but as far as the company is concerned it is an added expense in the accounts. This creates an agency problem. Lord Cranworth said in *Aberdeen Ry V Blaikie (1854)* that: a corporate body can only work by using agents. The agents should work in complete harmony with the interests of the company. In no way, should the agents be allowed to engage in acts that eventually conflict their interests with the company's interest.

In spite of such statements, members of the board are allowed to transact their allotted money from the company account. But it should be noted here that the directors are not allowed to use the company's assets for their own profits. In the famous case of *Regal (Hastings) Ltd V Gulliver (1942)*, the House of Lords had the opinion that the directors performed their duties in

the company while acting in such a way that resulted in their personal enrichment. The directors were stripped of the profits that they had made and that money was given to the shareholders.

## **2.4 Boardroom Diversity and Composition**

Numerous studies have been conducted in the quest to extrapolate what the effect of boardroom dynamics have on one or more dimensions of the firm's operations. One could for instance ask how efficiently decisions are made in a boardroom characterized by a high degree of age variance. Does it advance the process or inhibit it? The matter of composition and diversity of the board is of particular importance to our study as it covers several hypotheses stated in this paper. Within the theme of diversity and composition we will address empirically how the level of CEO Compensation responds to:

- ❖ The board's gender makeup
- ❖ The board's racial profile
- ❖ The age of the board
- ❖ Board size
- ❖ The influence of foreign chair- and directorships

Bøhren & Strøm (2010) are of the opinion that heterogeneity generally inhibits the functioning of the board's decisiveness. Of course, their study did not include all the explanatory variables selected for this study. The question of race is, for instance, very South Africa specific and a largely exploratory aspect of the study.

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## Determinants of CEO Compensation In South Africa

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### *Chapter 3: The Regulatory Framework*

#### **3.1 CEO Compensation in the Contemporary South African Business Environment**

*“For four decades South Africa's international relations were dogged by the apartheid issue. By the end of the 1980s, South Africa was one of the most isolated states on earth.” Nelson Mandela (Council on Foreign Relations, 1993)*

When assessing the South African environment, business or otherwise, it would be short-sighted not to take cognisance of her tumultuous past. For the legacy of this past still lingers uncomfortably to this day, in dire need of correction. The regulatory framework initiated since the dawn of democracy has been geared towards ensuring that senior management and the board of directors are more representative of the greater society. This translates into better representation of previously disenfranchised groups, such as blacks and women.

##### 3.1.1 Apartheid

In 1948 a formal system of segregation between ethnic groups was instituted, effectively rendering the majority of the population voiceless. Under this system, participation in the economy and the political discourse was defined along racial lines. Non-whites had effectively become second-class citizens, with every vestige of influence on the central political system eroded.

##### 3.1.2 Transformation

1994 ushered in a new era for the country, forever changing its course. For the first time in its history, South Africa had become truly democratic. The moment brought with it great expectations beyond the scope of democracy. The disenfranchised majority yearned to

participate meaningfully in the economy of the new South Africa. At this point the country was already characterised by gross levels of inequality. At the core of the ruling party's policy, was to address poverty and inequality (Beinart, 2001, 309). The accumulation process under Apartheid confined the creation of wealth to a racial minority and imposed underdevelopment on black communities. To be clear, the Apartheid policies systematically placed such a stranglehold on all people of colour, that even today a vast section of them are excluded from the economic environment. (<http://www.dti.gov.za/bee/complete.pdf>)

In this context, the term 'black' refers to all non-white citizens which includes black Africans, Indians and so-called coloured ethnicities.

### 3.1.3 Black Economic Empowerment

Since the inception of democratic reform, the government has reversed the policies of racial discrimination characterised by apartheid. However, it was understood that simply altering the legal framework into one that was embodied fairness was not sufficient to bring about meaningful change. They had to go beyond this and do so aggressively. A policy of affirmative action was subsequently introduced to promote equality and fair representation across all spheres of society, including the boards of companies. This policy still persists today. Formally, this policy which consists of a range of remedial legal measures is known as Black Economic Empowerment (BEE). "The government defines BEE as an integrated and coherent socio-economic process that directly contributes to the economic transformation of South Africa and brings about significant increases in the numbers of black people that manage, own and control the country's economy, as well as significant decreases in income inequalities," (<http://www.dti.gov.za/bee/complete.pdf>). Of particular significance to this research project is the management requirement entrenched in the BEE policy brief. This will become evident when examining the makeup of the Board of Directors. With that said, it is an unambiguous policy objective of BEE to significantly increase the number of black people at senior and executive levels in the corporate environment.

## **3.2 The Regulatory environment**

### **3.2.1 Corporate Governance defined**

According to the OECD principals, corporate governance is defined as ”...a set of relationships between management, the board and stakeholders of a company and also provides a structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance.”(Ali & Gregoriou, 2006: 100). This description is generally accepted but it must be borne in mind that the definition of corporate governance is subject to the code employed. Sir Adrian Cadbury, widely cited as the father of corporate governance, defines it as follows: ‘‘Corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals...the aim is to align as nearly as possible the interests of individuals, corporations and society’’(Corporate Governance Overview, 1999).

### **3.2.2 The King codes of governance**

The King I report was the first code of governance produced in South Africa, spearheaded by former High Court judge, Mervyn King in 1994. It stipulated codes of conduct and generally accepted practices in companies. The code, while not legally binding, was recognised at the time as the most comprehensive publication on the subject, embracing an inclusive approach to corporate governance. It was unprecedented in the field of corporate governance as the code went beyond the realm of the financial and regulatory environment to encompass a wide range of stakeholders.

The inclusive approach stipulates that the company clearly defines its goals, values and the relevant stakeholders. The daily activities and direction of the company must, in turn, be communicated explicitly to all stakeholders. The relationship between the company and stakeholders should ideally be mutually beneficial in nature. Evidence suggests that this strategy promotes the firm’s longevity and the long-term growth in shareholder wealth. (Institute of Directors in Southern Africa, 2002, 7)

### 3.2.3 King II

The King I reported was revised in 2002 and followed up with the King II report. The need to amend the King I code of governance was spurred on by the evolution of the global economic environment and legislative changes. The King II report most notably introduces the concept of the ‘Triple-Bottom line’ which emphasizes the necessity to take into account not only financial impacts but also on the social and environmental impact on a company’s operations. The code applies to all listed companies, financial institutions and the realm of the public sector. The aim of King II is to **improve governance and accountability** on a voluntary basis for affected companies, although all organisations are encouraged to adopt the code.

([www.gt.co.za/Publications/Effective-directors-guide/kingII.asp](http://www.gt.co.za/Publications/Effective-directors-guide/kingII.asp))

The King commission identified 7 cornerstones of good corporate governance. These are listed below:

- **Discipline** at senior management level and a commitment to practices that are accepted universally to be good and proper.
- **Transparency** requires that the company make all financial and non-financial information pertaining to the firm available in an accurate and timely fashion so that outsiders are able to make informed decisions.
- **Independence** refers to the extent to which conflicts of interest are minimized at board level. This could come in the form of a highly dominant CEO or a shareholder who owns a large stake in the firm. Various mechanisms used to improve on independence will be discussed in a later section.
- **Responsibility** must be taken by management and the board alike in the event of mismanagement. Mechanisms must also be put in place for corrective measures to be undertaken and to penalize transgressors.
- **Accountability** must be exercised by all members who make decisions or take actions on pertinent issues. As with responsibility, sufficient mechanisms must be implemented to foster a greater accountability. Enforcement of these parameters serves to create confidence in the board from the perspective of shareholders.
- **Fairness.** The rights of all stakeholders in the company must be respected. No single individual’s right’s is to take precedence over another.

- **Social Responsibility** has become an increasingly important characteristic of a good corporate citizen. Companies are to take cognisance of the environment in which they operate and place a special emphasis on behaviour that is ethical, non-discriminatory and non-exploitative. It is vital that companies act in a responsible manner with respect to human rights and environmental issues.

(Institute of Directors in Southern Africa,2002:11)

With respect to non-financial goals, companies are compelled to report on the following:

- Safety and occupational health issues, including HIV/Aids in the workplace. This is of particular importance in the case of South Africa, where it accounts for 17% of global HIV/AIDS prevalence.
- Environmental Impact Assessment and selecting the option with the least harmful impact
- The social impact on society. This entails, inter alia, adopting the principals of Black Economic Empowerment (BEE). Since the advent of democracy in South Africa, transformation in the corporate environment has been a national priority to address the imbalances of the past. It also encourages a culture of Corporate Social Responsibility (CSR). This reinforces the stakeholder view adopted in the King I report.
- Human Capital Development, in which special efforts must be made with respect to training existing staff, achieving equity goals and creating opportunities for women and other previously disadvantaged groups.

### 3.2.4 King II and the Board of Directors

In the context of this paper, the board is of paramount importance in our analysis of CEO compensation since it is ultimately the duty of the board to establish his/her remuneration package. It would therefore be foolish to ignore the legal framework within which the board operates.

