

An archetypal analysis of Chief Executive Officers in the mining sector according to their remuneration and company performance: A Resource-Based view

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By

Matthew Sebastian King

Student Number: G12k4852

Supervised by: Professor Owen Skae

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Abstract

The growth in the mining sector post 1994 saw many CEOs enjoy exorbitant levels of financial prosperity particularly in relation to the mining workforce. The pay disparity between the remuneration of CEOs and the average worker contributed to instability and labour unrest. While there has been extensive research conducted on the relationship between CEO remuneration and company performance, questions around the justification of exorbitant CEO remuneration levels have persisted. One of the shortcomings of these studies have been understanding company performance as limited to financial indicators.

For this reason, Resource-Based theory was used in this study to focus on CEOs as tangible, heterogeneous and immobile assets, who could influence company performance by creating a firm's competitive advantage. In order to investigate this, a mixed-method research design was utilised to ascertain the relationship between CEO remuneration and company performance. The data for the quantitative study was collected using an archival method by sourcing secondary data obtained from the sampled companies' annual integrated reports. Statistical tests were performed to test the relationship between CEO remuneration and company performance of mining companies listed on the JSE over the period of 2014 to 2018.

This was followed by the qualitative thematic analysis which utilised online information published about four CEOs sampled according to their pay/performance relationships (namely high earning/high performing; high earning/low performing; low earning/high performing and low earning/low performing). The VRIO framework was utilised in conjunction with the thematic analysis to assess the extent to which each of the selected CEOs could be identified as valuable, rare, inimitable and organised. Finally, the demographic characteristics and leadership attributes of these CEOs were collectively aligned to particular leadership archetypes.

This study found that despite company performance levels experiencing negative growth and volatility, CEO remuneration remained stable and experienced positive growth throughout the period. The qualitative analysis and the application of the VRIO framework was conducted in order to explore reasons why this disparity may continue to exist. The analysis of the differences in demographic characteristics and leadership attributes between these four CEOs provided a possible justification for the disparity in the levels of remuneration. It was found that some CEOs high levels of remuneration could be justified by virtue of their well-developed leadership skills. In particular CEOs need softer skills (such as communication, openness, relationship-building and stakeholder engagement) and to draw on the communicator, builder and coach archetypes in order to create a sustained competitive advantage within companies.

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List of Acronyms

CEO – Chief Executive Officer

EBITDA – Earnings Before Interest Taxation Depreciation and Amortisation

FCPA – Foreign Corrupt Practices Act

HE – High Earning

HEPS – Headline Earnings Per Share

HP – High Performing

JSE – Johannesburg Stock Exchange

LE – Low Earning

LP – Low Performing

MBA – Master of Business Administration

MPRDA – Mineral and Petroleum Resources Development Act

RBT – Resource-Based Theory

RBV – Resource-Based View

Rev. – Revenue

ROA – Return on Assets

ROE – Return on Equity

SA – South Africa

SPSS – Statistical Package for the Social Sciences

STI – Short Term Incentive

UNISA – University of South Africa

US – United States

VRIN – Valuable, rare, Inimitable, Non-Substitutable

VRIO – Valuable, Rare, Inimitable, Organised

1. CHAPTER 1: INTRODUCTION

1.1 Research context

The growth of the platinum industry in Rustenburg post-1994 saw many CEOs enjoy the financial prosperity which came with the platinum boom. In contrast, a workforce which was divided along ethnic, racial and regional lines, grew frustrated at the dire working conditions and low wages (Twala, 2012). This was exacerbated in 2012 when the infamous Marikana Massacre occurred on the 16 August. In a very short space of time 34 people were killed (and at least 78 were wounded) by South African police officers using assault rifles (Twala, 2012). The incident has been identified as a watershed moment within the democratic period of our history. Many scholars argue that this South African tragedy had its roots in the growing and continued inequality experienced in the mining sector (Twala, 2012).

In 2013 the largest three mining companies in South Africa, Anglo American Platinum, Impala and Lonmin paid their CEOs Chris Griffith, Terence Goodlace and Ben Magara, 17.6, 17.5 and 12.9 million rand respectively. This payment was despite all three companies experiencing a decrease in performance levels (Janse Van Vurren, 2014). More recently, Griffith has climbed to a salary amounting to 32 million rand with his remuneration committee chairperson, Nombulelo Moholi, stating that the increase was reasonable owing to the fact that their financial performance had exceeded expectations in 2017.

In contrast to these high levels of remuneration, the lowest paid underground workers were receiving a basic wage of approximately seven thousand rand per month (Faku, 2018). In 2017 the Minerals Council of South Africa reported that the mining sector employed 464 667 who in turn supported 4.5 million dependants. These numbers reflect that South Africa depends significantly on this sector and can therefore not afford the continued instability. In this context many researchers have argued that South African labour unrest is largely due to the difference in remuneration levels received by executives and the ordinary worker (Bussin, 2018). Kirkpatrick (2009) suggests that these compensation practices should be regulated by government given the local complexities of inequality, poverty and unemployment. The King IV Report on Corporate Governance (2016) was developed in order to ensure that fairer

executive remuneration¹ practices are carried out by South African companies' respective boards. Remuneration sensitivity has become an even greater topic of interest in South Africa with remuneration committees being a prerequisite for all JSE listed companies (King, 2016). The steady decline in mining productivity in South Africa as well as continuous labour unrest has led to many questioning the justification of remuneration of the CEOs who spearhead the South African mining sector (Bussin, 2018). Bussin (2018) found that there was a moderate to strong relationship between CEO compensation and company performance. In other words, CEOs remuneration was proportionally determined by the manner in which their company performed. However, he acknowledged that these findings may be due to the size of the organisations being assessed (Bussin, 2018).

The apparent disparity between what CEOs are being paid and the actual performance levels of their companies has been a global concern. This has stimulated both quantitative and qualitative investigations about how to measure the value of CEOs. Qualitative research which tried to identify the characteristics which are thought to make CEOs valuable has been undertaken by Stamoulis & Mannion (2012). Furthermore, the CEO Genome Project was established with the aim of identifying characteristics of CEOs that could lead to high-performance (Botelho, Powell, Kincaid & Wang, 2017). The findings of these and other studies are described in more detail in Chapter 2.

The level of remuneration of CEOs has been justified by focussing on the level of the performance of CEOs in the mining sector (Bussin, 2018). However, the validity of looking at performance measures alone as justification for remuneration is questionable. For the purposes of this research study it was therefore decided to apply Resource-Based theory to enhance the assessment of the CEO characteristics and potentially provide suggestions about what kinds of leadership archetypes can be identified. The application of Resource-Based theory and specifically the VRIO (Valuable, Rare, Inimitable, and Organised) framework (Barney & Wright, 1998) will be discussed in more detail in the section which follows.

¹ In general, the terms compensation and remuneration have been used interchangeably in the literature. However strictly speaking the term "remuneration" means compensation or pay, but it has a broader meaning than just basic pay. It can also include not just base salary or bonuses but commissions and other payments, as well as deferred compensation or benefits paid under the terms of an employment contract. In this project the broader meaning of the term remuneration is what is under investigation.

1.2 Proposed theoretical framework: Resource-Based theory

A company's performance is characterised by the available resources at its disposal and how effectively it is able to utilise these resources to achieve its organizational goals. Resource-Based theory puts forward the idea that a company's competitiveness is achieved through the combination of maximising both resources and capabilities. While all resources are equally important, the importance of human resources as the only thinking resource has been highlighted in the last few decades (Pesic, Milic & Stankovic, 2012).

The successful realisation of the CEO's role assumes that the CEO (as an important strategic human resource) has fulfilled certain conditions which companies can leverage to create a sustained competitive advantage. These conditions are encapsulated within the so-called VRIO framework (Barney & Wright, 1998). The study will thus use Resource-Based theory to focus on CEOs as tangible, heterogeneous and immobile assets, who are at the heart of creating and sustaining the firm's competitive advantage.

1.3 Problem statement

There has been extensive research conducted on the relationship between CEO remuneration and company performance. However, questions around the justification of exorbitant CEO remuneration levels have persisted. Particular CEOs have the demographic characteristics and leadership attributes which do in fact add sustained competitive advantage to the company and it can be argued affect the high level of remuneration. However, establishing what those multiple and dynamic CEO leadership attributes are has not received sufficient attention. In order to ensure sustainability and improve growth within the mining sector which is so vital to the economy of South Africa, this study aims to gain a better understanding of these attributes (through using Resource-Based theory and the VRIO framework) and ultimately clustering these attributes into leadership archetypes.

1.4 Research goal

The research goal of this study is to establish defining demographic characteristics and leadership attributes of four CEOs by analysing available online information published about them. These four CEOs will be selected from each quadrant of a graph which shows the

permutations of the pay/performance relationship, namely: high earning/high performing (HE/HP); high earning/low performing (HE/LP); low earning/high performing (LE/HP) and low earning/low performing (LE/LP).

The goal of this research can be broken down into three objectives as listed below.

1.5 Research objectives

1. To ascertain what the relationship is between executive compensation and company performance in the mining companies listed on the JSE over the period of 2014 to 2018.
2. To use the VRIO framework to assess the extent to which each of the selected CEOs is a resource which provides the company with a sustained competitive advantage.
3. Identifying the demographic characteristics and leadership attributes of these CEOs that would collectively form a leadership archetype.

Following on from this goal and objectives, chapter which follows is the literature review. Chapter 2 will focus on research conducted on the two relevant concepts namely executive compensation and company performance. Resource-based theory and the VRIO framework will also be explained in this chapter followed by a review of literature conducted about demographic characteristics and attributes which inform leadership archetypes.

2. CHAPTER 2: LITERATURE REVIEW

2.1 Background

Many working class South Africans have become increasingly frustrated with what is seen as a slow rate of economic transformation (Buhlungu, 2010). The Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA) was legislation which was passed to rectify what was seen as unequal distribution of natural resources. While South Africa became well-known for a progressive labour relations culture soon after democratisation most scholars agree that Marikana led to the collapse of positive relations. Unity amongst workers collapsed and heightened animosity between workers and management escalated. This animosity was complex and was exacerbated by the increasing wage gap between these groups (Gumede, 2015).

Given this contextual information the literature which will be reviewed for this study includes: executive remuneration; company performance and the relationship between these two within the mining sector. Following on from that Resource-based theory and the VRIO framework (as it is most applicable to this project) will be described. Finally, research conducted on CEO demographic characteristics and leadership attributes will be described followed by a brief review of research conducted on leadership archetypes.

2.2 Executive remuneration

As mentioned in the preceding section, the average executive remuneration in South Africa has risen by unprecedented levels over the last three decades. This has fuelled the public interest into the intricacies of the compensation-setting process (Frydman & Jenter, 2010). While some view the high earning CEOs as a consequence of their ability to set their own pay levels, others understand this phenomenon as the mechanism through which firms are able to attract and retain talent (Frydman & Jenter, 2010). CEO remuneration can be understood in two distinct time periods (pre and post 1970). Before 1970 CEOs experienced a much lower relative level of pay with moderate pay-performance sensitivity and little difference in the level of CEO pay within and between companies, whereas, after 1970 pay levels have grown exponentially with a wide range of compensation levels between and within companies (Frydman & Jenter, 2010). Share options have also drastically changed the remuneration landscape and created an

environment where CEOs have closer ties to the firms they represent (Frydman & Jenter, 2010).

