Do CEOs of target firms award themselves more options prior to a takeover?

A Research Report

by

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Abstract

Stock options increasingly feature as part of CEO compensation, and there is evidence that CEOs of South African listed target companies engage in the practice of awarding themselves more options prior to takeover. This finding is consistent with CEO behaviour of foreign companies as explained by literature.

After the recent financial crisis of 2008, there is a greater likelihood that financially stable companies might consider acquiring struggling companies with attractive potential future earnings. By gaining insight into the practices of stock option grants to CEOs, acquiring companies can ensure fair practice as well as not paying an undue premium for a target company.

This study was conducted using a sample of 39 Johannesburg stock exchange (JSE) listed target companies, which were acquired during the period 2005-2009. The focus was on the number of options awarded prior to the announcement date of the takeover in relation to subsequent options awarded. A median test, together with a Chi-squared test was used to evaluate the independence of option grants prior to acquisition and the actual acquisition transaction. Strong evidence was found that these two activities are not independent.

Keywords

CEO behaviour, Insider trading, Options, Target Company, Market signalling.

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 further declare that I have obtained the necessary authorisation and consent to carry out this research.

______________________ _10 November 2010___

Sean Slabbert **Date**

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1.1 Research Title

Do CEOs of target firms award themselves more options prior to a takeover?

1.2 Research Problem

International research (Fich, Cai & Tran, 2009; Hartzell, Ofek & Yermack, 2004) has shown that there is a tendency for companies to award stock options (whether scheduled or unscheduled) to their chief executive officers (CEOs) prior to merger and acquisition deals. Hartzell *et al.* (2004) see the justification for this practice as the target companies needing to reward CEOs prior to a take-over in order to compensate for potential loss of income in the new combined organisation. The stock options are viewed as part of a potential severance agreement should the CEO not survive the takeover. Fich *et al* (2009) found that depending on the interpretation of regulations, these option grants may be considered as a degree of insider trading in the target companies.

Where insider trading laws are enforced, Bris (2005) as cited in Gilbert & Tourani-Rad (2008), posits that there is actually an increase in the profitability and level of illegal insider trading prior to acquisitions. A similar argument is put forward by Fich *et al* (2009) with regard to CEOs vesting shares after an acquisition, despite the requirements of regulations such as Sarbanes-Oxley.

This study, in line with findings of international research, aims to find substantive evidence of this practice of awarding unscheduled or an increased number of options during the takeover transaction in South African companies. Timing of options granted has an impact on various stakeholders in an organisation. By having advance knowledge of an imminent acquisition, CEOs and potentially other executives, can enrich themselves by awarding themselves more stock options at a lower exercise price. This practice sends a signal to the rest of the market and should the CEO not survive the acquisition process, his severance involving the vesting of shares at a higher price is done at the expense of shareholders.

The research aims to identify the following:

1. Whether there is a pattern in the timing of options granted to CEOs of South African listed companies that were acquired in the last five years (2005 to 2009). Moreover, are the actual options granted abnormal in nature when compared to what could be expected?
2. The relationship between the annual number of director's dealings in the target company and the takeover of that company.

1.3 Research Scope

This study is limited to the actual acquisition transactions of listed companies on the Johannesburg Stock Exchange (JSE) across all sectors of industry. Only those target companies that have had a controlling share of greater or equal to 50% acquired will be considered. Furthermore, the inquiry will be limited to the options awarded to the CEOs or executives of these companies in a specific period before the acquisition transaction has been concluded. Where information is available, options awarded prior to takeover will be compared to options awarded post-takeover.

1.4 Research Motivation

After the recent financial crisis of 2008, there is a greater likelihood that financially stable companies might consider acquiring struggling companies with attractive potential future earnings. By gaining insight into the practices of stock option grants to CEOs, acquiring companies can ensure fair practice as well as not paying an undue premium for a target company (Hartzell, Ofek & Yermack, 2004; Cai & Vijh, 2007). Completed merger and acquisition transactions allow CEOs to cash out their illiquid stocks due to the vesting allowed because of the change in control (Cai & Vijh, 2007). Such stock movements may cause concern in the market after the acquisition deal has taken place and management need to be aware of the signals they send with such actions. Arguments have been made that a certain degree of insider trading can signal valuable information to the rest of the market (Lambert, 2010; Prentice & Donelson, 2010). According to Lambert (2010) insiders have better knowledge of their company's prospects and therefore know how best to allocate resources. He finds that in buying and selling their stock, insiders convey valuable information to the market when they bet their own money on mispriced stock. Prentice & Donelson (2010) agree that "Insider trading does send a signal, and that the signal is that the market presents an uneven playing field…" (p. 73).