The

information in the following section was accessed from a Grant Thornton publication on the King II Report (<http://www.gt.co.za/Publications/Effective-directors-guide/kingII.asp>)

#### CEO-CHAIRMAN DUALITY

The King II report makes it abundantly clear that there should be a division of responsibilities between CEO and Chairman. The reason is also unambiguous: It is necessary that no single member of the board has disproportionate or insurmountable power. However, in the event that duality is unavoidable the independency issue can be remedied in one of two ways. An independent director must be elected to the position of deputy chair. Alternatively, the board must be comprised of a strong contingent of independent directors.

#### DIRECTOR REMUNERATION

Decisions regarding the remuneration of directors are borne solely by a remuneration committee, comprised mainly or wholly of independent directors. The rationale behind the independence criteria is to foster objective decision-making with respect to remuneration issues. Furthermore, during this process the CEO may attend by invitation only but withdraw his presence when his remuneration is the article on the agenda. The remuneration committee is accountable to the shareholders of the company through the annual report. The report should incorporate a full disclosure of the said committee's membership, a comprehensive breakdown of each member's remuneration package, and the remuneration philosophy entrenched within the committee. This transparency promotes democracy amongst shareholders who can express their approval or disapproval of the board through a vote at the annual general meeting.

Directors should be compensated at a level which would attract and retain directors commensurate to their quality. The higher the calibre of the director, the greater will be the compensation attributed to him or her. It also stipulates that a large proportion of the compensation package should be performance-based. Implicitly, it refers to the bonus component of the package. This standard applies to directors at both executive and non-executive status. As with the remuneration committee, the annual report should fully disclose the total and composition of all directors' remuneration including that of the CEO.

#### BOARD COMMITTEES

Board committees serve as a control and accountability mechanism. It also ensures the most efficient division of duties within the greater board. King II states that at the very least, a board should establish an auditing committee and a remuneration committee. Furthermore, all committees must be headed by an independent director. This requirement is waived only in the case of operational committees, which are tasked to control and evaluate the core operations of the company. The accountability factor yet again comes to the fore, as the committee chairpersons are verbally held to task at the annual general meeting where shareholders are entitled to extract information from them on any pressing issues regarding the mandates of their respective committees.

Board committees have no executive power, but are essentially the engine rooms through which the board can make more enlightened decisions in a democratic manner based on the findings delivered by these specialised committees. A formal procedure is recommended for the purposes of task delegation by the board to the committees. In turn, the board committee is required to report back to the board after each meeting

#### INDEPENDENCE OF DIRECTORS

Included in the annual report should be a list of the board members, clearly classing them as executive, independent, or non-executive. Like much of the King II parameters, the disclosure of this information geared specifically for accountability and transparency to all stakeholders.

Executive directors are advised by the code not to exceed a term of three years, with the exception of intervention by shareholders on the issue. The idea here is to maintain a healthy balance of power and to breathe new life into a board. Included in the category of executive directors are so-called shadow directors, who direct the operations of the firm behind the scenes.

If there any doubt exists to the board and all its stakeholders about what qualifies a director as being independent, the King II report makes it distinct. It identifies no less than six parameters to satisfy the condition of independence. An independent, non-executive director must not:

- Be a representative or nominee of a major shareholder
- Have been an employee of the company in question in the last three financial years
- Serve in a professional advisory role in the company

- Have a significant business interest in the company
- Be a signatory to any significant contractual arrangements with said company
- Have any other business endeavours or special relationships which would constitute a conflict of interest

The independent directors serve an important function on the board, and would ideally constitute the majority of any board. By not being personally invested in the company, with the exception of their reputations, they are able to serve the stakeholders with the highest degree of objectivity. They are effectively the eyes of the shareholders and their monitoring function is indispensable. Apart from being objective monitors, they are an invaluable source of advice especially if they have served on other boards.

## BOARD MEETINGS

The King II code of governance recommends that the board meets at least every three months and that the number of meetings be recorded in the annual report with a concise list of attendees. Amongst other items on the board's agenda, they should review the systems and processes of these meetings with the aim of producing greater efficiency. This includes the evaluation of internal control mechanisms to attain even higher levels of effectiveness. Since the philosophy of the King II report on governance is driven by the Triple-Bottom-Line, a high degree of cognisance of ALL stakeholders must be observed. The board is encouraged to incorporate the non-financial aspects of the company pertaining to this broad base of stakeholders at these meetings.

The tenets of the King II code of governance underscore the importance of transparency, accountability, independence and a commitment to all stakeholders. The systems are designed in such a way that all these objectives are met. As mentioned before, the King II report was evolutionary and acclaimed widely as the most progressive document on corporate governance at the time of its inception. However, by 2008 the King Commission recognised that this document ran the risk of becoming obsolete. King II had to evolve with a changing corporate and



institutional environment, locally and internationally. The King III report was born on 9 September 2009, building on King II.

### 3.2.5 The King III Report

‘As with King I and King II, the King Committee endeavoured to be at the forefront of governance internationally and this has again been achieved by focusing on the importance of reporting annually on how a company has both positively and negatively affected the economic life of the community in which it operated during the year under review.’

(Institute of Directors in Southern Africa, 2009)

Essentially, this is not a new path for the King series. In fact, it is a natural progression of the Triple-Bottom-Line concept. It just goes a step further by requesting companies to quantify the societal dimension of thereof. King III goes deeper into uncharted territory by stipulating that it is not enough to merely quantify its economic impact on the immediate community. Companies are encouraged to put in place tangible plans for the following financial year geared at enhancing its positive impact on the community, if the effect was in fact positive, and to eradicate any negative effects on economic life of the community if the effect was to the contrary. (Institute of Directors in Southern Africa, 2009) As with its predecessor, the ‘comply or explain’ still holds.

King III places considerable emphasis on sustainability social transformation issues, thereby broadening the scope of corporate governance. The document acknowledges that these ideals can only be pursued through effective, visionary leadership. Within this updated framework, sustainability becomes the cornerstone of economic and moral considerations, and a driver for opportunities and risk in the business environment. The leadership within organisations must appreciate the complex nature in which business interacts with the natural environment and society at large. This once again reinforces the notion of the Triple-Bottom-Line. It is argued that firms will be able to extract long-term value if these three spheres are integrated in a responsible and efficient manner. By doing so, it represents a paradigm shift in doing business. No longer is it sufficient to observe these three layers in isolation, but rather to co-ordinate these layers in a synergistic way. One of the means to reach these goals is to introduce innovative approaches to sustainability in a way that increases profitability. The document does not produce explicit

solutions to innovation, instead leaving it up to the brains trust within the firm. Another aspect of sustainability pertinent to the South African context is the notion of fairness. The King III report recognises that social injustice is not sustainable over a longer horizon and that great leaps are to be made to integrate marginalised groups in this program. As discussed in the outset of this chapter, the issue of transformation in South Africa is the centrepiece of the political environment which must be addressed and embraced by all sectors of society in an efficient, inclusive and profitable approach.

In a sense the updated approach to sustainability is a resurgence of the King II report's recommendations on sustainability reporting. Although the tenets proposed by King II on sustainability reporting had become widely accepted practice in the country, there was a disconnect based on trust between business and society at large regarding the intentions and practices of corporations. Business executives voiced a grievance of their own on this matter. They felt that sustainability reporting had failed to return the promised benefits without impinging on their profits. The new integrated approach to reporting is an attempt to correct these and other disparities. Apart from the all-encompassing reporting framework mentioned thus far, the audit committee is required to release a statement to the board of directors and shareholders on the effectiveness of internal financial controls. This would form part of the integrated report. In addition to this, risk management is to play a greater role in the governance of the firm under the auspices of a formal risk management process. Lastly, the board must look into the strategic role of information technology, if any, and how it affects the process of governance in the company. (Institute of Directors in Southern Africa, 2009)

## Determinants of CEO Compensation In South Africa

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### *Chapter 4: Research Methodology*

#### 4.1 Introduction

Research is the seeking or search for knowledge. The word ‘*research*’ derives from the French word ‘*recherché*’ which means to travel through. The formal definition of research is a systematic and objective process of collecting, recording and analysing information or data in order to increase our understanding of the phenomenon or problem about which are interested (Zikmund,2000). The research process is multifaceted and presents the researcher with numerous options with respect to strategy. The aim of this chapter is to present the different paradigms of research available and to provide the rationale for my preference for the strategy which was ultimately settled upon. I will discuss the research design, research method, sampling technique employed, and an assessment of the data collection method. The blueprint of my research strategy is captured in the table on the next page.