Gabaix and Landier (2008) developed a model on CEO compensation in the United States. This found that in recent times the size of companies has been the biggest factor in CEO pay. They stated that the “six-fold increase of U.S. CEO pay between 1980 and 2003 can be fully attributed to the six-fold increase in market capitalization of large companies during that period” (Gabaix & Landier, 2008, p.1).

South Africa, with a Gini Coefficient of 64.2 % replaced Brazil as the most unequal society (with the gap between the poorest and richest individuals the highest in the world) (Statistics South Africa, 2012). There are particularly large disparities between the corporate fraternity and the average working-class employee remuneration levels (CEO vs Employee Salaries at South Africa’s 25 biggest companies, 2017). Using the 25 biggest companies listed on the Johannesburg Stock Exchange as the basis for their study, it was found that 1.3million employees were paid salaries amounting to R570 billion with R1.4 billion paid out directly to the CEOs of those firms (CEO vs Employee Salaries at South Africa’s 25 biggest companies, 2017). To put this in perspective, the average CEO gets paid R55.3 million annually whereas the average employee will receive R589, 850. This means that the CEOs are receiving 95 times as much as the average employee (CEO vs Employee Salaries at South Africa’s 25 biggest companies, 2017). The CEO pay-setting process which includes both short and long-term incentive schemes has led to disproportionate pay-outs and increased the (already enormous) pay gap experienced by company employees and CEOs. One argument for the existing pay disparity is the fact that CEOs are adding value to their respective companies and that this justifies to some extent the level of remuneration. Barney (1998) suggested that the CEO can be seen as a valuable, rare, inimitable and organised (VRIO) resource at the heart of creating and sustaining a company’s competitive advantage. This will be discussed in more detail later under “CEO Demographic Characteristics and Attributes”.

International research into remuneration of CEOs in 861 listed companies in the U.S (Baeten, 2016) shows that the pay/performance relationship is not always a simple inverse proportion. In that study it was found that CEOs in the best performing companies were in fact receiving relatively less than CEOs in mid-to-low performing companies. It was also concluded that the pay-ratio of these top performing CEOs was also substantially lower meaning that the gap between the CEO remuneration and the average employee was smaller (Baeten, Balkin & v.d.

Berghe, 2011). There is evidence to suggest that a trend has emerged among top CEOs which may explain this phenomenon. In 2015 LinkedIn CEO, Jeff Weiner, forewent his own \$14 million dollar bonus in an effort to try and boost company morale (Hansen et. al., 2013). Similarly, the CEO of Twitter, Jack Dorsey, gave away \$200 million dollars of his own shares to his employees (Hansen et. al., 2013). Rick Holley, the CEO of Plum Creek Timber donated his \$ 2 million bonus to the companies' shareholders because he believed that he should not be rewarded if the shareholders were not seeing an increase in value on their investments (Hansen et. al., 2013). In other words, top CEOs who are forfeiting their bonuses and shares are closing the gap between themselves and the average worker and thereby boosting company morale and practicing good governance.

In the section which follows some research outlining the background to understanding company performance will be described.

2.3 Company performance

Conventionally company performance has been measured by market performance indicators such as the All-Share index. By this measure the worst five-year period for the JSE in the previous five decades has just been concluded (Overberg Asset Management, 2018). Around 65% of shares on the JSE have dropped by over 20%, meeting the definition of being in a bear market. The drop in investment confidence has been influenced by South African-specific concerns surrounding land expropriation legislation and sluggish economic growth which is also attributable to a more generalised global aversion to emerging market risk (Bohlmann et al., 2015).

As opposed to these market performance indicators to measure company performance, the resourced-based view of the firm focuses on the dynamic capabilities of the CEO which all affect performance. In their evaluation of different performance measurement frameworks, Yadav, Sushil and Sagar (2013) looked at performance measurement frameworks which had developed over a 20-year period (1991-2011). This resulted in the creation of multiple hypotheses which showed that there have been shifts from financial to integrated perspectives in the 1990s, and operational to strategic perspectives in the 2000s. In conjunction these shifts have resulted in a performance measurement review and attempted development of "effective, integrated, and dynamic performance measurement systems" (Yadav et. al., 2013:25). This is intended as a complementary perspective to the accounting measures already used and aims to

provide business leaders with an opportunity to develop new business plans and help them compete in an ever-changing and highly competitive business landscape.

While the pay-performance relationship has been extensively researched in South Africa with a growing income inequality gap, labour unrest and political instability, this topic is repeatedly being thrust into the limelight. The question that is often posed is about the disconnect between the value CEOs are creating and what they are being paid. In the section which follows the relationship between the preceding two sections namely executive remuneration and company performance will be discussed.

2.4 The Relationship between executive remuneration and company performance

What has been shown internationally it is that the relationship between performance and CEO compensation is not linear. A recent study showed for example that in the top 100 performing companies in the world (based on shareholder returns and market capitalisation) the CEO who had the highest short-term compensation package came in at number 60 in terms of performance. In contrast, Amazon CEO Jeff Bezos (the highest performing company on the list) comes in at number 66 of the 68 CEOs where remuneration data is openly available in terms of the amount of short-term compensation he received (Hansen et. al., 2013).

The lack of a clear correlation between CEO remuneration and company performance is supported by Crotty (2019) who conducted research of the top JSE firms in South Africa. While the SA business cycle had experienced a 65 month period of decline due largely to a lack of acceptable governance, higher than normal levels of executive pay have remained constant (Crotty, 2019). Nick Holland, CEO of one of the biggest South African gold mines Gold Fields, experienced a 45% increase in total remuneration earning himself R39.7million in the 2018 financial year despite the company experiencing a drop in share price of -8.8% (Crotty, 2019).

Owing to the sheer size and instability of the mining sector in South Africa, the relationship between CEO remuneration and company performance within this sector is of particular interest.

In contrast to the findings of Bradley (2013), Bussin (2018) found that a moderate to strong relationship existed between CEO remuneration and company performance within the South African mining sector (2009-2013). Bussin (2018) noted that performance has however, been

put under pressure by the increasing cost of operations. He also found that organisational size had a significant impact on CEO remuneration levels.

In the section which follows the theory which will be used to understand the findings in this project will be described.

2.5 Theoretical framework: Resource-Based theory

Resource-based theory (RBT) is widely acknowledged as one of the most prominent and powerful theories for describing, explaining, and predicting relationships within organisations. Like many theories, RBT has undergone an evolution that mirrors the first three stages of the product life cycle namely: introduction, growth, and maturity.

In 2011, Barney, Ketchen and Wright argued that there are strong indications that RBT has reached maturity as a theory. Importantly they indicate the significance of the fact the scholars are increasingly using the term resource-based theory instead of resource-based view (a much less precise term). In addition, this theory has had transdisciplinary impact in that there have been prominent theory developments in other domains (such as knowledge-based view or the natural-resource-based view of the firm) and organizational economics (Combs & Ketchen, 1999).

As early as 1991, the resource-based view (RBV) of the firm was flagged as important for highlighting that resources and capabilities are important for understanding the sources of sustained competitive advantage for firms. Its popularity was manifest in how rapidly it was diffused throughout the strategy literature (Priem & Butler, 2001). The two original scholars in this field were Wernerfelt (1984) and Barney (1986). While Wernerfelt emphasized resources and diversification, Barney provided the organizing framework (called VRIN and later changed to VRIO as explained below).

This framework continues to be a much utilised basis for many RBT studies. This original framework was encapsulated in the acronym VRIN by focusing on the following four essential qualities: Value (V); (resources that can bring value can be a source of competitive advantage); Rareness (R) (resources that are rare and can provide a competitive advantage); Inimitability (I) (ideally resources that cannot be easily replicated by competing businesses) and Non-substitutable resources (N) (a resource which cannot be easily substituted by any other resources). Barney later refined this view by changing VRIN to VRIO - very simply Non-

substitutability was changed to Organization (O), that is whether the firm is organized in such a way as to exploit the resource (Barney, 1991).

According to Pesic, Milic and Stankovic (2012) human resources (such as a CEO) are important because it is the only resource which thinks and reflects and is characterized by knowledge, abilities and experience. When the VRIO framework is applied to the CEO as a resource, it can be used as a useful tool to use to estimate whether or not the CEO is performing in a way which provides the company with sustained competitive advantage. The application of the VRIO framework to the CEO as a resource (Pesic, Milic & Stankovic, 2012; Alexandru-Ilie, Alexandru, Iulian & Weiss, 2018) is outlined below (Table 1).

Table 1: VRIO framework and description of CEO demographic characteristics and leadership attributes

Framework	Description of CEO characteristics and attributes
Value	A CEO who is valuable is able to protect the company from threats and simultaneously exploit all opportunities in order to develop the company. A valuable CEO is often an innovator and pioneer who develops the company to be more productive, profitable and focused on innovation.
Rare	A CEO who is rare is able to display unusual attributes which are uncommon amongst their peers. This includes rare demographic characteristics, leadership attributes, knowledges and abilities which contribute to creating a sustained competitive advantage within the company.
Inimitable	A CEO who is have an attribute or characteristic which is very difficult or impossible to replicate, is inimitable. Inimitable resources fall into two categories namely “tangible” or “intangible”. The latter is for obvious reasons difficult to define (and hence more difficult to imitate). These difficult to replicate attributes of characteristics refer to soft skills which can hardly be imitated such as the creation of company cultures or the ethos of the company and relationships between all stakeholders.
Organised	A CEO can become a competitive advantage if the company is well organised. This refers to a CEO who has all the supportive systems (such as sufficient remuneration for incentivisation or motivation purposes), administrative processes and procedures in place in order for them to

	<p>achieve their full potential. This refers to a CEO who submits to continuous professional development; strategic management processes; incentives and rewards which contribute to the CEOs motivation and commitment to the company.</p>
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Resource-Based theory will be used in this project to understand the CEO as a resource by applying the VRIO framework to the information published online about four specific CEOs. This will be done in order to identify demographic characteristics or leadership attributes which contribute towards creating a competitive advantage. The section which follows will thus cover demographic characteristics, leadership attributes and conclude with a description of how these leadership attributes can be grouped into archetypes.

2.6 CEO demographic characteristics and leadership attributes

Theorists have traditionally assumed that CEOs can have a wide range of talents and abilities that will have an effect on company performance. For example, Murphy and Zabochnik (2004), and Gabaix and Landier (2008) all model CEOs with different attributes. Many empirical studies, such as Bennedsen, Pérez González, and Wolfenzon (2012) have shown that the attributes of specific CEOs do matter. However, neither theoretical nor empirical studies provide much guidance concerning which particular characteristics and abilities are important for corporate governance and performance (Kaplan, Klebanov & Sorenson, 2012).

