

The relationship between South African CEO compensation and company performance in the banking industry

B. Deysel & J. Kruger

ABSTRACT

This exploratory study is based on a statistical data analysis to determine whether a long-term correlation is present between South African CEO compensation and company performance in the banking sector. The detailed analysis, using a seven-year time period, is performed at individual company level as well as at sector level and includes two measures of company performance, namely market performance (share price) and accounting performance (return on equity, EBITDA and HEPS). The study is based on the agency theory, which postulates that linking CEO compensation to company performance is a means of reducing agency monitoring costs. It takes into account the historical and current trends in CEO compensation, including King III and its “say-on-pay” provision. Six out of seven null hypotheses were accepted in the study, indicating a long-term correlation between CEO compensation and variables such as company performance, average employee salary, general market performance and inflation. No correlation was found with company size.

Key words: CEO compensation, company performance, CEO remuneration, corporate governance, agency cost, agency theory, King III, banking sector, remuneration committee.

Introduction

It is important for shareholders that sustained market-related returns are generated. A key motivational factor in achieving this is chief executive officer (CEO) compensation linked to performance. A balance needs to be achieved between long-

Mr B. Deysel was a Master's in Business Leadership student at the University of South Africa School for Business Leadership. Prof. J. Kruger is at the University of South Africa School for Business Leadership. E-mail: Jkruger2000@yahoo.com

term and short-term compensation while also taking into account the market value of any particular CEO's role.

Politicians, the media and unions have criticised the current CEO pay levels at firms listed on the Johannesburg Stock Exchange (JSE) in comparison with average employee salaries. Unfortunately, emotionally charged overgeneralisations are often not based on facts. An index called the Gini coefficient is calculated periodically and determines the level of inequality between high income groups and groups earning a basic wage. South Africa consistently ranks among countries with the highest levels of inequality (World Bank 2013).

This study contributes to the discussion on excessive CEO compensation and the question whether the current levels of compensation are based on merit. CEO compensation is scrutinised in the context of growth in the performance of companies over a seven-year period.

Objective of the study

The aim of this study was to determine whether a long-term positive relationship exists between CEO compensation and the company's performance. Company performance is divided into: (i) market performance (growth in share price) and (ii) accounting performance (headline earnings per share [HEPS] and/or earnings before interest, tax, depreciation and amortisation [EBITDA] and/or return on equity [RoE]).

This study confirms the existence of other plausible relationships by determining the relationship between CEO compensation and (i) general employee compensation (CEO pay multiple and/or average employee salary), (ii) company size (total assets and/or number of employees), (iii) its peers (the JSE Banking [JSE Banks] Index; CEO compensation), (iv) the general market performance (JSE All Share Index [ALSI]) and (v) the general inflation (Consumer Price Index [CPI] inflation).

In the United States of America (USA), substantial data are available on CEO compensation as a multiple of average employee wage, yet very few similar studies have been performed in South Africa. Given the local complexities of inequality, poverty and unemployment (underpinned by the Gini coefficient), this study provides data that will serve as a reference point for future decisions.

The result of this study informs future discussions on the effectiveness of disproportionate CEO compensation packages and their long-term correlation with increased market capitalisation and sustained accounting performance. In addition, the study provides a scientific means of determining whether statements by

boards of directors about the correlation between company performance and CEO compensation are valid.

Theoretical foundation and literature review

Figure 1 outlines the structure of the literature review and gives an overview of the sequence and order of the theoretical topics covered.

The agency theory establishes the link between company performance and executive compensation. The agency theory is the theoretical foundation for executive compensation and its level (the absolute value) and composition (the structure).

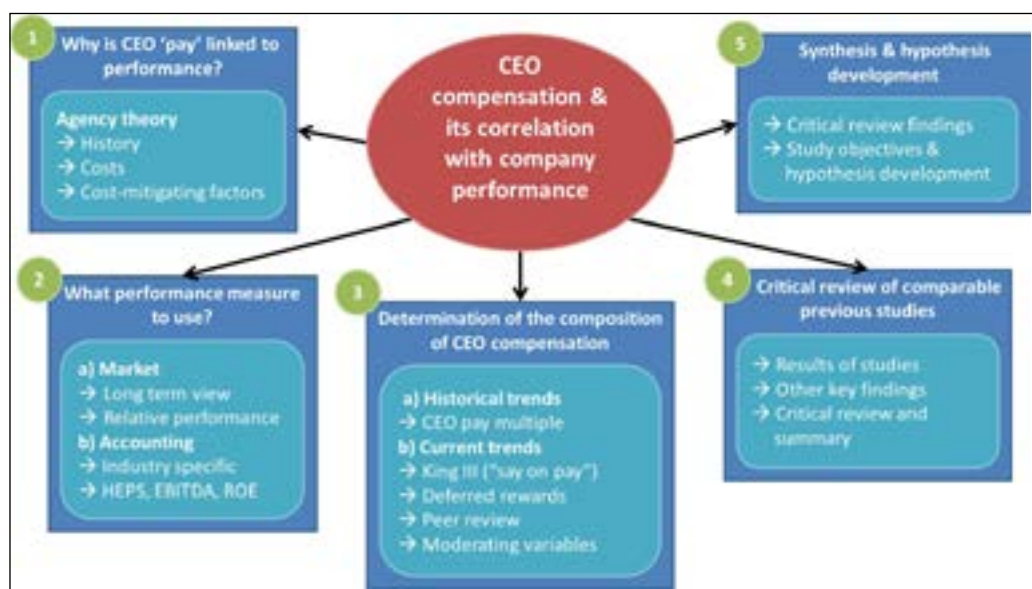


Figure 1: Overview of the fundamental bases covered by the study

Executive compensation – what performance measure to use?

It is necessary to determine which indicators of company performance should be used to evaluate performance. The indicators could be market-based or based on “historical” accounting profit (Eriksson & Lausten 2000).

Market performance

A company’s market capitalisation is the number of issued shares multiplied by the quoted share price on the securities exchange (SE). Owing to the influence of external factors, it does not always make sense to use the market information

unless the shortcomings are mitigated. This could be achieved by expanding the time horizon of the study and performing relative performance evaluations.

In order to determine a general trend, thereby removing short-term speculation and emotive effects such as herding and contagion (Paulo 2011), a long-term view of the market price needs to be developed. This will also remove the influence of macroeconomic factors such as the recent global economic recession. If viewed over a five- to seven-year period, the SE is less erratic. Consequently, a period of seven years was selected for this study to represent its long-term perspective.

Another method of increasing the utility of market information is to determine the company's performance relative to its peers. Tyson and Bournois (2005) and Farmer, Archbold and Alexandrou (2013) refer to this as "relative performance reviews". Causes of relative performance include increasing market share or increasing profitability at better rates than those of the competitors. Comparing the performance of a company to that of its competitors enables the researcher to determine the relative performance of the company irrespective of external factors.