Research Theme	Corresponding Choice
Research Type	Quantitative
Research design	Descriptive
Data type	Secondary data from Annual reports of listed firms
Population	Listed firms from South Africa
Sampling frame	Firms listed on the Johannesburg Stock Exchange (JSE)
Sampling method	Non probability (Convenience sampling)
Dependent variable	CEO compensation
Independent variables	Firm size, ROA, Board Size, Chairperson is Founder, Chairperson Remuneration, Chairperson is Former CEO, Chairperson is Domestic, Chairperson is Executive, Percentage of Independent Directors, Percentage of Female Directors, Age of Board, Percentage of Black Directors, Percentage of Foreign Board Members, Percentage of Non-Executive directors in Compensation Committee, Percentage of Foreigners in Compensation Committee.
Control variables	Industry and Year
Statistical method	Multiple regression analysis Ordinary Least Squares Method

*Table 4.1: Research Strategy/Framework.*

## 4.2 Research Design

A research design provides the roadmap for carrying out the project. The choice of research design must ensure that it is best suited to providing the relevant outcomes *vis-à-vis* research questions, and do so in the most efficient manner. The culmination of this section represents the completion of the formulation phase of the research process. Business research designs are generally categorised into one of three groups namely, (i) Exploratory, (i) Descriptive, or (iii) Causal (Hair *et al*, 2003).

### Exploratory Research

Exploratory research is typically conducted during the formative stage of a research project in order to clarify ambiguous problems. The purpose of the exploratory research process is essentially to get acquainted with the topic, narrowing the scope of the research topic, and then transforming discovered problems into defined ones (Zikmund, 2000). Ghauri & Grønhaug (2002) concur by saying that when a research problem is badly understood, the choice of the exploratory approach is warranted. It is therefore expected that subsequent research will be required to provide conclusive evidence. Cooper and Schindler (2006) illustrate graphically where exploratory research resides within the greater realm of the research process. This is given in Figure 1 below by the area titled ‘exploration’.

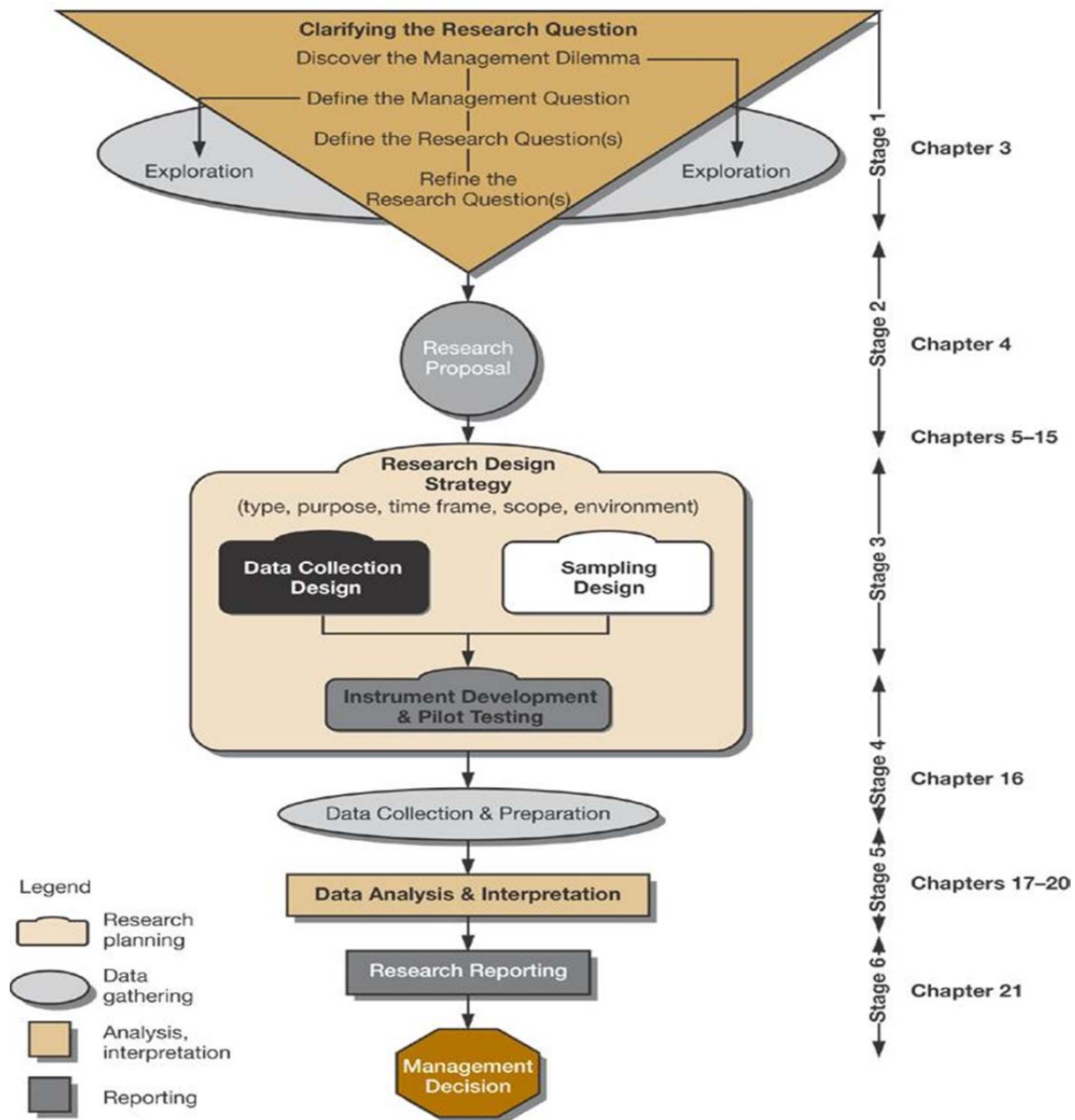


Figure 4.1: Integration of Secondary Data into the Research Process.

Source: Zikmund (2000)

Unless research into a certain study area has been thoroughly exhausted, is well understood by scholars and practitioners, and if there is no ambiguity about the theoretical bases, a study is expected to incorporate some level of exploratory research. The extent thereof is subject to the

degree to which the conditions above are satisfied.

### Descriptive Research

Descriptive research continues where exploratory research ends. It is a formalised procedure in contrast to the unstructured nature of initial exploration. Unlike exploratory research, descriptive studies are based on some previous understanding of the nature of the research problem (Zikmund, 2000). To be clear, descriptive research is underpinned heavily by the hypotheses formulated in the exploration phase. The goal of descriptive research would then be to test these hypotheses scientifically. It can be inferred by the reader that descriptive studies are used to describe some or other phenomenon. It is used, for instance, to describe the characteristics associated with a given sample, provide estimates of population proportions consistent with these characteristics, and to describe the correlations among several variables.

(Cooper & Schindler, 2006)

Descriptive research activity includes establishing a sample frame, deciding upon data collection mechanisms, collecting, checking and coding the data. Depending on the research objective, descriptive studies can either provide the user with a snapshot of a phenomenon at a specific point in time – cross-sectional studies, or a long-term perspective which captures changes in the phenomenon over an extended period of time – longitudinal studies. (Hair et al, 2003)

### Causal Research

Causal research, like descriptive research, is characterised by a structured or formalised approach.

The goal of causal research is the identification of cause-and-effect relationships between variables. The level of analysis inherent in this approach requires the researcher to have a rich grasp of the research subject. This is because there must be an established expectation of the interaction between variables derived from the relevant literature. (Zikmund, 2000)

The underlying premise of causal analysis is that the presence of some element, say A, brings about a change in another variable, B. On an empirical level, it is impossible to demonstrate with absolute certainty whether a causal relationship exists between two entities. This is the case

because it is not possible to factor in all other variables which have a bearing on the A-B relationship. The result will thus always be inconclusive (Cooper & Schindler, 2006). The user is only able to draw inferences of causation via descriptive statistics.

The research design implemented in this particular study will take the form of descriptive with some elements of causal research. The decision to go this route emanates from the fact that the theory on executive compensation is well established, rendering exploratory research redundant. The theoretical framework in this paper has sought to provide a sufficient context for the variables under scrutiny so as to arrive at meaningful hypotheses. It is also necessary to establish causation amongst variables, if any, to explain the level of CEO compensation.