Very often in research studies on the topic of CEO characteristics there are a wide range of definitions used to refer to “characteristics”. In other words, “characteristics” are sometimes defined at a basic demographic level to imply gender, age or educational level (Kaur & Singh, 2018; Ignatius, 2014). In other studies, characteristics are defined more generally as an attribute, a personality trait or an orientation (Peni, 2014). For the purposes of this review of the literature we will distinguish in the sections below between studies which focus on demographic characteristics and leadership attributes. The latter is more pertinent to this research project as they are more likely to be VRIO characteristics and will therefore be dealt with more comprehensively.

2.6.1 Demographic characteristics

The demographic characteristics of CEOs are important because the aim is to ascertain whether or not they influence the way in which they manage their companies. Demographic characteristics are measured in a different way when used in conjunction with VRIO. The concern is not whether the CEO having one demographic characteristic outperforms another characteristic but rather whether or not that characteristic enhances the CEOs value, rarity, inimitability or organisation.

The Demographic characteristics which have often been studied in relation to company performance are age, gender; nationality (ie whether the CEO is a local or a foreigner in that context) and the level of education of the CEO. Some findings with regards to these demographic characteristics will be briefly outlined below.

Despite the fact that one of the most commonly studied demographic characteristics in the literature is gender (Kaur & Singh, 2018) the evidence about a relationship between the gender of the CEO and company performance remains inconclusive. Kaur and Singh (2018) found that a positive correlation between having a female CEO and company performance does exist and that female-led companies experienced their propensity for risk-taking being reduced. This is supported by the research conducted by Peni (2014) who also proved that female CEOs were generally more in touch with consumer behaviour and needs and therefore created a competitive advantage for the firms which they led. In contrast Amran, Yusof, Ishak, and Aripin (2014) found that gender (and age) does not have any effect on performance.

Peni (2014) focus on experience found that age is a significant variable in the relationship between CEO demographic characteristics and performance. In that study (which used a sample of 500 firms) produced evidence to suggest that experience and demographic characteristics of the CEO were closely linked to the performance and value of the respective companies. The findings suggested that there is a positive relationship between the CEOs experience (and age) and company performance. They argue that the accumulation of knowledge and enhanced ability to oversee operations are invaluable resources to the firm which are likely to improve financial performance (Peni, 2014). In addition, Peni (2014) also found that older CEOs were more risk averse in their business practice which ultimately affected company performance (both positively and negatively).

There are other significant demographics which impacted firm performance negatively and positively. It was found that foreign directors who lacked familiarity with the local managerial norms, rules, and regulations impacted performance negatively. For example, of the top 100 CEOs, as sampled by Ignatius (2014) only 13 were of a nationality that differed from the country in which the company was located (Ignatius, 2014). Interestingly, a positive relationship emerged between a higher level of education and future company performance (Peni, 2014). This was supported by the fact that of the top 100 CEOs ranked in 2014, a quarter had MBA's and nearly as many had high-level engineering degrees (Ignatius, 2014).

However, many scholars agree that CEO performance is complex and cannot be reduced to a single demographic characteristic (such as age, gender or level of education). Kaur and Singh (2018) argued for example that the performance is not necessarily determined by leadership and that respective industries and corporate environments play a much more significant role. They suggest that the CEO performance is constrained by their specific corporate environment and that company performance is only marginally affected by the CEO's demographic characteristics. The VRIO framework may however show how a particular demographic characteristic in one context might very well enhance performance. The research which will be reviewed in the section which follows will focus on CEO attributes which pertains more directly to the objectives of this project.

2.6.2 Leadership attributes

Studies to understand the attributes of CEOs have often been undertaken within the discipline of psychology. Such studies looked at how particular pathological personality traits (like narcissism) could be linked to effective leadership skills of CEOs. Narcissism is generally considered to be pathological in that it includes egotistical, manipulative and exploitive behaviour. For example, Petersen, Galvin and Lange (2012) explored narcissism in relation to the concepts of servant leadership and found that it was not positively correlated. However, Rosenthal and Pittinsky (2006) suggested that since many effective CEOs fit the lay description of narcissistic personalities there may be some traits (like boldness and a high need for influence and achievement) which make CEOs more likely to be successful. Galvin, Waldman, and Balthazard (2010) cite, "the passion, boldness, daring, and risk taking, and confidence" of typical narcissists as possibly inspirational in the workplace. Overall the empirical support for a positive influence of narcissism on leadership is limited and scholars have turned towards the

notion of stakeholder engagement to show that narcissistic individuals have little concern for others and therefore are very unlikely to be concerned about developing equitable exchange relationships with others (Resick, Whitman, Weingarden, & Hiller, 2009).

A 10-year study by *Harvard Business Review* (Norwich University Online, 2019) found that effective CEOs demonstrate the four key behaviours namely being decisive; engaging stakeholders; adapting proactively and being reliable by consistently doing what they had promised to. It is almost impossible to identify the single most successful trait that a top-performing CEO needs. In addition to the above they must also be excellent communicators who can inspire others by communicating clearly. They need an unambiguous understanding of morals and ethics so as to inspire others, be able to build trust, and earn the respect of those they are collaborating with.

Stamoulis and Mannion (2012) analysed the psychometric assessments of CEOs by measuring attributes such as communication; decision-making ability; and relationship building skills. These assessments measured 60 common attributes which distinguished CEOs from other executives. CEOs differ most from other executives in three areas namely they were more willing to take risks; bias towards action; and their ability to 'read' people (Stamoulis & Mannion, 2012). Nine characteristics were identified as unique to high performing CEOs. These nine (most notable) differences were divided into three categories namely: being forward thinking; being intrepid and being interested in team building. Forward Thinking is conceptualised as the ability to plan for the future; being intrepid is defined as the ability to perform effectively in complex and difficult environments while team building is understood as the ability to achieve success through others (Stamoulis & Mannion, 2012).

Identifying the importance of these three categories of CEO attributes is consistent with the findings of Botelho et. al. (2017) who found that the most successful CEOs were likely to possess four attributes that lead to superior performance, namely decisiveness; stakeholder engagement; the ability to adapt and reliability. CEOs who possessed decisiveness were twelve times more likely to achieve a high level of performance in their role as CEO (Botelho et. al., 2017). Those who could engage with and understand the priorities of the stakeholders performed 75% better than those CEOs that did not engage or engaged only certain stakeholders. The third attribute (namely the ability to adapt) was shown to make the CEO of a firm 6.7 times more likely to perform well (Botelho et. al., 2017). Showing reliability as a

CEO also emerged as significant to good performance. The CEOs who were identified as highly reliable were twice as likely to be appointed and fifteen times more likely have success over the course of their career as CEO (Botelho et. al., 2017).

In research conducted later, Stamoulis (2016) again utilised detailed psychometric profiles of 200 CEOs (which were based on the results from three rigorous psychometric tests). Three attributes emerged as consistent with successful CEOs namely urgency and purpose; the ability to prioritise and humility. Urgency and purpose was conceptualised as an attribute of CEOs who displayed an eagerness to move forward (and can possibly be linked to Botelho's (2017) findings around decisiveness). CEOs who displayed urgency and purpose were found to be more successful than their counterparts who were less proactive in their decision-making.

Another attribute seen as fundamental to successful CEOs is their ability to prioritize. Stamoulis (2016) found that CEOs who were able to keep the 'bigger picture' in mind while prioritizing the core issues while conducting business were likely to become successful CEOs.

The final attributed which emerged from the research conducted by Stamoulis (2016) was humility. In other words, Stamoulis identified that CEOs who were more open-minded; wanted to gather additional information; and continuously learn from others, were more likely to become successful candidates. From these results emerged a number of interesting CEO profile paradoxes. The three standout paradoxes among high performing CEOs were that they are considered strategic yet tactical; tough yet emotionally sensitive; and decisive yet inclusive (Stamoulis & Mannion, 2012). It would seem that the ability to embrace effective and appropriate risks and have the ability to act on opportunities in high stakes situations is one of the most important traits that separate CEOs from other senior executives.

These paradoxes suggest that CEOs need to possess a broad range of capabilities and know when to utilise one opposing capability over another to achieve the strategic outcome. One can conclude that there is not one ideal profile for the successful chief executive. Boards obviously have to assess their needs before deciding on appointments. Every context is different and one company may require extroversion while others may benefit from a leader who can build relationships (Stamoulis, 2016). These broad ranges of capabilities as identified by Stamoulis (2016) might be able to be articulated in a cohesive archetype.

It must be noted that within the literature the terms “archetypes”, “leadership archetypes” or “leadership styles” are often used interchangeably. In the section which follows the research which pertains to these concepts will be explicated:

2.7 Archetypes

Contemporary Archetypal Psychology is still conducted within the Jungian tradition but also most directly related to analytical psychology and psychodynamic theory (even though it departs radically). Within this tradition, archetypes are thought to determine the basic ways that we perceive others and function as individual human beings (Faber & Mayer, 2009; Grutzner, 2011). Archetypal analysis has been used in multiple ways, from formal to non-formal, by qualitative or quantitative analysis, with a descriptive or prescriptive focus depending on the objectives of the research study. The construction of archetypes begins with a process where the researcher identifies relevant characteristics and attributes of the individual. These characteristics and attributes are understood in a broad sense as being symbolic representations (Eisenack, Lüdeke, & Kropp, 2006). Most contemporary researchers who have studied the archetype concept maintain that it is culture, not biology that imparts archetypal models from person to person (McAdams, 2006).

Probert & Turnbull James (2011) have studied how psychological archetypes can also influence perceptions of leadership. Archetypes can be used to create uniformity and standardisation with regard to the characteristics individuals associate with leadership. For instance, there are attributes of leadership (such as honesty and trustworthiness) that are universally endorsed, even though how these attributes are exhibited by leaders could vary from culture to culture.

Most relevant to this study however are organisational leadership archetypes proposed by Kets De Vries (2013). He identified eight archetypes as typically recurring patterns of behavior that could influence an individual’s effectiveness within an organization. They are:

1. the strategist (good at dealing with developments in the organization’s environment by providing vision, strategic direction and outside-the-box thinking);
2. the change-catalyst (leaders who thrive on turnaround activity, love messy situations and respond by re-engineering);
3. the transactor (deal-makers who are skilled at identifying new opportunities and negotiations);

4. the builder (leaders who engage in entrepreneurial activity by creating something new);
5. the innovator (leaders who utilise creative idea generation and possess a great capacity to solve extremely difficult problems);
6. the processor (these leaders operate extremely efficiently and ensure that their organizations are smooth running with structures and systems supportive of the organization's objectives);
7. the coach (a person focussed on leadership as a form of people development by getting the best out of people and creating high performance cultures);
8. the communicator (a leader who operates as a great influencer who has considerable impact on everyone in their surroundings).

