



GORDON INSTITUTE
OF BUSINESS SCIENCE
University of Pretoria

CEO pay-performance sensitivity in South African financial services companies

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A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfillment of the requirements of the degree of
Master of Business Administration.

9 November 2011

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ABSTRACT

Orientation: CEO remuneration has attracted attention over the past two decades, with significant renewed interest in light of the role it is said to have played in contributing to the global financial crisis. At the heart of the issue is the perceived weak relationship between corporate performance and CEO remuneration.

Research purpose: The purpose of this study was to describe the relationship between corporate performance and CEO remuneration within the South African financial services industry.

Motivation for the study: The motivation for the study was to develop a deeper understanding of the relationship within the South African context, as South African banks have remained stable and profitable through the financial crisis.

Research design approach and method: The research was a quantitative, archival study, conducted over a six year time period. The primary statistical techniques used in the study included: bivariate regression analysis, multiple regression analysis, and analysis of variance.

Main findings/results: The primary finding was that the relationship between corporate performance and CEO remuneration is favourable (moderate to strong), but has experienced a decline. This finding emphasises the impact that macroeconomic trends have on the relationship and the role of managerial power during periods of economic uncertainty.

The research further describes the structural changes in CEO remuneration with a shift away from variable pay.

Practical managerial implications: The results suggest that the use of discretion and the growing impact of managerial power will be key challenges that

remuneration committees will face in maintaining a favourable relationship between the two constructs in the future.

Contribution/value add: The study provides context to CEO remuneration within a South African framework. It further provides provides a key insight that the relationship between corporate performance and CEO pay is highly dependent on the macroeconomic environment, and that CEO pay in the South African financial services is experiencing structural changes.

Key words: CEO remuneration, CEO compensation, pay-performance sensitivity, financial services, South Africa.

DECLARATION

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



Paul Shaw

9th November 2011

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ACKNOWLEDGEMENTS

I would like to acknowledge several people who have played a key role in supporting me and inspiring me through this research project:

Firstly, my supervisor, Dr Mark Bussin for his guidance on the ‘academic way’ as well as his deep insights into reward management. The clarity and direction that you have brought to this research project has been invaluable.

This research has benefited from the deep discussions I have had with my work colleagues with respect to executive pay. I would like to acknowledge my colleagues who have continually supported me in the process.

GIBS has become an important part of my life over the past two years. I would like to acknowledge the GIBS community, both classmates and faculty alike who have inspired me enormously and fuelled the energy that has sustained me through this research project.

The support and interest I have received from my family has been enormous. The time that I have sacrificed with you has not gone unnoticed. Thank you.

And most importantly, my wife Lyndsay. You have encouraged me, challenged me and supported me through it all. Thank you. This has been an incredible growth journey and you share equally in my successes. I look forward to our exciting new adventure ahead.

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“When we do well, we get paid well. And when we don’t do well, sir, we don’t get paid”

Lloyd Blankfein, CEO: Goldman Sachs

Testifying to Congress, 2009

(Ferguson, 2010)

CHAPTER 1: INTRODUCTION

1.1 Background to the problem

Executive remuneration ('compensation' in the United States) in its various forms have become a contentious management challenge over the past decade, as remuneration levels have seemingly grown to an incomprehensible level when viewed in the context of pay received by the ordinary employee.

However, executive remuneration - which typically refers to the remuneration received by the Chief Executive Officer (CEO) and other senior directors - differs fundamentally from that of the general workforce in that executives are tasked with the responsibility of delivering on shareholders' expectations. As such, they are typically highly skilled, have significant leadership competencies and are viewed as a scarce commodity. As a result executives are highly incentivised through remuneration structures to remain in the employ of the organisation and drive the performance of the organisation, in line with shareholder expectations.

The discontent with executive remuneration has gained further momentum following the financial crisis that begun in the United States (US) and spread across many global economies during 2008. Executive remuneration, and in particular the area of incentives or incentive remuneration, has widely been regarded as one of the key contributors to the financial crisis. These sentiments have found their way into academic literature as researchers have attempted to understand more fully the root causes of the financial crisis.

Aronson (2010) indicated that a panel of corporate banking and law scholars, local financial services executives and bank regulators consistently cited the importance of misaligned incentive remuneration as a key cause of the financial crisis. Friedland (2009) indicated in a document outlining the key contributing

factors to the financial crisis that remuneration schemes in financial institutions encouraged inappropriate risk taking.

The result is that many well known financial services companies in the US filed for bankruptcy or had to accept assistance from the US Treasury under the Troubled Assets Relief Program (TARP) (Phillips, 2010) in order to avoid bankruptcy. This led to a global economic contraction.

The role that incentive remuneration played in causing the financial crisis is evident in the significant corporate governance and regulatory changes that have occurred since the economic recession of 2008. Within the last year, the USA Restoring American Financial Stability Act of 2010 (Dodd-Frank Wall Street reform) was agreed to by the Senate, requiring public companies in the US to establish policies for the clawing back of remuneration, and in particular incentive remuneration, where remuneration was found to be based on inaccurate financial statements (PwC, 2010).

Underlying the literature is a sentiment that the poor link between company performance and remuneration outcomes allowed these overly risky business practices to occur. Former IMF chief economist, Raghuram Rajan, tabled a highly provocative working paper in 2005 suggesting that remuneration practices in the financial sector were creating significant risks for the global financial system. According to Rajan, executives in the financial sector received significant levels of incentive remuneration despite engaging in business practices that eroded company performance and threatened the sustainability of the company, as well as the entire financial system in the long term (Rajan, 2005).

Bebchuk, Cohen and Spamann (2010) have indicated that executives in the financial services industry, and in particular the top five directors at Bear Sterns and Lehman Brothers, were well compensated despite the risks that eventually led to the downfall of both companies and the global recession that ensued.

Against the backdrop of the financial crisis of 2008, it is clear that the link between acceptable company performance and executive remuneration outcomes in the financial sector has not been satisfactory.

1.2 Problem definition

In South Africa, and indeed many other emerging economies, the financial system has not experienced the level of financial losses seen in more developed economies. South Africa's banking sector has been reasonably stable during the past three years and the 'tsunami' of financial write-offs appears to have missed the South African landscape. The International Monetary Fund (2009) suggested that despite the crisis intensifying across the world, South African banks had remained "orderly and stable", and that this prudent approach had contributed to the country's development.

It is noted that South Africa was ranked two in the world in terms of efficacy of corporate boards and ranked number one in the world in terms of strength of auditing and reporting standards (World Economic Forum, 2011). Further evidence suggested that South Africa's regulatory and governance institutions played a role in protecting the industry from overly risky business practices (PwC, 2011). Thus, while the US and other developed economies have been hit hard by the financial crisis, the South African financial services industry has fared reasonably well.

However it is unclear what role executive remuneration has played in either contributing to, or detracting from, the success of these regulations. In light of the emerging literature on executive remuneration and incentives across the global financial services industry, and given the importance of the South African financial services industry in facilitating increasing capital flows into Africa, it would be worthwhile to develop an understanding of the relationship between company performance and executive remuneration.

Thus the study seeks to determine the strength of the relationship between company performance and executive remuneration outcomes, with specific reference to the position of the CEO.

1.3 Areas of focus

The position of the CEO typically receives the most lucrative remuneration package of the executive management committee. This fact, coupled with the fact that the ultimate responsibility for company performance rests with the CEO, means that the remuneration package for the CEO is constantly under scrutiny. As such, the position of CEO is the most focal point of the discussion around executive remuneration, which is why this study will focus on CEO remuneration outcomes.

Remuneration is a broad term that encompasses a range of various reward components. As indicated by 21st Century Pay Solutions (2010), remuneration definitions include:

- “**Base pay**” means the cash salary;
- “**Benefits**” means all financial benefits that typically accrue on a monthly basis (pension, medical, and car allowance among others);
- “**Fixed pay**” means all components of remuneration that are guaranteed, including base pay and benefits. Fixed pay is also known as “guaranteed package” or “GP”;
- “**Incentive pay**” means all components of remuneration that are variable and accrue to an individual based on achievement of satisfactory measures of performance. Incentive pay is made up of short-term incentives and long-term incentives, and is also known as “variable pay”;

- **“Short-term incentive”** means all cash based payments that accrue to an individual based on company performance for a 12 month period;
- **“Long-term incentive”** means all cash and equity based awards that accrue to an individual based on company performance over a period longer than 12 months. These awards include: share options (‘stock options’ in the US), share appreciation rights, conditional shares, forfeitable shares and deferred bonus shares, among others;
- **“Total remuneration”** means fixed pay plus the short-term incentive, and is also known as “TR” or “total cost of employment”;
- **“Total earnings”** means fixed pay plus incentive pay (short- and long-term), and is also known as “total cost to company”.

The key area of focus for this study will be the fixed pay, short-term incentive and total remuneration. The literature refers broadly to incentive pay as a key component of the problem. This includes the long-term incentive. However, given the data available, this research project will focus specifically on identifying the relationship between measures of company performance and CEO fixed pay, short-term incentive pay and total remuneration, and will not include long-term incentive pay.

1.4 Research objectives

The broad research objective is to describe the link between measures of company performance and remuneration for CEOs. Specifically, the research will attempt to:

- Describe the relationship between individual measures of company performance and measures of CEO remuneration within the financial services industry over six years (2005 to 2010);

- Describe the relationship between multiple measures of company performance and measures of CEO remuneration within the financial services industry over six years (2005 to 2010);
- Determine whether the relationship between measures of company performance and measures of CEO remuneration within the financial services industry has changed over six years (2005 to 2010);
- Determine whether the mix between fixed pay and short-term incentive has changed in the financial services industry over six years (2005 to 2010);
and
- Determine the extent to which the context of CEO remuneration has changed over six years (2005 to 2010) with reference to the risk profile of financial services companies.

1.5 Research motivation

Remuneration, and in particular the remuneration of executives, has become a key management challenge over the past two decades. Popular media has picked up on the challenge and focused on the quantum of executive pay; the amounts received in real terms. Headlines such as “Finance and economics: mutiny over the bounty – pay at investment banks” (The Economist, 2010) and “Ready, set, dough: shareholder activism” (The Economist, 2010) speak to the furore over what is seen to be ‘excessive’.

Academic literature tends to focus more on the underlying philosophies, structures, and practices that shape remuneration rather than the level of pay that is received. Jensen and Murphy (1990) chartered the thinking about the underlying process of setting CEO remuneration. This has been followed up by numerous other academics, whose continual focus on understanding the ‘how’ and not the ‘how much’ has guided literature on executive remuneration.

The recent financial crisis has brought executive remuneration into the spotlight, emphasising the fact that there appears to be a weak link between the performance of organisations and CEO remuneration outcomes. The developments suggest that more work needs to be done to fully understand the management challenge.

Understanding the management challenge from a South African perspective is relevant for two reasons. The first, more obvious, reason has to do with the manner in which the South African financial services organisations have fared through the crisis, where performance of the financial system has remained relatively strong.

Secondly, because South Africa represents the gateway to Africa and is receiving increasing foreign direct investment and interest as a means to springboard into Africa. The International Marketing Council of South Africa has suggested that the invitation to join the BRIC group of countries, as well as South Africa's renewed membership on the United Nations Security Council, is a clear signal of South Africa's growing importance in the international landscape, especially as a platform for capitalising on African opportunities (Business Day, 2011).

Therefore an opportunity exists to make a contribution to the understanding of the relationship between company performance and CEO remuneration outcomes in a unique and important context.

1.6 Summary of introduction

In summary, the role of CEO and executive remuneration is a management issue that has gained significant attention over the past couple of decades, but has become even more relevant in the wake of the global financial crisis. There is a strong argument to suggest that CEO and executive remuneration played some

role in contributing to the current challenges in many financial systems and the global economy.

The South African context has shown something of a different picture, with the financial system remaining stable and characterised by continued profitability. At the same time, the South African context appears to be growing in importance as investors look to South Africa as a means to enter Africa.

With limited academic contributions to the body of knowledge around CEO and executive information available in South Africa, there exists an opportunity, and a need, to further develop the understanding of the relationship between measures of company performance and CEO remuneration.

In the following chapter, the relevant literature on the topic will be presented in order to provide greater context to the research problem.

CHAPTER 2: THEORY AND LITERATURE REVIEW

2.1 Introduction

The primary purpose of this study is to determine the relationship between measures of corporate performance and the remuneration paid to the CEOs of financial services organisations in South Africa. This chapter will set out the literature pertaining to the respective research constructs and will indicate how the various constructs relate to the research problem. The literature review will also provide insight into previous research conducted in the field as it relates to the specific constructs presented in this study.

The literature will begin with a review of executive remuneration and the underlying principles that drive the determination of remuneration for CEOs in the current business environment. This will focus primarily on the principle-agent challenge, and the issues that have arisen following the financial crisis of 2008. The literature review will then focus on measures of company performance and the challenge of linking reward outcomes for CEOs with that of measures of company performance. This will be followed up by a review of executive remuneration within the financial services industry, in order to provide further context to the study. Finally, the literature will present an overview of executive remuneration within the South African context.

2.2 The role of the CEO

The CEO plays a fundamental role in creating value and ensuring business continuity (Conlon & Smith, 2010). The CEO is appointed by the board of directors as the executive manager, whose sole task is to act as the leader of the organisation and deliver on corporate performance expectations. The CEO is the

person who is ultimately held accountable for the performance of the organisation.

The term 'leader' has many connotations, however a number of common threads appear to shine through the plethora of definitions of the leader within a business context. Firstly, the leader acts as a source of influence, intentionally providing direction for followers (Scully, Sims, Olian, Schnell, & Smith, 1994). Scully *et al.* (1994) went on to note that the second main thread is that leaders react to people and circumstances in the external environment.

In addition to the core role of the CEO, Mascarenhas (2009) suggested that there are eight key responsibilities that CEOs of large firms must tackle. These include: developing growth avenues, raising productivity, competing for talent, managing diverse risks, tightening corporate governance, incorporating sustainability, creating new innovation models, and building new infrastructures. While Mascarenhas' research focused more specifically on multi-national firms, it would be reasonable to suggest that the findings have a wider applicability.

Although the complexity and span of control may change across different firms and across different environments, it is evident that CEOs are responsible for an intricate set of activities that are required to enhance the competitiveness of the organisation. The CEO plays a pivotal role in managing the organisation's resources, within the context of a continually changing external environment, in order to create value for the shareholders.

2.3 CEO remuneration

Executive remuneration refers to the remuneration paid to CEOs and other senior executives of an organisation. It refers to the full suite of financial benefits that a CEO and senior executives receive, including the fixed pay component as well as the short-term incentive and the long-term incentive.

A wide body of academics ranging from financial economists through to organisational behaviourists have contributed to the understanding of the field of executive remuneration. A number of prominent academics; Jensen and Murphy (1990), Tosi Jr and Gomez-Mejia (1994), Yanadori and Milkovich (2002), and more recently Edmans and Gabaix (2009), have narrowed the focus of executive remuneration to that of the CEO. Their research suggests that while the principles of executive remuneration are applicable to that of the role of the CEO, they are shown to be far more acute in the role of the CEO.

Bebchuk, Cremers and Peyer (2010) alluded to the gravity of the role of CEO, indicating that CEOs in many instances receive a disproportionate share of the aggregate remuneration for the top-five executive team. The authors' observation was that CEOs typically receive the most lucrative and incentive driven pay of all executives. In the context of this study the focus will be on CEO remuneration, with the underlying principles of executive remuneration being viewed as applicable in a broader sense.

2.3.1 Origins of executive remuneration

The remuneration of executives has been identified as a key management challenge and found its way into economic thinking from as early as the 1930s. Adolf Berle and Gardiner Means published a widely acclaimed book in 1932, 'The Modern Corporation and Private Property', introducing the issue of management responsibility stemming from the separation of ownership and control. The vitality of their work arose from the groundbreaking work on the influence of management power and the inability of shareholders to control the corporation (Bratton, 2001). Berle and Means' contribution served as a foundation for the principle-agent theory.

The first discussions regarding the remuneration of executives in the context of the modern corporation have widely been attributed to Chester Barnard and his book 'The Function of the Executive' (Laffont & Martimort, 2001).

In his seminal work, Barnard indicates that financial incentives are a key ingredient for individuals to provide their discretionary effort. Barnard (1938) indicates that "in all sorts of organizations, the according of adequate incentives becomes the most definitely emphasized task in their existence. It is probably in this aspect of executive work that failure is most pronounced" (cited in Laffont & Martimort (2001, p. 21)).

This challenge of providing some form of financial and non-financial incentive to executives has developed and evolved over the decades and emergence of the principle-agent theory has arisen as the underlying economic principle driving executive remuneration.

2.3.2 Principle-agent theory

At the heart of principle-agent theory is an understanding that the structure and management of owner-controlled firms differs significantly from that of management-controlled firms (Tosi Jr & Gomez-Mejia, 1989). As suggested by Berle and Means (1991), the separation of ownership and control leads to two distinct set of actors; the principle who is a shareholder in the corporation, and the agent, who acts as a manager for the principle.

Jensen and Meckling (1976) formalised the principle-agent theory, defining an agency relationship as "a contract under which one or more persons (the principle(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent" (Jensen & Meckling, 1976, p. 6). The authors built on the earlier work of Berle and Means, indicating that in addition to the issue of property rights and the ability

to command control of the corporation, the separation of ownership and control leads to a set of behavioural implications and agency costs borne by the principle.

2.3.2.1 Value maximisation conflict

This issue of behavioural implications and agency costs primarily manifests itself in the motivating factors held by shareholders and management. Jensen and Meckling (1976, p. 6) indicated that “if both parties are value maximisers, there is good reason to believe that the agent will not always act in the best interest of the principle”. Copeland, Weston and Shastri (2005) mirrored this thought, suggesting that “there is no reason to believe that the manager, who serves as an agent for the owners, will always act in the best interest of the shareholders”, cited in (Leopold-Wildburger & Mietek, 2010, p. 1141).

Jensen and Murphy (1990) indicated a key reason for the misalignment of value maximisation, suggesting that the cost benefit relationship between managers and shareholders is often heavily weighted one way or the other. The authors suggested that managers are often heavily burdened with the cost of a decision with little direct benefit, or they benefit disproportionately in decisions with little benefit to the shareholders.

Literature strongly suggests that in reality, managers consistently act in a manner that promotes self interest. Managers are said to be ‘rent seeking’, wishing for greater pay while working less, and this is divergent from the shareholders’ desire for profit maximisation (O’Reilly & Main, 2010).

The value maximisation conflict is further complicated by the fact that due to the separation of ownership and control, the principle will never have perfect information regarding the trade-offs the agent makes in balancing conflicting objectives. The agent therefore has a diminished ability to sanction inappropriate actions.

2.3.2.2 Risk exposure conflict

In addressing the principle-agent problem through the issue of risk as a differentiating factor cannot be underestimated. Literature refers to the issue of differing levels of exposure to risk as a 'moral hazard'. The theory suggests that individuals act differently under differing degrees of risk (Holstrom, 1972). It is clear that the principle typically bears a far greater risk than the agent does, and this can lead to principle-agent conflict.