### 4.3 Quantitative and Qualitative Research

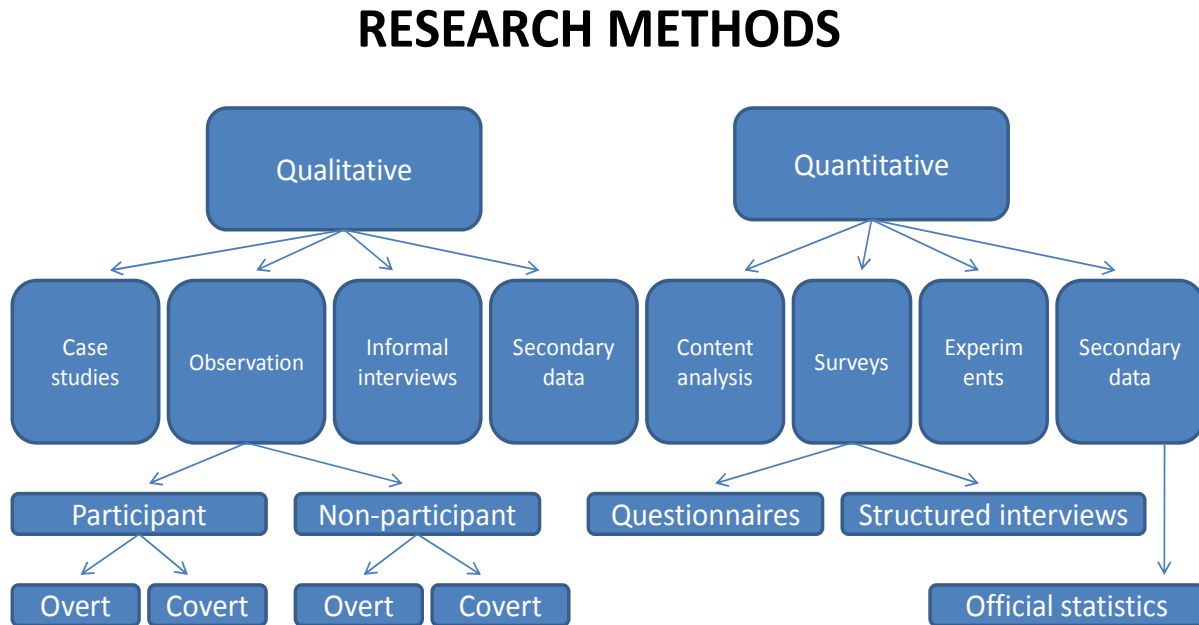


Figure 4.2 Illustration of qualitative and quantitative methods

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#### QUANTITATIVE RESEARCH

The quantitative paradigm is based on positivism, a science characterized by empirical research where all phenomena can be reduced to empirical indicators which represent the truth. The ontological position of the quantitative paradigm is that there is only one truth, an objective reality that exists independent of human perception. Under this regime, the investigator and that being investigated are independent entities. Therefore, the investigator is capable of studying a phenomenon without influencing it or being influenced by it. (Sale et al, 2002)

Quantitative research operates within a well-defined theoretical framework, derived from literature and/or previous research, allowing one to commence with a clear underlying

understanding or expectation of a how a particular phenomenon is likely to behave (Remenyi et al, 1998). This understanding will have been developed into a formalised model. Since the model is rigid, it is usually obvious what data is required to answer a particular research question.

Quantitative research attempts precise measurement of some phenomenon. Quantitative methodologies allow the researcher to answer questions such as how much or how many, how often, when and who (Cooper & Schindler, 2006). The goal is to measure and analyze causal relationships between variables within a value-free framework (Denzin and Lincoln, 1994)

## QUALITATIVE RESEARCH

‘Qualitative research is based on evidence that is not easily reduced to numbers. In some cases the evidence cannot be reduced to numbers and any attempt to do so would not be useful. In such cases statistical techniques are not sensible and hermeneutic (interpretive) approaches are preferable.’ (Remenyi et al, 1998)

This view is complimented by Cooper & Schindler (2006) who assert that qualitative research includes an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning (not frequency as with quantitative studies) of naturally occurring phenomena in society.

Qualitative research is subjective in nature and leaves much of the measurement process is left at the discretion of the researcher. Unlike its counterpart, this particular approach does not make use of rigorous mathematical analysis. Qualitative research is exploratory in nature and is conducted by means of experience surveys i) experience surveys, ii) secondary data analysis, iii) case studies and iv) pilot studies. (Zikmund, 2000)

Qualitative research is often disregarded as a lesser form scientific inquiry due its unstructured character. Ghauri & Grønhaug(2002) counter this line of thought by stating that research is not necessarily better simply because it is quantitative. The methods and techniques employed depend entirely on the research problem and what approach would be most suitable to answer that question.

The table below illustrates the most poignant differences between the two approaches. Given the nature of the study of CEO compensation and the sheer breadth of information cultivated in this field, it is quite clear that the best choice for this study would be the quantitative approach.

Qualitative Methods	Quantitative Methods
<ul style="list-style-type: none"> <li>• Emphasis on understanding</li> <li>• Focus on understanding from respondent's point of view</li> <li>• Interpretation and rational approach</li> <li>• Observations and measurements in natural settings</li> <li>• Subjective 'insider view' and closeness to data</li> <li>• Explorative orientation</li> <li>• Process oriented</li> <li>• Holistic perspective</li> <li>• Generalisation by comparison of properties and contexts of individual organism</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis on testing and verification</li> <li>• Focus on facts and/or reasons for social events</li> <li>• Logical and critical approach</li> <li>• Controlled measurement</li> <li>• Objective 'outsider view' distant from data</li> <li>• Hypothetical-deductive, focus on hypothesis testing</li> <li>• Result-oriented</li> <li>• Particularistic and analytical</li> <li>• Generalisation by population membership</li> </ul>

*Table 4.2 The difference in emphasis in qualitative versus quantitative analysis*

Source: Ghauri & Grønhaug (2002)

#### 4.4 Data Collection

Within the framework of quantitative analysis, there are two broad approaches to collecting data: primary and secondary data. You may refer to figure 4.1 to put into perspective. Primary data is sub-categorised further into experimental data, surveys and content analysis. I will not go into great length about these sub-categories as primary data was not used for the purposes of this project. Secondary data, in the form of annual financial reports, was collected instead. These reports cover the full spectrum of data that was needed to answer the research questions posed at the outset. It is a mandatory legal requirement that all firms listed on the Johannesburg Stock Exchange to provide a full disclosure on directors' compensation, the composition of the board, compliance with the King Codes of Corporate Governance, and the financial position of the firm.

#### 4.5 Population and sampling method

For several reasons it is rarely possible to test empirical generalizations against all the members of a target population. The basic idea of sampling is that by selecting some of the elements in a population, we may draw conclusions about the entire population (Cooper & Schindler, 2006).

The process of sampling involves any procedure using a small number or items or parts of the whole population to make conclusions regarding the whole population. The purpose of sampling is to enable researchers to estimate some unknown characteristics of a population. (Zikmund, 2000)

The benefits of sampling include:

➤ **Cost-effectiveness**

It is intuitive that sampling a representative portion of a population, as opposed to the entire population, would translate into less financial strain. The logistical cost of acquiring data from the aggregate of a geographically dispersed population renders this approach unfeasible in most

cases.

➤ Greater speed of collection

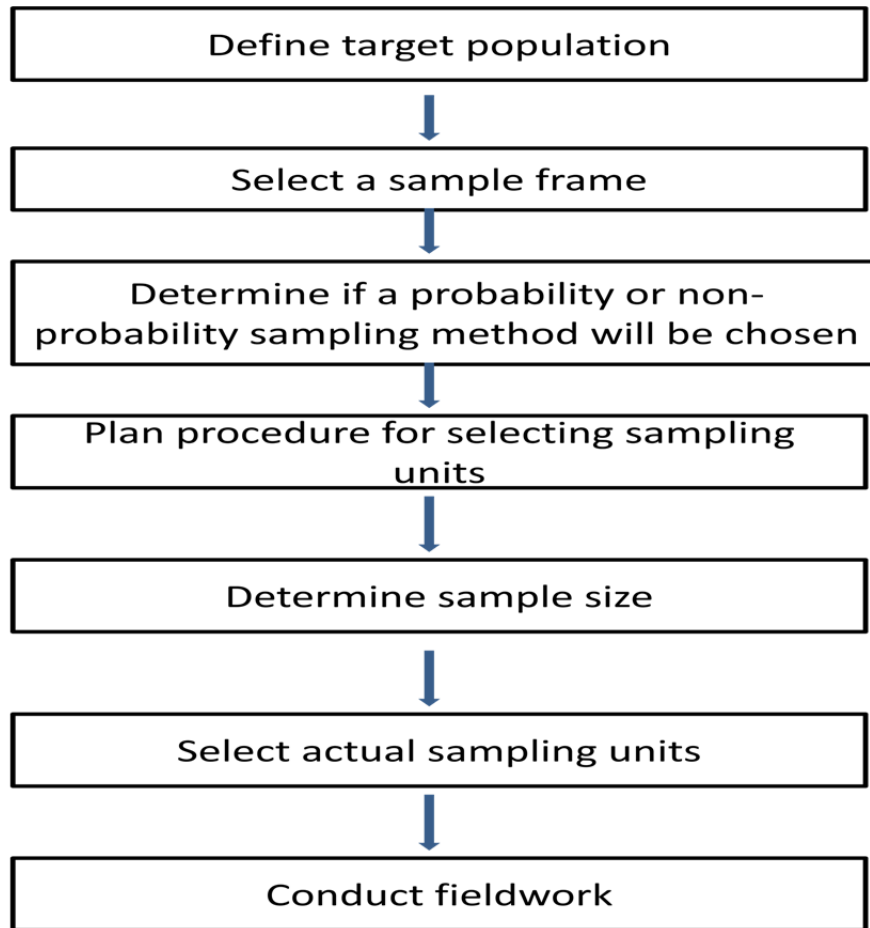
Again, for a large geographically dispersed population it is unforeseeable for a researcher to cover the entire constituency in a timely fashion. For this reason, a representative sample is preferred as the next best option.