Accounting performance

Given that publicly traded companies are subject to stringent regulatory oversight, using data from these companies does contribute to integrity and reliability. However, accounting data do have inherent limitations: they are historic and therefore backward looking, which is no guarantee of future performance; management may become focused purely on short-term earnings management (Dechow & Sloan 1991, in Murphy 1999); accounting profits can be manipulated by adjusting discretionary amounts (Healy 1985, in Murphy 1999); and temporary disequilibrium effects may be present, including different tax laws (for multinationals) (Wernerfelt & Montgomery 1988).

Despite the limitations, accounting profits are still widely accepted and used for performance measurement, but the types of metrics used have changed over the years. More traditional metrics are included in this study, namely return on equity (RoE); earnings before interest, tax, depreciation and amortisation (EBITDA); and headline earnings per share (HEPS). Metrics that have evolved and now take into account the excess value created by management after deducting the expected return are economic value added (EVA). However, when EVA is used it is not always easy to compare a company with its peers given the differences in the cost of capital expectations of the various companies. EVA was therefore not included as a proxy for company accounting performance.

Determining the composition of CEOs' variable compensation

A study by Bebchuk and Grinstein (2005) found that the composition of executive compensation changed significantly between 1995 and 2005, with equity compensation as a percentage of total compensation increasing from 33% to 55%. Figure 2 analyses the various components of a typical executive compensation package.

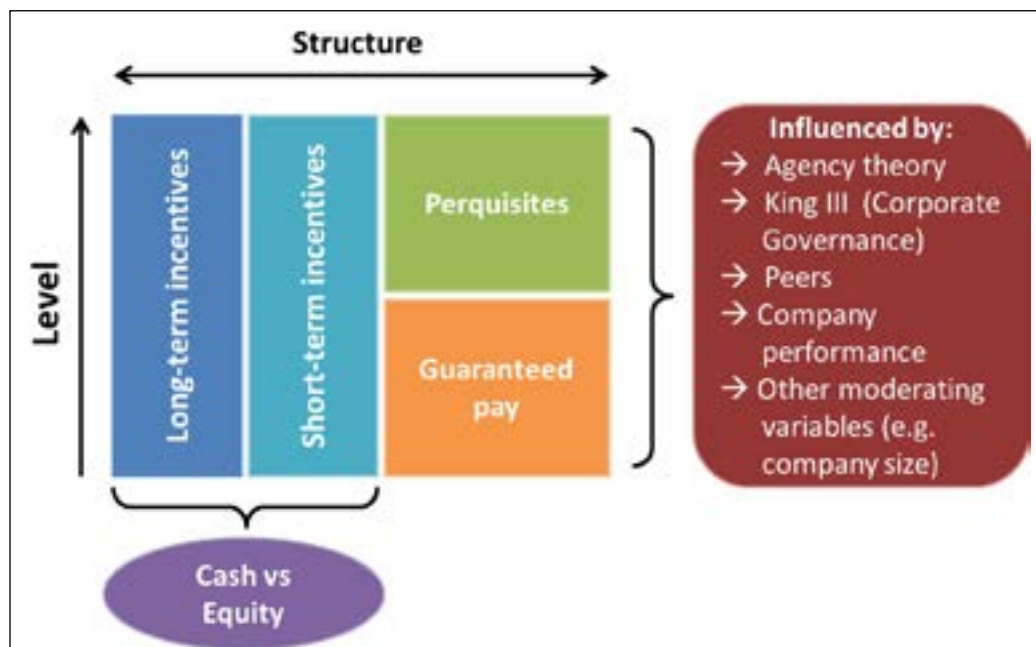


Figure 2: Composition of typical CEO compensation package: structure (composition) and level

Historical composition and increasing multiples: a valid concern

Retaining the services of an experienced professional manager (the agent) requires a guaranteed base salary. However, the remainder of the composition of the package is open to abuse.

Historical data on CEO compensation multiples indicate that CEO compensation has significantly outpaced other employees' earnings growth. In 2012, the CEOs of companies in the JSE Top 40 index received an average increase of 23%. Their short-term incentives increased by more than 52%, while the National Union of Metalworkers of South Africa (NUMSA) struggled to obtain a 13% increase in the minimum wages of miners (Oberholzer & Theunissen 2012).

According to Paulo (2011), CEOs in the USA were paid 20 times more than the *average* employee 25 years ago, but in 2011 this multiple exceeded 60. As illustrated in Figure 3, the multiple for wages earned by the *lowest* paid employee was approximately 140 in 1991, but this had skyrocketed to more than 500 in 2003 (Bebchuk & Fried 2003).



Source: Economic Policy Institute (2006)

Figure 3: CEO compensation compared with minimum wage in the USA (1965–2005)

In 2008, the South African CEO’s package was 58 times more than the average wage of company employees (Duncan 2008). South Africa is a country with growing inequality: its Gini coefficient was measured at 0.66 in 1993 and had deteriorated to 0.70 in 2008 (Leibbrandt, Woolard, Finn & Argent 2010). This is indicative of a growing elite along with lower-level wages that do not match the growth rates of higher-level workers (Ramcharan 2010). The CEO pay multiple is an important factor in understanding the plight of the average employee relative to CEOs, especially when disproportionate bonuses are awarded.

Recent trends in compensation: encouraging signs

Important recent trends in executive compensation are the result of the global economic recession and an increased focus on corporate governance in the business environment over the past decade. Key notable trends are the deferment and/or foregoing of bonuses; comparison to peers potentially leading to increased salaries; a reduction in base salary and “say-on-pay”; and King III and its effect on CEO compensation.

A recent phenomenon is that certain CEOs willingly relinquish their bonuses when their companies perform poorly. In 2012, Investec’s CEO, Stephen Koseff, had his compensation cut by 87% while also asking not to be considered for a bonus (Bloomberg 2012). In the 2012 financial year, ABSA’s CEO, Maria Ramos, deferred her R14 million incentive bonus. She would receive the bonus in shares in three equal portions in the next three years (*Business Day* 2012). In their study, Core, Guay and Verrecchia (2003) conclude that equity incentives are an efficient means to reduce cash outflow.

A study by Jensen, Murphy and Wruck (2004) found that compensation committees rarely do market studies and in many instances appoint consultants to recommend suitable compensation levels. The members of the committee, albeit qualified, may not have the required information at hand to set compensation at the correct levels. The fundamental issue at stake is that compensation levels are not set by the shareholders, but rather by directors who have a vested interest, as peers, in the recommended compensation package. This leads to excessive compensation packages, resulting in increased agency costs.

Increased shareholder activism, such as the appointment of a new CEO, is increasingly evident. BHP Billiton’s new CEO, Andrew Mackenzie, was appointed in 2013 and offered a base salary that was 20% less than his predecessor’s (Moneyweb 2013).