It has been said that exposing the CEO to the same levels of risk as shareholders is typically unfeasible and inefficient (Jarque, 2008). It is unlikely that the CEO will ever experience the same risk as shareholders without pledging his or her own capital, and shareholders typically employ agents so that they can focus on running the business from a pragmatic perspective, free of the emotional burden that investor risk creates. Thus, in addressing the principle-agent theory, it is reasonable to infer that risk plays an important role and is a challenge that is not easily overcome.

The presence of value maximisation conflict and risk exposure conflict has an effect on decision-making processes that managers undertake in order to carry out their responsibility of profit maximisation for the shareholders. Consequently it impacts the ultimate value that each actor receives in the relationship.

This continual 'gaming' and need for greater compatibility has given rise to an optimal contracting theory which focuses on aligning managers' and shareholders' interests through the use of incentives.

2.3.3 Optimal contracting theory

Scholars who promulgate the optimal contracting theory suggest that implementation of incentives and the associated linking of incentive pay to performance is a powerful way to eliminate rent seeking behaviour. Jensen and

Meckling (1976) noted that the principle can eliminate divergent agent behaviour by establishing appropriate financial and non-financial incentives. Where this is appropriately done, value maximisation on the part of the agent occurs simultaneously with value maximisation of the principle.

Jensen and Meckling (1976) indicated that the principle will pay the agent to expend resources thereby 'bonding' him to the objectives of the principle. In addition to the bonding costs, the agent will also need to expend monitoring costs to implement and facilitate effective bonding costs. The sum of these costs is defined as agency costs and corporations are continually looking to manage the balance between agency costs and value maximisation for the principle.

Edmans and Gabaix (2009, p. 486) gave an indication of what constitutes an optimal contract, suggesting that optimal contracts should "attract talented CEOs, and incentivise them to exert effort, exploit growth opportunities, and reject wasteful projects, while minimising the cost of doing so".

Jensen and Murphy (1990) suggested that the method of designing an optimal contract should focus on linking the agent's expected utility to the principal's wealth, creating a strong correlation between the financial benefit received by both the agent and the profit maximisation of the principle.

The role of designing an optimal contract rests with the board and is typically subject to shareholder approval. O'Reilly and Main (2010, p. 678) noted that the "board assumes a crucial role in designing a contract that aligns the interests of the shareholders and management, and monitoring and enforcing the terms of the contract".

The literature suggests that optimal contracting is accepted as conceptually strong and provides a key approach to remedying the fundamental agency problem afflicting management decision-making. This is done by incentivising the

agent, primarily through a combination of fixed pay and variable pay, in order for the agent to experience the same favourable outcomes as the shareholder in the event of favourable firm performance.

2.3.4 Labour market theory

Labour market considerations are frequently suggested as an important determinant of CEO remuneration. Chalmers, Koh and Stapledon (2006, p. 260) indicated that “the labour demand theory posits that CEO remuneration level is optimal reflecting a firm’s demand for labour and alignment with shareholder’s interest.” The theory suggests that labour market forces create a natural supply and demand relationship and that CEO remuneration is a function of the principle-agent challenge and a shortage of suitably talented managers.

An emerging body of research suggests that labour forces act to undermine most factors in the determination of CEO remuneration and that CEO remuneration is largely determined by market forces (Gabaix & Landier, 2008). Himmelberg and Hubbard (2000) argued that there is a limited supply of highly skilled CEOs capable of leading large complex organisations which raises the value of the individual to the organisation.

This narrow interpretation of labour market forces suggests that CEO remuneration is a prerequisite for corporate performance and not an outcome of it; the approach is based on the premise that for effective corporate performance to occur, the organisation needs the appropriate management and thus the attraction of appropriate talent will determine the remuneration of the CEO. In contrast, optimal contracting based on the principle-agent theory suggests that remuneration is an outcome of the desire to align the principle and the agents’ interests.

While labour forces are acknowledged as an influential factor in the level of the pay determined, its applicability in isolation of the principle-agent theory has limitations and is subject to some criticism. Importantly, it would be an assumption to suggest that the substitutability of CEOs and the supply of CEO talent is the same across all industries and firm structures. Cremers and Grinstein (2008) indicated large heterogeneity in managerial talent pools across certain industries and homogeneity across others.

Thus the extent to which the supply of CEOs influences the underlying process of setting CEO remuneration is varied. It is therefore acknowledged that while the principle-agent challenge provides the primary economic basis for determining CEO remuneration, the supply of CEOs does to some extent impact the determination of CEO remuneration.

2.3.5 Managerial power

In addition to the economic underpinnings of CEO remuneration, an alternative body of thought promulgates the importance of behaviourist considerations that influence the determination of CEO pay. A primary behaviourist consideration is that of managerial power. Bebchuk and Fried (2004) indicated that managerial power, which manifests in the influence that CEOs carry with the members of the board, plays a perverse role in the determination of incentives.

The managerial power approach is underpinned by the key assumption that the role of monitoring is implemented effectively and that the board of directors, as custodian of the monitoring function, always acts in the best interests of the shareholders. Recent literature has made strong suggestions that CEOs have a significant ability to influence the decision-makers involved in setting and evaluating CEO remuneration. Bebchuk and Fried (2004) provided a strong argument that members of the board are merely representatives of the principle and are not the principle in itself. This proxy relationship creates challenges in

that members of the board are shown to be fallible and subject to the same conflicting decision-making challenges as the CEO and senior executives.

The thrust of the argument for managerial power revolves around the incentive for directors to be re-elected, the friendship and loyalty developed between the board and the executive team, cognitive dissonance and group thinking of professionals who have shared similar career paths, and the role of disclosure and benchmarking (Bebchuk & Fried, 2004). These criteria suggest that the members of the board act on behalf of the principle, but may be malleable to the influence of the CEO.

O'Reilly and Main (2010, p. 676), articulated this sentiment by effectively indicating that rather than serving the shareholders' interests it may be that boards can be "captured" by the CEO and made to serve his or her interests. Cheng and Indjejikian (2009) provided further support for the managerial power issue, indicating that CEOs have strong negotiation power with their boards.

In discussing managerial power, Bebchuk and Fried (2003) argued that CEO remuneration is both a potential instrument for addressing the principle-agent theory and a part of the problem itself. CEO remuneration is an instrument which addresses the principle-agent challenge for all the reasons indicated in the previous section, but is part of the problem in the sense that it may drive agents to influence and manipulate circumstances in order to realise the benefit of the incentive. The role of managerial power therefore serves as a force which undermines the economic underpinnings of CEO remuneration determination.

In a somewhat different perspective on behaviourist considerations, Chapman and Kelliher suggested that institutional factors dominate and constrain organisational decision-making and this extends to decisions regarding remuneration (2011). The authors suggested that the constant 'herding' and desire to align with the market norm is developed by coercive institutional forces.

This suggests that while managerial power may act as an internal influence for conformity and legitimacy seeking behaviour, additional external forces in the form of legislation and governance frameworks may play a substantial behaviourist role in the determination of CEO remuneration.

2.3.6 Summary of CEO remuneration

The principle-agent theory and the subsequent optimal contracting theory have gained significant support conceptually, and have developed a vitality and longevity since the early work of Jensen and Meckling (1976). The extent to which the organisation can develop a remuneration structure that links remuneration outcomes to measures of corporate performance remains a key management challenge.

In addition to the design of CEO remuneration structures, the implementation of CEO remuneration practices have been subject to challenges in the form of behaviourist complications. The extent to which the monitoring function operates independently and is free of undue influence by the CEO, remains a key challenge and one that is being addressed by corporate governance frameworks.

Importantly, both these challenges exist within the context of labour forces and varying levels of heterogeneity and substitutability of CEO talent.

The thrust of this research lies in the first challenge and the extent to which organisations are effectively linking remuneration outcomes with measures of corporate performance. The following section will focus on literature that pertains to the sensitivity between CEO remuneration and measures of corporate performance.

2.4 Pay-performance sensitivity

The relationship between company performance and the associated remuneration outcomes that a CEO receives has fascinated academics and the media alike. Murphy (1985) was one of the first proponents of the pay-performance sensitivity concept, analysing the relationship between pay outcomes and measures of company performance of 501 managers in 72 companies, and found that fixed pay, short-term incentive and total earnings (remuneration outcomes) are positively related to total shareholder return and growth in firm sales (measures of company performance).

Evidence suggests that pay-performance sensitivity refers to the correlation between remuneration outcomes and measures of corporate performance, and that there is not one definitive measure but rather the term refers to a broad set of variables. The following sector sets out the prior research on pay-performance sensitivity, discussing the main variables that are used as measures of both pay and performance followed by an overview of the findings with regard to the nature of the relationship between pay and performance.

2.4.1 Remuneration components

2.4.1.1 WorldatWork reward framework

WorldatWork, the world's largest not-for-profit professional association dedicated to leadership in reward management, indicated that remuneration is a single component within the total rewards mix (Nienaber, 2010). The key elements of the total reward framework as suggested by the WorldatWork include:

- Remuneration (“compensation” as prescribed by the WorldatWork);
- Benefits;
- Work/life balance;

- Performance and recognition; and
- Development and career opportunities.

These are shaped by the characteristics and culture of the organisation and have an impact on individuals and the organisation as a whole. Graphically the framework is depicted as follows:



Figure 1: Total reward framework

(World at Work, 2011)

Despite being one single component of a broader framework, remuneration is consistently viewed as a critical component of the reward mix. In the context of this study, the focus will be on the remuneration component of the reward mix.

2.4.1.2 Armstrong and Brown's reward model

Numerous academics have provided further insight into the main elements of the remuneration component. Armstrong and Brown's (2006) total rewards model distinguishes between transactional rewards and relational rewards, with the transactional reward referring to the remuneration component. In the model, Armstrong and Brown (2006) refer to remuneration as being made up of:

- Base pay;
- Employee benefits; and
- Variable pay (both short-term and long-term incentives).

2.4.1.3 Towers Perrin reward model

Towers Perrin (now known as Towers Watson), a leading global HR consulting organisation, built on Armstrong and Brown's model indicating that the total reward mix is made up of four variables; transactional, relational, individual and communal, plotted on a four quadrant matrix (Armstrong & Brown, 2006). The remuneration component is shown to be a combination of the transactional and individual variables and is made up of base pay, contingency or variable pay, cash bonuses or short-term incentives, long-term incentives, shares and profit sharing.

2.4.1.4 Mercer Human Resource Consulting total reward framework

Further insight into the elements that make up the remuneration component is presented in Mercer Human Resource Consulting's total rewards framework. According to Mercer, the framework is made up of pay, benefits and career, and within the pay category, the following elements are applicable: base pay, overtime pay, short-term incentives, other lump sums, cash profit sharing, and long-term incentives (cited in (Nienaber, 2010)).

2.4.1.5 Consistent remuneration components

The abovementioned research contributions indicate that within the remuneration component, the following variables are consistently expressed as important elements:

- Base pay;

- Benefits;
- Short-term incentives;
- Long-term incentives;
- Adhoc/other payments; and
- Share ownership.

In the context of the pay-performance relationship, fixed pay (the sum of base pay and benefits), short-term incentives and long-term incentives are the measures that appear to be the most widely used. Adhoc or other payments have rarely been included, as they are, by their own admission, unrelated to performance. Share ownership is applicable only in the sense that it refers to remuneration structures and is contingent on performance. This set of remuneration components is illustrated in the following framework and links back to the set of definitions as indicated in Chapter 1.

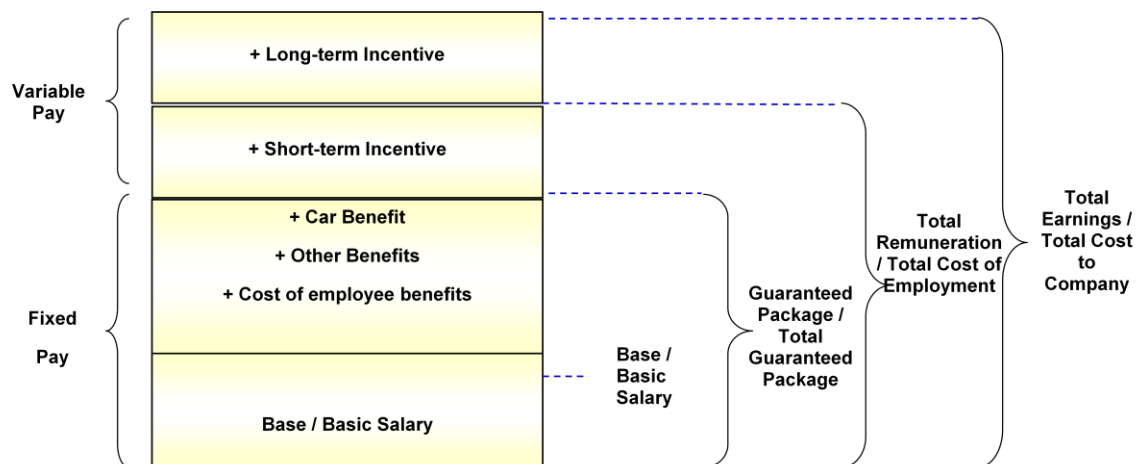


Figure 2: Remuneration components

(21st Century Pay Solutions, 2010)

Lippert and Porter (1997) indicated that numerous studies, including Murphy (1986), used fixed pay and short-term incentives as the measures of remuneration. The authors went on to argue that measures of remuneration should ideally include long-term incentives as they represent a significant portion of total earnings. In the context of this study it will not be possible to include long-term incentives due to time constraints. However, it is noted that numerous credible studies have focused on fixed pay and short-term incentives and that the validity of the study will not be compromised by the omission.

2.4.2 Measures of corporate performance

In analysing the link between remuneration outcomes and measures of company performance, the notion of shareholder value has been consistently used. In the case of Murphy's seminal work, total shareholder return was used as the measure of corporate performance, while growth in firm sales was also indicated as a key measure of corporate performance (Murphy, 1985). The two pronged approach by Murphy was indicative of the various measures that have been, and continue to be, used as measures of corporate performance.

Tosi, Werner, Katz, and Gomez-Mejia (2000), provided further indication of the measures that have been used to define corporate performance. Their research included the following corporate performance measures:

- Absolute financial performance levels;
- Changes in financial performance;
- Share performance;
- Return on equity (ROE);
- Return on assets (ROA); and

- Internal performance indicators.

Absolute performance measures such as turnover and profit are an obvious starting point as they refer to easily identifiable and observable measures. These are audited figures and credible measures of performance.

Share performance allows one to evaluate how absolute performance translates into value for the shareholder. The important measures of share performance include share price and headline earnings per share.

Return on equity and return on assets are financial ratios which are measures that are derived from absolute performance and which provide a richer understanding of the performance of the organisation. Tosi *et al.* (2000) indicated in their research that internal performance indicators refer to the market-to-book ratio and change in working capital. These internal ratios are effectively financial ratios that provide an indication of the company's internal efficiencies.

Thus it appears as though the abovementioned performance measures could be categorised into three main categories. These include:

- Absolute financial performance measures – measures which refer to audited (qualified) measures within a specific year;
- Financial performance ratios – measures which refer to ratios derived from absolute performance measures; and
- Market performance measures – measures which refer to performance within equity markets.

The performance measures indicated by Tosi *et al.* (2000) provide a further point of comparison. For all of the above categories, one can observe the measure as a current or actual measure or view it in terms of growth or decline from the

previous years' measure. Thus the change in measures over time is a further area of analysis.

The abovementioned measures of corporate performance have consistently been used in research pertaining to pay-performance sensitivity. Gerhart and Milkovich (1990) used return on assets (financial performance ratio) as a measure of corporate performance, while Abowd (1990) used total shareholder return (market performance measure) and economic profit (absolute financial performance). Furthermore, Lilling (2006) used market value (market performance measure) and growth in sales (change in absolute financial performance), while Phillips (2010) explored share returns and earnings per share (market performance measures), as well as return on equity (financial performance ratio).

It is clear that there is not one specific measure of corporate performance but rather a range of different performance measures categorised as indicated above. Furthermore, the performance measures may either be applied in actual terms or as a delta value, indicating the change in value from one year to the next.

2.4.3 Relationship between pay and performance: evidence

Following Murphy's seminal study on pay-performance sensitivity, numerous other academics provided further contributions to the body of literature. The important arguments and findings are presented below.

2.4.3.1 Fixed pay not sensitive

Fixed pay, short-term incentives and long-term incentives are explored extensively in Gerhart and Milkovich's (1990) study on managerial remuneration and financial performance. In the study two key hypotheses were presented. The first hypothesis proposed that fixed pay is positively correlated with organisational performance. The second hypothesis focused on variable pay (both short- and long-term incentives), proposing that variable pay is positively correlated with

organisational performance. In both the hypotheses, return on assets (ROA) is used as the measure of organisational performance.

The study made interesting observations in respect of both of the hypotheses. According to Gerhart and Milkovich (1990), the coefficient in respect of fixed pay was not shown to be statistically significant, suggesting that fixed pay is not positively correlated with organisational performance. In contrast, variable pay was shown to be positively correlated with a statistically significant relationship between variable pay and organisational performance.

Within the remuneration framework and given the market forces for the attraction and retention of high calibre CEOs, it would make sense that fixed pay is considerably less sensitive than variable pay. Although the sensitivity of fixed pay will be tested, it is expected from the outset that variable pay will indicate a greater level of sensitivity to performance than fixed pay.

2.4.3.2 Total pay sensitive, but not particularly favourable

Murphy then collaborated with Jensen on a research project that analysed the relationship between company market value and the wealth of the CEO (1990). The authors' study sought to determine the correlation between the change (delta) in the two variables; for every \$1000 change in market value, how much does the wealth of the CEO change? Similar to Murphy's earlier study, the pay-performance relationship was shown to be a positive one, although the authors suggested that the relationship was not a particularly favourable one for the CEO. The study indicated that a \$1000 change in corporate value only corresponded to a \$2.59 change in CEO remuneration (1990).

The study raised a further important point and that is the observation that the relationship between pay and performance was weakening over time. According to Jensen and Murphy (1990), a risk-averse orientation, driven by the significant

interest and dissatisfaction in the level of CEO remuneration, eroded the relationship between pay and performance and entrenched a bureaucratic approach to CEO remuneration. Controversially, the authors suggested that the process rather than the level of pay should be the primary area of focus. Furthermore, the authors stated that a stronger link between pay and performance would lead to higher CEO pay, but that the higher pay would be realised in tandem with increased performance.

Belliveau, O'Reilly III and Wade (1996) indicated further evidence of a positive relationship between CEO pay and corporate performance. The authors suggested a correlation of 0.41 between total earnings and return on equity for a sample of 61 CEOs.

2.4.3.3 Economic profit sensitive, accounting profit not

Abowd (1990) analysed the pay-performance relationship among 250 companies and found that greater use of variable pay (both short-term incentives and long-term incentives), was positively related to total shareholder return and gross economic profit.

Abowd (1990) also found contrasting evidence indicating that accounting-based measures of performance yield only weak evidence of a relationship between remuneration and corporate performance. In contrast, however, economic and market performance measure showed a far stronger correlation with variable pay.