The Leadership Archetype Questionnaire (Kets De Vries, Vriegnaud, Agrawal & Florent-Treacy, 2010) was developed and intended to provide a more scientific basis for the identification of the eight leadership archetypes described above.

Despite the differences in the ways in which archetypes have been conceptualised in research it is clear that archetypal influences on thinking are widespread. For this reason, understanding the archetypal leadership styles of a particular potential CEO may be useful in creating a more sustainable employment practice by matching particular archetypes with particular dynamic contexts within the mining sector.

2.8 Conclusion

In this chapter the research which has been conducted on executive remuneration and company performance and the relationship between the two has been reviewed. In addition, the theories most often utilised, the CEO characteristics, attributes and archetypes was briefly outlined. In the chapter which follows the methods (including data collection and analysis) undertaken for this research project will be carefully described.

3. CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The relationship between CEO remuneration and company performance in the South African mining sector has been fairly extensively researched and is often discussed in the media. However, in South Africa's current economic climate more research is needed to understand this relationship and gain a deeper understanding of the dynamic CEO characteristics which could potentially increase productivity and stability in this sector. The suggestion that these CEO characteristics may improve efficiency within the sector supports the argument that the disparity in pay between the CEO and the average worker may be justified.

3.2 Research design

A mixed-method research design was utilised in this project to integrate different ways of understanding the interplay between CEO remuneration and company performance. Mixed methods are especially useful in understanding connections between quantitative results and qualitative findings and can be used to ensure that the limitations of one type of data is balanced by the strengths of another (Creswell, Piano Clark, Gutmann. & Hanson, 2003).

The population, unit of analysis, sampling technique and methods of analysis for each of the quantitative and qualitative sections will be described in the sections which follow.

The first part of the mixed methods approach entailed a positivist, quantitative research design in order to conduct a replication of an empirical longitudinal study as published by Bussin (2018). The previous study utilised data generated from 2009 to 2013. This study used some of the most common remuneration and performance indicators to test for the relationship between CEO remuneration and company performance of 26 companies (using data generated from 2014 to 2018) in the mining companies (as described in the section "Quantitative Unit of Analysis").

3.3 Population and sampling

3.3.1 Quantitative sample

The data for the quantitative study was collected using an archival method by sourcing secondary sources (such as the specific company's annual integrated report) to obtain the financial data required to complete the investigation. All relevant financial information of the mining companies listed on the JSE was sourced from the McGregor BFA database (as was the case with Bussin, 2018). This database has now been renamed the IRESS and is known as the principal global supplier of share market and wealth management systems in many countries including Australia, Asia, New Zealand, Canada, South Africa and the United Kingdom. The study period was between 2014 and 2018 (5 years) and the number of companies used was 26 which meant that 130 cases were studied in total.

3.3.1.1 Unit of analysis

The units of analysis used for CEO remuneration were:

- Basic Salary
- Short-term Incentives (Bonus)

Long-term Incentive (Share options etc.) and Fixed Benefits were not included in this study since as not all Annual Integrated Reports published these figures.

The units of analysis for company performance were:

- Return on Assets (ROA)
- Return on Equity (ROE)
- Headline Earnings Per Share (HEPS)
- Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA)
- Revenue (Rev.)

3.3.1.2 Sampling technique

All JSE listed mining companies were considered in the sample frame. The data was sampled using a time series data method where the same variables were selected from annual integrated reports. The sample consisted of companies which were selected through a purposive sampling

method whereby only companies with the necessary data available and which were published on IRESS were eligible for the sample. Table 2 below provides the list of the 26 mining companies sampled for this study:

Table 2: Sample of mining companies included for the study

African Rainbow Minerals LTD	Impala Platinum LTD
Anglo American Platinum LTD	MC Mining LTD
Anglo American PLC	Merafe Resources LTD
Anglogold Ashanti LTD	Northam Platinum LTD
Assore LTD	Pan African Resources PLC
Bauba Platinum LTD	Randgold & Exploration LTD
BHP Billiton PLC LTD	Resource Generation LTD
Drd gold LTD	Royal Bafokeng Platinum LTD
Exxaro Resources PLC	Sibanye Gold LTD
Gemfield Group LTD	Trans Hex Group LTD
Glencore PLC	Unicorn Capital Partners
Gold Fields LTD	Wescoal Holdings LTD
Harmony Gold	Wesizwe Platinum LTD

There were 36 mining companies listed on the JSE in 2018. To qualify for this study a company needed to have all necessary data available on IRESS database and have been active for the entire duration of the five-year period from 2014 to 2018. For this reason, the ten companies below were excluded from the study.

Table 3: Sample of mining companies excluded from the study

Eastern Platinum LTD	Orion Minerals LTD
Firestone Energy LTD	Rockwell Diamonds Incorporated
Hwange Colliery Company LTD	South 32 LTD
Core Potash PLC	Tharisa PLC
Middle Eastern Diamonds Resources LTD	Union Atlantic Minerals

3.3.1.3 Measurement/analysis instruments

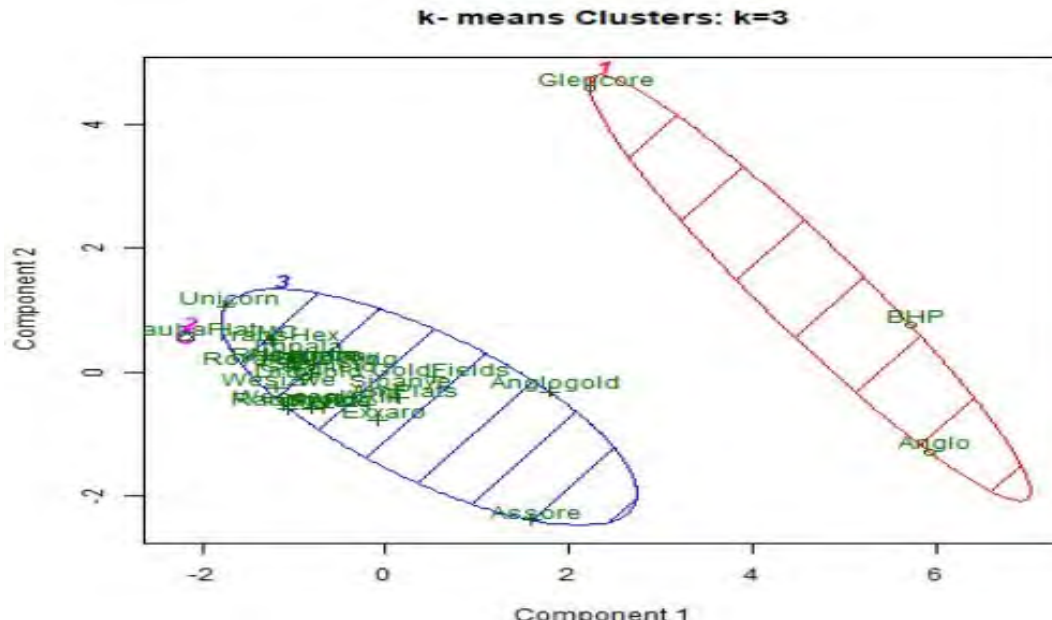
The data was collated in Microsoft Excel and the statistical analysis was conducted using SPSS (version 22). These programs were both licensed through Rhodes University.

3.3.1.4 Quantitative data analysis

The statistical analysis techniques of correlation and multivariate regression analysis were conducted. The Pearson product moment correlation coefficient to determine the sample correlation coefficient for the relationship between fixed pay, STI and organisational performance.

The replicated quantitative study was extended in this mixed methods project by utilising the data of that correlation. An initial cluster analysis was performed for the purposes of identifying four CEOs on which to conduct the qualitative analysis. However, the desired quadrants did not emerge from this cluster analysis as shown in Figure 1 below.

Figure 1: Cluster Analysis of CEO pay/performance relationship



A k-means clustering algorithm was applied to all the company remuneration and performance data (that has been scaled). Component 1 and Component 2 represent all of the measures included in the data-set. The results of Figure 1 above show that there are no obvious number of groups in the data (within groups sums of squares) and the group clusters suggest that there are only two clusters of data.

The first cluster consists of the three companies whose financial results were reported using foreign currency (Anglo American, Glencore and BHP Billiton). The second cluster contained the remaining 23 companies.

To develop satisfactory quadrants it was therefore necessary to introduce a ranking system in which the quadrants were established by ranking companies from 1 to 26 in terms of their remuneration as well as their performance. High performing companies were ranked 1-13 whereas low performing companies were ranked 14-26. In the same way high earning CEOs were ranked 1-13 whereas low earning CEOs were ranked 14-26. Figure 2 below represents the intended pay/performance quadrants which the cluster analysis aimed to create.

Figure 2: Pay/Performance Quadrants

P A Y	HIGH PAY & LOW PERFORMANCE	HIGH PAY & HIGH PERFORMANCE
	LOW PAY & LOW PERFORMANCE	HIGH PAY & LOW PERFORMANCE
P E R F O R M A N C E		

The selected CEOs which emerged from this ranking system are shown in Table 6 in Chapter 4 which follows.

The section which follows will describe the methodology utilised for the qualitative method.

3.3.2 Qualitative sample

3.3.2.1 Unit of analysis

By utilising an interpretive paradigm and a hermeneutic approach to the texts, the thematic analysis ensured that the qualitative findings are grounded in the experiences of the identified CEOs as reported in the media.

3.3.2.2 Sampling technique

To select the four CEOs for the sample, two additional criteria were taken into consideration. Firstly, they needed to have been the CEO of the company for the entire research period. Secondly, they needed to have been the focus of media attention so that sufficient information about them was available online. It was decided that the sample of information for each CEO would consist of at least 20 to 30 newspaper articles, interviews, information provided in the company's integrated reports and videos. It was found that CEOs of low performing companies who received lower levels of pay had very limited media profiles and they were excluded on these grounds. Once these criteria were applied there was a sample frame of nine CEOs

By using the manual ranking of pay/performance and taking the two criteria (mentioned above) into consideration, a sample of four CEOs emerged from the nine. They were Mark Cutifani (as the CEO of Anglo American), Chris Griffith (as the CEO of AmPlats), Nick Holland (as the CEO of Gold Fields), and Zanele Matlala (as the CEO of Merafe Resources). Llewellyn Delport (as the CEO of Transhex LTD) was excluded on the grounds that not enough information on him was available in the public domain.

The data for the qualitative study was collected by using Google as a search engine to identify various online sources. Their name of each CEO and the company were used as the key words in the search. Articles about each CEO was sampled until saturation. That is, repeated searches were conducted until no new information could be found. Articles which contained too little information or no direct quotations from the identified CEOs were excluded.