All over the world, countries are in the process of approving legislation that will allow shareholders to participate in decision-making about executive pay. In the USA and Germany, the “say-on-pay” proposal provides for an advisory, non-binding vote by shareholders. Australia has approved a “two-strike policy”, whereby all directors have to step down (but may be re-elected) if more than 25% of the shareholders vote against compensation packages at two consecutive shareholder meetings. In Switzerland, shareholders must elect all members of the compensation committee.

In South Africa, following the global emphasis on improved corporate governance, the King III Code of Corporate Governance was issued in 2009. King III focuses on stakeholder involvement and includes a section on executive compensation (IoD 2009). The code requires compensation committees to set and disclose the basis

upon which executives will be incentivised. Basic salaries and performance-related pay should be disclosed separately. It will become increasingly difficult for directors to reward themselves if their performance does not form the basis of bonus awards (IoD 2009).

The trends give insight into the structuring and justification provided by remuneration committees (REMCOs) when determining CEO compensation packages.

Frequently cited moderating variables as justification for compensation packages

General executive compensation averages are often the benchmark used by REMCOs, but various other factors may moderate the packages awarded to CEOs. A study by Oberholzer and Theunissen (2012) found that factors such as industry type, industry growth phase, company size and complexity, CEO tenure and CEO experience may all play a role in determining the packages offered to individuals. Ultimately, shareholders need the services of a professional manager to ensure that their interests are managed appropriately. This may contribute to the seemingly disproportionate packages offered to certain CEOs. In such instances, provided the compensation is adequately structured and linked to performance, it is worth retaining the service of such individuals. However, how clear is the link to performance?

A critical review of similar research studies

In an annual publication on executive compensation compiled by PwC (2012), key local and international trends are identified and analysed. Contributors to the publication suggest that there is still a strong perception that there is a direct link between company performance and CEOs' compensation, which gives rise to ethical and monetary challenges. The following critical review of similar studies aims to identify areas of focus and to solve problems that result from shortfalls identified in the studies.

Link between company performance and CEO compensation

A study of corporate financial performance and CEO compensation by Firth, Lohne, Ropstad and Sjo (1996) in Norway found no significant relationship between company performance and CEO compensation. A study by Bebhuk and Grinstein (2005) in the USA concluded that, between 1993 and 2003, less than 50% of growth

in mean CEO compensation could be linked to company market capitalisation growth. A study of the performance of Australian banks and CEO compensation by Doucouliagos, Haman and Askary (2007) found a positive correlation between the two factors. The study reviews previous findings by Dogan and Smith (2002), which found no such correlation in companies listed on the Malaysian Stock Exchange. It also notes a positive correlation found by Crespi-Cladera and Gispert (2003) in companies listed on the Spanish Stock Exchange. In a study of 200 firms listed on the Australian Stock Exchange (ASX), conducted by Niap, Taylor, Morley and Kim (2012), it was concluded that size is a determinant of CEO compensation, while company performance has a very weak correlation. In their dual study of CEO compensation and company performance in the United Kingdom (UK) and Poland, Herdan and Szczepańska (2012) conclude that there is a positive relationship between CEO compensation and both company performance and company size. This finding is supported by a Canadian study of 755 firms, conducted by Zhou (1999), which found a positive relationship between company size and CEO compensation. Their study included a reference to Hansell, Luther, Planschke and Schatt (2009), who found a *negative* correlation between CEO compensation and company performance in 158 large US companies during the 2007–2008 period. This was during the economic recession and pointed towards excessive levels of compensation.

A UK study of the relationship between CEO compensation and company performance determined that non-financial measures could be included successfully in certain circumstances to compensate CEOs. The study used both financial and non-financial measures, such as customer satisfaction (Ogden & Watson 2007). A South African study by Loubser (2009) found a statistically significant relationship between share-based payments and company market capitalisation. The study focused on the assumption that share-based payments are used as a means of reducing agency costs, but the study did not take into account overall compensation, nor have other moderating variables been tested for a relationship.

A UK study by Farmer et al. (2013) concluded that there is a significant correlation between each of the individual elements of CEO compensation (guaranteed pay, bonus payments and long-term incentives), while emphasising relative performance reviews (e.g. to peers or the industry). The study, performed on the 204 largest non-financial firms included in the FTSE 350, covered the period from 2003 to 2007. However, the study did not include the effect of the global economic recession or more recent executive compensation trends.

Given the recent re-pricing of certain CEOs' basic packages, it is important to consider total compensation to determine the relationship between CEO compensation and company market value. Other variables typically also need to be included in the study to contextualise the findings.

Determining the best measure for company performance and its link to CEO compensation

In Doucouliagos et al. (2007), a detailed review of the different measures of company performance is discussed. This study, while opting for a smaller research sample, pursues a detailed understanding of the industry and its driving forces in the context of individual firms within the industry. The lack of a detailed industry analysis has been an oversight in many similar studies that have only included high-level data analyses.

CEO pay multiple

A noteworthy finding of the Scandinavian study by Firth et al. (1996) is the limited variability in remuneration among different levels of salaried employees and the CEO. A minimum wage multiple of only 4 has been calculated by Eriksen and Lommerud (1992), which is in stark contrast with the USA, where such multiples exceed 140 (Bebchuck & Fried 2003).

Ogden and Watson (2007) found that when adequate political and/or regulatory pressure is applied to state-owned entities, it results in curtailed increases in CEO compensation. In the UK, CEOs operating in the water utility industry have been found to be compensated at levels well below the average listed company CEO, mostly as the result of regulatory and political pressure.

The inclusion of the CEO pay multiple is particularly important when conclusions are reached about excessive CEO compensation in the South African context, as the country remains challenged by vast inequalities and a high Gini coefficient (Leibbrandt et al. 2010).

Moderating variables identified and linked to CEO compensation in previous studies

The study by Firth et al. (1996) established a positive relationship between CEO compensation and company minimum wage, while company size was also positively linked. Two reasons are given for the link between company size and CEO salary: large firms have several executive levels, resulting in a higher overall package; and the absolute value of a high CEO compensation is less visible in larger firms.

The study by Herdan and Szczepańska (2012) of Polish and UK firms where a correlation between CEO compensation and company size is present, is based on a seminal study by Rosen (1982). This study found that large firms prefer CEOs with good track records and are therefore more willing to remunerate them at higher levels.

Therefore company size is deemed an important variable often cited by REMCOs as a reason for above-average CEO compensation packages.

In Niap et al. (2012), a significant positive relationship is reported between CEO compensation and the independence of the REMCO, which is ascribed to acquiescence. King III gives specific guidelines on the independence of the board subcommittees to reduce the likelihood of a friendly REMCO. Doucouliagos et al. (2007) proposes that CEO age can be used as a proxy for productivity, with experience being mooted as the reason. Other control factors also measured in the study relate to company size and CEO share ownership.