The study is important as it suggests that the design of CEO pay is typically based on economic profit and not necessarily accounting profit. This would be expected when one considers the impact that accounting policies and interpretation differences can have on measures of financial performance. Economic profit would probably be seen as a purer, more appropriate measure of performance. Consider a company that has sold off underperforming assets - the

accounting profit may be favourable in that particular year but is not necessarily an appropriate measure of performance.

2.4.3.4 Evidence refuting-pay performance sensitivity

In contrast to the findings of Gerhart and Milkovich (1990), Jensen and Murphy (1990) and Belliveau *et al.* (1996), numerous academics have conducted studies on the link between CEO pay and measures of corporate performance, and found very little evidence of a positive relationship between the two variables. Finkelstein and Boyd (1998) report correlations of 0.13 and -0.03 between return on equity and total earnings, while in an earlier study, Johnson found return on equity to be correlated with executive pay at 0.003 (cited in Tosi *et al.* 2000).

The contrasting results suggest that there are a number of factors affecting the outcomes of these studies. Tosi *et al.* (2000) suggested that the range of different research methodologies may impact the output of the research, and also alluded to the fact that moderator variables may have an impact on the relationship between CEO pay and corporate performance. Some of these moderating variables will be discussed further.

2.4.3.5 Influence of firm size

The role of firm size in the relationship between pay and performance was addressed by Tosi *et al.* (2000). The study proposed two important hypotheses. The first hypothesis was that firm performance was an important determinant of CEO remuneration. The second, and contrasting, hypothesis proposed that CEO remuneration is largely insensitive to firm performance and largely determined by firm size (Tosi *et al.*, 2000).

In the study, total earnings was used as the measure of CEO remuneration (the dependent variable), while measures of corporate performance and firm size were used as the independent variables. The authors confirmed the broad range

of measures that are consistently used, indicating that the study ended up with 46 independent variables (Tosi *et al.*, 2000). According to Tosi *et al.* (2000, p. 309), factor analysis was used to “find the underlying patterns and relationships for a large number of variables” and it was used to “find the underlying constructs measured by a large number of performance and size variables”.

The findings of the study helped to shed some light on the relationship between CEO pay and corporate performance. According to Tosi *et al.* (2000), firm size accounts for 40% of the variance in the earnings of total earnings for CEOs, while corporate performance only accounted for 5% of the variance.

Cichello (2005) provided further evidence of the impact of firm size, indicating greater variance between measure of market performance and CEO pay when size is not taken into account. According to the author, “when dollar amounts are used as the measure of firm performance it is imperative that the specification include size controls” (Cichello, 2005, p. 626).

Insofar as possible, size controls should be used in order to ensure that the variance due to firm size on pay-performance sensitivities is reduced.

2.4.3.6 Impact of monitoring

The role of monitoring is an important variable as it acts as a powerful motivational force and can significantly impact the behaviour of the CEO. As indicated by Tosi and Gomez-Mejia (1994), monitoring is a behavioural process which includes direct supervision, rules and procedures, which are put in place to ensure that ‘non-programmable’ responsibilities are done within a reasonable decision-making framework. In the context of CEO remuneration, monitoring typically refers to the corporate governance structures that are put in place by the shareholders (principle).

Tosi and Gomez-Mejia (1994) made a profound observation in that, at high levels of monitoring, executives can do little to influence performance outcomes. The abovementioned study would conflict with most governance and monitoring related literature, which suggest a positive relationship between monitoring and pay-performance sensitivity. The principle underlying this observation is that at higher levels of monitoring, executives are compelled to be more risk-averse, resulting in behaviour that deviates from the risk inclined position of the principle. Thus excessive monitoring can have an adverse affect on a CEO's ability to perform at a level that is expected of him or her.

Further monitoring issues which may impact the pay-performance relationship include the main tenets of corporate governance. Issues such as the independence of the board and the duality of the roles of CEO and chairperson, are commonly cited in academic literature. Lee, Lev and Yeo (2007) indicated that high board independence strengthens the positive relationship between firm performance and pay, while Petra and Dorata (2008) indicated that organisations that have separated the role of CEO and chairperson are more likely to keep CEO variable pay low.

The authors indicated that in the event of duality, the board is able to exercise greater control over the variable pay offered to CEOs. A further consideration presented by Petra and Dorata (2008) revolves around the size of the board, where it is suggested that organisations that maintain the size of the board below ten members are more likely to exercise greater control over CEO remuneration.

Intuitively, one would expect monitoring systems to have a positive effect on the performance-pay relationship. However, the evidence suggests conflicting views and a lack of clarity as to how, and the extent to which, monitoring affects the relationship between CEO pay and measures of corporate performance.

2.4.4 Summary of pay-performance sensitivity

The abovementioned studies frame the broad concept of pay-performance sensitivity. In its most broad definition, pay-performance sensitivity refers to the correlation between CEO remuneration outcomes and the value created for the principle.

The evidence suggests that there is no one definitive measure, but rather the term refers more broadly to a range of measures that are made up of various remuneration outcomes and corporate performance outcomes. Importantly, the relationship between pay and performance is seen as a viable way to address the principle agent problem. The agent takes action a in order to maximise the utility of the principle y (Sloof & Van Praag, 2008). In the event that this happens, the agent shares in a percentage of the utility.

Evidence suggests that there is a positive relationship between CEO remuneration outcomes and corporate performance. However the strength of this relationship varies between fairly strong - 0.41 (Belliveau, O'Reilly III, & Wade, 1996) and relatively weak - 0.003 (Johnson, 1982, cited in Tosi *et al.*, 2000). It is noted that varying methods of data collection and statistical techniques may contribute to the variances. It may also be suggested that varying samples and contexts within which the studies have been conducted (such as geographical, economic and industry contexts), may further impact the relationship between the pay and performance.

Importantly, previous research sheds light on some important considerations. The research confirms the fact that the fixed pay is less sensitive than variable pay. It further indicates a greater sensitivity to measures of economic profit than it does to accounting profit.

Finally, the literature points to the fact that moderator variables may play a role in the pay-performance relationship. The two important variables are the size of the firm and the role of monitoring systems within the organisation. Firm size is shown to have a large influence on the variance of CEO pay-performance sensitivity, while the impact of monitoring remains unclear in the face of conflicting evidence.

2.5 The financial services industry

In response to the financial crisis of 2008, executive and CEO remuneration has come under intense scrutiny, with the financial services bearing the brunt of the enquiry. As indicated earlier in this study, executive and CEO remuneration has widely been blamed as a key contributor to the behaviour that led to the crisis.

Emerging research in the field of CEO remuneration is increasingly focusing on the financial services industry in order to determine the role that remuneration played in driving overly risky behaviour. The research has yielded starkly contrasting results. Bebchuk and Spamann (2009) have provided a compelling argument that CEO remuneration induced the behaviour that led to the financial crisis, while Fahlenbrach and Stulz (2011) provided a contrasting view indicating that CEOs in the financial services industry with higher long-term incentive allocations, as well as a higher percentage of short-term incentives, did not perform worse during the financial crisis. Furthermore, the authors challenged the notion that CEOs and executives reduced their holdings in anticipation of the crisis. According to Fahlenbrach and Stulz (2011, p. 11) executives “suffered extremely large wealth losses in the wake of the financial crisis”.

The following section will explore the nature of the financial services industry and provide evidence of the relationship between remuneration outcomes and corporate performance within this specific industry.

2.5.1 Structure of remuneration in the financial services industry

Core and Guay (2010) posed an important question in addressing the issue of CEO pay in the financial services industry; is there a difference between CEO remuneration in the financial services than other industries, and indeed should there be a difference? The question presented by the authors led to a rigorous debate around the structure and underlying principles of CEO pay within the financial services industry. The evidence appears to suggest that CEO remuneration is structurally different with a greater exposure to variable pay.

Adams and Mehran (2003) provided some evidence that the nature of CEO remuneration in the financial services industry is different from that of other industries. According to the authors, banking companies “paid their CEO’s relatively larger cash remuneration (fixed pay and short-term incentives) but relatively smaller share grants and share option grants (long-term incentives)”. The structure of CEO remuneration is said to be influenced by significantly different corporate governance structures to that of non-financial services companies. The outcome is a leveraged approach to remuneration where a significant component of the remuneration offering is variable.

The findings of Adams and Mehran are supported in a post financial crisis study, where DeYoung, Peng and Yan (2010) indicated that risk aligned remuneration for CEOs of large US banks was shown to be higher than non-financial firms.

According to Adams and Mehran (2003), the differing governance environment is a function of the nature of bank production. The provision of government insurance has served to water down monitoring in the banking industry, while the banks’ capacity to take on financial leverage appears to incentivise significantly higher risk investments.

John, Mehran and Qian (2010) provided further evidence of the implicit bail-out policy that banks experience, indicating that banks are insulated from financial losses even in the event of institutional failure. At the same time, the leveraged nature of financial services companies suggests that shareholders benefit from higher risk-investment choices, which increase the value of bank assets while keeping the downside risk limited (Bebchuk & Spamann, 2009). Thus, the financial services industry is characterised by expanded managerial discretion and a culture of the pursuit of growing investment opportunities.

2.5.2 Pay-performance sensitivity in the financial services industry

The pay-performance relationship appears to have changed significantly over time and has been impacted by deregulation in the industry. The research speaks specifically to regulation in the American context, however the insights provide a view into the role of regulation within the pay-performance sensitivity relationship.

Within the American context, the financial services industry went through two substantial deregulation changes during the 1990s which served to significantly alter the nature of competition within the industry by lowering barriers to entry. The first was the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (RNIBBEA), which allowed commercial banks to operate branches in different states (Cunat & Guadelupe, 2007).

The second main regulation change was the Gramm-Leach-Bliley Act of 1994 (GLBA) which was known as the Financial Services Modernization Act (Cunat & Guadelupe, 2007). The act removed legislation that separated the services of banking, insurance and securities underwriting. This served to open up the market where all financial services companies were able to compete against one another and across a broad range of product classes.

In their study on the effects of the abovementioned deregulation, the authors found that while total pay only increases marginally, “this masks a differential effect on the various components of pay” (Cunat & Guadelupe, 2007, p. 3). Within the remuneration mix, fixed pay was shown to come down, while variable pay, in the form of short- and long-term incentives, is shown to have increased. In addition to the structural changes in remuneration, the authors indicated that following these structural changes, the pay-performance sensitivity increased within the financial services industry (Cunat & Guadelupe, 2007).

The findings of Cunat and Guadelupe are largely consistent with that of other research undertaken on the effects of deregulation in the financial services industry. Hubbard and Palia (1995) indicated that a CEO received \$4.34 for every \$1000 increase in shareholder wealth before deregulation, while after regulation this ratio increased to \$5.72. These findings are consistent with the findings of Crawford, Ezell and Miles (1995), who found a stronger relationship between CEO remuneration outcomes and measures of corporate performance following the deregulation.

While deregulation has led to an increase in pay-performance sensitivity, it is not entirely clear whether this has translated into higher pay-performance sensitivities relative to other industries. John and Qian (2003) indicated that bank CEOs have lower pay-performance sensitivities than other CEOs. Although this evidence is acknowledged, there is little evidence to support the finding. Therefore one can clearly attribute greater pay-performance sensitivity to deregulation where deregulation serves to generate greater competition within the industry. However the extent to which the deregulation in the US has lead to higher pay-performance sensitivities in relation to other industries remains unclear.

2.5.3 Current challenges in financial services industry

In addition to an increase in pay-performance sensitivity, research has indicated that there is a correlating relationship between deregulation in the financial services industry and increased risk taking within the industry. Hagendorff and Vallasca (2011) indicated that the sensitivity of CEO wealth to firm risk, also known as 'vega', increased following the GBLA which created a distinct incentive to pursue riskier business activities. Importantly, the authors' research has indicated that CEOs are responsive to these remuneration outcomes and have been shown to actively pursue more risky investment opportunities following deregulation (Hagendorff & Vallasca, 2011).

Further research alluded to the fact that remuneration outcomes served to drive risky behaviour within the financial services industry. Crotty (2008) indicated that securitisation provided attractive fee incomes for a range of financial services providers, yet these service providers were not liable to pay back the fees should the securities suffer large losses. As a result, there was a clear motivation for financial services institutions to maximise the flow of these loans through the financial system, irrespective of whether they were sound or not.

In addition, recent research has indicated that executive remuneration is a significant determinant of a firm's total-debt to total-assets ratio for the financial sector (Barton & Laux, 2010).

Existing research indicates that remuneration outcomes in the financial services sector have shaped behaviour with a clear incentive to pursue more risky business opportunities. However, it is not entirely clear to what extent this is a deviation from the principle-agent theory. A body of literature spearheaded by Bebchuk *et al.* (2010) argued that agency conflicts exist, and that CEO and executive remuneration has contributed significantly to the financial crisis. On the other hand, Fahlenbrach and Stulz (2011) indicated that a lack of alignment

cannot be blamed for the financial crisis, while Hagendorff and Vallascas (2011) mirrored these sentiments, indicating that the risk inclined behaviour observed in the financial services industry was in line with the objectives of value maximising shareholders.

What is clear from the research is that the leveraged nature of financial services and the subsequent CEO remuneration structures have implications for the stability of the financial services industry. Hagendorff and Vallascas (2011) indicated that this inherent volatility in the financial services industry provides support for the case of regulation of CEO and executive pay in the financial services industry. Evidence in the US has indicated that there is a positive pay-performance relationship with deregulation, and that increased regulation may in fact have a negative impact on this relationship.

2.5.4 Summary of financial services industry

The key finding in terms of the financial industry is that remuneration appears to be structurally different from that of other industries. The leveraged nature of the industry is somewhat unique, and while there may not be significant differences in the quantum of pay in the industry versus non-financial industries, the structure of the remuneration components appear to be different with a greater focus on variable pay.

The research provides evidence that deregulation in the US led to greater competition within the industry, which in turn drove greater sensitivity between CEO remuneration and measures of corporate performance. This has relevance because the current challenges in the financial sector support the case for increased regulation and it is not clear what impact this will have and whether the findings with regard to regulation will hold in other contexts.

2.6 The South African context

In looking at the South African context, this research report will briefly explore the broad issue of CEO remuneration and then focus more specifically on the financial services landscape.

2.6.1 CEO remuneration in South Africa

The literature pertaining to the remuneration of CEOs and executives is particularly limited within the South African context. Crotty and Bonorchis (2006) have attempted to uncover some of the issues that exist within the executive pay environment in South Africa. In line with popular media, their book appears to be particularly concerned with the level of CEO pay.

It is noted that some of the criticisms of Crotty and Bonorchis (2006) regarding the seemingly excessive levels of CEO pay have relevance in the South African context. The wage gap continues to be a particularly challenging dilemma in such an unequal society. The authors make reference to the Gini-coefficient, a measure of the inequality in a society, indicating the South Africa has one of the highest inequality scores in the world (Crotty & Bonorchis, 2006).

Collier, Idensohn and Adkins (2010, p. 84) indicated that “South Africa continues to retain its pre-democracy status as one of the most unequal nations in terms of the income gap between the richest and poorest persons... despite a commitment to reducing this inequality”. Within this context, the ‘reasonableness’ of the level of CEO and executive remuneration is continually under the spotlight, whether a robust pay-performance sensitivity can be proven or not.

Crotty and Bonorchis (2006) raised further issues, including those of managerial power and labour market forces. The authors indicated similar concerns to those of Bebchuk and Fried (2004), suggesting that the network of directors is a particularly closed one, with directors looking after each other’s interests. The

book also discusses the issue of a shortage of skilled executives, dismissing the argument as having no defensible basis. According to Crotty and Bonorchis (2006), each and every company perceives their directors as above average, and attempts to remunerate them as above average. In doing so, companies have ratcheted up the level of remuneration.

While the book provides some interesting insights, it fails to present a balanced perspective on the state of CEO remuneration in South Africa. The book dismisses any link between remuneration outcomes and measures of corporate performance without giving evidence of studies conducted on this particular issue. This appears to be a function of the lack of available research on the subject.

In addition to the issues mentioned above, the growing role of governance within the South African context must be acknowledged. As noted by Collier *et al.* (2010), a pursuit of more effective governance structures has resulted in many countries adopting a code of corporate governance. In South Africa, the code driving governance of executive remuneration is known as the King Code of Governance for South Africa. Currently in its third edition (King III), the code has evolved into a comprehensive framework which is comparable to the UK's Corporate Governance Code (Collier *et al.*, 2010).

A critical element of King III is the requirement that remuneration outcomes for the CEO and senior executives be linked to measures of corporate performance (Institute of Directors, 2009). This has manifested itself in practice guidelines for all of the components of CEO remuneration, including fixed pay, short-term incentives and long-term incentives. King III operates on an 'apply or explain' basis, where the onus is on compliance unless the company can clearly articulate a reason for non-compliance (Collier *et al.*, 2010).

While King III does not constitute formal regulation, it appears to be having a significant impact on the manner in which CEO remuneration is addressed.

Following King III, the JSE listing requirements now requires all listed companies to include a narrative statement in the annual reports indicating any deviation from the governance framework set out by King III (Collier *et al.*, 2010).

Furthermore, the new Companies Act which came into effect on the 1st May 2011, has indicated specific requirements which pertain to CEO and executive remuneration (PwC, 2011). While the detail of the new Companies Act remains somewhat unclear at these early stages, the evidence is that it will play a significant role in the determination of CEO and executive remuneration in the future. The trends over the past decade have indicated a significant move towards more comprehensive governance, while formal regulation in some form or other, particularly with respect to disclosure of executive remuneration, is becoming part of the South African CEO remuneration context.

2.6.2 The financial services industry in South Africa

The South African financial services landscape has been described as sophisticated, characterised by good profitability, capitalisation levels and reserves (International Monetary Fund, 2008). In addition to providing a stable financial system for the economy of South Africa, the financial services sector acts as a key conduit to one of the most attractive emerging market regions in the world; Africa.

Khumalo (2008) indicated that South African outward foreign direct investment into sub-Saharan Africa is driven by the financial services industry, which has experienced significant expansion into African countries since 1994. Furthermore, South Africa facilitates more than a third (36%) of all foreign direct investment into sub-Saharan Africa (Asiedu, 2006). The financial services industry therefore plays an important role, not only in the context of South Africa as a developmental state, but also from a regional perspective. The South African financial services sector is critical for the development of Africa as a whole, and in light of the

growing interest in Africa as an investment opportunity, its role in the world economy appears to be rising steadily.

In describing the impact of the global financial crisis on the South African financial services industry, the South African Reserve Bank (2011) indicated that prudent financial regulation and risk management, along with limited exposure to highly leveraged securitisation instruments, have played a role in sheltering the industry from the negative effects of the crisis.

South Africa has seen the introduction of numerous regulatory rulings such as the National Credit Act and the Financial Intelligence Centre Act, along with the implementation of Basel II and governance frameworks such as King III. These regulatory and governance frameworks have been reasonably effective in providing stability throughout the financial crisis. Despite reaching the highest level of household indebtedness, capital and reserve cushions within the South African financial services industry have been sufficient to soften the external shock of the crisis (International Monetary Fund, 2008).