➤ Accuracy

While it may be intuitively appealing to conclude that a population would yield better results, Cooper & Schindler (2006) argue that the quality of a study may be markedly improved through sampling by means of more thoroughly scrutinising missing, suspicious and incorrect data; a higher level of supervision; and better processing than would otherwise be possible.

#### 4.6 The Sampling Process

The process and decisions made at this stage of the research are integral to the eventual quality of the research findings. It is comprised of the steps listed in the figure below. In practice this sequence of steps are not necessarily followed to the tee. Room does exist for some degree of flexibility depending on the nature of the research.



*Figure 4.3: Stages in Selection of a Sample*

*Source: Based on Zikmund (2000)*

➤ **Target Population**

The target population refers to the universe of elements from which samples are drawn (Remenyi et al, 1998). In the case of this study, the target population is the universe of all South African firms.

➤ **Sample Frame**

A sample frame is a comprehensive list of objects from which a sample is to be drawn. More clearly, it asks the researcher to define the population with precision (Remenyi et al, 1998).

While the target population is simply defined as all South African firms, the sample frame for this study is all South African firms listed on the Johannesburg Stock Exchange (JSE)

between 2005 and 2009. During this period, the population of firms listed on the JSE grew from 388 to 416.

➤ **Probability versus Non-Probability Sampling**

Of the numerous sampling techniques that are at the disposal of researchers, two distinct categories exist namely, probability sampling and non-probability sampling. As their names may suggest, it pertains to the probability of an object being selected or sampled out of the sample frame. In probability sampling every element in the population has a known non-zero probability of being selected. In contrast, in non-probability sampling the probability of selection is unknown because the method is arbitrary. (Zikmund, 2000)

The drawback of non-probability sampling is the fact that the researcher's subjectivity may lead to selection bias. The technique applied in this study will follow the non-probability paradigm. This choice emanates from the time constraints surrounding the collection of the vast matrix of heterogeneous data. Secondly, the availability of relevant information contained in the annual reports was not consistent.

➤ **Procedure for Selecting Sampling Units**

Within the realm of the non-probability sampling framework, the convenience method of sampling best suits the characteristics in the research environment. This means that the samples were selected according to what was most convenient to the researcher. In this instance, availability played the most decisive role. From the sample frame, a total of 52 companies were ultimately selected, yielding 240 observations.

#### 4.7 Validity and Reliability

**Validity** refers to accuracy. If the issues of reliability, validity, trustworthiness, quality and rigor are meant differentiating a 'good' from 'bad' research then testing and increasing the reliability, validity, trustworthiness, quality and rigor will be important to the research in any paradigm. (Golafshani, 2003).

**Reliability** refers to consistency. This is a concept most known for testing and evaluating quantitative data. But as an idea, it is used for all kinds of research. It is a concept of good

quality research, in qualitative studies reliability then has the purpose of generating understanding. (Golafshani, 2003). This concept closely relates to “dependability”. So it is concerned with if we can depend on the results or not.

To widen the spectrum of conceptualization of reliability and revealing the congruence of reliability and validity in qualitative research, Lincoln and Guba (1985) state that: "Since there can be no validity without reliability, a demonstration of the former is sufficient to establish the latter".

Based on the above, I believe that I have sufficiently complied with the principals of reliability and validity.

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## Determinants of CEO Compensation In South Africa

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### *Chapter 5: Regression Analysis and Findings*

#### 5.1 The Multiple Regression Model:

$$\begin{aligned} \text{CEO\_Total\_Comp} = & \alpha + \beta_1 (\text{Chair\_Rem}) + \beta_2 (\text{Chair\_Former\_CEO}) + \beta_3 (\text{Chair\_Domestic}) + \beta_4 \\ & (\text{Chair\_Founder}) + \beta_5 (\text{Executive\_Chair}) + \beta_6 (\text{Board\_Size}) + \beta_7 (\% \text{\_Ind. \_Directors}) + \beta_8 \\ & (\% \text{\_Female\_Directors}) + \beta_9 (\% \text{\_Foreign\_Directors}) + \beta_{10} (\% \text{\_Black\_Directors}) + \beta_{11} \\ & (\text{Board\_Age}) + \beta_{12} (\% \text{\_Non-Exec\_in\_Comp. \_Comm}) + \beta_{13} (\% \text{\_Foreign\_in\_Comp. \_Comm}) + \\ & \beta_{14} (\text{ROA}) + \beta_{15} \text{Ln} (\text{Market\_Cap}) + \varepsilon \end{aligned}$$

Where,

CEO\_Total\_Comp = Total Compensation of CEO;

Chair\_Rem = Remuneration of Chairperson;

Chair\_Former\_CEO = Chairperson previously occupied position of CEO;

Chair\_Domestic = Chairperson is South African;

Chair\_Founder = Chairperson is founder of the firm;

Executive\_Chair = Chairperson serves executive role in firm;

Board\_Size = The number of directors on the board;

%\_Ind.\_Directors = Percentage of independent directors on the board;

%\_Female.\_Directors = Percentage of female directors on the board;

%\_Foreign.\_Directors = Percentage of foreign directors on the board;

%\_Black.\_Directors = Percentage of black directors on the board;

Board\_Age = Average age of the board;

%\_Non-Exec\_in\_Comp. Comm = Percentage of non-executive directors in compensation committee;

%\_Foreign\_in\_Comp. Comm = Percentage of foreign directors in compensation committee;

ROA = Return on Assets;

Ln(Market\_Cap) = Natural log of firm's market capitalization.

The estimation process followed the Ordinary Least Square (OLS) procedure.

## 5.2 REGRESSION ANALYSIS

The following section outlines the regression model used for the purpose of evaluating the hypotheses. Regression analysis allows us to examine to what degree the independent variables influence the dependent variable, in this case CEO compensation.

The most important factors to be considered within the framework of regression analysis are:

**The level of significance**, or p-value, is the required level of statistical validation to conclude that variations have not taken place by chance. For the purpose of this study, the conventional significance level of 5% was chosen. In this case, a p-value below or equal to 0.05 is regarded as significant.

**The t-test** is a statistical test which shows if each of the variables will have a significant effect on the dependent variables.

**F-test.** The F-test is a statistical test which compares the variance between two dimensions; Mean squares(between) and Mean squares(within). The larger the sizes of these are, the higher is the probability for the result being significant.

**Model Fit.** R<sup>2</sup> (adjusted) represents the explanatory power of a model, and should ideally be as close to 1.00 as possible. An R-squared of 1.00 indicates that the variables in the model perfectly explains the phenomenon .

**The coefficient ( $\beta$ ) of each of the independent variables** indicates the proportional and directional relationship between the dependent and independent variables. It is not sufficient to look at the coefficients in isolation, since this is not a measure of significance.

### 5.2.1 Descriptive Presentation of the Data

#### Descriptive Statistics

	Mean	Std. Deviation	N
CEO Total comp	7161572.97	5523175.210	145
Chair Remuneration	1170586.23	1359123.959	145
Chair former CEO(Yes=1, No=0)	.12	.323	145
Chair is (domestic = 1/ foreigner = 0)	.97	.164	145
Chair (founder=1, not founder=0)	.09	.287	145
Chairman is executive in company(Yes=1, No=0)	.14	.353	145
Board size	11.90	3.517	145
Percent of indep directors	7.28591446 446114E-1	2.047152884 695258E-1	145
Percent Female directors	1.26995178 043911E-1	9.170451426 076479E-2	145
Percent of foreign directors	.10	.125	145
Percent of blacks directors	2.60002157 500544E-1	1.582678470 348665E-1	145
Average age of board	54.1690	3.01157	145
Percent of Non-exec in comp com	95.37%	11.709%	145

Per of foreigners in comp-com	6.25%	16.147%	145
ROA %	18.1673	19.71946	145
Market Capitalization (Natural Log)	9.32298565 419286E0	1.618217201 568738E0	145

*Table 5.1: Descriptive Statistics*

- **Observations.** This table displays, amongst other things, the number of observations in the sample set. The number of observations in the original sample stands at 240, but due to missing values for several of the variables this number has been reduced to 145.
- **Mean.** This value is the sum of observed values divided by the number of observations. It is however not necessarily an accurate reflection of the sample. Outliers or extraordinary values may cause the mean value to be less representative than if the values are excluded.

We observe, for instance, that the mean compensation of CEO's is R 7 161 572.97. It is not clear whether this is in fact representative of the population since the sample accounts for a fraction of the population. One must bear in mind that the degree of heterogeneity amongst the companies listed on the Johannesburg Stock Exchange with respect to industry, size and performance. The potential for outliers should ideally be taken into account.