3.3.2.3 Qualitative data analysis

Thematic analysis has by now been established as a fairly reliable form of qualitative analysis, which has been outlined in a number of texts (Braun & Clarke 2006; Fereday & Muir-Cochrane 2006; Joffe 2012; Willig, 2013). Fereday and Muir-Cochrane (2006, p.82) describe the process of thematic analysis as involving “a search for themes that emerge as being important to the description of the phenomenon [under investigation]”, and therefore, as constituting “a form of pattern recognition within the data”. Braun and Clarke (2006, p.82) propose that “[A] theme captures something important about the data in relation to the research question, and represents

some level of patterned response or meaning within the dataset.” Both of these definitions make reference to identifying a pattern which suggests that a theme refers to a particular, recognizable configuration of meanings and that identifying a theme is a systematic meaning-making activity which is not subjectively random or haphazardly uninformed.

These kinds of thematic analyses were discussed in Chapter 2 under the heading of “Leadership attributes” (Stamoulis & Mannion, 2012; Stamoulis, 2016; Botelho et. al., 2017). In this project the themes will be identifiable by focussing on manifest meaning (reflected in the reported explicit media content) of what that particular CEO said or did. This is therefore very much an inductive approach to thematic analysis, in that the researcher does not have a prior deductive thematic frame which they impose on the data. Instead the analysis emerges from the “bottom-up” and is thus clearly tied and connected to the data being analysed.

Braun and Clarke (2006) as well as Fereday and Muir-Cochrane (2006) have outlined a six-step process for conducting a thematic analysis. The first step is always familiarising oneself with the data (which means reading and re-reading the texts several times). This was especially important in this case because the researcher was not very familiar with the data (since it had not been transcribed from interviews or observations). On the basis of this familiarisation process the researcher then developed some broad ideas about the content (in relation to the research question). Uppermost in their mind as they were reading the data was what was being said about a particular CEO (or what the particular CEO was saying about themselves in an interview). The question posed during this initial analysis was, “Could these codes possibly be thought of as part of a characteristic; personality trait or orientation towards the world?”(Braun & Clarke, 2006). These codes would later be clustered as themes and would form the basis of the archetypes developed.

This initial coding lead to a more in-depth coding as the researcher worked through each text, line-by-line, in order to identify meaning units. Each meaning unit was labelled as a code that described or captured some aspect of the CEO’s characteristics. Each of the texts utilised as data generated many codes. These codes operate at a descriptive level of analysis. When the researcher was able to recognise the pattern and underlying meaning across the codes they then clustered them together into themes.

The last stage of the qualitative analysis comprised of exploring specifically those attributes which might have contributing towards making the CEO a resource which is valuable; rare, inimitable and organised (Barney & Hesterley, 2010). These disparate themes were clustered

into cohesive and meaningful leadership archetypes and linked to the four CEOs. Whilst it would be unrealistic to assume that these leadership archetypes are generalizable from such a small sample, it is hoped that the study will make a contribution to understanding how CEOs demographic characteristics and leadership attributes have a significant impact on company performance. This could provide evidence that the variable and exorbitant remuneration levels of CEOs are sometimes justifiable.

3.4 Conclusion

In this chapter the mixed-method that was used to achieve the research goal through three research objectives was described. For each of the quantitative and qualitative objectives, the unit of analysis, sampling techniques and data analysis methods were carefully explained. In the following chapter both the quantitative and qualitative results will be presented.

4. CHAPTER 4: RESULTS

4.1 Introduction

The first objective of this research was to establish the relationship between CEO remuneration and company performance among JSE listed mining companies during the period 2014 - 2018. Various statistical tests were conducted on some of the most common remuneration and performance indicators. What follows in Chapter 4 are the descriptive statistics and the results from the statistical tests as well as the findings of the qualitative analysis conducted.

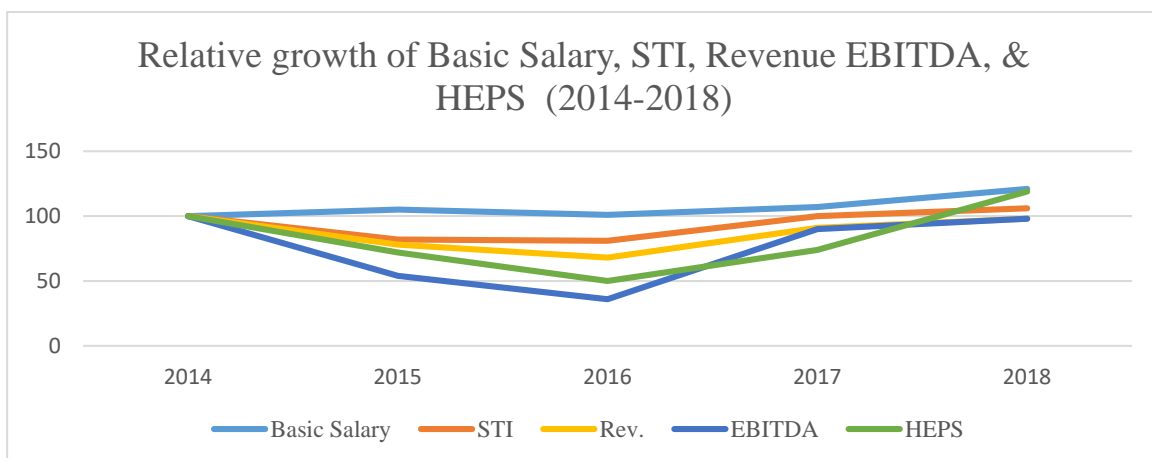
4.2 Quantitative findings

4.2.1 The pay/performance relationship

In order to graphically illustrate the trend in the five measures (namely basic salary and short-term incentive, revenue, earnings before interest tax depreciation and amortisation, and headline earnings per share) an index line graph was constructed. This was necessary as these indicators varied in size and type of unit measured. The index line graph resulted in two performance measures being outliers (namely ROE and ROA) as their relative growth levels were extreme and volatile. They could thus not be graphically represented on the scale below.

Nevertheless, these two measures are discussed below Figure 3 as they are consistent with the findings of the three performance measures represented below.

Figure 3: Relative growth of Basic Salary, STI, Revenue, EBITDA, & HEPS (2014-2018).



What is evident from Figure 3 above is that the two remuneration measures used in the study (Basic salary and STI) experienced more stability than the performance measures Rev.; EBITDA; and HEPS as well as ROE and ROA (which are not represented above) over the study period. It is also evident that basic salary grew at a greater rate than all performance measures between 2014 and 2018 and STI grew at a greater rate than all performance measures barring HEPS.

Only HEPS and ROA experienced positive growth rates over the study period, however, were still outperformed by the growth of basic salary. ROE, revenue and EBITDA all showed negative growth between 2014 and 2018 of -6%, -1.57% and -2.02% respectively. Meanwhile basic salary and STI grew by 21.32% and 5.35% respectively over the same period.

Overall the descriptive statistics indicate that CEO remuneration has consistently outgrown performance levels. Interestingly, STI (or Bonus) has experienced growth levels far more closely linked with the performance indicators suggesting that it may be a better indicator of performance. The strength of the relationship between measures will be discussed in detail in the section which follows.

The following section will be providing more results which are specific to the first objective of this study which can be found in the introduction chapter (chapter 1). In order to accurately present the results guidelines to analyse the correlation coefficient need to be discussed. In this case the strength of the correlation coefficient was assessed according to the following guidelines: weak relationship: $r = 0.10$ to 0.29 ; moderate relationship: $r = 0.30$ to 0.49 ; and strong relationship: $r = 0.50$ to 1 (Bussin, 2018). It is important to note that the CEO remuneration was used as the dependent variable while the performance measures were used as the independent variable.

4.2.2 Multivariate regression analysis: CEO remuneration and company performance

The first step in the process was to identify any independent variables which correlated to the dependent variable. ROE, ROA, EBITDA, HEPS and revenue were used as performance measures in the analysis. To analyse the strength of the relationship between basic salary and company performance, as well as short-term incentive and company performance, the Pearson product-moment correlation coefficient was used.

Using the hypothesis below correlation was tested:

H₀ = There is no correlation between the variables

H₁ = There is a significant correlation between the variables

A 5% level of significance which is represented by a p value of 0.05 was accepted. Test results were thus understood as follows:

P value < 0.05, reject the H₀, then there is a correlation

P value ≥ 0.05, accept the H₀, then there is no correlation

Table 4: Pay/performance correlations (below the diagonal) and p-values (above the diagonal)

	Basic sal	STI	Rev	EBITDA	HEPS	ROA	ROE
Basic sal	1	0	0.0029	0	0.009	0.2454	0.7197
STI	0.7506	1	0.8195	0.001	0	0.3213	0.3286
Rev	0.5598	0.047	1	0.0038	0.702	0.6958	0.6675
EBITDA	0.8082	0.6083	0.548	1	0.0251	0.5118	0.5212
HEPS	0.502	0.8087	0.0788	0.4384	1	0.4457	0.1447
ROA	0.2362	0.2024	0.0805	0.1347	0.1563	1	0.3626
ROE	0.0739	0.1995	0.0884	0.1317	0.2941	0.1861	1

Table 4 above reflects that there is a strong correlation which exists between basic salary and revenue (0.5598), EBITDA (0.8082) and HEPS (0.502), while in contrast, basic salary shares a weak relationship with ROA (0.2362). No statistically significant relationship is present between basic salary and ROE (0.0739).

The 2nd dependent variable which is included as part of CEO remuneration is the short-term incentive or STI. From Table 4 above one can see that STI is strongly correlated to EBITDA (0.6083) and HEPS (0.8087), weakly correlated to ROA (0.2024) and ROE (0.1995), and has no statistically significant relationship with revenue (0.047). The Table 5 below depicts these relationships clearly.

Table 5: Summary of the pay/performance correlations

Dependent variable	Independent variable	Relationship	Significance
Basic salary	Revenue	Strong relationship	Significant
	EBITDA	Strong relationship	Significant
	HEPS	Strong relationship	Significant
	ROA	Weak relationship	Not significant
	ROE	No relationship	Not significant
STI	Revenue	No relationship	Not significant
	EBITDA	Strong relationship	Significant
	HEPS	Strong relationship	Significant
	ROA	Weak relationship	Not significant
	ROE	Weak relationship	Not significant

As can be seen in Figure 3, Table 4 and 5 a significant relationship exists between CEO remuneration and numerous measures of company performance. However there is a disparity between the growth rates of performance and remuneration.

Table 6 below shows the data which was used in ranking the companies' performance and earnings and provides the names of the CEOs analysed, the company that they represent, and the quadrant into which they fall.