Ogden and Watson (2007) report that although non-financial measures in many instances could counter the profit focus, the needs of various stakeholders (i.e. a profit requirement) could be balanced with adequate planning and a structured approach to offset the possible loss of income. However, an objective perspective of performance for non-financial measures presents REMCOs with practical challenges.

Doucouliagos et al. (2007) postulate that the recent trend of deferred compensation may cause a lagged link between CEO compensation and company performance. Niap et al. (2012) investigate both a lagged and a non-lagged relationship between CEO compensation and market value, which enables the research team to conclude whether compensation drives performance or vice versa.

In this study, no offsets have been included in the data analysis. Given the seven-year timeline, any correlation would still be identified, since the long-term trend would take this into account.

The importance of the time horizon of the study

Firth et al. (1996) use a time horizon of eight years (1986–1994), but their study pre-dates the detailed disclosure of CEO compensation by listed firms. Similarly, Doucouliagos et al. (2007) use a 13-year time horizon (1992–2005), but in South Africa detailed disclosure has only occurred since the release of King II and IFRS 2 (both issued during 2002). The ten-year time horizon used by Bebchuk and Grinstein (2005) allows for a solid theoretical foundation of data interrelationships.

Loubser (2009) uses a five-year study period, which could be extended to seven years to provide a long-term view. The study by Herdan and Szczepańska (2012) is based on a time horizon of four years (2007–2010). The time horizon of four years is considered too short for a statistical long-term correlation analysis. The Niap et al. (2012) study spans only three years (2007–2009) and coincides with the economic recession. The latter may have skewed research findings somewhat, particularly given such a short time horizon, thereby hampering the ability to reach conclusions

on statistical relationships. In Farmer et al. (2013), the study period spans five years (2003–2007), which allows for a sound basis. However, had the study extended over seven years, it would have included the results of the economic recession and would have increased the credibility of the findings.

Previous studies either do not include details of the full compensation package, or their assessment timeframes do not extend over a period that allows for meaningful statistical analysis and interpretation (subsequent to the amended disclosure requirements). This study addresses these shortcomings and incorporates additional suggestions, thereby contributing to the field and providing a unique perspective in a South African context.

Research question and hypothesis

The aim of the study was to determine whether a positive long-term relationship is present between South African CEO compensation and company performance in the banking sector. Do comparatively large CEO packages result in long-term wealth creation for shareholders?

H₁ There is a positive long-term relationship between CEO compensation and company performance. Proxies for performance are as follows:

- (i) Accounting performance: HEPS and/or RoE and/or EBITDA
- (ii) Market performance: share price.

The study also included moderating variables (included as subhypotheses) relating to the various relationships, namely: There is a positive long-term relationship between CEO compensation and the following:

- (i) Average employee salaries (CEO pay multiple and/or average employee salaries)
- (ii) Company size (total assets and/or number of employees)
- (iii) The company's peers (JSE Banking Sector CEO compensation)
- (iv) JSE market performance (JSE ALSI)
- (v) General inflation (CPI inflation).

Research methodology

Compensation by its very nature is qualitative, yet linking this to performance requires both a qualitative and quantitative analysis. REMCOs, in their annual reports, maintain that there is a link between company performance and CEO

compensation, yet the same reports may emphasise the importance of recruiting and maintaining the best talent. A quantitative and qualitative multistep approach is utilised given the significant weighting that performance-based incentives carry as a proportion of overall CEO compensation. Certain contextual information that encompasses an element of qualitative research has also been included, allowing for an informed conclusion from the study's findings.

Sampling

The firms listed under the Johannesburg Stock Exchange (JSE) Banking Sector (a grouping used by McGregor BFA for index purposes) formed the starting point for selecting all potential firms that could be included in the study. Only companies that could show a seven-year financial history were considered for inclusion. All the banks included under the JSE Banking Sector (JSE Banks) met this criterion and were included.

Data collection and preparation

Information on CEO compensation was collected manually from the selected companies' annual financial statements by reviewing their remuneration reports. All other financial information for the selected companies was obtained, including EBITDA, HEPS, RoE, total company salary and wages, total number of employees, and the closing share price as at 31 December of each year.

The following values were calculated using the data obtained:

- (i) Average employee salary, calculated as follows:

$$= \frac{\text{Total company salary and wages}}{\text{Total number of employees}}$$

- (ii) CEO pay multiple, calculated as follows:

$$= \frac{\text{Total CEO compensation}}{\text{Average employee salary}}$$

Indexed values were calculated for each of the following: CEO compensation, average employee salary, company closing share price as at 31 December of each period, RoE, EBITDA, HEPS, CEO pay multiple, annual CPI inflation ('CPI') and JSE ALSI.

$$\text{Calculation formula for indexed values} = \left(\frac{X_N - X_B}{X_B} \right) 100 + 100$$

Data analysis methodology

A decision-tree approach was conceived, as illustrated in Figure 4, to allow for a conclusive analysis of and the drawing of conclusions from the results of the research study.

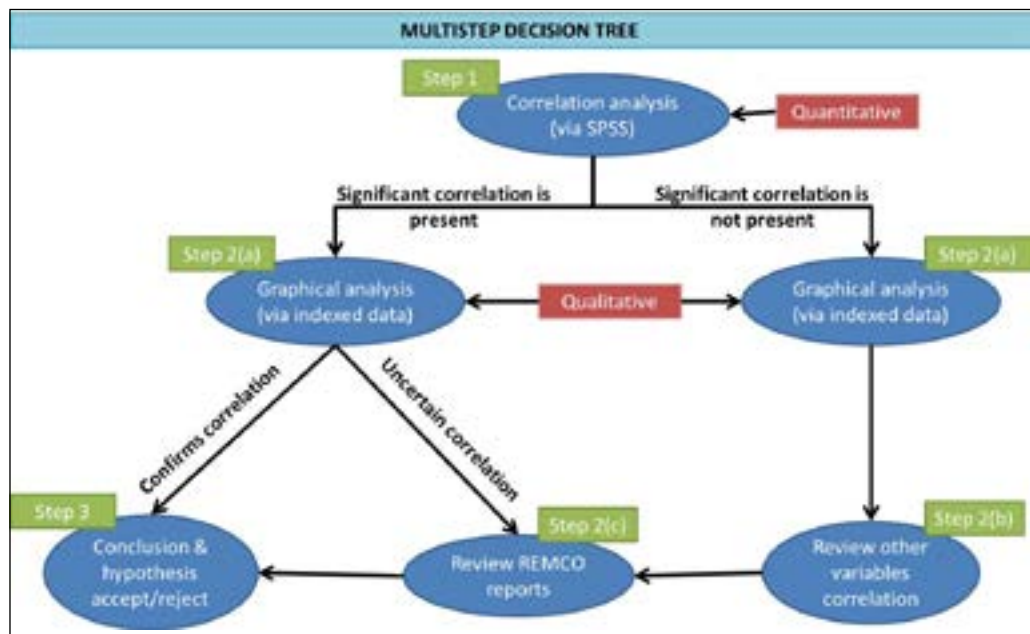


Figure 4: Multi-step decision tree

The process illustrated in Figure 4 is explained as follows:

Step 1: Correlation analysis

The SPSS statistical program was used to perform a correlation analysis of CEO compensation and each of the independent variables. It measures the extent to which a correlation present in one variable is represented by a variance in another variable. For the purposes of this study, correlations that were significant at the five per cent level were accepted.