- **Standard deviation.** This number represents the degree of distortion from the mean across the entire sample. A high standard deviation tells us that the concentration of data diverges widely from the mean value. This too can be an indication of extreme outlier values. Conversely, a lower standard deviation implies that the data is concentrated close to the mean and therefore more effective for drawing statistical inferences.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686 <sup>a</sup>	.471	.354	4437576.419

*Table 5.2: Model Summary*

Table 5.2 illustrates the robustness of the model – the ability of the independent variables to make extrapolations about the phenomenon being studied. The model’s explanatory power (explained variance) has been determined to be 47.1% for  $R^2$  and 35.4% for adjusted  $R^2$ . This implies that the explanatory variables explain just over 47% percent of the variations in CEO compensation.

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.069E15	26	7.958E13	4.041	.000 <sup>a</sup>
	Residual	2.324E15	118	1.969E13		
	Total	4.393E15	144			

b. Dependent Variable: CEO Total comp

*Table 5.3: Anova Output*

From the Anova table we observe that the variables which make up the model are indeed statistically significant. This is given by the last column in the table.

### 5.2.2 **Correlation Analysis**

In this particular section we present the reader with the correlations between all the variables pertinent to this study. Correlation analysis is a prerequisite to conducting the regression analysis. It allows the researcher to identify the relationship between the independent variables in terms of direction and strength. But more importantly, it serves to identify any cases of multicollinearity where two or more predictor (independent) variables are highly correlated. Strong correlations amongst predictor variables do not necessarily compromise the robustness of the model as a whole, but it compromises the explanatory power of individual independent variables. The correlation coefficient value lies between 1 and -1, where 0 indicates no relationship; 1 indicates a perfectly positive relationship; and a value of -1 implies a perfectly negative relationship. The correlations are tabled on the next page.



							0									
% Independent Directors	-.024	-.213	-.011	-.056	-.187	-.227	.195	1.000								
% of Female Directors	.094	.008	-.059	.032	-.142	-.244	.322	.176	1.000							
% of Foreign Directors	.207	.000	.143	-.098	-.196	-.084	.256	.091	.163	1.000						
% of Black Directors	-.012	.096	-.120	.101	.041	-.113	.368	.299	.443	.080	1.000					
Average Age of Board	.222	.148	.355	.091	.182	.148	.088	.102	.012	-.037	-.368	1.000				
% Non-Exec in Comp. Comm	.001	-.137	-.151	-.067	-.278	-.329	.277	.334	.367	.250	.228	.160	1.000			
% of Foreigners in Comp.	.268	.074	.079	-.021	-.122	-.160	.149	.006	.286	.671	.088	-.083	.117	1.000		



Committee																
Return on Assets (ROA)	.024	.004	.179	.091	.139	.103	-0.605	.244	-.015	-.127	.087	-.076	-.031	-.013	1.000	
Ln Market Capitalization	.284	.249	.129	-.151	-.120	.199	.333	.143	.182	.330	.219	-.121	-.032	.193	.143	1.000

*Table 5.4: Correlation Matrix*

In the table above we observe three cases of medium-strong correlations amongst independent variables:

- We find that there is a medium-strong positive relationship, 0.670, between Executive Chairmanship and Chair Remuneration.
- A medium-strong positive relationship is observed between Chairman Remuneration and the Chairman being the founder of the company, at a correlation level of 0.605
- We observe a positive relationship of similar strength, 0.625, where the Chairman is the Founder and serves as an Executive Chairman.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. p-value
		B	Std. Error	Beta		
1	(Constant)	-3.647E7	1.089E7		-3.347	.001
	Chair Remuneration	.840	.584	.207	1.438	.153
	Chair former CEO(Yes=1, No=0)	2063230.238	2065620.645	.121	.999	.320
	Chair is (domestic = 1/ foreigner = 0)	5070014.494	2507622.964	.151	2.022	.045
	Chair (founder=1, not founder=0)	-3022699.685	2485386.419	-.157	-1.216	.226
	Chairman is executive in company(Yes=1, No=0)	-6068172.906	2341484.104	-.388	-2.592	.011
	Board size	443919.978	191654.555	.283	2.316	.022
	Percent of independent directors	-4691321.556	2570177.518	-.174	-1.825	.070
	Percentage of Female directors	-9332433.150	5735570.246	-.155	-1.627	.106
	Percentage of foreign directors	2967898.687	5537976.764	.067	.536	.593
	Percentage of black directors	-1686370.420	4160691.679	-.048	-.405	.686
	Average age of board	530941.852	195897.063	.290	2.710	.008

Percentage of Non-exec in compensation committee	-25379.942	43741.445	-.054	-.580	.563
Percentage of foreigners in compensation committee	30690.111	38383.269	.090	.800	.426
ROA %	9710.504	24517.027	.035	.396	.693
LnMarketCapitalization	845872.050	352456.230	.248	2.400	.018

*Table 5.5: Regression Output*

### 5.2.3 Interpretation of Regression Output

We are now in a position to interpret the results of the regression output. This has been done in a manner that is orderly albeit somewhat laboured. The variables are assessed one at a time according to the key descriptive parameters – t-value, coefficient value and sign, and the significance level.

#### **CHAIRPERSON REMUNERATION**

*H<sub>0</sub>: CHAIR REMUNERATION IS POSITIVELY RELATED TO CEO COMPENSATION*

The chairperson's remuneration as a predictor variable was included in the study to capture an element of the principal-agent dynamic. It was done on an exploratory basis rather than being rooted in literature.

According to the standardised coefficient, 0.207, a positive relationship does indeed exist between CEO compensation and the remuneration of the chairperson. There is not much else one can glean from coefficient analysis therefore it is necessary to evaluate this hypothesis on the

basis of significance. Next up we can have a look at the t-statistic which is regarded as insignificant if it falls outside the region of -1.96 and 1.96. The t-value attributed to chairperson remuneration, 1.438, is therefore not significant. Similarly, the p-value of 0.153 tells us that the remuneration of the chairperson is not a significant explanatory factor at the 5% level of significance.

### **CHAIRPERSON FORMER CEO**

*H<sub>0</sub>: IF THE CHAIRMAN HAS PREVIOUSLY OCCUPIED THE POSITION OF CEO, CEO COMPENSATION WILL BE HIGHER*

According to the regression output, the relationship between the two variables is positive as denoted by the coefficient 0.121. It is however insignificant according to both the t-value, 1.438, and a p-value of 0.320, meaning that the null hypothesis cannot be supported.

### **CHAIRPERSON NATIONALITY**

*H<sub>0</sub>: CEO COMPENSATION IS LOWER WHEN THE CHAIRPERSON IS SOUTH AFRICAN*

The coefficient points to a positive relationship between the Chairperson's nationality and CEO Compensation, contrary to what was hypothesised.

Even more revealing, is the corresponding t-value of 2.022. This value falls within the rejection region and based on this we can reject the null hypothesis.

The p-value generated is 0.045 which is statistically significant meaning that we cannot reject the null hypothesis. Therefore CEO Compensation is predicted to be higher under the chairmanship of a South African national.

## **CHAIRPERSON IS FOUNDER**

*H<sub>0</sub>: WHEN CHAIRPERSON IS FOUNDER, CEO COMPENSATION IS LOWER*

The coefficient of this parameter is -0.157 which supports the notion of an inverse relationship. However, this relationship is not statistically significant. The p-value is 0.266 which is well above the significance level of 0.05. The t-value, which is calculated as -1.216, simultaneously confirms that the relationship is inverse and that it is insignificant. The null hypothesis is thus not supported.

## **CHAIRPERSON IS EXECUTIVE**

*H<sub>0</sub>: WHEN CHAIRPERSON IS EXECUTIVE, CEO COMPENSATION IS HIGHER*

We begin by exploring the directional relationship between the two variables by looking at the value of the coefficient. The value given is -0.388. This negative relationship suggests that the compensation of CEO's will invariably be lower in cases where the chairperson occupies an executive function in the company. Of course, this result cannot be viewed in isolation. The p-value reveals a statistically significant value of 0.011. The t-value corresponds with this assessment at a value of -2.592, which is in the rejection region.

We therefore reject the null hypothesis at a significance level of 5%.

## **BOARD SIZE**

*H<sub>0</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO BOARD SIZE*

The coefficient for board size is 0.283 which translates into a positive relationship as has been hypothesised. The corresponding t-value is 2.316 which lies outside the rejection region. The p-value is 0.022 which is statistically significant. Based on this result, we can conclude that the size of the board does indeed have a significant positive relationship with CEO compensation at the 5% level.

### **PERCENTAGE OF INDEPENDENT DIRECTORS**

*H<sub>0</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF INDEPENDENT DIRECTORS INCREASES*

Firstly, we observe that the value of the coefficient is -0.174. This confirms that, *ceteris paribus*, CEO compensation is inversely related to the proportion of independent directors. The t-value, -1.825, while validating the inverse relationship does not indicate an adequate level of significance. The p-value is quite revealing too. At 0.070, the influence of independent directorships is regarded as insignificant at the 5% level. It is however very close and would be supported at the 10% level of significance, but rejected in the case of this study.