Academic literature on incentives within South African financial services companies is relatively limited. A recent study identified noticeable structural changes in the way executives in the banking industry are paid, indicating a move towards greater use of variable pay (Olivier, 2008). This limited research appears to be consistent with the international research from western societies. Despite indicating the structural changes in CEO and executive remuneration, the study does not provide any indication of the relationship between the variable pay and the performance of the banks.

2.7 Summary of the literature review

The literature review has provided an overview of the key issues that shape the field of CEO remuneration. In particular, the principle-agent theory is juxtaposed

against other theories that have been hypothesised as alternative theories underpinning the determination of CEO remuneration. The literature further indicates that the relationship between remuneration outcomes is an important one, and one that appears to have improved over time.

Numerous modifiers have been identified as key variables in the relationship between remuneration outcomes. These include the size of the firm and the extent to which monitoring exists within the industry. Furthermore, increased competition appears to have had an impact on the relationship, creating a more positive pay-performance relationship, as evidenced in the US following deregulation in the financial services industry.

In addition to these broad findings, the financial services industry is shown to be a dynamic industry with a unique CEO remuneration proposition. The highly leveraged nature of the industry appears to have led to a greater focus on variable pay. This approach has, in turn, created the impetus for more risky investment and operational business decisions.

The debate about whether this is a deviation from the theoretical underpinnings of CEO remuneration (principle-agent theory) is not clearly answered. There appear to be compelling arguments and conflicting results either way. The research does, however, support the case for greater regulation in the financial services industry as a means to provide greater stability and sustainability in the industry.

The onset of greater regulation could have a negative impact on the relationship between remuneration outcomes and measures of corporate performance if competition is compromised. However if greater regulation serves as a monitoring mechanism within an industry that remains highly competitive, then one could argue that the pay-performance relationship would strengthen over time.

Finally, the literature has provided the South African context to the research. It indicates that the South African financial services industry has remained stable through the global downturn, characterised by effective monitoring systems and robust regulation. However, the literature remains limited with regard to CEO pay in the South African context, and there is little indication of the relationship between remuneration outcomes and measures of corporate performance.

Intuitively, one would think that the relationship would be a positive one given the impact of monitoring, but as a starting point it makes sense to isolate the relationship between pay and performance and develop an understanding of that relationship.

The following chapter presents the main research questions that provide the direction for this research project.

CHAPTER 3: RESEARCH QUESTIONS

3.1 Introduction to research questions

The research questions are derived from the challenges that have been highlighted in the literature review and provide the direction for the research methodology to follow. The literature indicates that despite a body of knowledge emanating from developed economies, there is little understanding of the relationship between CEO remuneration outcomes and measures of corporate performance within the South African context. The research questions will provide the thrust for this relationship to be uncovered.

3.2 Specific research questions

3.2.1 Research question one

Is there evidence of a positive relationship between individual measures of corporate performance and measures of CEO remuneration in the South African financial services industry over six years (2005-2010)?

3.2.2 Research question two

Is there evidence of a relationship between multiple measures of corporate performance and measures of CEO remuneration in the South African financial services industry over six years (2005-2010)?

3.2.3 Research question three

Has the relationship between measures of CEO remuneration (fixed pay and short-term incentives) and measures of corporate performance in the South African financial services industry, strengthened over six years (2005-2010)?

3.2.4 Research question four

Is there evidence of a change in the structure between fixed pay and short-term incentives in the South African financial services industry over the six year time period?

3.2.5 Research question five

Is there evidence of increased total-debt to total-assets ratios in the South African financial services industry over six years (2005-2010)?

3.2.6 Summary of research questions

In summary, research question one seeks to determine the relationship between individual measures of corporate performance and measures of CEO remuneration, while research question two shifts the focus to the relationship between multiple measures of performance and CEO remuneration. Question three seeks to make sense of the findings of question two by providing a sense of the trends occurring in the relationship between the two constructs.

Research question four seeks to provide context to the first three research questions by testing whether the South African financial services industry is structurally different from the general market. Similarly, research question five adds important context to the findings of the first three research questions by testing whether South African financial services companies have had a significant change in their risk profile over the six year time period.

The following chapter sets out the methodology used in this research project.

CHAPTER 4: RESEARCH METHODOLOGY

This study was a non-empirical, quantitative study where the objective was to describe the relationship between the abovementioned constructs.

4.1 Research design

The research took its lead from the literature, which suggested that the appropriate way to align shareholders' interests with those of managers is through the use of performance-based incentives. Following on from the literature review, the study took a formal approach where the research followed a series of procedures and data source specifications. The study was a desktop study; archival in nature where the researcher gathered information from a range of secondary sources. This approach was *ex-post facto* where the focus was on reporting the characteristics of the variables rather than playing any role in manipulating them (Blumberg, Cooper, & Schindler, 2008). The information was gathered from public company disclosures and therefore the data is credible and has been subject to a financial audit, as stipulated by the JSE Securities Exchange rules.

The data was longitudinal in nature, where the study was repeated over an extended period (Blumberg, Cooper, & Schindler, 2008). The relationship between annual short-term performance incentives and measures of company performance was observed over a six year period. This period coincided with a full business cycle, with the world economy experiencing growth in 2006 and 2007, and then moving into a recessionary phase from 2008. The collected data was analysed statistically to determine the correlation between the key constructs of pay and performance.

The abovementioned approach provided a meaningful research framework for the following reasons;

- A quantitative approach allowed for simple yet robust statistical analysis in the form of a regression analysis;
- The conceptual framework of incentive pay suggests that there is an independent variable (organisational performance) and a dependent variable (incentive pay). A descriptive approach served to determine the relationship between the two variables;
- The longitudinal nature of the study allowed for trends to develop and was useful in isolating unusual observations; and
- The archival nature of the study meant that the relevant data was in existence. Thus the archival nature of the study eliminated the challenge of generating sufficient data.

4.2 Universe

The universe of the study was limited to companies that are listed on the JSE Securities Exchange, are in the financial services industry and have been for the last six years in a row (2005 – 2010). The universe was determined by the fact that JSE listed companies are the only companies that are required to disclose the remuneration of their directors. The limitation of the universe to financial services companies was in order to align the research with the unique challenges that have developed globally over the past three to four years.

4.3 Unit of analysis

Data regarding both fixed pay as well as short-term incentives was included as the key remuneration measure in the pay and performance relationship. The specific measures included:

- Fixed pay (total guaranteed pay);
- Short-term incentives; and
- Total remuneration.

Data for the long-term incentives was omitted.

Specific measures of company performance were limited to four measures and included:

- Profit after tax – an absolute measure of accounting profit;
- Earnings before interest, tax, depreciation and amortisation (EBITDA) – an absolute measure of economic profit;
- Return on Equity (ROE) – a ratio measure of profit generated relative to shareholders' equity; and
- Headline earnings per share (HEPS) – a measure of accounting profit per share.

Other broad measures of company performance that formed part of the analysis included:

- Total-debt to total-assets ratio – a measure of the ratio of total debt to total assets and an indicator of a company's risk profile; and
- Book value (total assets) – a measure of the company size and complexity.

Individual performance analysis was limited to the CEOs of the chosen companies.

4.4 Population and sampling

The population of the study included all listed financial services companies. The Real Estate sector was eliminated due to them typically operating as trusts and being managed by Boards rather than a CEO and management team. Therefore the pay found in the Real Estate sector is structurally different from that of the other financial services companies. The omission of the Real Estate sector allowed the researcher to eliminate systematic variance within the sample by eliminating the sub-groups that are known to be structurally different in terms of remuneration (Blumberg, Cooper, & Schindler, 2008). The total number of financial services companies changes periodically due to new listings and de-listings, however the number of companies was 30. Table 1 indicates the sample group.

Table 1: Sample group

1. Absa	16. Liberty Holdings
2. African Bank	17. Mercantile Bank
3. Barnard Jacobs Mellet	18. MMI Holdings (previously Metropolitan)
4. Brait	19. Mutual & Federal
5. Brimstone	20. Nedbank Group
6. Cadiz	21. Old Mutual
7. Capitec Bank	22. Peregrine
8. Clientele Life	23. PSG Group
9. Coronation Fund Managers	24. Remgro
10. Discovery Group	25. RMB Holdings
11. FirstRand Group	26. Sanlam
12. Glenrand MIB	27. Santam

13. Hosken Consolidated Investments	28. Sasfin
14. Investec	29. Standard Bank
15. JSE	30. Zurich (previously SA Eagle)

The number of individual CEOs over the six year time period amounted to 49. It is noted that where new CEOs were appointed, they were appointed at similar levels of pay, except where sign-on bonuses and other adhoc pay was provided. All 'other' pay was separated and tested to determine whether other pay made a statistically significant difference to the results. This confirms that the transition of CEOs during the six year time period did not generate a confounding variable.

4.5 Data collection and analysis

Data was collected from databases containing historical company performance information. McGregor BFA was used as the primary source of data. Where data was missing from the database, individual company annual reports were used to collect the relevant data.

The initial part of the analysis took the form of a bivariate regression analysis (research question one). This was used to determine the co-efficient of determination between the dependent variable (CEO pay) and explanatory variable (organisational performance), expressed as follows:

$$\text{CEO pay} = \beta_0 + \beta_1 \cdot \text{organisational performance}_x$$

The analysis was then extended to include a multiple regression analysis (research question two) in order to determine the most appropriate predictors of the dependent variable within a model of explanatory variables. The multiple regression analysis was hierarchical in nature, introducing variables in stages.

The multiple regression analysis is expressed as follows:

$$\text{CEO pay} = \beta_0 + \beta_1 \cdot \text{organisational performance}_x + \dots + \beta_k \cdot \text{organisational performance}_k$$

The research included a repeated measures Analysis of Variation (ANOVA) (research question four and five) to determine the explained deviations and the unexplained deviations across a number of groups (Blumberg, Cooper, & Schindler, 2008). The F-ratio was important to describe the level of significance.

Secondary statistical analyses were used to support the primary statistical techniques of bivariate and multiple regression analysis, and repeated measures ANOVA. On two occasions, a paired-samples t-test was required to analyse data compared from one group under two different conditions. As the specific data used was non-parametric, a Wilcoxon signed rank test was used. A Wilcoxon signed rank test is designed for use with repeated measures when participants are measured on two occasions, or under two different conditions (Pallant, 2010).

4.6 Validity and reliability

Validity refers to the extent to which the research measures what it intends to measure. It indicates the truthfulness of the research. As indicated by Walonick (2011), generally validity is determined by the judgement of the researcher. In determining the validity of the research, it is noted that prior literature played a key role in the determination of the research questions and the methodology followed to answer the research questions.

Reliability in the research was tested by means of a Cronbach's Alpha test. The Cronbach's Alpha coefficient is a measure of internal consistency or homogeneity between items. Blumberg *et al.* (2008) noted that the Cronbach's Alpha test has the most utility for multi-item scales at the interval level of measurement, and is used to estimate reliability for dichotomous items.

4.7 Research limitations

Due to the nature of this study and the time constraints of the research project, the following have been identified as limitations:

- The six year time frame may not be long enough to fully describe the relationship between performance and pay;
- The study will only describe the specific relationship between performance and pay and will not provide further information about causal factors influencing the performance and pay relationship; and
- The study is in one industry sector and may not be transferable to other industries.

The methodology provided clear direction for the research and ensured that the research process was undertaken in a manner that would address the specific research questions. The findings of the research are presented in Chapter 5.

CHAPTER 5: RESULTS

The results chapter will present a broad analysis of the descriptive statistics in order to present an overview of the data that was used, as well as a presentation of the results pertaining to the four main research questions.

5.1 Descriptive statistics

5.1.1 Description of sample

The final sample included 30 companies in the financial services sector. The total number of CEOs analysed over the six year period was 49. 43.3% (13) of the companies had one CEO over the six year period. The remaining 56.7% had a change of leadership over the six year period. 10% (3) of the companies had two changes in leadership over the six year period. These included ABSA, FirstRand, and Peregrine.

5.1.2 Measures of company performance

Company performance was measured based on economic profit (EBITDA), accounting profit (Profit after Tax), and shareholder returns in the form of return on equity (ROE) and headline earnings per share (HEPS). Furthermore, two critical company characteristics which are indicators of company performance were included - debt to assets ratio (D/A) and total assets or book value.

The reliability of each measure was tested using the Cronbach's alpha coefficient. The number of items for each measure was six, referring to the six year period. Within each item the number of cases was between 28 and 30. Values were excluded listwise where there was not sufficient information for the year under review. According to Pallant (2010), the Cronbach's alpha coefficient should be above .7.

The following table indicates the observed Cronbach's alpha coefficients for the four main measures of corporate performance and two company descriptors:

Table 2: Cronbach's alpha coefficient – Measures of corporate performance

EBITDA	PAT	ROE	EPS	D/A	BV
.987	.964	.369	.864	.947	.989

The coefficient scores indicate that all measures have indicated a high degree of internal reliability, with the exception of ROE. Four out of the six measures are shown to be higher than .9, while one of the measures is shown to be higher than .85. The ROE figure presented a low reliability. A deeper analysis of the statistics indicated that negative ROE values, particularly in 2009, had skewed the data somewhat. Analysis of the alpha item if deleted indicates that the reliability rose to above .5 following the exclusion of that year.

Thus the reliability of the measures of company performance was generally viewed to be strong.

Table 3: Descriptive statistics – Corporate performance (Mean)

	EBITDA(R'm)	PAT(R'm)	ROE(%)	HEPS(c)	D/A(%)	BV(R'm)
2005	7729.3	2333.4	30.3	585.3	46.4	132301.7
2006	8143.0	2595.3	35.2	629.0	63.7	169321.5
2007	10869.3	3244.4	31.2	640.2	66.2	212804
2008	12871.8	2802.1	20.5	447.2	67.4	237031.4
2009	11180.8	1755.1	18.7	214.7	71.2	234628.9
2010	10218.5	2342.3	17.9	450.1	68.8	250030.2

Table 4 indicates the standard deviation scores over the six year period for each of the measures of company performance:

Table 4: Descriptive statistics – Corporate performance (Standard deviation)

	EBITDA(R'm)	PAT(R'm)	ROE(%)	HEPS(c)	D/A(%)	BV(R'm)
2005	13551.2	3638.9	16.1	679.3	32.4	239891.6
2006	14730.4	3686.6	24.1	754.5	31.4	344384.9
2007	19772.9	4905.3	13.2	732.0	30.8	433519.5
2008	25295.7	4403.8	27.9	503.3	32.8	489941
2009	20485.8	2984.4	19.5	636.4	27.3	475105.4
2010	17204.8	3346.7	11.4	442.3	29.0	493188.1

Each individual measure of company performance is discussed further.

5.1.2.1 Earnings before interest, tax, depreciation, and amortisation

The EBITDA mean rose from R7.72bn to R10.21bn over the six year period.

Figure 3 provides an indication of the trend for EBITDA over the six year period.

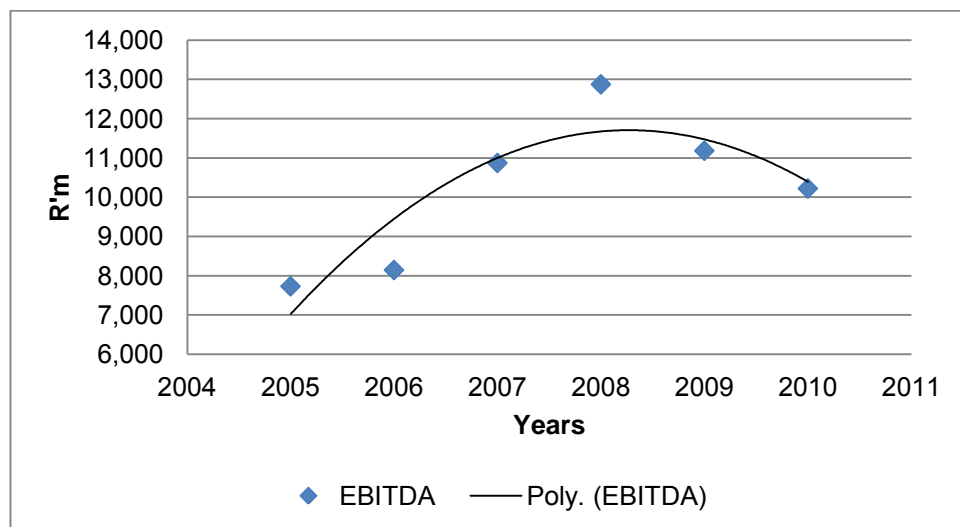


Figure 3: EBITDA – Mean (R'm) trend

The mean EBITDA observation peaked in 2008 at R12.87bn before declining to R11.28bn in 2009 and R10.21bn in 2010.

5.1.2.2 Profit after tax

In contrast to the EBITDA observation showed net growth over the time period, the profit after tax mean rose to its highest level of R3.24bn in 2007 and then declined to levels in line with the 2005 mean. The net growth in the mean over the six year time period is negligible at 0.3%. Figure 4 presents a graphical illustration of the trend:

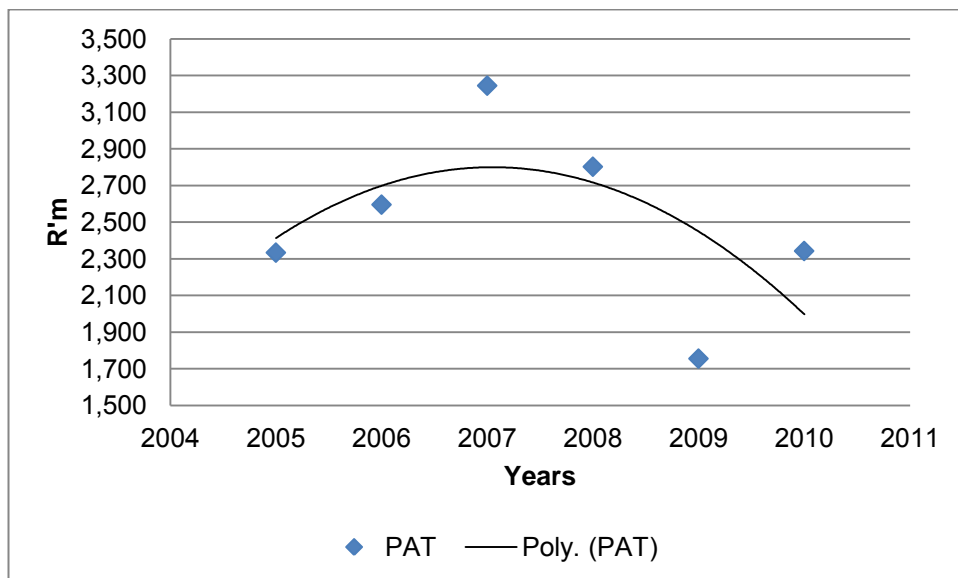


Figure 4: PAT – Mean (R'm) trend

The trend from a profit after tax perspective is similar to that of EBITDA, but the decline is more pronounced over the years 2009 and 2010.