Bidding companies need to know that they are acquiring a company at the appropriate market price. Any additional stock options granted will influence the fair price of the acquisition, depending on how CEOs manage the expectation of investors (Aboody & Kasznik, 2000). Management of the bidding company has a duty to ensure that they are acting in the best interest of shareholders.

In their research, Fung *et al.* (2009) found that in times where merger and acquisition premiums are high, and when these premiums were not questioned, managers tended to make poor decisions that allowed them to build their empires and in doing so, imposed agency costs on the firm. Ultimately, the management of the target company needs to ensure that all dealings around the acquisition are legal and that they are not associated with any suspect business.

North (2001) puts forward another view on the granting of options. He argues that despite shareholders of target firms being rewarded once the deal has been completed, the managers of the firm are often in disagreement to being acquired. Although incentive schemes such as managerial ownership and stock options are designed to align shareholder and managers' interests, North (2001) argues that the downside of such an incentive scheme is that managers get to the point where they can block unwanted acquisitions attempts.

This study aims to contribute to existing literature by trying to find out if the behaviour as described by Harris & Bromiley (2005) and Fung, Jo & Tsai (2009) is prominent in takeover deals in the South African context.

2 Theory and Literature Review

2.1 Introduction

A business topic that enjoys much academic debate is whether or not executive compensation is "fair and equitable" (Kanagaretnam, Lobo & Mohammad, 2009). More importantly, the question that they ask is "do executive compensation schemes induce unethical behaviour by executives?" (p.137). Fich, *et al.* (2009) found that in transactions where publicly listed companies were acquired, the target companies issued their CEOs with unscheduled options. Furthermore, their study found that these target companies "earn premiums significantly lower than those predicted." (p.31).This practice whereby management do not act in the best interests of shareholders (generally referred to as the agency problem) has a significant negative impact on shareholder value and raises questions around business ethics.

The theory that is reviewed describes various options that boards have when deciding on mutually beneficial compensation packages for their CEOs. Following on from that discussion, this section also considers the perceptions of insider trading and investigates the arguments put forward by academics as well as possible ways to deter this so called practice of insider trading.

In conclusion, this section looks at the impact these dealings have on the share price of the target companies and also the effect on timing of options issued to CEOs in an attempt to better understand the reasons for option granting behaviour that falls outside of standard policy.

2.2 CEO Remuneration

According Steverman (BusinessWeek Online, Sep. 2009) the trend of CEO compensation has moved away from golden parachutes and focussed on compensation based on long-term accomplishment. Furthermore, Steverman argued that compensation had to be commensurate with performance. Evidence showed that "CEOs profit while their companies do well, but are protected when they do poorly." (Steverman, 2009, p. 2-2). Bebchuk & Fried (2003) agree that executive compensation packages are structured to allow for golden parachute severances in takeover deals, regardless of poor performance. They argue that such a generous "goodbye payment" (p. 81) is a signal to the new CEO which only weakens their desire to perform.

Executives are in a position to take advantage of inside information by having discretion of when to vest their stock options (Laux, 2010). At the outset, Laux (2010) saw this practice as "detrimental because it decouples pay from performance…" (p.118). He went on to argue that depending on the exercise price of the options, the CEO may have used his inside information to abandon or continue with a particular project. Laux (2010) then concluded that by allowing CEOs to control the timing of exercising their stock options actually formed “part of an optimal pay arrangement.” (p. 133). In a similar vein, Evans & Hefner (2008) deemed CEOs as being wise to negotiate a golden parachute based on their findings that the occurrence of takeover activity was higher at firms that have recently recruited an external CEO.

Business ethics researchers have been concerned with the proportion of compensation of CEOs for some time now. This has been the case especially where options were granted in an attempt to get the firms out of the stagnant phase of their business life cycle (Kanagaretnam, Lobo & Mohammad, 2009). Kanagaretnam *et al*. (2009) found that options granted to these CEOs were not an efficient means of improving performance of these stagnant firms. In light of the effects of the sub-prime crisis, there have been renewed efforts to enforce stricter regulations to curtail insider trading (Prentice & Donelson, 2010). The argument was however, that insider trading was useful as a signalling device and promoted the flow of information to corporate decision makers (Manne, 2005; Macey, 2007 as cited by Prentice & Donelson, 2010 p. 2).