### **PERCENTAGE OF FEMALE DIRECTORS**

*H<sub>0</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF FEMALE DIRECTORS INCREASES*

In the case of female representation on the board, it is evident that a negative relationship exists between the percentage of women on the board and the dependent variable. This is manifested in the coefficient statistic and the t-value, -0.155 and -1,627 respectively. The p-value is 0.106. These results are interpreted to be statistically insignificant at the 5% level of significance. Based on this model, the percentage of female directors has a negligible effect on CEO compensation. The null hypothesis is not supported in this case.

### **PERCENTAGE OF FOREIGNERS DIRECTORS**

*H<sub>0</sub>: CEO COMPENSATION INCREASES AS THE PROPORTION OF FOREIGN DIRECTORS INCREASES*

On the basis of the regression values, there is a positive but insignificant relationship between the percentage of foreign directors and CEO compensation. The positive relationship is again given by the coefficient, 0.067. The evidence of significance, or lack thereof, is embedded in the p-

value and t-value which yield figures of 0.593 and 0.536 respectively. The hypothesis is therefore not supported.

### **PERCENTAGE OF BLACK DIRECTORS**

*H<sub>0</sub>: CEO COMPENSATION DECREASES AS THE PROPORTION OF BLACK DIRECTORS INCREASES*

With a p-value of 0.686 and a t-value of -.405, the hypothesis that the proportion of black directors on the board has significant explanatory power cannot be supported. On a purely directional basis though, we do find that there is a negative relationship as given by the coefficient, -0.048.

### **AVERAGE AGE OF BOARD**

*H<sub>0</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE AVERAGE AGE OF THE BOARD*

According to the regression output, the coefficient of Board Age is 0.290 implying a positive relationship with CEO compensation. The p-value and t-value deem that this hypothesis is plausible at a significance level of 5%. The p-value is 0.008 which quite close to zero, indicating that this parameter has strong explanatory power. The t-value, 2.71, merely reaffirms this position since it lies within the rejection region of +/-1.96.

### **NON-EXECUTIVE DIRECTORS IN COMPENSATION COMMITTEE**

*H<sub>0</sub>: CEO COMPENSATION IS INVERSELY RELATED TO PERCENTAGE OF NON-EXECUTIVE DIRECTORS IN THE COMPENSATION COMMITTEE*

Consistent with the postulation of the hypothesis, we observe an inverse relationship between the dependent and independent variable, given by a coefficient statistic of -0.054. Statistically, the explanatory power of the independent variable is not significant at the 5% level. The p-value

stands at 0.563, which is well out of bounds while the t-value is -0.580. We can therefore not conclude that the percentage of Non-Executive Directors is significant in explaining variations in CEO Compensation.

### **FOREIGN DIRECTORS IN COMPENSATION COMMITTEE**

*H<sub>0</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO PERCENTAGE OF FOREIGN DIRECTORS IN THE COMPENSATION COMMITTEE*

The coefficient for this parameter is 0.090 which is to be interpreted as having a positive relationship with CEO Compensation. In other words, the greater the percentage of Foreign Directors in the Compensation Committee, the higher will be CEO compensation. The answer to whether this relationship is significant or not is found in the t-value and p-value. A p-value of less than 0.05 is indicative of a significant relationship, and so too is a t-value lying outside the range of 1.96 and -1.96. For this particular model, we have a p-value of 0.426 which is insignificant according to the guidelines. The corresponding t-value is 0.80, indicating an absence of significance. Therefore, the hypothesis is not held up as statistically significant.

### **RETURN ON ASSETS (ROA)**

*H<sub>0</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE FIRM'S RETURN ON ASSETS*

The proxy for company performance, Return on Assets, does not yield a great degree of explanatory power according the regression output. While it does report a positive relationship between CEO Compensation, coefficient of 0.035, it does not stand up to the test of significance. With a p-value of 0.693 and a t-value of 0.396, ROA is statistically insignificant and therefore the hypothesis is not supported on this basis.



## **MARKET CAPITALIZATION (Firm Size)**

*H<sub>0</sub>: CEO COMPENSATION IS POSITIVELY RELATED TO THE SIZE OF THE FIRM*

Market Capitalization, the proxy used for Firm Size in this study, reports a coefficient statistic of 0.248. It is therefore, as predicted, positively related to CEO Compensation. Moreover, it has a p-value of 0.018 – statistically significant. The t-value leads to the same conclusion with a reading of 2.40. This is of course within the region of significance. We can therefore state that they hypothesis that CEO Compensation is commensurate with Firm Size holds true at a significance level of 5%.

### **5.2.4 Discussion of Results**

With no less that fifteen hypotheses tested, and an array of outcomes, the regression analysis was rather extensive. It is therefore fitting that the results be neatly summed up. Some of the outcomes were predictable, while others challenged conventional wisdom in the field of CEO Compensation.

#### **Board composition and diversity**

A very noticeable anomaly in the set of results is that pertaining to foreign directors. While theory on board matters postulates that an increase in foreign directors, especially those from Western societies, would invariably have an upward effect on CEO Compensation, our results present a different picture. The foreign director dimension has been incorporated twice in our analysis – As general members of the board; and as members of the compensation committee which is responsible for setting the CEO Compensation package. In both cases, we failed to observe any significant degree of extrapolative power with respect to CEO Compensation. It did however exhibit a positive relationship with CEO compensation as was expected, but again, not to any significant degree. This presents researchers with an opportunity to examine what influences this outcome in the South African context. One could look into the origin of the foreign directors, for example, if they are from other low-middle income economies where CEO Compensation is not as inflated as in The United States. Alternatively, it could be due to

established compensation level norms which offset the influence of foreign directors. These suggestions are, of course, not exhaustive and are subject to further research.

From a South African standpoint, one of the more interesting exploratory questions of this research was to ascertain what effect institutional reform regarding gender and race would have on CEO Compensation, if any. We found both parameters to have a negative relationship with CEO Compensation albeit not at a statistically plausible level.

When it comes to the age of the board we observe that older boards reward CEO's more handsomely than their younger counterparts. This result was estimated to be of statistical significance. This may be explained by a higher degree of complacency or a reflection of how individual board members' attitudes towards money develop with age. The implication here is that as one becomes older and more established, the more priority will be placed on financial security. This too is subject to further research.

The only other measure of diversity and composition that had a significant influence on CEO Compensation was Board Size. As we observed in the preceding section, the relationship was positive and linear in nature. This result is intuitively appealing. One would expect that larger firms would require a larger governance structure, and by extension, a larger board. Large companies in turn generate higher revenues with which to reward the CEO.

We also had the opportunity to explore what the consequences are, if any, in the event that the Chair of the Board is from abroad. The premise being that, with wielding so much influence at Board level, the Chair may advocate a higher compensation package as is practised in Western countries. Instead what we found is that the CEO is paid significantly less (at the 5% level) under the chairmanship of a foreigner. This result defies conventional theory and there is a need to study this phenomenon within a country-specific framework.

### **Independence and Incentives**

A recurring theme in the field of corporate governance is that of the Principal-Agent problem, ie. the most effective and efficient manner of aligning interests in order to get the best out of the executive management team. The paper sought to assess, insofar as it was possible, the boardroom dynamics which suitably capture the Principal-Agent problem. The majority of this

section is dedicated to the nuances in the relationship between the CEO the Chairperson, because this is the traditional frame of reference on the topic.

Based on the results, when the Chairperson is the founder of the firm but does not occupy an executive role, the compensation of the CEO is expected to be lower on average. It must be noted again that this downward sloping relationship is not significant enough to be a genuine explanatory variable. One can reasonably deduce that a possible explanation to the negative relationship is that a founding Chairman is more invested in the firm and would be less inclined to spending exorbitant amounts on the management team. Still this is open to interpretation.

On the other hand, when the Chairman is occupies an executive role but is not the founder, we observe a significant decline in CEO Compensation. As a side note, we must take caution when interpreting this particular variable. Recall that in the correlation analysis, the Executive Chairman variable was characterised by a high degree of multicollinearity which impinges on the credibility as a predictor. Therefore, the reader must interpret this result with a healthy dose of suspicion.

This paper also presented a useful opportunity to test whether there is a correlation between the compensation of the Chairperson and that of the CEO. I believe it captures the alignment of incentives dimension of the Principal-Agent problem in its most simplistic form. The test showed the relationship to be positive but not statistically significant. In a nutshell, the compensation of the CEO is expected to, *ceteris paribus*, increase simultaneously with the Chairperson's.

Then there is the case of the Chairperson being previously employed as the firm's CEO. It is not atypical for a former CEO to be appointed as Chairperson and there were several cases of this phenomenon in the study. The data shows some evidence of a positive relationship between CEO pay and the status of the Chair as a former CEO. The significance of the relationship is however rather negligible.