Although the correlation analysis provided a good first impression of the relationship between CEO compensation and the variables, further investigation of the correlation was deemed necessary. As there was a significant correlation between CEO compensation and company performance, the analysis proceeded to step 2.

Step 2(a): Graphical review of indexed growth values

The growth for each variable was calculated using an indexed approach. During step 2(a), the two indexed variables were graphically plotted to determine whether a reasonable correlation was present. Given that further analysis of abnormal values was required, the remuneration reports were reviewed for further understanding. Other variables were not considered in detail, since the main hypothesis had been rejected.

(If, during the graphical review, a significant correlation between CEO compensation and company performance had *not* been present, the process would have proceeded to step 3.)

Step 2(a) to (c): Graphical review and review of REMCO reports

In instances where no significant correlation was found between CEO compensation and company performance variables, the following process was followed:

- (a) Graphical illustration of the relationship was performed to determine the scope of the deviant correlation.
- (b) Other variables were considered for significant correlations, while also being plotted graphically.
- (c) The remuneration reports were reviewed in detail for an explanation of the absence of a link between company performance and CEO compensation. The justification of CEO compensation was of critical importance to shareholders and therefore was expected to appear in the REMCO report for the purposes of corporate governance.

Step 3: Conclusion and accepting or rejecting the hypothesis

The multistep approach has been designed to provide a multilayered approach to reaching conclusions on the equitability of CEO compensation relative to company performance. Step 1 determined the detailed level of review. However, if step 2 had indicated that a detailed analysis of the positive relationship was also required, it might have resulted in a different overall conclusion than step 1; this would have depended on the outcome of the analysis and conclusion in step 2.

(Step 3 involves an overall review of available information to determine whether sufficient reasoning – particularly in instances where no statistical correlation is present – is deemed to override the purely quantitative analysis.)

To determine the existence of an overall relationship between variables, the individual company relationships as well as the JSE Banking Sector's overall relationship was taken into account and investigated. Where a majority of companies confirmed the existence of a relationship, and where this was supported by the sector data, the overall correlation was inferred with confidence. Other cases will require the analysis of qualitative data and conclusions based on individual merit.

Other data considerations

Consideration was given to certain variables affecting the data during the analysis and interpretation phase of the study.

Endogenous factors

These factors include the intricacies of individual companies, such as CEO tenure, and major structural changes in company composition, such as unbundling and mergers.

Exogenous factors

These factors include changes in global economic conditions that affect businesses globally, and changes in global regulatory requirements for banks, such as the changes introduced in Basel III.

Data analysis and discussion of research findings

Part A: Determination of the correlation between CEO compensation and company performance at a company level

Barclays Group Africa (BGA)

In Table 1, no significant correlation at the five per cent level is present between the CEO salary and any company performance measures. Furthermore, there is no link between the CEO salary and other variables such as total assets and average employee salary. External measures such as CPI and JSE Bank Sector salary are also not correlated.

Relationship between SA CEO compensation and company performance in the banking industry

Table 1: BGA correlation matrix

		BGA CEO salary	Sector CEO salary	BGA share price	BGA HEPS	BGA EBITDA	BGA ROE	BGA total assets	BGA no. of employees	BGA avg sal per employee	BGA CEO pay multiple	CPI inflation	JSE ALSI
BGA CEO salary	Pearson correlation	1	.67	.22	.12	-.23	-.63	.24	.12	.66	.66	.34	.25
	Sig (1-tailed)		.05	.32	.40	.31	.07	.30	.40	.05	.05	.23	.30
	N	7	7	7	7	7	7	7	7	7	7	7	7
* Significant at 0.05 level.													

Source: McGregor BFA

In Table 1, no significant correlation at the five per cent level is present between the CEO salary and any company performance measures. Furthermore, there is no link between the CEO salary and other variables such as total assets and average employee salary. External measures such as CPI and JSE Bank Sector salary are also not correlated.

In the remuneration committee (REMCO) report, performance measures such as return on equity (RoE) are provided as performance benchmarks for CEO compensation. A change of CEO midway through the reporting period resulted in the re-pricing of CEO compensation. A detailed review of the annual REMCO reports reveals that BGA implemented a key executive retention plan. The reasoning for the bonuses relates to medium- to long-term strategic integration of all the Barclays' African entities into one group, ABSA (2010). This transaction, realised during 2012, provides some justification for the annual bonuses. The CEO's decision to forego her bonus during 2012 is commendable. However, given an insufficient quantitative or qualitative link with company performance, the disproportionately large bonuses awarded to the CEO, in absolute Rand-value terms, taking the cost per employee and CEO pay multiple into account, remains open to dispute.

Capitec (CPT)

Table 2: CPT correlation matrix

		CPT CEO salary	Sector CEO salary	CPT share price	CPT HEPS	CPT EBITDA	CPT RoE	CPT total assets	CPT no. of employees	CPT avg sal per employee	CPT CEO pay multiple	CPI inflation	JSE ALSI
CPT CEO salary	Pearson correlation	1	.81*	.77*	.72*	.73*	.18	.74*	.66	.72*	.60	.56	.66
	Sig (1-tailed)		.01	.02	.03	.03	.35	.03	.06	.03	.08	.10	.06
	N	7	7	7	7	7	7	7	7	7	7	7	7
* Significant at 0.05 level.													

Source: McGregor BFA

In Table 2, a significant correlation at the five per cent level is present between the CEO salary, the company accounting performance measures (HEPS and EBITDA) and the company market performance measure. Notably, CPT also exhibits a significant correlation between CEO compensation and total assets, and average salary per employee.

CPT has experienced substantial growth coupled with strong accounting performance. Although the CEO compensation is closely linked to the JSE Banking Sector’s CEO packages in terms of growth, none of the other CEOs’ performance nor the absolute value of packages could be compared to that of CPT’s CEO. Overall, CPT has been conservative in increasing its CEO’s compensation relative to performance, but rewarded him with large short-term and long-term incentives for sustained performance.