Table 6: Company/CEO Performance vs Remuneration (2014-2018)

CEO/Company Performance vs Remuneration (2014-2018)						
		Anglo American Platinum LTD (Chris Griffith)	Anglo American PLC (Mark Cutifani)	Gold Fields LTD (Nick Holland)	Merafe Resources LTD (Zanele Matlala)	Trans Hex (Delpport)
Performance (average 2014-2018)	ROE (%)	-1.6	0.2	-3.4	12.9	-28.1
	ROA (%)	0.9	4	-1.4	13	-6.3
	Rev. (ZAR in billions)	51.1	318.7	35.2	3.9	0.57
	EBITDA (ZAR in billions)	7.9	95.4	13.4	1.1	0.11
	HEPS (c)	1086	3333	204	21	-53

	% change in Share Price/annum	14.5	12.25	-0.25	12.25	-19.25
	Performance	HIGH	HIGH	LOW	HIGH	LOW
Remuneration (average 2014-2018)	Basic Salary (ZAR in millions)	8	23.4	13.6	4	3.3
	STI (ZAR in millions)	5.1	32.8	9.6	4.1	1.5
	Remuneration	HIGH	HIGH	HIGH	LOW	LOW
	Quadrant	High Earning & High Performing	High Earning & High Performing	High Earning & Low Performing	Low Earning & High Performing	Low Earning & Low Performing

Source: Various Annual Integrated Reports of companies (as shown above) (2014-2018)

The ranking of the companies' performance and remuneration was achieved by looking at the six performance measures and two remuneration measures respectively. For example, the percentage change in share price for Anglo American PLC was 12.25% per annum (between 2014-2018), by contrast, the percentage change in share price for Gold Fields was -0.25% per annum (between 2014-2018). Clearly Anglo American PLC qualified as a high performing company whereas Gold Fields qualified as a low performing company. This ranking system was applied to all six of the performance measures across all five companies. Similarly with remuneration measures, the average basic salary received from 2014-2018 by CEO of Anglo American PLC, Mark Cutifani, was R23.4 million whereas the average basic salary received from 2014-2018 by CEO of Merafe Resources LTD, Zanele Matlala, was R4 million. Clearly Mark Cutifani qualified as a high earning CEO whereas Zanele Matlala qualified as a low earning CEO. This ranking system was applied to both measures of CEO remuneration.

In conclusion, remuneration 'has grown at a much higher rate than performance over the study period. The qualitative analysis and the application of the VRIO framework has been conducted with a view to exploring the reasons why this disparity may exist. The differences in demographic characteristics and leadership attributes between these four CEOs may provide justification of the levels of remuneration.

4.3 Qualitative findings

The sample of four CEOs were: Mark Cutifani (as the CEO of Anglo American), Chris Griffith (as the CEO of AmPlats), Nick Holland (as the CEO of Gold Fields), and Zanele Matlala (as the CEO of Merafe Resources). The themes which emerged from the thematic analysis

(utilising the VRIO framework) and the alignment to archetypes (Kets De Vries, 2013) are briefly tabulated below.

Table 7: Application of VRIO Framework and Archetypes of four CEOs

	Mark Cutifani	Chris Griffith	Nick Holland	Zanele Merafe
Valuable	* Experienced * Internationally respected * Mining background * Leadership in sector * Innovator	* Experienced * Mining background * Innovative	* Experienced * Financial background * Pioneer	* Experienced * Respected by Peers * Leadership in sector * Financial background
Archetypes	* Change-catalyst - leaders who thrive on turnaround activity * Transactor - deal-makers who are skilled at identifying new opportunities * Innovator - leaders who utilise creative idea generation and possess a great capacity to solve extremely difficult problems			
Rare	* Openness * Not concerned with status/ hierarchies	* Openness * Responsive to criticism * Relatively young	X	* Black female * Relatively young
Archetype	* Communicator - a leader who operates as a great influencer who has considerable impact on everyone in their surroundings			
Inimitable	* Relationship builder * Stakeholder engagement * Transformation	* Relationship builder * Stakeholder Engagement * Community development	X	* Transformation * Community development
Archetypes	* Builder - leaders who engage in transformational activities by creating something new * Coach - a leader focussed on leadership as a form of people development by getting the best out of people and creating high performance cultures			
Organised	* High earnings * Vision and mission * Sustainability	* High earnings * Vision and mission	* High earnings * Vision and mission	X
Archetypes	<ul style="list-style-type: none"> • Strategist - good at dealing with developments in the organization's environment by providing vision, strategic direction and outside-the-box thinking • Processor - these leaders operate extremely efficiently and ensure that their organizations are smooth running with structures and systems supportive of the organization's objectives; 			

In Table 7 the themes which emerged from reading information about these CEOs, were linked to the VRIO framework and specific archetypes. For example, the quality of being inimitable was identified in three of the CEOs because there was a lot of discussion in the media about them being focussed on relationship building, stakeholder engagement, transformation and community development. These themes are also characteristics which pertain to the builder archetype (with its orientation towards transformation) and the coach archetype (with its orientation towards the relationships and the development of people). The application of the themes to the VRIO framework and to specific archetypes was applied throughout Table 7.

More detail about how these themes are explicitly linked to the VRIO framework and fit with the archetypes will be explained in the discussion of qualitative results found in Chapter 5.

4.4 Conclusion

In this chapter the quantitative and qualitative results have been shown. The results from the tests for correlation are mixed and inconclusive even though there was a statistically significant relationship between 3 of the performance measures and the remuneration measures, this may be attributed to the size of the companies. These results (together with the descriptive statistics) echo the fact that a disparity exists between what CEOs are being paid and how the company (that they are the CEO of) is performing.

Numerous themes emerged as a result of conducting a thematic analysis on online information published about these four CEOs. This information was then categorised according to the VRIO framework to find out which of the qualities (namely, being valuable; rare; inimitable and organised) could be ascribed to each of these CEOs. Finally these demographic characteristics and leadership attributes were aligned to particular archetypes (Kets de Vries, 2013). The discussion of how the CEO demographic characteristics and attributes align with the VRIO framework and fit with the leadership archetypes can be found in the chapter which follows (Chapter 5).

5. CHAPTER 5: DISCUSSION

This chapter will discuss both the quantitative and qualitative findings some of which were presented in the previous chapter. In this mixed method study, the first research objective was focussed on the relationship between CEO remuneration and company performance. The second and third research objectives were focussed on multiple CEOs (some high-performing, others lower-performing with various remuneration levels) and tried to assess them according to the VRIO framework and distinguish archetypes related to their leadership styles. These findings are qualitative and will be discussed in the second section.

5.1 Discussion of quantitative results

Using various statistical techniques and descriptive statistics the previous chapter investigated the relationship between CEO remuneration and company performance and produced results which provide insight into specific details about this relationship.

The quantitative results found that basic salary grew at a higher rate (on average) than all five of the performance measures it was tested against. In the same way STI grew at a higher rate than all of the performance measures barring one (HEPS).

From the correlation analysis it was found that the performance measures which are more affected by the size of the company indicate a closer link to remuneration whereas others indicate no relationship at all.

These results show that while a relationship may exist between some performance measures and CEO remuneration, the amount that CEOs are paid nonetheless grows (on average) by a far greater proportion than the (average) level of performance. This suggests that the CEOs are paid based on more than the company's financial performance alone. It is therefore possible that the CEOs personal characteristics play a role in the value they are creating and in justifying the amount that they are paid.

5.2 Discussion of qualitative results

In this section the qualitative results of the thematic analysis of four high-earning CEOs, namely Mark Cutifani, Nick Holland, Chris Griffith and Zanele Matlala will be presented. As was discussed in the review of literature (Chapter 2) CEO performance is complex and cannot be reduced to a single demographic characteristic or the identification of the most important

trait (Ignatius, 2014). The purpose of this study has been to explore thematic similarities and differences between four CEOs according to the VRIO framework. These themes were tabulated in Table 7. It must also be noted that each of these CEOs has a different media profile. Since there is not the same amount of information available on each of these CEOs that could have affected the scale of the thematic analysis which was conducted.

Finally, this framework will be aligned with leadership styles in an attempt to propose possible leadership archetypes which may have influenced the performance of their companies and created a sustained competitive advantage.

Each of the four CEOs will be discussed in the section which follows.

5.3 Mark Cutifani (High Earning / High Performing)

Mark Cutifani is the CEO of Anglo American (2013-present). He was born in Sydney as the son of a working-class couple. He started working in a mine while still at school. He graduated at the top of his class at the University of Wollongong despite having to pay for his studies by working simultaneously at a coal mine (Ashton, 2014).

5.3.1 Valuable

If one were to read the information available about Cutifani then he can undoubtedly be recognised as valuable. When he was appointed at Anglo American he was seen as a good fit because he "had an international presence and experience of running a significant public company in South Africa" (Bawden, 2013). On top of that as a mining engineer he was able to connect the two worlds of operations and business (as well as having been at the helm of 11 different companies). He has the respect of many South African mining moguls and was elected as the President of the South African Chamber of Mines and inducted into the Johannesburg Indaba's SA Mining Hall of Fame and has received numerous international awards (Jamasnie, 2019).

Cutifani fulfils another characteristic of being valuable in that he is well known for innovation. The AngloGold turnaround, as it is popularly referred to in media reports, was spearheaded by Cutifani (Biesheuvel, 2018). One of the ways that he achieved this was to shake up and streamline his management team significantly. He is cited in the media as an "extraordinary leader and trailblazer in industry innovation" (Davies, 2014). His reputation was built on these foundational characteristics as well as the many awards he has subsequently received.

5.3.2 Rare

There is information about Cutifani (which is available online) which describes him as having a rare characteristic for a senior and very well paid executive. There are anecdotes which illustrate how he is accessible to everyone and disinterested in status or hierarchies. For example, he did away with reserved parking spaces at the head office and took doors off offices in order to facilitate more openness and transparency within the company. He sold the £30million Gulfstream G550 private jet, which had been used to ferry Anglo bosses to mines overseas. For him it was “a symbolic and powerful message regarding costs” (Davies, 2014). The cost (\$10million per annum) simply outweighed the benefits (saving time) for him. This is a rare characteristic within international corporations.

5.3.3 Inimitable

The third characteristic which is intangible and inimitable is the way in which Cutifani is orientated towards relationships. He has identified relationships and engagement with stakeholders as the core of his leadership style. He has been quoted as saying “If you don’t have good relationships you don’t get access to ground; if you don’t have access to ground you can’t develop a mine” (Biesheuvel, 2018). For him people are at the core of any ethical business saying “The day you forget that the people are the ones that will make the real difference is the day you cease to be a leader” (Business media Mags, 2019).

An illustration of the value he places on relationships is the emphasis he has placed on the safety of miners. He was influenced by his experience as a young man who worked in a mine and who witnessed his mentor being killed in a mining fatality. He is quoted as saying “if you can't make it personal and if you can't demonstrate that you care for people [then] why do you think people would go out of their way to deliver the best they can for you” (Anglo American, 2014). Not only does he think of this reciprocation as contributing to his success as a CEO but he also sees the well-being of his employees as something which should be the “primary objective ...and the most important objective of any leader in the business” (Anglo American, 2014).

Undoubtedly the way he engages stakeholders is unusual in the sector in that it subverts the usual power dynamic which is traditionally at work between management and labour. He believes that mining companies should “rethink how [to] engage workers and provide a sense of ownership ... to get everyone around the table” (Smith, 2018). He has commented

extensively on how stakeholder engagement in South Africa has been characterised by distrust. According to Cutifani in South Africa the needs of business and workers are not incompatible. He believes that what is needed is for stakeholders “to all lift [them]selves above narrow individual interests – and work to better serve the needs of core stakeholders,” (Le Cordeur, 2017). He commented that “Marikana was a wake-up call [which] made everybody reflect ... and changed the dialogue” (Davies, 2014). It was noted in the media during a wave of violence he was the only mining chief (then employed at AngloGold Ashanti) to attend the mass memorial for striking workers shot during a wave of violence, believing that it is important to show solidarity with workers who experience danger (Davies, 2014).