5.1.2.3 Return on equity

The data indicates that the average return on equity rose from 30.3% in 2005 to 35.2% in 2006 and then fell to its lowest levels over the six year period in 2010, with a figure of 17.9%. Figure 5 indicates the trend over the six year period:

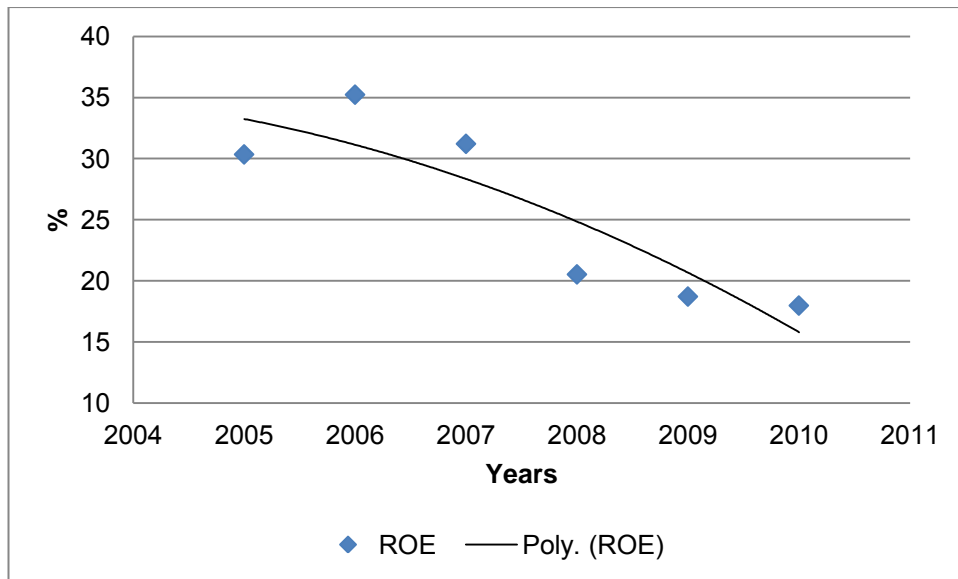


Figure 5: ROE – Mean (%) trend

The results indicate a 40.9% net decline in ROE over the period.

5.1.2.4 Headline earnings per share

Headline earnings per share (HEPS) is shown to have decreased noticeably over the six years. The 2010 figure of 450.1 c/share indicates a net decline of 23% from the 2005 figure.

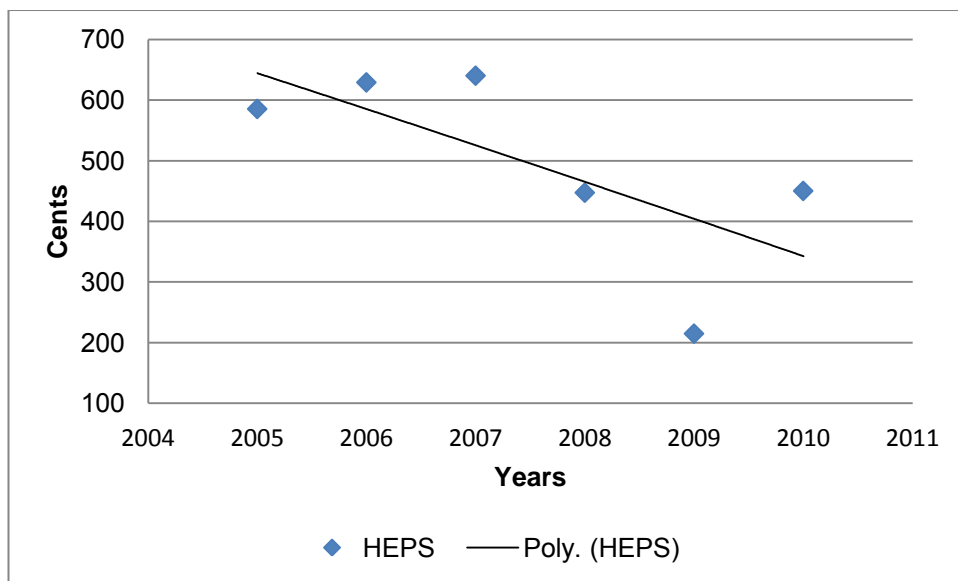


Figure 6: HEPS – Mean (c) trend

The data indicates that headline earnings per share peaked at 640.1 c/share in 2007 before declining.

The polynomial trend line indicates an almost linear trend over the six year period.

The overall trend is therefore a consistent decline from 2005 levels. The 2010 figures indicate a moderate overall improvement, although it is not clear whether this improvement will translate into a sustainable upward trend in the future.

5.1.2.5 Debt to assets ratio

The D/A ratio is viewed as a measure of the company’s risk profile; the higher the ratio of total debt to total assets, the more risky the organisation becomes. The data indicates that the D/A ratio has increased across the sample of 30 companies over the six year period. The D/A ratio increased from a median level of 46.3% in 2005 to a median level of 68.7% in 2010. The descriptive statistics indicate that the D/A ratio peaked in 2009 at a level of 71.2%.

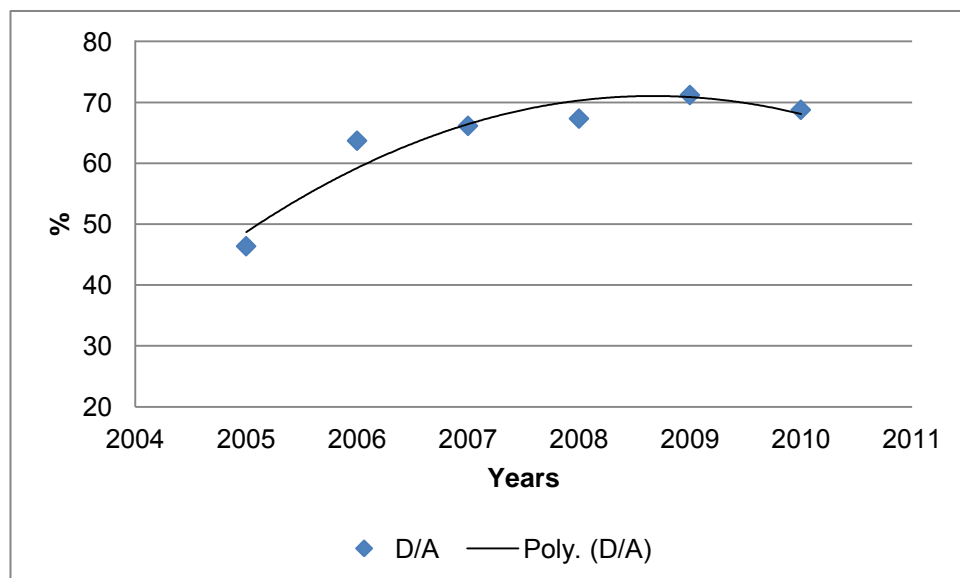


Figure 7: D/A ratio – Mean (%) trend

The overall trend across all sized companies is a noticeable increase in the debt to assets ratio. This has improved marginally across all sized companies, but the D/A ratio remains at elevated levels from 2005.

5.1.2.6 Book value

The book value represents the total assets of the company. It is a critical indicator of the size and complexity of the organisation. The mean book value almost doubled to R250bn.

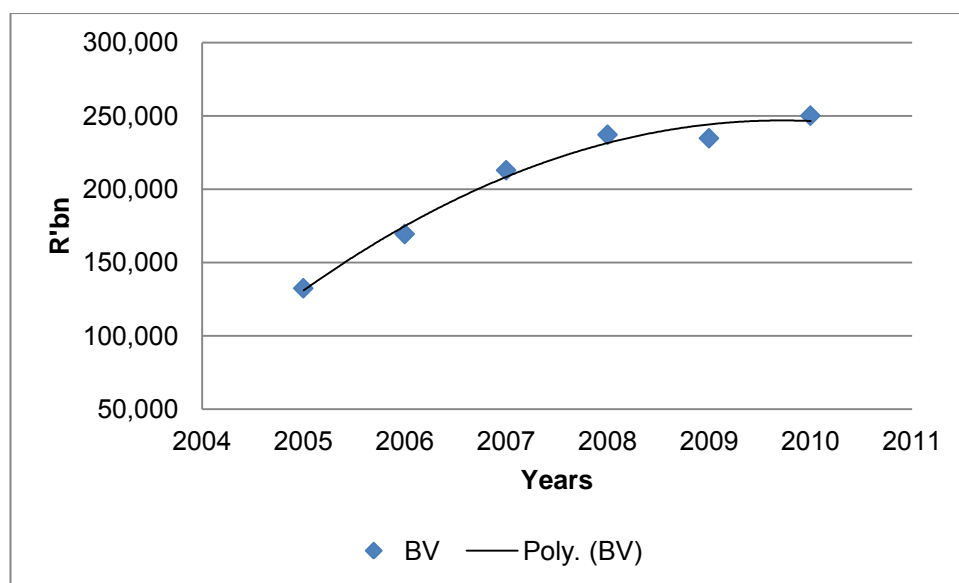


Figure 8: BV – Mean (R'bn) trend

Thus, the book values of the companies in the sample have increased over the six years in a steady fashion.

5.1.2.7 Summary of measures of company performance

The descriptive statistics indicate that there was an overall increase in company performance until approximately midway through the six year period. This was followed by a decline in company performance and is reflected in EBITDA, PAT, ROE and HEPS observations. In addition, the risk profile as indicated by the D/A ratio increased noticeably over the six year period. In contrast to these declining

measures of performance, the mean book value of the companies in the sample grew steadily over the period.

The figures validate the impact of the financial crisis within the South African financial services industry.

5.1.3 Measures of CEO remuneration

Measures of CEO remuneration include fixed pay, short-term incentive (STI), and total remuneration (TR). A further measure, named total remuneration extra (TRX), is made up of total remuneration including non-recurring payments (such as restraint of trade payments and ex-gratia payments).

Again, the reliability of each measure was tested using the Cronbach’s alpha coefficient.

Table 5: Cronbach’s alpha coefficient – CEO remuneration

GP	STI	TR	TRX
.972	.924	.930	.930

The number of items for each measure was six, referring to the six year period. The number of cases varied between 28 and 37, depending on the number of CEOs in office during the year under review. The Cronbach’s alpha coefficient indicates a high degree of internal reliability with all measures in excess of .9.

Table 6 sets out the mean scores over the six year period for each of the measures of CEO remuneration:

Table 6: Descriptive statistics – CEO remuneration (Mean R'000)

	Fixed pay	STI	TR	TRX
2005	2823.5	3145.5	5969.1	6002.0
2006	3054.4	4418.4	7472.8	8173.8
2007	3091.0	6841.2	9740.8	9892.0
2008	4268.6	6152.6	10421.2	10695.2
2009	4049.9	3830.8	7880.7	8560.8
2010	4050.6	3724.5	7775.1	7840.7

Table 7 sets out the standard deviation scores over the six year period for each of the measures of CEO remuneration:

Table 7: Descriptive statistics – CEO remuneration (Standard deviation R'000)

	Fixed pay	STI	TR	TRX
2005	2132.8	3339.3	4691.6	4677.5
2006	2224.6	5681.1	6741.0	7009.3
2007	1879.6	10257.01	11152.4	11074.9
2008	3578.7	9869.3	10781.0	10742.4
2009	2559.8	4904.9	6138.7	7053.1
2010	2513.8	3810.9	5109.7	5040.1

A brief discussion of each individual measure is presented.

5.1.3.1 Fixed pay

Fixed pay increased steadily at the median from R2.8m to R4m from 2005 to 2010. This represents a compound annual growth rate of 9%. Fixed pay is expected to have continued to grow in spite of declining market conditions, as it is particularly rare for fixed pay to experience a decline. The size of the growth is noticeable as it suggests that fixed pay growth has been higher than CPIX figures but has remained single digit growth.

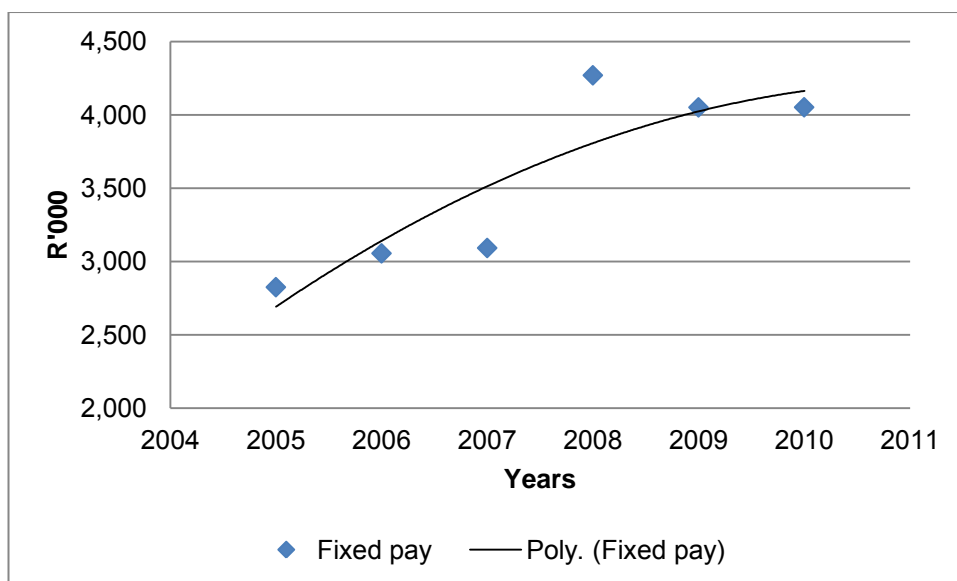


Figure 9: Fixed pay – Mean (R'000) trend

It is evident that fixed pay has not experienced runaway growth as suggested by the media and other social commentators. It is questionable whether an overall growth percentage over the six year period of 9% is larger than the increases observed for the general population of employees.

5.1.3.2 Short-term incentive

The short-term incentive is viewed as a critical component of the research and one of the areas that has generated criticism in the wake of the financial crisis. This component of CEO remuneration is viewed as one that should be tightly

linked to measures of company performance. The median short-term incentive has varied between R3.1 m in 2005 and R3.7m in 2010. The trend indicates that the mean STI increased to its highest point in 2007 at (R6.8m) before declining to 2010 levels.

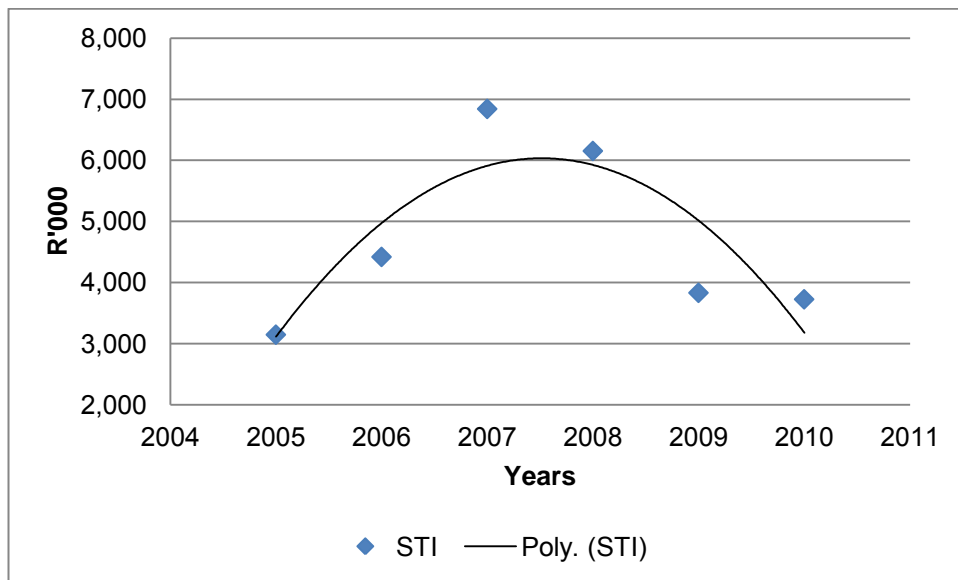


Figure 10: STI – Mean (R'000) trend

The trend chart indicates that the STI grew over the first half of the six year period and then declined in the second. At face value, this appears to mirror the trend of many of the measures of company performance. In particular, the trend appears to be similar to that of the EBITDA and PAT trends.

The results are noteworthy in that they begin to build an argument that there is some relationship between measures of company performance and STI. The extent to which this relationship is statistically significant is explored further in the research.

5.1.3.3 Total remuneration

The data indicates that in a similar fashion to STI, the TR increased to its highest level in 2008, before declining to its lowest level in 2010. This observation gives an indication of the magnitude of the STI within TR, as the first measure of CEO

performance (fixed pay) indicated a steady, albeit moderate, increase over the six year time period.

The TR descriptive statistics indicate that the mean total remuneration package rose from R5.9m in 2005 to R10.4m in 2008, before declining to R7.7m in 2010. The change in mean total remuneration package indicates a 30% increase over the timeframe and a 6% year on year increase.

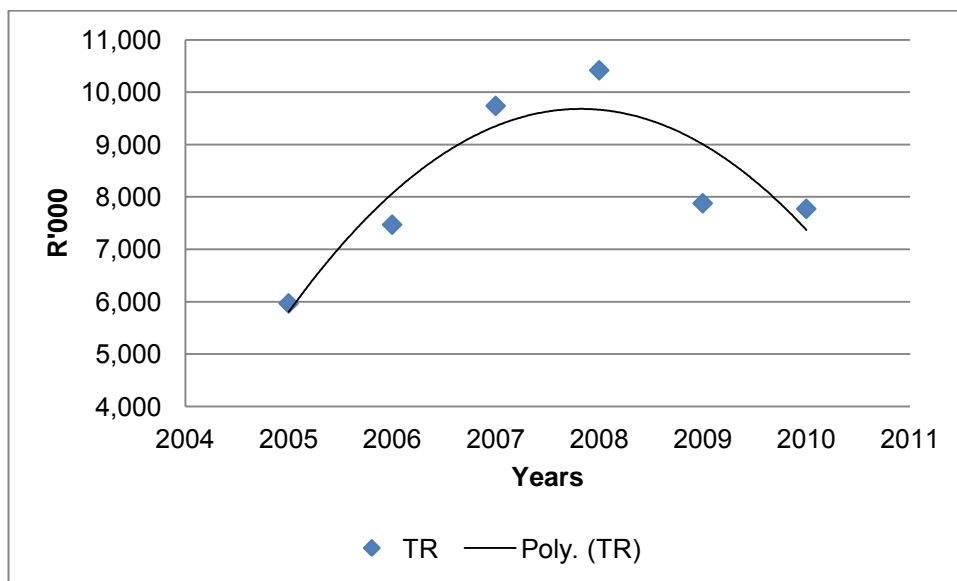


Figure 11: Total remuneration – Mean (R'000) trend

Overall, the trend appears to be similar to that of the STI and suggests that there is a relationship between particular measures of company performance.

5.1.3.4 Total remuneration extra

Total remuneration extra (TRX) was initially included as a variation of total remuneration. It refers to total reward but includes all unusual payments that occur during the year. These refer to sign-on payments, gratuitous payments, loss of office payments and any other unusual payments that may have occurred during the period. The following table indicates the trend which is very closely aligned to that of total remuneration.