FirstRand (FSR)

Table 3: FSR correlation matrix

		FSR CEO salary	Sector CEO salary	FSR share price	FSR HEPS	FSR EBITDA	FSR RoE	FSR total assets	FSR no. of employees	FSR avg sal per employee	FSR CEO pay multiple	CPI inflation	JSE ALSI
FSR CEO salary	Pearson correlation	1	.92**	.72*	.83*	.04	-.04	.02	-.78*	.88**	.46	.64	.85**
	Sig (1-tailed)		.00	.03	.01	.47	.46	.49	.02	.01	.15	.06	.01
	N	7	7	7	7	7	7	7	7	7	7	7	7
** Significant at 0.01 level. * Significant at 0.05 level.													

Source: McGregor BFA

In Table 3, a significant correlation at the five per cent level is present between CEO compensation, one of the company accounting performance measures (HEPS) and the company market performance measure. A change of CEO occurred during 2009, which coincided with the global economic recession and a reduction in company share price. During the period under review, FSR unbundled Discovery (2008), Momentum (2011) and Outsurance (2011). However, it has sustained growth and closely aligned CEO compensation with company performance.

In Table 4, no significant positive correlation at the five per cent level is present between the CEO compensation and company accounting performance measures. However, a significant negative correlation is present between CEO compensation and RoE, which indicates that the two items moved in an opposite direction. A significant positive correlation is present between CEO compensation and variables such as the CEO pay multiple, the number of employees, total assets, CPI inflation, the JSE ALSI and the average salary per employee.

Nedbank (NED)

Table 4: NED correlation matrix

		NED CEO salary	Sector CEO salary	NED share price	NED HEPS	NED EBITDA	NED RoE	NED total assets	NED no. of employees	NED avg sal per employee	NED CEO pay multiple	CPI Inflation	JSE ALSI
NED CEO salary	Pearson correlation	1	.89**	.79*	.43	-.12	-.86**	.87**	.76*	.99**	.99**	.91**	.89**
	Sig (1-tailed)		.00	.02	.17	.40	.01	.01	.02	.00	.00	.00	.00
	N	7	7	7	7	7	7	7	7	7	7	7	7
** Significant at 0.01 level. * Significant at 0.05 level.													

Source: McGregor BFA

Given the lack of compelling support for the growth in CEO compensation, a detailed analysis of the remuneration reports for NED is included in Table 5, which illustrates the magnitude of the long-term incentives as a percentage of total CEO compensation:

Table 5: NED CEO LTI and compensation review

	2012	2011	2010
Guaranteed remuneration	6 247 000	5 983 000	5 459 000
LTI	16 250 000	10 500 000	6 000 000
STI	6 250 000	9 700 000	7 000 000
Total	28 747 000	26 183 000	18 459 000
LTI as % of package	57%	40%	33%
STI target measures (as % of guaranteed pay)	182%	162%	122%
Benchmark as reference for STI (on-target to maximum)	150–250%	150–250%	150–250%

Note: LTI: long-term incentive; STI: short-term incentive

Source: Nedbank (2011, 2012, 2012)

Relationship between SA CEO compensation and company performance in the banking industry

Key company performance measures include return on equity (RoE) (as a sliding scale relative to cost-of-equity outperformance); and the performance of company share price relative to the FINI15. Not only did the company not outperform the JSE Banks Index (which is not the FINI15), but it also failed to outperform the JSE ALSI. While performing up to 15% poorer than its peers, it still qualifies the CEO for 25% of a possible 150% for that element which is questionable. The substantial absolute value of the long-term incentives remains subject to further questioning, and no details are provided about overall value benchmarks or increase measures.

Given the analysis and graphical illustration of CEO compensation relative to other measures, the justification for the upward spiralling growth in CEO compensation is unconvincing and could be deemed excessive.

Standard Bank (SBK)

Table 6: SBK correlation matrix

		SBK CEO salary	Sector CEO salary	SBK share price	SBK HEPS	SBK EBITDA	SBK RoE	SBK total assets	SBK no. of employees	SBK avg sal per employee	SBK CEO pay multiple	CPI inflation	JSE ALSI
SBK CEO salary	Pearson correlation	1	.73*	.03	.69*	.02	.03	.36	-.07	.34	.58	.26	.32
	Sig (1-tailed)		.03	.48	.04*	.48	.47	.21	.45	.23	.09	.29	.24
	N	7	7*	7	7*	7	7	7	7	7	7	7	7

* Significant at 0.05 level.

Source: McGregor BFA

In Table 6, a significant positive correlation at the five per cent level is present between CEO compensation and one of the company accounting performance measures, namely HEPS. No significant correlation is present between CEO compensation and the company market performance measure or any other factors

such as the CEO pay multiple, the number of employees, total assets and average salary per employee. External variables, such as the CPI and JSE ALSI, also do not correlate with CEO compensation.

The CEO received no bonus because of poor underlying performance during 2010. During 2011, the company’s long-time CEO retired and a re-pricing occurred with the appointment of a new joint-CEO. All things considered, the CEO compensation was sensitive to the company’s relatively poor performance, and did not appear excessive. The fact that CEO compensation is sensitive to periods of relatively substandard performance is a fitting example of fair compensation relative to company performance.

Part B: Hypothesis testing: the relationship between CEO compensation and the JSE Banking Sector

Main hypothesis

Step 1: Correlation analysis

Table 7: JSE Banks correlation matrix

		JSE Banks market cap	JSE Banks HEPS	JSE Banks EBITDA	JSE Banks RoE
JSE Banks CEO salary	Pearson correlation	.698*	.698*	-.227	-.162
	Sig (1-tailed)	.040*	.040	.313	.364
* Significant at 0.05 level.					
Note: For consistency, the JSE Banking Sector market capitalisation instead of share price (the variable at individual company level) was used. The sector market capitalisation compared with the share price result differed by less than one per cent, and the difference is considered immaterial.					

Source: McGregor BFA

In Table 7, a significant correlation at the five per cent level is present between CEO compensation, a JSE Banking Sector accounting performance measure, namely HEPS, and the JSE Banking Sector market performance measure, market capitalisation. The study therefore found that in the banking industry, on average, CEO compensation packages do correspond with company performance measures in the long run. The finding is highly significant, as the period under review included an economic recession.

Relationship between SA CEO compensation and company performance in the banking industry

Given the fact that averages may conceal detailed underlying trends, Table 8 presents the correlations between company performance and CEO compensation.