He is proud of the way in which Anglo American has transformed saying that “If people want to see transformation, [they should] talk to us at Anglo American ... while we are the first to acknowledge we still have a lot of work to do in this critical area” (Le Cordeur, 2017). The media depicts Cutifani as someone who avoids engaging in political discourse although he is not ignorant about the countries far-reaching political issues. He is quoted as saying that mining bosses are “not politicians” (McKay, 2016). Cutifani is shown to be inimitable because he actively worked to provide a sense of ownership for his employees as the foundation of transformation.

5.3.4 Organisation

There are many aspects to “organisation” which affect a CEO as a resource. In order for the CEO to be a resource which provides a competitive advantage they have to be supported by the systems, processes and procedures of the company. Being the CEO of a company that has a clearly articulated mission and vision statement is an indication of the company being organised with regards to strategic management processes. Another aspect is that of adequately incentivised remuneration. As Cutifani falls into the High-earning quadrant it is fair to say that he is supported by the organisation of the company. Another less obvious example of organisational support is the fact that he has operated within a company which integrates sustainability to focus not only on financial prospects but also on the environment (which includes the people living in the environment and the upliftment of local communities (Biesheuvel, 2013).

5.4 Chris Griffith (High Earning / High Performing)

Chris Griffith is the CEO of Anglo American Platinum. He is a South African who holds a BEng degree in Mining from the University of Pretoria with strong leadership instincts and ability (Groenewald, 2013). He has experience as a CEO having been appointed as CEO of Amplats in 2012 and prior to that being CEO of Kumba Iron Ore.

5.4.1 Valuable

Griffiths is valuable because of his extensive experience in the mining sector in South Africa. In his opinion the most useful part of preparing him for challenges has been his working experience. By coming up through the ranks he not only gained knowledge about all the parts of the operations but also worked with a variety of different people and has been able to connect at all levels of operations and management (Groenewald, 2013).

He has also proved to be valuable for this ability to innovate and identify opportunities for growth. He has identified the “green economy” as a substantial opportunity and therefore pushes for the innovative developing uses for platinum such as fuel cell and hybrid vehicles (Talevi, 2019). Like many valuable CEOs he is intrepid and pragmatic about the sector saying “when you start big things you don’t know how they are going to end ... we had to retrench, it was tough but absolutely necessary (Hogg, 2014).

5.4.2 Rare

Griffith can be thought of as rare since (unlike Holland) he has not developed a reputation for defensive reactions to criticism. In 2014 his reaction to a query about his salary was widely reported. He responded to criticism with an apology by saying that his “choice of words was inappropriate and a poor way to describe the challenging situation” (“Amplats CEO apologises for ‘fair pay’ comments,” 2014). His management style is decisive with a focus on clear and open communication. In his view CEOs should “do all the difficult things as quickly as possible ... [and] be open with people [in the company] motivating for the vision and communicating ... how exactly we will deal with the situation” (Groenewald, 2013).

In talking about negotiations he reported that he avoided becoming confident since it easily leads to arrogance which prevents deep listening (Talevi, 2019). Griffith is also a veteran of

symbolic gestures like participating in the CEO Sleepout™ which happens annually to stimulate a philanthropic mind-set amongst CEOs in South Africa. The first event raised more than R26 million overnight, making it the singularly most successful overnight fundraising event in the history of the country and the African Continent (Hogg, 2015). In his own words Griffith believes that “it is part of human nature, business nature, to want to grow, contribute, employ and share more with communities and society (Groenewald, 2013).

Griffith is unusual amongst the CEOs in that he is significantly younger than Cutifani and Holland. This creates a tangible advantage since he has more time to build his company.

5.4.3 Inimitable

Besides these tangible aspects of inimitability there are also intangible aspects. As with Cutifani, Griffith has focused on building relationships with stakeholders. He claims that besides working very hard he also “spent more time with the people ... than anyone else around me” (Groenewald, 2013). He has an unusually good relationship with the senior leadership of the relevant unions and government officials. He is quoted as saying that they are all on the same page and that “[everyone] needs to get behind this wagon and push like hell” (Talevi, 2019). He has also focused on redressing inequalities within the sector by means of transformation and community engagement. Under his leadership a donation of well-located urban land for low cost housing was made for the purposes of increasing economic opportunities. At the time he flagged this as an example of how business and mining companies can embrace land reform in order to “build a country where all South Africans can achieve their potential regardless of race, gender, sexuality and beliefs” (Barron, 2019).

5.4.4 Organisation

Griffith has been identified as being a high-earning CEO. He is thus rewarded by the organisation which he leads. Furthermore, he is also adamant that in times of uncertainty organising the company so that it can support the vision of the CEO is essential. He maintains that his company has not only created a clear vision but also plotted solutions, directions and actions which are embedded in organisational structures (Talevi, 2019). This is consolidated by evaluation and assessments of these structures and processes in order to maximise the chances of achieving a competitive advantage.

5.5 Nick Holland (High Earning / Low Performing)

Nick Holland is the CEO of Goldfields. He was born in Birmingham, United Kingdom. He matriculated at King Edward VII School before completing his Bachelor degrees in Commerce and Accounting at Wits University in South Africa, qualifying as a chartered accountant. He worked at the former Trans-Natal Coal Corporation moving on to Impala Platinum and Gencor. When he first joined Gold Fields he was the Chief Financial Officer for 10 years before becoming the CEO of Gold Fields in 2008. Gold Fields has made significant strides in becoming a truly global mining company with operating mines and projects in six countries (Citi Business News, 2016).

5.5.1 Valuable

Nick Holland is clearly a valuable resource as a CEO given his extensive experience as described in the previous paragraph and his pioneering approach to managing his company. In 2012 with the unbundling of Gold Fields, the CEO stated that he was starting a new trend that would forever change the South African gold mining industry. He advocated that every gold mine was struggling with the same issues and that a new approach was required (England & Thomas, 2015). He saw the challenges as an opportunity to consolidate and restructure the industry. In keeping with this pioneering outlook he has often spoken out often about the need to move towards more mechanised and automated mining. He has said that “the gold mine of the future has to be set-up, structured and managed differently from what it is today, [in order to] remain relevant and value-adding to all its stakeholders” (John, 2017).

5.5.2 Not rare

Using the VRIO framework as a lens it is possible to say that Holland is not a rare resource as he has become a lightning rod for investor anger over executive pay. He is portrayed in the media as a symbol of the worst of what labour was alleging about management. Investment analysts identified that many mining executives were getting very large remuneration packages which they classified as undeserved (Mail & Guardian, 2013). Criticism began in 2012 when his 39% pay rise to R45.3-million (despite shares falling 17%). Holland's salary, benefits and share awards at that time were more than twice that earned by the CEO of his larger rival, AngloGold Ashanti's Srinivasan Venkatakrisnan. However, despite dismissing most criticism levelled at the company these increases were halted and his pay dropped by 45 percent the

following year in 2016 and he declined a cash bonus in response to governance failings relating to the company's South Deep mine (Crowley, 2016). Declining a bonus is rare but in this case possibly an isolated incident and not a trend in his position on the issue of remuneration.

Holland has also seen his fair share of controversy which is also not considered rare in the corporate sector. In 2013 he was also embroiled in a Securities and Exchange Commission (SEC) saga (which many thought he would not survive). US Securities Exchange Commission's (SEC) which regulates companies listed on the US stock exchanges, investigated whether Gold Fields was in contravention of the US Foreign Corrupt Practices Act (FCPA) after the company awarded approximately R2 billion worth of shares and cash payments to senior leaders of the ANC, as well as members of parliament and people linked to President Jacob Zuma, as part of a BEE deal announced in 2010. At that time Gold Fields hired Gayton McKenzie and Kenny Kunene, who had been convicted of robbery and fraud respectively, to organise the transaction, paying them millions in shareholder funds for doing so (Mantshantsha, 2013).

5.5.3 Not inimitable

With regards to being inimitable, Holland has created a company ethos and stakeholder relationships which could be considered more typical of the sector and not inimitable. He does not shy away from the limelight and describes himself as someone who leads from the front. For example, when the most violent strikes erupted in South Africa Holland insisted on meeting thousands of angry armed miners against the advice of his security advisors (Feit, 2013). Some analysts suspect that he enjoys confrontation and comes across as “a picture of certitude” who vigorously defends his power amid a chorus of criticism from many stakeholders (Mantshantsha, 2014).

He has also engaged very combatively with mining unions and with Minister Gwede Mantashe intervening in processes (as the former general Secretary of the National Union of Mineworkers). Mantashe called for Holland's resignation on numerous occasions and referred to his leadership style as “backwards” (Mahlase & Khumalo, 2018). Holland's stock response has not been constructive but rather been to dismiss criticism based on the fact that he enjoys testing boundaries. He has gone as far as to say that he has learnt not to pay any attention to criticism (especially from shareholders) in the mining sector since the pendulum can swing from boom to bust in a relatively short space of time. He says that he does not feel pressured by criticism because Gold Fields is not “a one trick pony ... [and] is made up of many mines”.

He has often stated his intention to be around for a long time and is quoted as saying that “There is still much work to be done and one swallow doesn’t make a summer” (Njini, 2018). Similarly, he has had little time for critics in the press calling them “somewhat parochial” and accusing them of lacking understanding of the mining sector (Mantshantsha, 2014).

5.5.4 Organisation

With regards to “Organisation” we can say that Holland continues to be well remunerated for his role as CEO. In addition, he takes an unapologetically pragmatic view of his CEO role as “the pursuit of cash, not production” (Business Day, 2013). He believes in the need to change the role of the mining CEO as moving away from managing assets or operational decision making towards focusing on coaching and mentoring, integrated stakeholder management, collaborative decision making and managing a portfolio of mines (John, 2017). The company is organised to support him in his long-term view of his role as CEO in that that have well-known and clearly articulated strategic mission and vision statements.

5.6 Zanele Matlala (Low Earning / High Performing)

Zanele Matlala joined the Merafe board as an independent non-executive director in 2005 becoming the CFO in 2010. She replaced Steve Phiri left in 2012 when she was appointed CEO. She is also a non-executive director of Dipula Income Fund, Stefanutti Stocks Holdings, RAC Limited and Old Mutual Investment Group Holdings. She is an accountant with a BCom and BCompt (Hons)(UNISA) and a Chartered Account.

5.6.1 Valuable

Matlala is considered a valuable resource as a CEO. Like the previous three CEOs she brings a wealth of experience. Prior to becoming the CEO of Merafe she was a banking hall manager, an articulated clerk; a wholesale venture capital funds head and account manager as well as being the CFO for the Development Bank of Southern Africa.