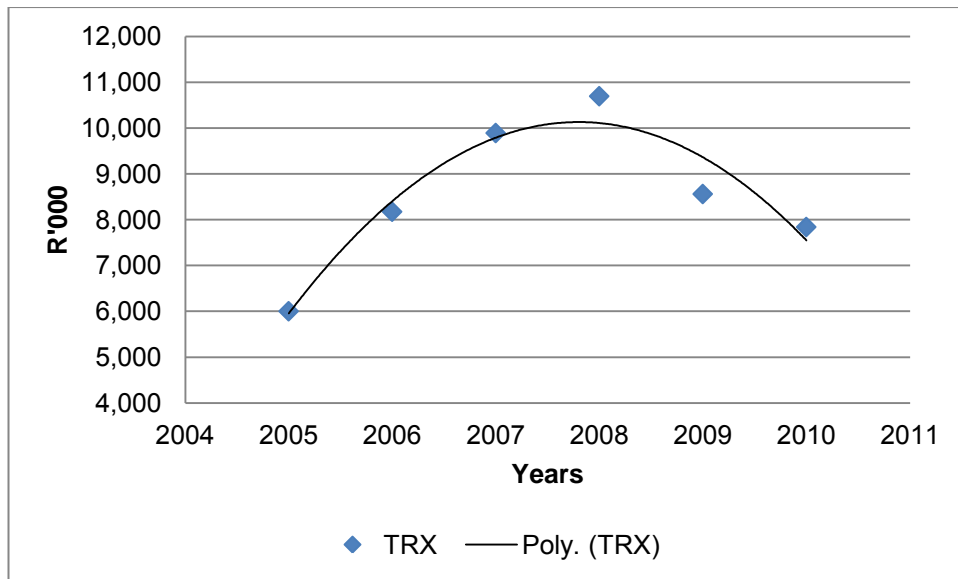


Figure 12: TRX – Mean (R'000) trend

The data indicates that the mean TRX figure rose from R6m in 2005 to R10.6m in 2008, before falling to R7.8m in 2010. The descriptive statistics suggest that there is very little difference between total remuneration and total remuneration extra.

A paired sample T-test was identified as the appropriate approach to determine the significance of the addition of unusual payments to total remuneration. However, as the data required a non-parametric test, a Wilcoxon signed rank test was used. The test revealed a statistically significant difference in the means following the inclusion of unusual payments to total remuneration in only two of the six years (2005 and 2006). The test statistics indicate $z = -2.023$, $p < 0.05$ in 2005 and $z = -2.934$, $p < 0.05$ in 2006.

Table 8: Wilcoxon signed rank test – TR vs TRX

	2005	2006	2007	2008	2009	2010
Z	-2.023 ^a	-2.934 ^a	-1.604 ^a	-1.604 ^a	-1.604 ^a	-1.000 ^a
Asymp. Sig. (2-tailed)	.043	.003	.109	.109	.109	.317

a. Based on negative ranks

As the test did not indicate a statistical difference consistently across the time period, total remuneration extra was omitted for the remainder of the analysis.

5.1.3.5 Summary of measures of CEO remuneration

The measures of CEO remuneration indicate that fixed pay experienced a steady increase and that net increase was 9% per year for the six year period. In contrast, the short-term incentive and total remuneration increased noticeably until approximately halfway through the period, before declining thereafter.

When viewed in the context of the measures of company performance, these observations begin to build an argument that while fixed pay has not been sensitive to company performance, the short-term incentive and total remuneration has. The extent of this relationship was explored further and is discussed in the next section of the findings.

5.2 Results for research question one

A key purpose of the research study was to describe the relationship between measures of corporate performance and CEO remuneration. The expectation was that a positive relationship exists between measures of corporate performance and CEO remuneration in light of the performance of South African financial services companies over the recent past. A bivariate correlation analysis was conducted between each measure of corporate performance and each measure of CEO remuneration.

5.2.1 Bivariate regression: Corporate performance and FP

The relationship between measures of corporate performance and fixed pay was investigated using Pearson product-moment correlation co-efficient. Preliminary analyses were performed to ensure no violation of normality, linearity and homoscedasticity. The results indicate that there was a strong positive correlation

between fixed pay and three measures of corporate performance; book value, EBITDA and profit after tax. The table below indicates that the average r score over the six year period was .69, .59, and .53 respectively.

Table 9: Pearson product-moment correlations – Corporate performance and FP

	2005	2006	2007	2008	2009	2010	Avg
B/V	0.742**	0.821**	0.182	0.839**	0.811**	0.739**	0.69
EBITDA	0.715**	0.709**	0.328	0.61**	0.611**	0.587**	0.59
PAT	0.697**	0.802**	0.307	0.593**	0.241	0.565**	0.53
HEPS	0.381*	0.209	0.312	0.143	0.226	0.118	0.23
ROE	-0.127	-0.253	0.232	-0.105	0.045	-0.499**	-0.12
D/A	0.203	0.266	0.067	0.291	0.163	0.012	0.17

** p < .01 (2-tailed)
* p < 0.05 (2 tailed)

According to Pallant (2010, p. 134), the following guidelines indicate the strength of the relationship: small or weak, $r = .10$ to $.29$, medium or moderate $r = .30$ to $.49$, and strong, $r = .50$ to 1 . Therefore book value, EBITDA and profit after tax reflect strong relationships.

5.2.2 Bivariate regression: Company performance and STI

A similar analysis was done using short-term incentives as the dependent variable. The relationship between measures of corporate performance and short-term incentives was investigated using Pearson product-moment correlation coefficient. The same preliminary tests were conducted. The results indicate a

moderate relationship between book value, EBITDA and profit after tax, with average r scores of .38, .38, and .31 respectively.

Table 10: Pearson product-moment correlations – Corporate performance and STI

	2005	2006	2007	2008	2009	2010	Avg
B/V	0.693**	0.382*	0.309*	0.186	0.317	0.409*	0.38
EBITDA	0.605**	0.438**	0.372*	0.312	0.239	0.291	0.38
PAT	0.529**	0.437**	0.357	0.329*	0.031	0.164	0.31
ROE	-0.037	0.229	0.300	0.379*	0.316	0.292	0.25
HEPS	0.489**	0.431**	0.147	0.243	0.209	-0.104	0.24
D/A	0.045	-0.062	-0.146	0.266	0.318	0.379*	0.13

** p < .01 (2-tailed)
* p < 0.05 (2 tailed)

5.2.3 Bivariate regression: Company performance and TR

A final analysis was done using total remuneration as the dependent variable. The relationship between measures of corporate performance and short-term incentives was investigated using Pearson product-moment correlation coefficient. The same preliminary tests were conducted. The results indicate a strong relationship between company performance and both book value and EBITDA, as well as a moderate relationship between company performance and profit after tax. The average r scores were shown to be .56, .52, and .45 respectively.

Table 11: Pearson product-moment correlations – Corporate performance and TR

	2005	2006	2007	2008	2009	2010	Avg
BV	0.823**	0.593**	0.239	0.449**	0.592**	0.669**	0.56
EBITDA	0.751**	0.603**	0.350*	0.488**	0.446**	0.505**	0.52
PAT	0.694**	0.633**	0.327	0.498**	0.125	0.400*	0.45
HEPS	0.518**	0.432**	0.198	0.270	0.278	-0.019	0.28
D/A	0.123	0.350	-0.142	0.340**	0.323	-0.289	0.12
ROE	-0.084	0.110	0.249	0.312	0.272	0.028	0.15

Similar to that of fixed pay and short-term incentives, the three measures which have the strongest relationship with the dependent variable are book value, EBITDA and profit after tax.

5.3 Results for research question two

Research question two sought to determine the relationship between a set of independent variables (company performance) and the dependent variable (CEO remuneration). The motivation for the research question was that measures of company performance are not typically viewed in isolation and that CEO remuneration, particularly the short-term incentive component, is determined within a scorecard of company performance measures.

A hierarchical multiple regression was used to determine the relationship between measures of company performance and each of the measures of CEO remuneration (fixed pay, short-term incentives and total remuneration) after controlling for the influence of size (book value). Initial tests indicated some degree of multicollinearity between EBITDA and Profit after Tax, therefore

separate models were developed using the two measures in isolation. Model one included EBITDA, ROE, HEPS and D/A ratio, while model two substituted PAT for EBITDA. Other analyses were conducted to ensure no violation of normality, linearity and homoscedasticity within the two models.

Model two indicated similar results to that of model one, although it is noted that model one showed a stronger relationship between the set of independent variables and the various dependent variables in some of the observations.

A Wilcoxon signed rank test was then used to determine the difference between scores from the two models. The tests indicate that the difference between the models was not statistically significant ($p > .05$).

Table 12: Wilcoxon signed rank test – Model one vs Model two

	Fixed pay	STI	TR
Z	-.105 ^a	-.841 ^a	-.314 ^a
Asymp. Sig. (2-tailed)	.917	.400	.753

a. Based on positive ranks.
b. Wilcoxon Signed Ranks Test

Thus for purposes of brevity, model one was used as the focal point for discussions and all references to the model are in respect of model one.

In the model, EBITDA, ROE, HEPS and D/A ratio were entered at Step 1, indicating an R score of .66, .62 and .66 for fixed pay, short-term incentives and total remuneration respectively. These scores explain 44%, 38%, and 45% of the variance in fixed pay, short-term incentives and total remuneration respectively. After entry of book value as an independent variable at Step 2, the R scores were .8, .68 and .76 for the three measures of CEO remuneration respectively. At Step

2, the total variance explained by the model was 66% for fixed pay, 45% for short-term incentives and 58% for total remuneration. Table 13 sets out the results for the hierarchical multiple regression of fixed pay.

Table 13: Hierarchical multiple regression – FP

R	2005	2006	2007	2008	2009	2010	Avg
Model	0.750	0.739	0.437	0.659	0.648	0.711	0.66
Model (incl BV)	0.810	0.867	0.499	0.880	0.898	0.847	0.80
R ²	2005	2006	2007	2008	2009	2010	Avg
Model	0.562	0.546	0.191	0.435	0.420	0.506	0.44
Model (incl BV)	0.656	0.752	0.249	0.775	0.807	0.717	0.66

Table 14 sets out the standardised coefficients (Beta) highlighting the role that each variable played in the model. It is clear that fixed pay was strongly influenced by EBITDA.

Table 14: Standardised coefficients – FP

	2005	2006	2007	2008	2009	2010	Avg
EBITDA	0.53*	0.71*	0.323*	0.768*	0.752*	0.645*	0.621
ROE	0.078	-0.172	-0.118	-0.165	0.208	-0.259	-0.071
HEPS	0.372	0.112	0.212	-0.226	-0.109	0.015	0.063
D/A	-0.066	-0.09	-0.118	-0.065	-0.122	-0.281	-0.124

* p < 0.05

When viewing the relationship between the model and short-term incentives, the relationship is found to be similarly strong. Table 15 sets out the results for the hierarchical multiple regression of short-term incentives.

Table 15: Hierarchical multiple regression – STI

R	2005	2006	2007	2008	2009	2010	Avg
Model	0.705	0.682	0.629	0.563	0.549	0.572	0.62
Model (incl BV)	0.843	0.682	0.631	0.568	0.631	0.715	0.68
R ²	2005	2006	2007	2008	2009	2010	Avg
Model	0.497	0.465	0.396	0.317	0.301	0.327	0.38
Model (incl BV)	0.711	0.465	0.398	0.323	0.308	0.512	0.45

In contrast to the standardised coefficient (Beta) observations for fixed pay, EBITDA was shown to be far less influential, with ROE playing a more significant role in the relationship between the model and short-term incentives.

Table 16: Standardised coefficients – STI

	2005	2006	2007	2008	2009	2010	Avg
EBITDA	0.53*	0.539*	0.489*	0.044	0.218	0.407	0.371
ROE	0.078	0.251	0.439*	0.454*	0.505*	0.411*	0.356
HEPS	0.372*	0.361*	0.297	0.149	-0.119	-0.267	0.132
D/A	-0.066	-0.257	-0.267	0.359	0.36	0.161	0.048
p < 0.05							

Finally, Table 17 sets out the results for the hierarchical multiple regression of total reward.

Table 17: Hierarchical multiple regression – TR

R	2005	2006	2007	2008	2009	2010	Avg
Model	0.825	0.756	0.601	0.614	0.623	0.554	0.66
Model (incl BV)	0.945	0.772	0.605	0.627	0.804	0.779	0.76
R²	2005	2006	2007	2008	2009	2010	Avg
Model	0.681	0.571	0.362	0.377	0.389	0.307	0.45
Model (incl BV)	0.893	0.595	0.366	0.393	0.647	0.606	0.58

The total reward standardised coefficients (Beta) were observed as a natural combination of the fixed pay and short-term incentive results, and are presented below:

Table 18: Standardised coefficients – TR

	2005	2006	2007	2008	2009	2010	Avg
EBITDA	0.667*	0.688*	0.453*	0.295	0.488*	0.621*	0.535
ROE	0.045	0.155	0.403*	0.36*	0.491*	0.179	0.272
HEPS	0.356*	0.341*	0.336	0.061	-0.141	-0.192	0.127
D/A	-0.007	-0.246	-0.261	0.307	0.238	-0.018	0.002
p < 0.05							

The model indicates that the control measure (book value) is statistically significant, explaining a noticeable additional variance in fixed pay, short-term incentives and total remuneration. The average differences in R squared scores, as indicated by the results, are presented as follows:

Table 19: Average difference in R square

	FP	STI	TR
Average difference in R square	0.216	0.069	0.136

However, even when controlling for book value (size), the results clearly suggest a moderate to strong relationship between the model and the various measures of CEO remuneration.

5.4 Results for research question three

Research question three sought to determine if the relationship between the various measures of corporate performance and CEO remuneration strengthened over the six year time period. The expectation was that the relationship would have strengthened based on the increased regulation and monitoring that has occurred in the South African financial services industry over the six years. The R scores from the multiple regression models were used to chart the trend over the six year period using model one. The results are discussed briefly below.

5.4.1 Trends: Company performance and FP

The data indicates that the model declined from an R score of .75 in 2007 to an R score of .437 in 2007, before exhibiting an improvement to .711. Similarly, the degree of shared variance as indicated by the R squared figure declined from .562 in 2005 to .191 in 2007 before increasing to .506 in 2010. Therefore the trend line looks like a U shape.

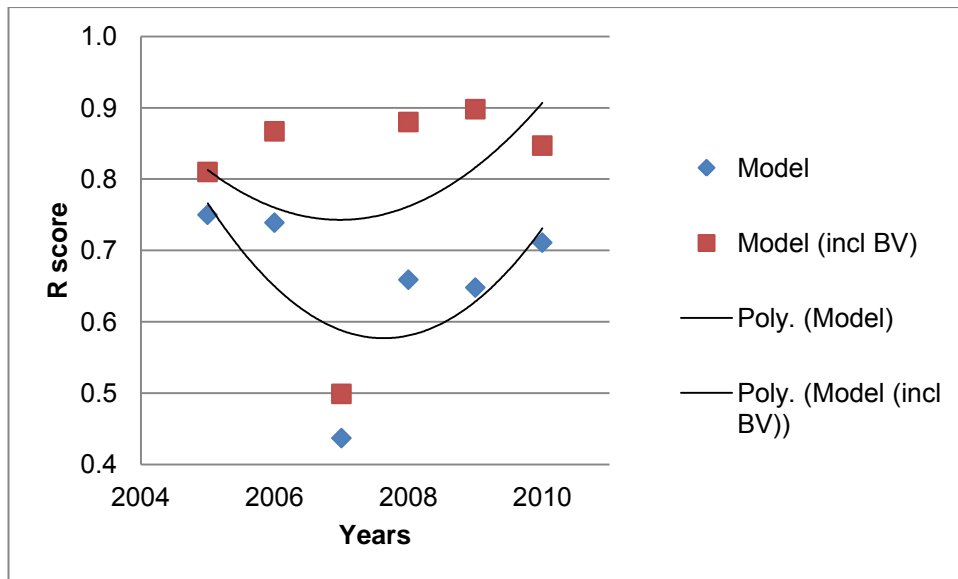


Figure 13: Multiple regression – FP

The model indicates a sharper upward trend through the second half of the six year period, when book value is included in the model.

5.4.2 Trends: Company performance and STI

The STI indicated a strong downward trend over the six year period. Model one, controlling for size, indicates that the STI declined every year from 2005 (R = .705) until 2009 (R = .549), and then indicates a marginal upward movement in 2010 (R = .572). The degree of variance declined from .497 in 2005 to 3.01 in 2009, before showing an upward trend to .327.

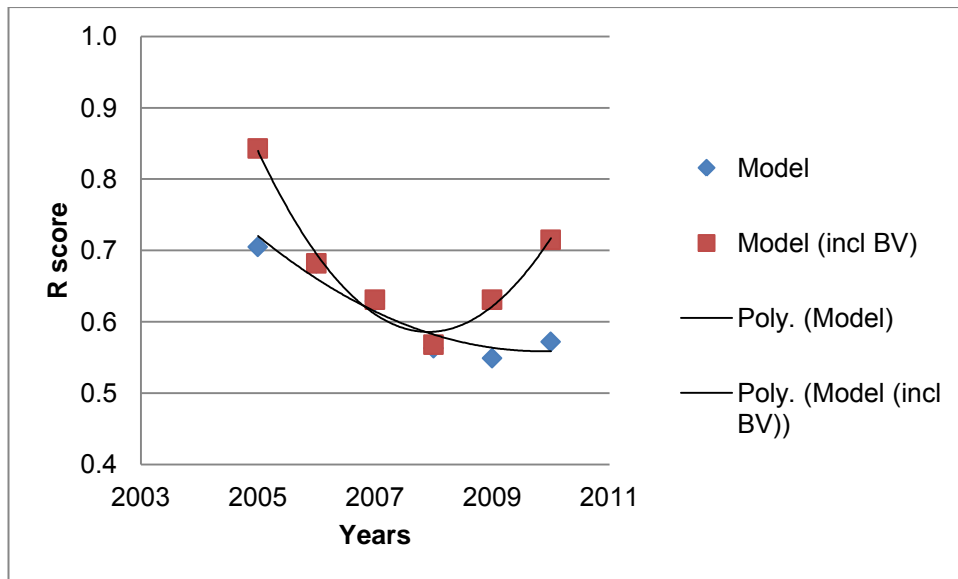


Figure 14: Multiple regression – STI

It is noteworthy that when one includes book value in the regression analysis, the trend shows a noticeable upward trend from 2008. This indicates that book value has a noticeable effect on the multiple regression model.

5.4.3 Trends: Company performance and TR

The total remuneration trend line appears to be very similar to that of the trend line observed for the short-term incentive. The model experienced a decline in the R score from .825 in 2005 to .554 in 2010. Similarly, the measure of shared variance (r^2) declined from .681 in 2005 to .307 in 2010.

The model shows a noticeable increase in 2008 when book value is introduced into the model, while the model which excludes book value continues to decline. The deviation between the two trend lines from 2008 indicates the role of book value in driving the regression model.