Table 8: Correlations between company performance and CEO compensation

CEO package (dependent variable)	Independent variables – significant correlation present?					
	Share price	EBITDA	HEPS	RoE	Other mitigating factor*	Potentially overpaid?
BGA	No	No	No	No	No**	Likely**
CPT	Yes	Yes	Yes	No	N/A	Not likely
FSR	Yes	No	Yes	No	N/A	Not likely
NED	Yes	No	No	No	No***	Likely***
SBK	No	No	Yes	No	N/A	Not likely
JSE BANKS	Yes (0.4)	No	Yes (0.4)	No	N/A	Not likely
<p>* Only considered where no clear correlation existed between company accounting and/or market performance and CEO compensation; alternatively the field was marked as “not applicable” (N/A).</p> <p>** Refer to the analysis presented under Barclays Group Africa’s correlation analysis.</p> <p>*** Refer to the analysis presented under Nedbank’s correlation analysis.</p>						

Step 2: Conclusion on main hypothesis

Company market performance (share price) exhibited a p-value of 0.04, while at least one company accounting performance measure (HEPS) also exhibited a p-value of 0.04. In addition, for each of these variables, three out of the five companies in the population individually exhibited a significant positive correlation. We therefore found support for the hypothesis.

Subhypothesis 1

Step 1: Correlation analysis

Table 9: Subhypothesis 1 correlation analysis

		JSE Banks average salary per employee	JSE Banks CEO pay multiple
JSE Banks CEO salary	Pearson correlation	.824*	.556
	Sig (1-tailed)	.011	.097
* Significant at 0.05 level.			

Source: McGregor BFA

In Table 9, a significant correlation is present at the five per cent level between CEO compensation and average employee salary in the JSE Banking Sector. However, the correlation between CEO compensation and the CEO pay multiple is not statistically significant.

Table 10 summarises the findings at company level.

Table 10: Subhypothesis 1 variables correlation summary

CEO package (dependent variable)	Independent variables – significant correlation present?	
	Average salary per employee	CEO pay multiple
BGA	No	No
CPT	Yes	No
FSR	Yes	No
NED	Yes	Yes
SBK	No	No
JSE BANKS	Yes	No

Step 2: Conclusion on subhypothesis 1

The average employee salary exhibited a p-value of 0.011, while the number of employees exhibited a p-value of 0.097. Therefore, we found support for the hypothesis that a positive long-term relationship exists between CEO compensation and average employee salary.

Subhypothesis 2

Step 1: Correlation analysis

Table 11: Subhypothesis 2 correlation analysis

		JSE Banks total assets	JSE Banks no. of employees
JSE Banks CEO salary	Pearson correlation	.479	-.087
	Sig (1-tailed)	.139	.426
*NSignificant at 0.05 level			

Source: McGregor BFA

In Table 11, no significant correlation is present at the five per cent level between CEO compensation and the JSE Banking Sector.

Table 12 summarises the findings at company level.

Relationship between SA CEO compensation and company performance in the banking industry

Table 12: Subhypothesis 2 variables correlation summary

	Independent variables – significant correlation present?	
CEO package (dependent variable)	Total assets	Number of employees
BGA	No	No
CPT	Yes	No
FSR	No	Yes (Negative)
NED	Yes	Yes
SBK	No	No
JSE BANKS	No	No

Step 2: Conclusion on subhypothesis 2

The relationship between CEO compensation and total assets exhibited a p-value of 0.139, while CEO compensation and number of employees exhibited a p-value of 0.426. None of the variables represent a significant positive correlation at the five per cent level. Based on the findings, although a moderately strong relationship is present, there is no significant positive relationship and the hypothesis was therefore rejected.

Subhypothesis 3

Step 1: Correlation analysis

The sector figure cannot be compared to itself, therefore only Table 13, which summarises the findings at company level, is analysed in order to reach a conclusion.

Table 13: Subhypothesis 3 variables correlation summary

	Independent variables – significant correlation present?
CEO compensation (dependent variable)	JSE Banking Sector CEO compensation
BGA	No
CPT	Yes
FSR	Yes
NED	Yes
SBK	Yes
Overall	Yes

Step 2: Conclusion on subhypothesis 3

Table 13 illustrates that four of the five companies in the population exhibited a significant long-term positive correlation between CEO compensation and the compensation of their peers. Therefore, more than 80% of the population’s CEO compensation closely matched that of other CEOs. This is a strong indicator of the influence of averaging CEO packages. We therefore found support for the hypothesis.

Subhypothesis 4

Step 1: Correlation analysis

Table 14: Subhypothesis 4

		JSE ALSI
JSE Banks CEO salary	Pearson correlation	.746*
	Sig (1-tailed)	.027
* Significant at 0.05 level.		

Source: McGregor BFA

In Table 14, a significant correlation is present at the five per cent level between CEO compensation and the JSE ALSI.

Table 15 summarises the findings at company level.

Table 15: Hypothesis 5 variables correlation summary

	Independent variables – significant correlation present?
CEO package (dependent variable)	JSE ALSI
BGA	No
CPT	No
FSR	Yes
NED	Yes
SBK	No
JSE BANKS	Yes

Step 2: Conclusion on subhypothesis 4

The correlation between CEO compensation and the JSE ALSI exhibited a p-value of 0.027, which is indicative of a statistically significant positive long-term

Relationship between SA CEO compensation and company performance in the banking industry

relationship between CEO compensation and the JSE ALSI. Only two of the five companies' individual CEO compensations correlated at the five per cent level with the JSE ALSI, yet the two companies were very closely correlated with p-values of 0.008 (FSR) and 0.004 (NED). CPT fell only slightly outside the cut-off at 0.055. Given the low probability at a sector level and the overall low p-values for three of the five companies, we found support for the hypothesis.

Subhypothesis 5

Step 1: Correlation analysis

Table 16: Correlation analysis for subhypothesis 5

		CPI inflation
JSE Banks CEO salary	Pearson correlation	.707*
	Sig (1-tailed)	.038
* Significant at 0.05 level.		

Source: McGregor BFA

In Table 16, a significant correlation is present at the five per cent level between CEO compensation and general inflation.

Table 17 summarises the findings at company level.

Table 17: Subhypothesis 5 variables correlation summary

	Independent variables – significant correlation present?
CEO package (dependent variable)	CPI inflation
BGA	No
CPT	No
FSR	No
NED	Yes
SBK	No
JSE BANKS	Yes

Step 2: Conclusion on subhypothesis 5

The relationship between CEO compensation and general inflation exhibited a p-value of 0.038, which is indicative of a statistically significant positive long-term relationship between CEO compensation and the JSE ALSI. Only one of the five companies' individual CEO compensations correlated at the five per cent level with

general inflation. An analysis of the p-values indicated that NED closely correlated with a p-value of 0.002 (NED), while CPT at 0.096 and FSR at 0.059 fell only slightly outside the cut-off. Given the low probability at a sector level and low individual p-values for those outside the cut-off, we found support for the hypothesis.

Summary of hypotheses findings

Table 18 summarises the findings related to the goals of the research study.