Her self-reported management style is goal-focused with a strong desire to get things done. She has achieved a great deal since her first job which earned her R150 per month. Now Xstrata-Merafe Chrome Venture employs more than 6 000 full-time employees with a market capitalisation of R2-billion-plus. With regards to the organisation of Merafe, she has overseen a long-term investment process which finally came to fruition (Hogg, 2014). As she has

reported “the significant investment in improving the venture’s energy efficiency [has given them] a competitive advantage and contribute[d] to future sustainability”. Under her leadership Merafe has enjoyed significant success and growth with the advantage of a strong balance sheet, low gearing, a healthy cash flow and excellent partnership with Xstrata. According to Matlala it is “one of the world’s largest diversified mining companies with a reputation for running responsible and efficient operations” (Pireu, 2014). More recently it was reported that Merafe, had zero debt and R600-million cash on hand (Creamer, 2018).

Recently she was appointed as the vice president of the Minerals Council. Since the Minerals Council office bearers and board members play a pivotal role in leading and representing the mining industry this is evidence of being held in high regard amongst her peers.

5.6.2 Rare

It would be reasonable to assess Matlala as a rare resource since she is a black and female CEO in a sector which is dominated by white men. Despite the on-going transformation in the mining sector this is still relatively rare. In addition, the board is composed of 87% of black members; 62% of its board members are women and 71% of its employees are black. Although she lobbied for several years to get the government to restrict the export of raw chrome, it never happened. She reports that the market forces rectified the situation organically.

5.6.3 Inimitable

In the case of intangible inimitability Merafe has built a strong corporate social investment culture. Merafe's corporate costs of R40.4-million in 2017 included corporate social Investment expenses of R3.5-million, which involved the company taking care of schools in the communities where it operates by upgrading science laboratories. She is thus created inimitable value by being focussed on community development.

5.6.4 Not Organised

Matlala is recognised as high-performing but not high-earning. In comparison to CEOs in similar contexts she is thus not well remunerated especially considering the continued profitability of the company. While the company is organised to incentivise her performance, in comparison to others in the mining sector it could be argued that it is not organised to support her as the valuable resource that she appears to be.

By applying the VRIO framework to these four CEOs in the mining sector we can ascertain that Mark Cutifani and Chris Griffith are recognised as being a valuable, rare, inimitable and organised resources as CEOs. Nick Holland on the other hand is neither rare nor inimitable and Zanele Matlala's company is not organised in such a way as to support her for the purposes of creating a sustained competitive advantage. In the section which follows the way in which the VRIO framework aligns with leadership archetypes will be discussed.

5.7 Leadership archetypes

The qualitative findings about the VRIO framework will be discussed and possible leadership archetypes of Mark Cutifani; Nick Holand; Chris Griffith and Zanele Matlala will be presented. It is important to acknowledge that it would be simplistic to fit the varied attributes of these CEOs into one archetype (and exclude all others). These CEOs are each enormously talented in their own ways. However according to the VRIO framework they do not all possess rare or inimitable qualities. The intention of the discussion which follows is to show how the VRIO framework (Pesic, Milic & Stankovic, 2012) can be aligned to particular archetypes (Kets De Vries, 2013).

5.7.1 Transactor / Innovator / change-catalyst archetypes

CEOs who are considered valuable are able to protect the company from threats and exploit opportunities. They are also often innovators and pioneers. The attributes which make a CEO valuable thus align with the change-catalyst; transactor and innovator archetypes. In this analysis all four CEOs are undoubtedly well-respected and added value to their companies. They each have vast experience and are trailblazers, often described as favouring innovation or being lauded for being pioneering (Innovator archetype). Their leadership styles all indicate a willingness to be intrepid, bold or take risks so as to do something original in order to ensure success (Transactor archetype). In this way they have all been skilled deal-makers and brought about substantial changes within their companies (Change-catalyst archetype) (Kets De Vries, 2013). These actions have undoubtedly enabled them to identify opportunities for growth which have created sustained competitive advantage.

5.7.2 Communicator archetype

CEOs who are considered rare usually possess rare demographic characteristics or leadership attributes which are uncommon. With regards to demographic characteristics, only Matlala

and Griffith possessed rare characteristics. Cutifani and Holland are both the same age, born outside of South Africa and white males. Griffith and Matlala, on the other hand, are both South Africans in their mid-fifties (54 and 55 years respectively). This is relatively young for a CEO. In addition Matlala (as a black South African female CEO) is rare within the mining sector.

With regards to leadership attributes both Cutifani and Griffith are lauded for their openness and communication. Cutifani was considered exceptionally accessible (doing away with hierarchical spaces) while Griffith was responsive to criticism and willing to apologise (and not reactive as seen in articles about Holland). This rarity fits with the communicator archetype (De Vries, 2013).

5.7.3 Builder / Coach archetypes

One of the themes that came through very strongly in the information that was analysed about Cutifani, Griffith and Matlala were their orientation towards being inimitable. This is a difficult attribute to recognise because it is often thought of as intangible. However for these CEOs it is seen in the ways in which they build strong relationships with all stakeholders and focus on transforming the mining industry through community upliftment. They are recognised for their clearly articulated set of ethics and values for the common good of the company. A very important aspect of inimitable leadership is empathy. These three CEOs are focussed on building a sense of connection to the employees in the organisation. They are adept at motivating and empowering employees to drive change throughout the organization and also transform the communities around the mines. These attributes are very clearly aligned with the Builder and Coach archetypes since they are engaged in transformative activities which are people-centred.

Holland was identified as neither rare nor inimitable since his media profile portrays him in a fairly negative light. His tenure has been tainted by suspicion about unethical practices and dealings. This together with his confrontational combative style in dealing with the media has not made him well respected by his peers, union or government officials.

5.7.4 Strategist/Processor archetypes

Three of the CEOs, namely Cutifani, Griffith and Holland fit with the organised attribute of the VRIO framework since they are all (relatively speaking) high-earning CEOs. In addition all three practice a strategic leadership style articulating their vision and mission statements

often in the media. The attribute of being organised thus fits with the strategist and processor archetypes (Kets De Vries, 2013).

5.8 Conclusion

In this chapter we have discussed both the quantitative and qualitative findings. In the former we have concluded that CEO remuneration grew at a much higher rate than company performance. The focus then shifted to a sample of four CEOs and it was found that while all of them were undeniably valuable to their companies, they did not all have attributes which were rare, inimitable or organised.

6. CHAPTER 6: CONCLUSION

6.1 Introduction

In the concluding chapter of this mixed-method study both the quantitative and qualitative findings will be summarised. The overarching argument will be presented and the possible limitations will be described before suggestions are made for future research.

6.2 Summary of findings

6.2.1 Quantitative

In response to the first research objective about the relationship between CEO remuneration and company performance many of the findings in this study mirrored Bussin's study (2018) which analysed the preceding five year period (2009-2013).

These results show that remuneration grew at a higher proportion than company performance overall. We can thus argue that while a relationship may exist between some performance measures and CEO remuneration, the amount that CEOs are paid has increased (on average) by a far greater proportion than the (average) level of performance. This suggests that the CEOs are paid for reasons other than the company's financial performance.

It is therefore possible that the CEOs personal characteristics played a role in the value they created and contributed to a justification for the high level of remuneration.

The qualitative part of the study therefore focussed on the CEOs demographic characteristics and leadership attributes in order to gain insight into the value that these CEOs were adding.

6.2.2 Qualitative

In response to the second research objective it was found that by applying the VRIO framework these four (variably performing and earning) CEOs could definitely be clearly distinguished from each other. All four CEOs were considered to be valuable resources for their companies. They all shared some attributes such as being intrepid, decisive and daring. In addition each had shown that they were willing to be innovative and pioneering to some extent and that this resulted in positive changes within their companies.

Not all of the four CEOs however were rare, inimitable or organised. Those CEOs who were assessed as being intangibly inimitable (according to VRIO) were clearly focused on stakeholder engagement, community upliftment and integrated sustainability. This necessitated building relationships, developing people and communicating clearly to all stakeholders.

In response to the third research objective each of the four aspects of the VRIO framework were aligned to leadership archetypes. Thus it was shown that in order to be valuable and create a sustained competitive advantage all four CEOs drew on the change-catalyst, transactor and innovator archetypes. With regards to being rare there was reference to tangible and intangible aspects. While one CEO was considered rare for their demographic characteristics, two CEOs were able to be intangibly rare by drawing on the communicator archetype. The most difficult VRIO aspect to analyse was inimitability. Three CEOs were identified as drawing on the builder and coach archetypes by focussing on transformation and developing people. Finally the CEOs who could be classified as organised drew on the strategist and processor archetypes by not only being supported by their companies in terms of adequate incentivisation (by way of pay) but also communicating clear strategic organisational plans.

In conclusion this qualitative study makes the argument that some CEOs who are high earning can justify their pay by virtue of their well-developed leadership skills. It is clear that the softer skills (such as communication, openness, relationship-building and stakeholder engagement) are not shared by all CEOs even though they are needed in order to create a sustained competitive advantage.

6.3 Limitations

With regards to the quantitative argument, it is well documented that the size of the company has an impact in studies like this. Thus while these companies were all in the mining sector they were very different sizes. Three of the companies (who in fact recorded the highest levels of performance) had financial results which were reported in foreign currency thus skewing the data.

Secondly, while these companies are all located within the mining sector they mine vastly different commodities. The commodity pricing cycles drastically influence these companies' financial results.

Thirdly, the economic climate has been weaker during this period than during the period of Bussin's study (2018). The JSE has been in a bear market which means that overall investment has slowed. There is no way of telling how this variable context potentially impacted on the performance measures.

With regards to the methodology there were also two very apparent limitations. Firstly, many of the studies cited in the literature used varying definitions of the variables being tested. For example at times remuneration included long-term incentives (share options) and others did not. Additionally owing to the selection criteria that were applied to the sampling of the CEOs, the sample frame of nine was very limited.

With regards to the qualitative section of the study and the use of Resource-based view, it has also been widely acknowledged that one of the limitations of RBT is that it does not take into account the social context in which firms are forced to operate. To what extent are these leadership archetypes thus a reflection of the actual individuals or to what extent are they a function of the contexts in which they have to lead these companies? Similarly the data that was used for the qualitative study was media articles which appeared online. Not every CEO included in the sample had the same media profile and the limited sample of articles hampered the reliability of the analysis.

6.4 Suggestions for future research

Taking these limitations into account there are a number of suggestions to be made for future research. With regards to the quantitative study, the suggestion is to conduct more research about the relationship between CEO remuneration and firm performance (specifically within the mining sector) whilst paying attention to the size of the companies and the commodities in the study.

With regards to the qualitative limitations, it would be beneficial to conduct more thematic analyses and develop leadership archetypes based on bigger samples. In this way the use of RBT and specifically the VRIO framework aligned with archetypal analysis could be expanded and developed by incorporating similar institutional theories.

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