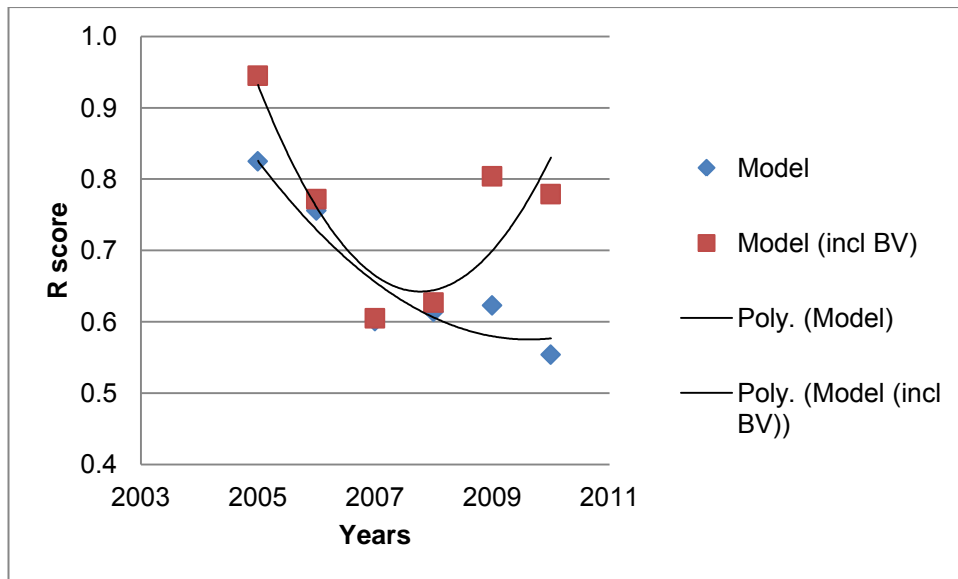


Figure 15: Multiple regression – TR

The analysis indicates a general decline in the relationship between measures of company performance and the various measures of CEO remuneration for at least the first half of the six year time period. In the case of fixed pay, it is noted that there is a upward trend in model one and this is accentuated when one includes book value as a variable in the regression model.

In the case of short-term incentives, the trend is a continuing decline over the six year period, with only a marginal increase in the final year. This trend is mirrored in the total remuneration analysis where the trend is an unmistakable decline over the period. In the case of both the short-term incentives analysis and the total remuneration analysis, the introduction of book value indicates a trend line that begins to show noticeable improvements from 2008 onwards.

5.5 Results for research question four

The purpose of research question four was to determine whether the structure of CEO pay had changed within the financial services industry over six years. The ratio of short-term incentive relative to fixed pay was analysed and shown to have

increased from 2005 to its highest level in 2007, before declining between 2007 and 2010.

Table 20: Ratio of STI to FP expressed as a percentage

	2005	2006	2007	2008	2009	2010
Ratio STI/FP (%)	114.2	151.3	201.0	178.5	126.0	122.4

Figure 16 indicates the mix between fixed pay and short-term incentives as a percentage of total remuneration. The chart indicates the change in the mix and one would suggest from looking at the chart that the change has been statistically significant.

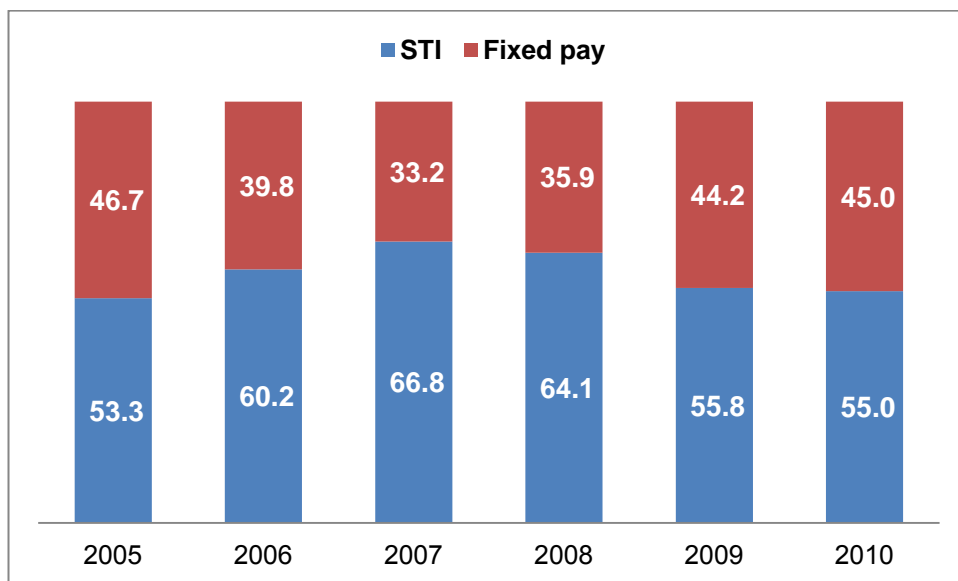


Figure 16: Structure of reward mix

A one-way repeated measures of ANOVA was used to determine the difference in ratio between STI and fixed pay (continuous dependent variable) over the six year period (categorical independent variable). The means and standard deviations are presented in Table 21 indicating that the ratio between STI and fixed pay rose from 114.2% to 201% in 2007, before declining to 122.3% in 2010.

Table 21: Descriptive statistics – STI/FP ratio

	N	Mean (%)	Std. Deviation (%)
Ratio STI/FP '05	34	114.2	104.3
Ratio STI/FP '06	36	151.3	144.4
Ratio STI/FP '07	33	201.0	268.7
Ratio STI/FP '08	36	178.5	256.6
Ratio STI/FP '09	35	126.0	239.4
Ratio STI/FP '10	28	122.4	184.3
Valid N (listwise)	16		

Table 22 indicates that there was a significant effect for time, Wilks' Lambda = .469 $F(11, 2.486)$, $p < .1$, multivariate partial eta squared = .531. Wilks' Lambda indicates that where a large proportion of the variance is accounted for by the independent variable (time), the groups will have different mean values.

Table 22: One way repeated measures of ANOVA – STI/FP ratio

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	
Time	Pillai's Trace	.531	2.486 ^a	5.000	11.000	.097	.531
	Wilks' Lambda	.469	2.486 ^a	5.000	11.000	.097	.531
	Hotelling's Trace	1.130	2.486 ^a	5.000	11.000	.097	.531
	Roy's Largest Root	1.130	2.486 ^a	5.000	11.000	.097	.531

- a. Exact statistic
 - b. Design: Intercept
Within Subjects Design: Time
-

The results indicate that there was a statistically significant difference in the STI/FP ratio over the six year time period, but only at the 0.1 level of confidence.

5.6 Results for research question five

The purpose of research question five was to determine whether South African financial services companies had experienced a change in their debt profile through a significant increase in debt over the six year period. The descriptive statistics section indicated the general trend was an increase in the D/A ratio over the period.

A one-way repeated measures of ANOVA was used to determine the difference in D/A ratio (continuous dependent variable) over the six year period (categorical independent variable). The means and standard deviations are presented in Table 3 and Table 4 in the descriptive statistics discussion. Table 31 indicates that there was a significant effect for time, Wilks' Lambda = .493 $F(14, 7.395)$, $p < .0005$, multivariate partial eta squared = .507. This suggests that there was a statistically significant difference in the D/A ratio over the six year time period.

Table 23: One way repeated measures of ANOVA – D/A ratio

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.507	7.395 ^a	5.000	36.000	.000	.507
	Wilks' Lambda	.493	7.395 ^a	5.000	36.000	.000	.507
	Hotelling's Trace	1.027	7.395 ^a	5.000	36.000	.000	.507

Roy's Largest Root	1.027	7.395 ^a	5.000	36.000	.000	.507
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a. Exact statistic

b. Design: Intercept

Within Subjects Design: Time

5.7 Summary of results

The descriptive statistics indicate that there appears to be a similar trend occurring across measures of corporate performance and CEO remuneration. This face value observation was tested statistically and the results from research question one indicate that there is a moderate to strong relationship between individual measures of corporate performance and the three measures of CEO remuneration.

The results from research question two indicate that a model of corporate performance measures exhibit a moderate to strong relationship with the three measures of corporate performance. The results of research question three indicate that the relationship between measures of corporate performance (represented by the model of performance measures) and the three individual measures of CEO remuneration had weakened over the six year time period. The results suggest some degree of improvement in the relationship over the last year or two, but the general trend has been a declining relationship between the two constructs.

Finally, the results of research questions four and five provide further context to the environment within which this has occurred. Research question four indicates that there have been changes in the structure of CEO remuneration, while research question five indicates that this has occurred within the context of an increasing risk profile for the companies in the sample, observed by a statistically

significant increase in the D/A ratio of financial services companies in South Africa over the period 2005 – 2010.

The following chapter discusses the implications of the findings presented in this chapter.

CHAPTER 6: DISCUSSION OF RESULTS

Chapter six presents a discussion of the key research questions and seeks to make sense of the findings within the context of the literature that has gone before it, as well as within the context of the objectives of the study.

6.1 Discussion of research question one

Research question one analysed by means of bivariate regression analysis the relationships between individual measures of corporate performance and measures of CEO remuneration. The following discussions set out the implications that arise from the findings of research question one.

6.1.1 Book value

Book value was shown to have the strongest individual relationship with all three measures of CEO remuneration. This supports the earlier findings of Tosi *et al.* (2000), who indicated the significant role that size plays and provided the motivation to control for size in the multiple regression analysis.

The findings also suggest that there is a strong incentive to grow the asset base of the company. While the relationship is not necessarily a causal one, the use of book value as a proxy for size and complexity when setting CEO remuneration suggests that there may be a strong incentive for CEOs to pursue growth for personal rather than organisational reasons.

6.1.2 Absolute profit

Following book value, EBITDA was shown to have a strong relationship with fixed pay and total remuneration, whilst having a moderate relationship with short-term incentive. Much of the literature refers to the sensitivity in dollar terms, and in the context of this Rand denominated study, the results suggest that a R1000 increase in EBITDA will result in a R5.90 increase in fixed pay, a R3.80 increase in short-term incentives and a R5.20 increase in total remuneration.

This was followed by profit after tax which indicated a strong relationship with fixed pay, whilst having a moderate relationship with short-term incentives and total remuneration. This indicates that a R1000 increase in profit after tax will result in a R5.30 increase in fixed pay, a R3.10 increase in short-term incentives, and a R4.50 increase in total remuneration.

The results of research question one indicate that economic profit, as indicated by EBITDA and referring to profit unencumbered by non-cash accounting charges, has a stronger individual relationship than accounting profit with measures of CEO remuneration. This supports the findings of Abowd (1990), who indicated that there was a stronger relationship with economic profit than there was with accounting profit. In contrast to Abowd's findings, the results suggest that while the relationship between measures of CEO remuneration and accounting profit is not as strong as that of economic profit, accounting profit still exhibits a moderate to strong R score with measures of CEO remuneration.

6.1.3 Ratio measures

In contrast to the moderate to strong scores indicated by absolute profit measures, the remainder of the measures (ratio and market measures) were shown to be relatively weak. All were below the .30 threshold suggested by Pallant (2010). Similarly, the relationship between ROE and measures of CEO remuneration was shown to be universally weak across the three measures of CEO performance, supporting the work of Finkelstein and Boyd (1998) who indicated a weak relationship between ROE and measures of CEO remuneration. The results are in contrast to Belliveau, O'Reilly III and Wade (1996), who suggested a .41 regression between ROE and total remuneration.

Interestingly, the area where ROE showed the strongest relationship with CEO remuneration was in the short-term incentives analysis. This is encouraging as it is the area one would expect the relationship to be its strongest, but with a score of .25, the relationship remains weak.

The implication of this finding is that ratio measures, which are generally measures of efficiency, do not appear to be driving CEO remuneration strategy. Efficiency is an important perspective as it links in the effect of book value (the

size of the company's asset base). As indicated in 6.1.1, there is a strong relationship between CEO remuneration and book value and while this research does not focus on causality, the results suggest that there may be a causal relationship between book value and CEO remuneration. Thus efficiency measures which analyse absolute profit relative to the balance sheet (such as Return on Assets and Return on Equity) are important to account for the size of the balance sheet.

6.1.4 Market measures

The lack of relationship between measures of CEO performance and market measures would need to be explored further. While absolute profit measures and CEO remuneration are shown to be strongly correlated, this has not translated into a strong relationship between headline earnings per share. This could be due to a number of factors, most notably changes in the capital structure of the company. However, if it is found, following further analysis, that the relationship between market measures and measures of CEO remuneration are weak, then one would infer that the principle agent model is not being effectively implemented in the South African financial services companies.

Intuitively, one would prefer to see a stronger relationship between market measures and measures of CEO remuneration, particularly with the variable components of CEO remuneration.

6.1.5 Risk profile

The weakest relationship between individual measures of corporate performance and CEO remuneration was found between the D/A ratio and CEO remuneration. This measure of performance was the weakest across two of the CEO remuneration measures, namely short-term incentives and total remuneration. The importance of this observation is that the results indicate that there is no real relationship between an increase in the D/A ratio and an associated increase in CEO remuneration.

6.2 Discussion of research question two

Research question two analysed by means of multiple regression analysis the relationships between a mixture of measures of corporate performance and CEO remuneration. This was done through the development of two multiple regression models that were hierarchical in design in order to control for size.

The research indicates that while EBITDA presents a stronger individual correlation with measures of CEO remuneration than profit after tax, the analysis of the two models suggests that there is no statistically significant difference between the two. As such, model one was used as the point of discussion.

Model one included EBITDA (absolute measure), ROE (ratio measure), HEPS (market measure) and D/A ratio (measure of risk). The model included book value (measure of company size) at Step 2 in order to control for size. Thus the model included all of the major perspectives of company performance. The objective was to create a holistic model that encompassed all of the major perspectives of company performance.

The following discussions set out the implications that arose from the findings of research question two.

6.2.1 Strength of the model

The model indicated a strong regression with measures of company performance. It was shown to be stronger than .6 for all measures of CEO remuneration. Similarly, the lowest r squared value was .38 which would indicate a reasonable level of shared variance.

This suggests that while some individual measures of company performance are correlated with the various measures of CEO remuneration, the combination of the measures into a model shows a marginal strengthening of the relationship between the two constructs. Thus the components appear to contribute positively to the relationship between the two constructs.

6.2.2 Dynamics of the model

Within the context of the relationship between the two constructs, the four variables showed different contributions to the overall correlation. This was found by analysing the Beta coefficient. Analysis of the Beta value allows one to assess “the unique contribution of each variable, when the overlapping effects of all other variables are statistically removed” (Pallant, 2010, p. 166).

Analysis of the model using fixed pay as the dependent variable showed a large average Beta in the case of EBITDA. The average Beta was shown to be .621 or 62.1%. Further analysis indicated that only EBITDA made a statistically significant contribution across all six years. The model further corroborates the evidence that the relationship between absolute measures of performance and CEO fixed pay is a strong one, and that EBITDA remains the driving variable - even where additional measures of performance are included in the model.

Analysis of short-term incentives indicated that while EBITDA had the highest average Beta coefficient over the six year period, the average Beta coefficient for ROE was found to be similarly high. The analysis also indicated that ROE was shown to be a statistically significant contributor to the model in four of the six years, while EBITDA was shown to be a statistically significant contributor in only half of the six years observed.

Possibly the most interesting finding is the shift that was observed from EBITDA to ROE as the significant contributor to the model. The results indicated that EBITDA was the statistically significant contributing variable in the first three years of the six year period, while ROE became the statistically significant contributor to the model over the last three years of the study. 2007 was shown to be the transition year where both variables were shown to be statistically significant.

The implication of this observation is the growing focus on ROE within the model as the performance of organisations declined from 2007/2008. As ROE is a ratio measure and a measure of efficiency, this would suggest that the relationship between the model of corporate performance variables and short-term incentives became more objective through the six year period, and more focused on efficiencies rather than absolute profit.

The total remuneration observations presented themselves as a hybrid of the fixed pay observations and the short-term incentive observations. EBITDA was shown to be the strongest contributing variable, followed by ROE and HEPS. Analysis of the Beta value indicated that EBITDA made a statistically significant contribution to the model in four out of the six annual observations, while ROE was found to be statistically significant in three of the six annual observations. Lastly, HEPS was found to be statistically significant in the first two years of the six year period.

The findings suggest that EBITDA contributes to the majority of the model for fixed pay and total remuneration, while in the case of short-term incentives there appears to be an equally strong contribution from both EBITDA and ROE.

It is encouraging to note that ROE plays a larger role within the model in the case of short-term incentives. One would expect fixed pay to be largely determined by EBITDA because it is strongly influenced by size. However in the case of the short-term incentive which is a variable component of pay, the focus should shift from one that is largely EBITDA focused, to one where a combination of performance measures is implemented.

The total remuneration observation is reasonably predictable, being a combination of fixed pay and short-term incentives. The results therefore indicate an EBITDA value lower than the fixed pay observation, while having an ROE observation higher than the fixed pay observation.

6.2.3 Introduction of book value

Introduction of book value into the regression analysis improved all of the observations notably. As indicated in Chapter 5, the R scores of fixed pay, short-term incentive and total remuneration rose to .8, .68, and .76 respectively. This reflected R squared observations of .66, .45, and .58 for the respective measures of CEO remuneration.

The introduction of book value into the hierarchical regression analysis had the greatest effect on fixed pay, and the least effect on the short-term incentive. The introduction of book value accounts for an additional 21.6% of the variance for fixed pay, while only accounting for 6.9% of the variance in short-term incentives.

This clearly indicates that while book value has an impact on the model, the amount of additional variance explained by book value is three times as much for fixed pay than it is for short-term incentives. Furthermore, this indicates that organisations within the financial services industries have not been as influenced by size in determining short-term incentives as they have in the case of fixed pay.

The total remuneration observations appear as a natural combination of the fixed pay and short-term incentives observation. It is noted that the total remuneration results contrast somewhat with the results of Tosi *et al.* (2000), who suggested that remuneration is largely insensitive to performance and primarily determined by size. In the study the authors indicate that 40% of the variance can be explained by size, while measures of performance only explain approximately 5% of the variance.

The results from this study indicate that 44.8% of the variance can be explained by the model, while an additional 13.6% of variance is explained by size. Thus it would appear as though the financial services industry in South Africa has had a more robust approach to setting CEO pay over the past six years than the US based sample from Tosi *et al.* (2000).

Thus the limited role that book value plays within the model may account for part of the reason that South African financial services companies have remained 'orderly and stable' as indicated by the IMF in the literature review.

6.3 Discussion of research question three

Research question three analysed the trend of the relationships between measures of corporate performance and measures of CEO remuneration. In order to analyse the trend, model one was used with reference to the three measures of CEO remuneration and the regression observations were tracked over the six year time period. A polynomial trend line was used to plot the trend and was used given the small number of observations (years). This is best used where the data fluctuates. Given the small number of observations, it was anticipated that the data would fluctuate.

6.3.1 Fixed pay

The findings in chapter five indicated that the trend between model one and fixed pay was characterised by a noticeable decline from 2005 to 2007, before improving through the latter half of the six year period. At the same time the descriptive statistics indicated that the mean fixed pay showed a steady growth over the six year period.

A deeper analysis of the fixed pay mean data points indicated that the mean increased by 4.7% year on year from 2005 to 2007, but increased by 8.7% over the entire time period. This was the result of a 10.3% year on year increase over the period 2007 to 2010.

This suggests that the reason that the relationship between the model and measures of CEO remuneration declined over the first half of the time period and then improved over the latter half of the time period, was because the initial fixed pay increases were not keeping up with the growth in measures of company

performance, and in particular EBITDA, by virtue of its significant role in the model.