CEOs disclose information relating to their firms’ financial performance in such a way to derive greatest personal benefit from stock option grants. Critics saw these CEOs as having managed “investors’ expectations around award dates by delaying good news and rushing forward bad news” (Aboody & Kasznik, 2000 p. 73). Further consideration therefore needs to given to the link between company performance and executive remuneration. In the context of acquisitions, one needs to identify the intent behind the acquisition – was it to create synergy between the buyer and the target, or was it to remove inefficiency in the market by having gotten rid of incompetent managers (Kanagaretnam *et al*., 2009; Tannous & Cheng, 2007)?

Research by Fich *et al* (2009) showed that once an acquisition deal was finalised, the target CEOs received cash bonuses and additional golden parachute payments for potential loss of future earnings. Hartzell, Ofek & Yermack (2004) found that there was a negative correlation between "special cash payments and the likelihood that the target CEO obtains an important executive post in the acquiring company." (p. 59). Davila & Penalva (2006) established that where CEOs negotiated compensation with minimal variation, there was an increase in the cash component of their pay. This was particularly found when these CEOs had greater influence on the corporate governance structure of their firms.

In a Canadian study conducted by Tannous & Cheng (2007), they found that there was a high turnover rate among CEOs and presidents of target companies. The turnover rate of the 168 companies evaluated came to 69.05%, where senior managers were replaced within a year of the takeover. One of the findings of the study was that acquiring firms look for target firms that are underperforming because of managerial problems. Once the acquisition was made, the underperforming CEO or President was replaced. These findings were consistent with work done in the 1980s (Fama, 1980; Jensen & Ruback, 1983, as quoted in Tannous & Cheng, 2007 p. 251), whereby acquisitions served to improve discipline and efficiency in the market. Carroll & Griffith (2007) however, argued that in instances where companies experienced prolonged periods of poor performance, rather than boards having removed the CEOs of these companies, “it may be more cost effective to re-align their compensation packages to include more stock-based payments. CEOs whose compensation is less sensitive to performance may lack enough incentives for improvement, especially if the costs of replacing them are high.” (p. 228).

The findings of Evans & Hefner (2008) supported the action of boards that awarded their CEOs golden parachutes in an attempt to protect the human capital of recently hired CEOs. This was especially the case during periods of financial uncertainty and possible take over activity. Evans & Hefner (2008) went on to argue that such incentives were valuable to all stakeholders because merger and acquisition activity was encouraged over bankruptcy.

According to Evans & Hefner (2008) highly sought after CEOs demanded these guarantees because they were not willing to sacrifice their own welfare when the risk of a takeover may not have been as a result of their improper or unprofessional behaviour. They further believed that a golden parachute acted as a recruitment tool to get management in place that would bring about the necessary turnaround of a financially risky firm.

From the work done by Evans & Hefner (2008) it was evident that firms that adopted a golden parachute policy had a high likelihood of being taken over. Moreover, they found that prior to adoption of such severance packages, these firms had significantly higher incidences of bankruptcy and financial distress.

Harris & Bromiley (2005) found strong evidence that where CEOs received high proportions of their total compensation in the form of stock options, there was a tendency to misreport the firm's financial position. This finding is seen as a counter argument of linking pay, in the form of stocks, with long-term performance (Steverman, 2009; Laux, 2010). Executives who do not have long-term incentive plans, but are rewarded with stock options are therefore seen to be more likely to pursue value-destroying, market driven mergers and acquisitions for their own gain in the short-term (Fung, Jo & Tsai, 2009).

In examining CEO compensation, Burns & Kedia (2003) found significant evidence that where remuneration packages with option portfolios were sensitive to share price, CEOs adopted aggressive accounting practices that often resulted in restatement of company results. Their findings confirmed those of Harris & Bromiley (2005), whereby compensation linked to stock price increased the likelihood of CEOs misreporting.