A substantial component of this paper, as is the case for most governance papers, is dedicated to the notion of independence. Independence of directors to carry out their assigned task of control and evaluation without any interference to be precise. I have posed the question: How does CEO Compensation respond to an influx of independent directors? The results show that the relationship is negative. This is encouraging as it gives one the impression that boards with

greater proportions of impartial members behave in a more fiscally responsible manner. As encouraging as this may be, as an explanatory factor it failed the test of significance.

Analysis of CEO Compensation would be incomplete without making reference to the Remuneration/Compensation Committee. This is after all the think tank tasked with structuring the CEO's compensation package. The composition of this sub-committee is thus of importance. The norm is for the committee to consist entirely of Non-Executive directors as part of good governance practice. This rule is not always enforced, and because of that, I was able to make extrapolations about the influence of Non-Executive directors on CEO pay. The results reveal that a higher percentage of Non-Executive directors in the compensation committee translates into less reward for the CEO. But it too failed the test of significance.

## **Performance**

The performance of the firm is typically included in the assessment of CEO Compensation. The proxy for performance used differs amongst scholars. I opted for Return on Assets (ROA), as used by Bøhren & Strøm (2010) in their study of governance and politics. The logic here is that a CEO is rewarded, to some extent, according to the performance of the firm under his watch. This is why a traditional component of CEO Compensation is performance-based. The relationship between these two components was found to be positive but not to a significant degree.

My second proxy for performance is based on the size of the firm, but unlike ROA, is not directly related to the performance of the CEO. I opted to present the size of the firm in terms of its market capitalisation, which is the product of the number of shares in issue and the market value of the share. It goes without saying that large firms, such as multinational corporations, will have substantially higher market capitalisation than medium-sized firms. To adjust for this discrepancy, I have instead used the natural logarithm of market capitalisation (LnMarketCap) to provide a more balanced assessment. This relationship was found to be statistically significant in a positive direction. What this says is simple: The larger the firm, the higher will be CEO Compensation, all else being equal.



## Determinants of CEO Compensation In South Africa

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### *Chapter 6: Summary and Conclusion*

#### 6.1 **SUMMARY**

At the outset of this paper, the research question was framed as follows: Which variables **significantly** affect the level of CEO Compensation? Of the 15 variables proposed, only 4 were able to survive the rigorous battery of tests. Those variables are summed up as follows:

- ❖ The age of the board
  - CEO Compensation is predicted to be higher as board age increases
- ❖ The size of the firm
  - CEO Compensation rises as firm size increases
- ❖ The nationality of the Chairperson
  - CEO Compensation is higher in cases where the Chair is South African
- ❖ Whether the Chairperson is an executive
  - CEO Compensation is predicted to be lower in the event that the Chair is executive

The most conspicuous of these results is the assertion that CEO pay is higher when the Chairperson of the board is local. Theoretically, the opposite should be true. This may suggest that the South African business environment has unique factors which nullify the traditional proposition. Determining why this is the case is a potential area of future research.

As for the status of the Chairperson being executive or not, while being statistically significant, was determined to have substantial multicollinearity. The predictive power of the parameter was therefore compromised and so should not be used for further extrapolation. Instead, future models must include an interaction term to take into account the correlations among independent variables.

The body of literature regarding CEO Compensation in South Africa as a factor of boardroom dynamics is somewhat limited, giving this country-specific project a somewhat exploratory flavour. Nevertheless, I hope to have made a useful contribution to the field of CEO pay studies at large. South Africa does, after all, enjoy the status of an emerging market and any information

pertaining to its corporate dynamics will assist stakeholders in understanding how things are done in the country.

The model itself explains under half of all variations in CEO Compensation, which implies that there is still a treasure chest of discoveries to be made in determining what causes its fluctuations. I would encourage researchers to delve deeper into this matter so that a more robust model may be created.

## **6.2 LIMITATIONS OF THE STUDY**

The limitations of this thesis have by and large been driven by time constraints in the data collection process. In a project of this nature and theme, one would ideally want a sample size as close to the population size as possible. It was not possible in the case of this thesis, where the sample is representative of about 10% of the sample frame. I attempted to make the sample as representative of the population as possible by incorporating firms from a wide cross-section of industries, while giving due recognition to the large listing presence of mining sector on the stock exchange. It is not a watertight solution and so does leave open the possibility of ‘‘noise’’ or distortions.

## **6.3 CHALLENGES**

In hindsight, I must concede that embarking on a research project of this scale was rather ambitious given the time constraints. The lion’s share of the project’s duration was dedicated to collecting and organising data. The source of the data came in the form of annual reports in electronic format. Navigating the trove of documents in the quest for the few needles in the haystack proved to be an agonising and painstaking process. Bear in mind that the presentation format of annual reports is not homogeneous from one company to the next, or even from year to year. There were also several cases where the annual reports did not provide all the data necessary to complete the model, resulting in numerous instances of missing data. While the premise of this task was that it be carried out in a bipartisan fashion, the reality was to the contrary. Any potential benefits of synergy were ultimately lost.

## **BIBLIOGRAPHY**

### BOOKS, JOURNALS and ARTICLES

Bøhren, Ø. Strøm, R. Governance and Politics: Regulating independence and Diversity in the Board Room. *Journal of Business Finance and Accounting*. 2010.

Ashley M. Guidroz, Lindsey M. Kotrba, and Daniel R. Denison (2008) *Managerial Power, Stock-Based Compensation, and Firm Performance: Theory and Evidence*. New South Wales.

Eisenhardt, M, K. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57).

Harris, J. ( 2006). How Much is Too Much? In R. W. Kolb, *The Ethics of Executive Compensation*.

Roth, T. A., Dugan, D., & Graham, M. (2008). Effective Executive Compensation. *AMACOM*.

Friedman, M. 1970. The social responsibility of business is to increase its profits. *The New York Times Magazine*, **33**: 122–126.

Hayward, M. L. A., Rindova, V. P., and Pollock, T. G. 2004. Believing one's own press: the causes and consequences of CEO celebrity. *Strategic Management Journal*, **25**(7): 637–653.

Golafshani, N. *Understanding Reliability and Validity in Qualitative Research. The Qualitative Report*. 2003. Volume 8 Number 4 December 2003 597-607.

Lincoln, Y., Guba, E.G. *Naturalistic inquiry*.1985.  
Sage Publications. Beverley-Hills, California.

Jensen, M. C. 2002. Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, **12**(2): 235–256.

Jensen, M. C. and Meckling, W. 1976. Theory of the firm: managerial behavior, agency



costs and ownership structure. *Journal of Financial Economics*, **3**: 305–360.

Kakabadse, A., Morsing, M. Corporate Social Responsibility: Reconciling Aspiration with Application. 2006. Palgrave Macmillan Publishers, New York.

Rawls, J. 1971. *A Theory of Justice*. Cambridge, MA: Harvard University Press.

Mishra, C. S., McConaughy, D. L., and Gobeli, D. H. 2000. Effectiveness of CEO pay-for-performance. *Review of Financial Economics*, **9**: 1–13.

Blasi, J. R. and Kruse, D. L. 2003. *In the Company of Owners: The Truth About Stock Options and Why Every Employee Should Have Them*. New York: Basic Books.

Murphy, K. J. 1999. Executive compensation. In O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*. Amsterdam: Elsevier, pp. 2485–2563.

Gregoriou, G.N., Ali, P. *Corporate Governance: An International Perspective after Sarbanes-Oxley*. February 2006. John Wiley and Sons Inc.

Mandela, N.R. *South Africa's Future Foreign Policy*. Council on Foreign Relations. November 1993.

The Institute of Directors in Southern Africa. KING REPORT ON CORPORATE GOVERNANCE FOR SOUTH AFRICA. 2002. Parktown 2193. South Africa.

The Institute of Directors in Southern Africa. KING REPORT ON CORPORATE GOVERNANCE FOR SOUTH AFRICA. 2009. Parktown 2121. South Africa.

## INTERNET SOURCES

News24.\_

Last Traded:

Change:

Volume:

Market Cap:

Prices are delayed by 15min.

\_\_\_\_\_

SA bosses best off in the world. Available Online:

<http://www.fin24.com/Economy/SA-bosses-best-off-in-the-world-20101126>

(Accessed 26 November 2010)

News24. Business worried about salary cap. Available Online:

<http://net-145-057.mweb.co.za/Economy/Business-worried-about-salary-cap-20101124>

(Accessed 26 November 2010)

Department of Trade and Industry, Republic of South Africa. Black Economic Empowerment.

Available [Online]:

<http://www.dti.gov.za/bee/complete.pdf>

Grant Thornton. A brief overview of King II. Available [Online]:

[www.gt.co.za/Publications/Effective-directors-guide/kingII.asp](http://www.gt.co.za/Publications/Effective-directors-guide/kingII.asp)