The impact of the greater fixed pay increases through the latter half of the time period appears to have played a role in strengthening the relationship between the model and fixed pay.

A further implication of the results is that CEOs have received more noticeable increases through the more challenging years than during the initial period of economic growth. This would suggest that as tough trading conditions have become a reality, so the fixed pay has received greater attention in order to compensate for declining short-term incentives.

If one couples this observation with that of declining short-term incentive levels over the second half of the six year time period as suggested in the findings for the next research question (four), one could infer that the structure of pay had shifted somewhat to be less exposed to variable pay, and more exposed to fixed pay over the second half of the six year time period.

Thus one could infer that as economic conditions have become more volatile, so CEOs have begun to manage the risk component in their remuneration packages. If the inference is correct, this would provide evidence of the risk exposure conflict alluded to in the literature review, as well as suggesting the assertion of managerial power as suggested by Bebchuk and Fried (2004) in response to the risk exposure conflict.

The trend line when book value was introduced to the model appears to have a similar shape to that of the fixed pay trend line, although it is shown to be higher on the chart. This is indicative of the stronger relationship between the model and fixed pay. The consistent shape between the two trend lines simply indicates that

book value does not change the trend other than making the relationship stronger.

6.3.2 Short-term incentives trends

The short-term incentives trends indicated a declining relationship over the six year period. The initial decline was not particularly large but this became more noticeable in 2007 and 2008. The finding suggests that it becomes more difficult to maintain an optimal contract through increasingly difficult operating conditions.

The issue of managerial power as indicated by Bebchuk and Fried (2004), as well as labour market forces as indicated by Chalmers, Koh and Stapledon (2006) and Gabaix and Landier (2008), appear to become far more influential in the determination of short-term incentives as economic conditions worsened.

It appears as though the vulnerability experienced by organisations during difficult trading conditions provides the CEO with greater negotiating power, as shareholders seek to ensure stability and continuity through the difficult period. One could reasonably infer that the state of the external economy therefore plays a critical role in the relationship between measures of corporate performance and CEO remuneration.

The introduction of book value to the model indicated that the relationship strengthened over the latter half of the time period. This finding deviates from the model that controls for book value. This suggests that CEOs have been rewarded for the growth in book value over the latter half of the six year period.

The finding could indicate that in conjunction with increased managerial power, CEOs may be justifying short-term incentives based on increased complexity and growth in the asset base of the company. The finding is a concerning one, as growth in asset base alone should not account for the upward trend as it is not a

pure measure of performance but rather a characteristic of the organisation that typically comes with an increased risk profile.

It suggests that if book value is a key determinant of CEO remuneration, then CEOs have a clear incentive to grow the organisation's asset base for personal reasons rather than those of the principle, at the expense of the company's risk profile.

6.3.3 Total remuneration trends

The total remuneration trends are presented as a combination of fixed pay and short-term incentives. The model is shown as a downward trend line from 2005 to 2010. There appears to be some levelling out during the latter years, but unlike the fixed pay observations, there is no upward trend in the final two years.

Where the model does align with the fixed pay observation is following the introduction of book value as a variable. The results indicate that there is a strengthening of the relationship between the model and total remuneration following the introduction of book value. Again, this is a concerning finding as it suggests that CEOs may have been rewarded for the wrong reasons over the latter half of the period.

This suggests that as an overall observation, organisations have experienced a declining relationship between measures of corporate performance and measures of CEO total remuneration. However, the relationship remains at a level which is viewed as moderate to strong. The declining relationship brings into focus the role of managerial power, along with labour market forces, as a fundamental determinant of CEO remuneration, especially during periods of economic turmoil.

6.4 Discussion of research question four

Research question four focused on the structure of CEO remuneration within the financial services industry. The literature highlighted that international research has suggested an increased focus on variable pay relative to other industries. The question sought to provide some context to CEO pay structures within the financial services industry in South Africa. The hypothesis was that the structure of pay was indeed different and that it had changed over the six year period.

6.4.1 Structure of pay within the financial services industry

The findings provide insight into the structure of total remuneration and the role that short-term incentives play in the total remuneration structure. Unfortunately it does not give a full perspective of variable pay, as the long-term incentives analysis is not included in this study.

However, it does provide insight into the structure of short-term incentives relative to fixed pay. As suggested in the literature by Adams and Mehran (2003) and Cunat and Guadelupe (2007), short-term incentives are shown to be noticeably higher than those of other industries.

When juxtaposed against business research from PwC on the matter of pay structure, the findings indicate that the current structure of pay is not significantly different from the general market within South Africa. The current mix between fixed pay and short-term incentives for the general market for CEOs is shown to be 57% fixed pay and 43% short-term incentives (PwC, 2011). The findings indicate that in 2010 the mix between the two pay components was 55% fixed pay and 45% short-term incentives.

It is further noted that the mix seen in 2007, when many of the measures of company performance were shown to be at their highest levels over the six year

period, the mix between the two components of pay was 66.8% fixed pay and 33.2% short-term incentives.

The Wilcoxon signed rank test, which was used due to the non-parametric nature of the trends data set, indicated that there was a statistically significant difference between the average short-term incentive component over the six year period at the .1 level of confidence.

Thus while the structure of pay does not appear to be noticeably different from the general market in its current form, it has been shown to be significantly different in structure at certain points over the six year period.

6.4.2 Change in structure of pay

The research question also tracked the trend of the change between the two components of CEO remuneration. The findings indicated that there was a trend of increasing short-term incentives from 2005 to 2007, followed by a decline in short-term pay from 2007 to 2010. In absolute terms, the increase in variable pay over the first two years was shown to be 25%, while the decline from 2007 to 2010 was shown to be a 17.7% contraction.

The implication of the findings around the structure of pay provide further evidence for the argument introduced in point 6.3.1, where it was suggested that there was a shift away from variable pay towards fixed pay in CEO remuneration packages over the latter half of the six year time period. This further supports the argument that CEOs' remuneration has become more risk averse over the latter half of the six year period, characterised by a noticeable move away from the focus on variable pay to a greater focus on fixed pay.

This observation provides more evidence of the role of managerial power in periods of economic difficulty. It can reasonably be inferred that CEOs have exerted some influence in the determination of their pay levels and structure, and

that the change in pay structures has not occurred only as a natural response to declining short-term incentives in the wake of weaker performance. The noticeable increase in fixed pay coupled with the declining short-term incentive points to a deliberate change in the structure of CEO remuneration.

6.5 Discussion of research question five

Research question five focused on the context within which the trends have occurred. The objective of research question five was to determine whether the trends occurred within the context of an increasing risk profile or not. The results clearly indicate that the trends occurred within the context of an overall increased risk profile, as indicated by a higher average debt to assets ratio for financial services organisations.

6.5.1 Increased risk profile

The critical observation was that the D/A ratio increased fairly dramatically throughout the six year period. Thus while CEO remuneration was shown to move away from a risk aligned position, the actual risk profile of the organisations in general had increased.

Much of the risk of the companies appears to have arisen in response to the financial crisis and the steps that financial services companies had to take in order to maintain stability. This would have presented itself in the form of bad debt write offs and re-capitalisation initiatives.

Despite the increase in the risk profile of the organisations in the sample, there have been no bankruptcies in the South African financial services industry and most companies have remained profitable, albeit less so. This contrasts with those of developed economies such as the US or the UK where numerous financially distressed financial services organisations suffered major losses and were either bailed out by the state or purchased in quick-fire sales.

The increased debt to asset ratio corroborates the findings of Barton and Laux (2010), who described a growing total debt to total assets ratio within the US financial services industry and highlighted the continuing challenges that exist in the financial services industry.

6.5.2 Re-alignment of CEO remuneration

The finding suggests that CEOs had a strong incentive to re-align the risk-inclined nature of their remuneration packages as the risk profile of the organisation increased. As the companies became more risky, so a large portion of the CEOs' remuneration became increasingly volatile.

While the conceptual purpose of having variable pay is to ensure that there is greater pay-performance sensitivity, it can be argued that when the ability to deliver on targets is influenced significantly by external factors, such as in the case of the deep financial crisis observed in 2008, the attractiveness and effectiveness of this risk aligned approach diminishes.

Thus the increased D/A ratio provides motivation for the re-alignment in CEO remuneration, which in turn provides some explanation for the declining relationship between measures of corporate performance and CEO remuneration.

6.6 Summary of discussion of results

The discussion of each research question has helped to analyse the meaning of the findings set out in Chapter 5. The discussion has focused on the relationship between the constructs in research questions one to three, and has shown reasonably favourable pay performance sensitivities, albeit declining since the onset of the financial crisis in 2008.

The discussion has further provided a deeper insight into the context within which the constructs have been analysed by providing insight into the structure of pay in

research question four, and the risk profile of the organisations in research question five.

The findings appear to have yielded two key insights for managing CEO remuneration. The first is set at a conceptual level and relates to the tension between the principle agent theory and the management power theory. The findings suggest that the two approaches are not mutually exclusive but rather they co-exist, with the balance between the two being influenced by the external environment.

At a management level, the notable observation has been the declining pay-performance sensitivity. This has been coupled with an associated shift away from risk aligned remuneration structures and highlights the risk averse nature of CEOs. The implication is that it appears to be significantly more difficult to manage the relationship between company performance and CEO remuneration during periods of economic uncertainty and volatility.

The following chapter will reiterate the main findings and present recommendations given the various findings.

CHAPTER 7: CONCLUSION

7.1 Introduction

In this chapter the main findings of the research are highlighted. Thereafter, recommendations are presented for implications to relevant stakeholders and lastly recommendations are made for future research.

7.2 Research findings

7.2.1 Primary research finding

In contrast to the general global sentiment that the link between measures of corporate performance and CEO remuneration is a weak one, the South African financial services industry is shown to have a moderate to strong relationship between the two constructs. However, the results from the past six years have indicated a decline in the relationship over the past three years which raises some concern about the future relationship between the two constructs.

Although, the current levels appear to be on a standing that remains satisfactory (moderate strength), one would like to see the strength of the relationship return to pre-2008 levels. This is particularly true given the role South Africa looks set to play in facilitating capital flows into Africa in the future.

7.2.2 Secondary research findings

The secondary research findings are observations that have underpinned the primary research finding and provide further context to the relationship between corporate performance and CEO remuneration in the South African financial services industry.

The secondary research findings are presented at two levels; a conceptual level and a management level. At a conceptual level, the relationship between the principle agent theory and the managerial power theory is exposed as a fluid relationship, largely dependent on the external environment.

While the initial expectation was that the level of pay-performance sensitivity would strengthen over the period, based primarily on the influence of increased monitoring and regulation, this was not found to be the case. Instead, the role of the external environment played a far more influential role in determining levels of pay. As such, pay-performance sensitivity was higher over periods of good performance and lower over periods of weaker corporate performance. The implication of this finding is that pay-performance sensitivity is likely to fluctuate based on macroeconomic trends.

At a management level, the findings indicate that the results provide insight into the performance measures used. Importantly, the results suggest that the inclusion of book value can skew remuneration decisions. This creates a challenge because increased book value typically means increased complexity. However, it is just a proxy for complexity and organisations will need to ensure that the setting of pay is not unduly influenced by book value.

Secondly, the decline in the relationship between the constructs has created numerous management challenges. The first relates to the management of the tension between the principle agent theory and the managerial power theory. The study suggests that remuneration committees are likely to have to make greater use of discretion during periods of poor economic performance. This is likely to occur as behavioural considerations gain traction in the form of managerial power in CEO remuneration decisions. This suggests that the decision-making policies and processes are going to have to be robust in order to ensure consistency and fairness in the application of discretion.

Thirdly, the results yielded an associated structural change in the mix of remuneration components. Most notably there was an observed shift in CEO remuneration from variable pay to fixed pay. This occurred as financial services companies in South Africa experienced a noticeable increase in their risk profiles as suggested by the D/A ratio. This suggests that remuneration committees may need to reconsider limiting the shift in the mix of remuneration components. As a result, remuneration committees and shareholders should be mindful of increasing fixed pay at elevated levels in light of the increasing D/A ratio.

7.2.3 Summary of conclusions

The following key conclusions are therefore made:

- The relationship between the two constructs has been favourable but is experiencing a concerning decline;
- The relationship between the principle agent theory and the managerial power theory is not mutually exclusive, but a dynamic and fluid one influenced by the state of the economy. As such, the level of pay-performance sensitivity is likely to fluctuate over time, in line with macroeconomic trends;
- The role of performance measures is clearly highlighted in the study, with EBITDA (economic profit) playing an important role in determining fixed pay and ROE playing a role in determining short-term incentives along with EBITDA. The study highlights the role that the use of book value can have in distorting remuneration decisions;
- The use of discretion in the determination of CEO remuneration is likely to attract attention in light of the weakening relationship between the two constructs. This will create the impetus for robust policy frameworks to ensure consistency and fairness; and

- The change in the structure of CEO remuneration packages raises a concern as it signifies an increasing lack of alignment between shareholders and CEOs. Managing this shift will require remuneration committees to either reverse the shift, or pragmatically manage the shift within reasonable target levels.

7.3 Stakeholder recommendations

In managing the relationship between corporate performance and measures of CEO remuneration, it is recommended that the relevant stakeholders should:

- Consider the process of setting CEO remuneration. It is evident from the study that there appears to be a relationship between the two constructs on face value. However, a deeper understanding of the relationship indicates that the true correlation has declined. It is proposed that similar regression techniques may be used in business to create a robust link between the two constructs;
- Consider the target level of pay-performance sensitivity. The research project has been conducted from the perspective that greater pay-performance sensitivity is better. This position is informed by the literature. However, the impact of the economic downturn highlights the role that managerial power plays in setting pay during tougher economic conditions. This may have been necessary to attract, motivate and retain leadership skills during the downturn. It is recommended that a target range of pay-performance sensitivity be pursued by organisations, rather than an absolute level. This will allow organisations to manage the relationship between the principle agent theory and the managerial power theory within a reasonable level, and with some degree of flexibility;
- Consider the role that discretion plays in determining CEO remuneration. It is recommended that organisations develop a formal policy that deals specifically with discretion within the context of the executive reward strategy;

- Consider the structure of CEO remuneration. The notable change in the structure of CEO remuneration is underpinned by risk adverse behaviour of CEOs. It is therefore recommended that organisations should have a policy position regarding the level of risk that the CEO is required to assume. This would need to be done in conjunction with the psychology of incentives, the culture of the organisation, and the personality profile of the CEO. Importantly though, the organisation should clarify its position with regard to the structure of the remuneration package, and decisions regarding CEO remuneration should be made holistically within the context of the target structure; and
- Consider the measures of corporate performance that are relevant when determining CEO remuneration. It also indicates the role that book value plays in influencing remuneration outcomes. It is recommended that organisations carefully consider the measures used to determine remuneration, ensuring that the right measures are used to determine the right components. It is further recommended that controls are put in place to ensure that book value does not unduly influence remuneration decisions.

7.4 Suggestions for future research

Whilst this study has contributed to the body of knowledge of the relationship between measures of company performance and CEO remuneration within the financial services context, several limitations of the research were highlighted in Chapter Four. These, along with additional observations made during the research project, suggest that further research is necessary to address these limitations in order to fully appreciate the area of study.

As such the following areas for future research are presented:

- The study could be expanded over a larger time frame. Whilst it was noted in the study that six years represented the full business cycle from growth through to recession, the six year time frame remains a limited time period

with significant external factors at play. A longer time frame may prove to add further insights to the study, especially in the future as one expects the economy to return to stronger and more stable growth levels;

- The study did not focus on causality. The primary objective of this study was to determine the nature of the relationships between the two constructs. The fact that it has been proved that there is a relationship between the two constructs suggests that further research may be necessary to expand on these findings and determine whether causality exists in the relationships.

This is particularly relevant as the observed relationship between the two constructs appears to support the proposition that prudent management of CEO and executive remuneration has contributed to stability of the financial sector within the financial services sector. Further research is necessary to fully understand this relationship;

- The study focused specifically on the financial services industry. It is noted that remuneration practices tend to vary from industry to industry and that the financial services industry is significantly different from other industries. In order to more fully appreciate CEO remuneration in South Africa, the study would need to be expanded beyond the financial services industry.

This is particularly relevant when one considers that it is not only the financial services industry which positions South Africa to take advantage of increased foreign direct investment in Africa, but rather a range of different industries; and

- The study did not include long-term incentives. It is difficult to compare long-term incentives on face value, and analysis of long-term incentives requires indicative modelling to determine the expected value of the

instrument. This was not possible given the timeframe of the research project. However, long-term incentives are an important component of a CEO's total earnings, and the addition of this perspective may add further insights to the relationship between measures of corporate performance and CEO remuneration.

7.5 Conclusion

In conclusion, the relationship between the two constructs presented some pleasing results and some areas of concern. It is gratifying to note that the relationship between the two constructs has been strong and remains at a moderate level in spite of the global financial crisis. It is notable however that the relationship has declined and one would not like to see the relationship decline further in light of a global recovery.

The evidence of a favourable relationship between the two constructs suggests that this may be part of the reason why South African banks have remained orderly and stable throughout the economic downturn. It further positions South Africa to play a key role in the global expansion into Africa. Finally, it suggests that the unhappiness over CEO remuneration may be somewhat misplaced, but indicates the challenge that exists in maintaining a strong link between corporate performance and CEO remuneration.

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ANNEXURE A – CEO’S INCLUDED IN SAMPLE

ER Bosman – Absa	MJD Ruck – Liberty Group
SF Booysen – Absa	JB Hemphill – Liberty Group
M Ramos – Absa	DJ Brown – Mercantile Bank
L Kirkinis – African Bank	P Doyle – Metropolitan/MMI
KG Jacobs – Barnard Jacobs Mellet	W van Zyl – Metropolitan/MMI
AM Mazwai – Barnard Jacobs Mellet	B Campbell – Mutual & Federal
AC Ball – Brait	KN Kennedy – Mutual & Federal
MA Brey – Brimstone	TA Boardman – Nedbank Group
R Cadiz – Cadiz	M Brown – Nedbank Group
R Barkai – Cadiz	JH Sutcliffe – Old Mutual
R Stassen – Capitec	J Roberts – Old Mutual
GJ Soll – Clientele Life	LJD Fourie – Peregrine
T du Toit – Coronation Fund Managers	SD Melnick – Peregrine
H Nelson – Coronation Fund Managers	KA Betty – Peregrine
A Gore – Discovery	JF Mouton – PSG
LL Dippenaar – FirstRand	MH Visser – Remgro
PK Harris – FirstRand	P Cooper – RMB Holdings
S Nxasana – FirstRand	NV Beyers – SA Eagle/Zurich
DJ Harpur – Glenrand MIB	GRC Munnoch – SA Eagle/Zurich
AJ Chislett – Glenrand MIB	J van Zyl – Sanlam
MJA Golding – HCI	SC Gilbert – Santam
JA Copelyn – HCI	IM Kirk – Santam
S Koseff – Investec	RDEB Sassoon – Sasfin
B Kantor – Investec	JH Maree – Standard Bank
RM Loubser – JSE	