Table 18: Summary of hypotheses findings

Is there a positive long-term correlation between CEO compensation and each of the variables?		
Independent variable	Hypothesis	Finding
Company performance	A positive long-term relationship exists between CEO compensation and company performance.	Accepted
Average employee salary	A positive long-term relationship exists between CEO compensation and average employee salaries.	Accepted
Company size	A positive long-term relationship exists between CEO compensation and company size.	Rejected
Bank CEO peers	A positive long-term relationship exists between company CEO compensation and the compensation of his/her peers.	Accepted
JSE ALSI performance	A positive long-term relationship exists between CEO compensation and JSE market performance.	Accepted
General inflation	A positive long-term relationship exists between CEO compensation and general inflation.	Accepted

Key findings

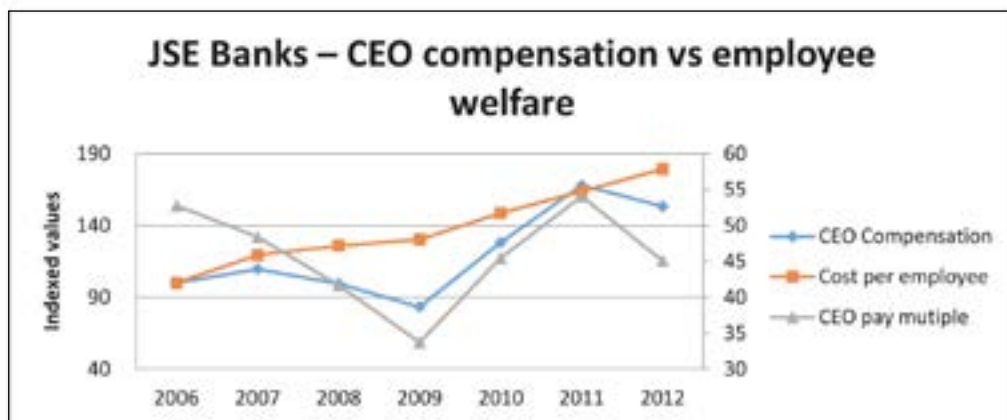
The key findings of the study are discussed in this section.

Overall, there is a statistically significant positive long-term correlation between the JSE Banking Sector market performance and CEO compensation, although not all banks included in the population exhibit this correlation. In one instance, the CEO compensation reflected a strong sensitivity to poor company performance, which is indicative of certain REMCOs being judicious in linking variable compensation to company performance. The measure remained consistent throughout the reporting period, which made consistent and fair judgement of performance possible.

Two companies showed plausible CEO overcompensation when compared to both company performance and CEO compensation packages of peers. In both instances,

Relationship between SA CEO compensation and company performance in the banking industry

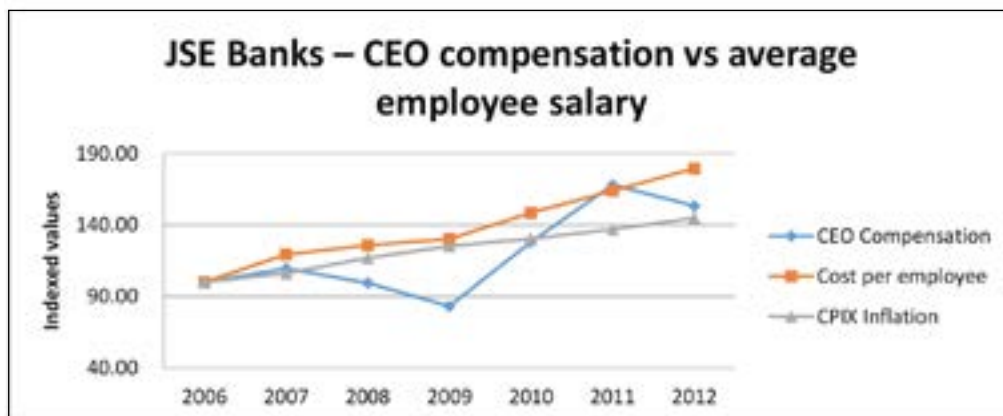
CEO compensation significantly exceeded company performance measured over a seven-year period. A qualitative analysis was performed to determine the underlying motivation for compensation, and some justification was provided. However, the absolute levels of compensation remain contentious. Although detailed justification is provided for short-term incentives, peer pressure or the law of averages appears to inflate CEO compensation annually. The literature review revealed that it is common practice for companies to link excessive CEO compensation to company size. This study found no significant long-term correlation between CEO performance and company size at a sector level, yet in one instance where the CEO compensation was considered contentious, size was closely correlated. Overall, employees in the banking sector are well remunerated, which is corroborated by the finding that there is a positive long-term relationship between CEO compensation and average employee salary. Figure 5 illustrates this correlation. There is less correlation between average employee salary and company performance in periods of poor performance. This indicates that a relatively insignificant portion of an average employee's salary comprises variable remuneration, in comparison with a CEO's compensation, which includes a substantial variable portion.



Source: McGregor BFA and own calculations

Figure 5: CEO compensation compared with average employee salary

The CEO pay multiple is related to the Gini coefficient, as it embodies the difference between high-income earners, in this instance CEOs, and the average employee. Figure 6 illustrates that employees have consistently received increases in excess of inflation, which is indicative of sound human resource practices.



Source: McGregor BFA and own calculations

Figure 6: Employee welfare and inflation

Deeper investigation of correlative salary increases (of CEOs and employees) would inform future business discussions of organised labour and the issue of minimum wages, which fell beyond the scope of this study.

Based on the findings of the data analysis, the goals of the research study were achieved, thereby contributing meaningfully to the study of the relationship between CEO compensation and company performance.

Further research

This research paper focuses on the JSE’s Banking Sector. Future research could focus on other sectors of the JSE and other logically grouped companies. Future studies may also focus on a specific sector in other countries. IFRS 2 has been effective for more than nine years, but the detailed disclosure of directors’ remuneration is still gradually improving each year. King III has added to improved disclosure, and continued future developments in IFRS will aid future studies. In some instances, the research revealed that the actual value of share options, at grant date, is not well disclosed; with improved disclosure, further detailed analysis of performance-based remuneration would be possible. This includes a long-term review of the link between actual realised equity compensation and potential equity compensation as approved at the time of the equity compensation award. With employee strikes being an on-going phenomenon in South Africa, further studies on the CEO pay multiple – relative to both average employee salary and minimum wage – will add quantifiable data to the annual discussions between organised labour and business.

With ever-increasing corporate governance requirements, the quality of company remuneration policies is likely to improve. Refined monitoring, reporting and disclosure will further help guide executive remuneration, and may even culminate in the creation of a predictive model to forecast executive remuneration. Research into a likely remuneration predictor is possible. As disclosure improves, stakeholders' abilities to critically analyse the information presented to them by the company's annual financial statements will also be enhanced.

Conclusion

This study provides an original contribution with regard to the link between South African CEO compensation and company performance in the banking industry. This will be of particular interest to investors and other stakeholders, such as unions and regulators, who expect CEOs to be compensated based on aligned interests relating to company performance. The findings are consistent with the principles of the agency theory.

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