According to Grinstein & Hribar (2004), CEO compensation should be based on measures that are observable – such as market returns or profitability ratios. They also take a view on managerial power, whereby they argue that CEOs are in a position to influence board decisions as well as incentive or compensation decisions. In keeping with this line of thinking, the question that comes to mind is one of whose best interests are being served when considering the effects of managerial power? If the head of the company is in a position of power to influence remuneration policy for herself and the executives, options may well be granted at times that would maximise profits for the executives. Bebchuk & Fried (2003) viewed the fact that executives have managerial power to address the agency problem as part of the agency problem itself. In having influence over their own pay, executives are liable to cost shareholders more than just the excessive pay that they receive. These executives were thus seen to adversely affect corporate performance with distorted management incentives (Bebchuk & Fried, 2003).

Merger and acquisition bonuses tended to be cash-based incentives for the successful completion of a deal. The level of managerial power therefore had a significant impact on the value of these bonuses. Compensation committees were found to “hide information relating to why they give M&A bonuses.” (Grinstein & Hribar, 2004, p. 142).

In the context of this study, if South African target-company CEOs are anything like their international counterparts, the question is: do CEOs actually award themselves more options prior to a takeover? Should this indeed be the case, the next question is: what is the intended signal CEOs wish to send to the market when they award themselves more options prior to a takeover? Do they wish to indicate that there is a promising development in the horizon – the takeover, which will result in synergies and greater shareholder value (Kanagaretnam *et al*., 2009; Goergen & Renneboog, 2004)? Alternatively, is it a case of enriching themselves as found by Del Brio & Perote (2007), or is the company just protecting its human capital (Evans & Hefner, 2008)?

2.3 Insider Trading

In their analysis of transactions by corporate insiders in Germany, Betzer & Theissen (2007) found that these trades were associated with significant abnormal returns. Furthermore, they established that the magnitude of the price reaction also depended on the ownership structure and the accounting standards used by the organisation. In another study, Manne (2005) confirmed that the share price moves in the desired direction when insider trading is prevalent.

Betzer & Theissen (2007) calculated that insider trading affected the share price significantly – where market-model cumulative abnormal returns (CARs) amounted to 3.6% after insider purchases and minus 3.54% after insider sales in the 20 days after the trade. These findings may suggest one of the reasons for CEOs awarding themselves more options prior to a take over in line with Del Brio & Perote (2007).

Gilbert & Tourani-Rad (2008) also found that insiders were at an advantage by being able to detect and exploit inaccurate or un-priced information. Insiders therefore knew what the likely effect on the share price would be, especially when having knowledge of upcoming announcements. The main finding of the research done by North (2001) was “that managerial ownership is negatively related to the probability of acquisition.” (p. 126). This observation was consistent with the hypothesis that significant managerial ownership allowed management to block unwanted takeover deals.

Opportunistic behaviour of insiders was seen to be further enhanced by insiders being allowed to delegate their transactions to a third party, or where there was diffuse ownership concentration (Del Brio & Perote, 2007). As a solution, Del Brio & Perote (2007) suggested improving control mechanisms. One of these controls was to have more rigorous enforcement of existing regulations. Their rationale being that this would to improve the transparency of stock markets.

In his research, Bowman (1983) found that stock price behaviour, after the public announcement of the firms’ earnings, was consistently anomalous to what was expected in efficient markets. He attributed this to the possibility that news regarding the stock had become available to the market prior to the formal announcement. Gilbert & Tourani-Rad (2008) supported the notion that insider trading was an inefficient signalling mechanism. However, they suggested that the practice offered the market a true evaluation of a firm's value because available information was priced into the market value. This finding was found to be consistent with the research done by Lambert (2010).

According to Mordant & Muller (2003) insiders were found to profit in varying degrees from trading in their own company's shares. Although a possible explanation may be that these abnormal returns were as a result of the effects of firm size and value present in the market and not because of insider trading (Mordant & Muller, 2003).

2.4 Measures in place to deter Insider Trading

Davila & Penalva (2006) examined the relationship between a firm's governance structure and the weighting of CEO performance measures regarding their compensation. Their view was that corporate governance is "a combination of external and internal mechanisms." (p. 466). These governance measures gave the firm a level of takeover protection and were a function of weighted accounting-based performance measures and how much influence the CEO had over "internal governance decisions." (Davila & Penalva, 2006, p.490).

In the United States, Fich *et al.* (2009) found that CEOs were allowed to receive stock options despite the introduction of an external mechanism such as the Sarbanes-Oxley regulations. The reason behind such practice was that "option grants do not constitute a "purchase" under the 1934 Securities Act…" (p. 32). Consequently, while the acquisition transaction was in progress, the issuing of unscheduled options did not infringe insider trading laws.

In his research, Lambert (2010) proposed that price-decreasing insider trading such as "sales, short sales and purchases of put options on the basis of negative information" (p. 44) should be deregulated. The reason being that this form of insider trading combats the problem of overvalued equity. Gilbert & Tourani-Rad (2008) examined the impact of regulatory changes in New Zealand and found that "well constructed insider-trading laws could be effective in minimising the most harmful aspects of insider trading." (p. 407).

2.5 Impact of Acquisitions on Share Price

Research conducted by Goergen & Renneboog (2004) found that "synergies are the prime motivation for bids and that targets and bidders tend to share the wealth gains." (p. 40). Beny (2005), as cited in Gilbert & Tourani-Rad (2008), found that "countries with stricter regimes had higher liquidity, more widely held share ownership and more accurate prices." (p. 410), after he rated the strength of insider trading laws.

In their analysis of the Spanish stock market, Del Brio & Perote (2007) posited that insiders traded their own firm's shares (dependent on timing policy) exclusively for their own gain. They also found that insider profitability had increased when they had high levels of discretion within the organisation, as indicated by high levels of free cash flow.

The European merger and acquisition study done by Goergen & Renneboog (2004) established that cumulative abnormal returns (CARs) including the price run-up over the two-month period prior to the announcement, rose to 23%. Furthermore, they found that the effect on the share price varied depending on the status of the bid (hostile or otherwise). There was also strong evidence that the means of payment also had a significant impact on the wealth effect, where "All-cash offers trigger an abnormal return of almost 10% upon announcement (27.5% including price run-up)…" (p. 39).

Fung *et al.* (2009) further found that when mergers or acquisitions were driven by the market, future operating and stock performance of the bidding firm was impacted negatively – such that value was destroyed if these CEOs had misaligned incentives. These arguments give some insights into understanding why the target CEOs are likely to leave after their firms have been acquired. Executives are not only seen to be in position of power to influence remuneration committees, but as found by Chauvin & Shenoy (2001), they have an incentive as well as the opportunity to time any communication of inside information to the market in such a way that the exercising price of stocks is reduced prior to granting themselves options.

In a study of mergers and acquisitions (specifically including unlisted targets) in the South African context, Smit & Ward (2007) however found that the financial performance of the enlarged entity was not significantly affected by the acquisition. Furthermore, there were no significant abnormal returns on the stocks in the event window considered.

Where firms employed stock options as compensation, executives were rewarded by maximising the difference between the exercising price and the market price of the stocks (Chauvin & Shenoy, 2001). According to Chauvin & Shenoy (2001), executives wanted to maximise the long-term stock price. To take this reasoning a step further, Chauvin & Shenoy (2001) argued that these executives had an incentive to "temporarily decrease the market price of the stock on the day of the option grant in order to decrease the exercise price." (p. 54). Chauvin & Shenoy (2001) posited that executives accomplished this temporary decrease in stock price by communicating any bad news they may have prior to receiving their options. Alternatively, executives could have delayed any good news until after their options were granted.

Target firms stand to gain more from an acquisition deal than the acquiring company (Williams, Michael & Waller, 2008). Managers of these firms were found to negotiate large bonuses for themselves, despite this having been costly to their shareholders. Williams *et al.* (2008) were found to be in agreement with Harris and Bromiley (2005) concerning CEO compensation linked to stock options. They found that compensation was driven by CEO behaviour – CEOs behaved in relation to the risk inherent in their stock options and the volatility of their equity returns after an acquisition deal.

In light of the findings of the above research, target CEOs have sufficient motivation to award themselves more options prior to a takeover. With insider knowledge, target CEOs and their executives are in a position to make decisions that would benefit them more than the shareholders. This then becomes an ethical issue – as a corporate insider being aware of an imminent takeover, the CEO can enrich himself at the expense of the stakeholders in the transaction.

2.6 Timing of options issued to CEOs

The Securities and Exchange Commission (SEC) amended its rules regarding disclosure of option grants made during merger talks (Maremont, 2009). However, specific reference was made to merger talks and not acquisitions per se.

Fung *et al.* (2009) found that companies with a greater market valuation increased the likelihood of a merger or acquisition deal being funded by stock. In such cases, they also noted that bidding companies were willing to pay a greater premium for the target company. These findings therefore give some more insights in understanding why CEOs would want to award themselves more options prior to their companies being taken over. Evans & Hefner (2008) however argued that newly hired executives would be reluctant to accept stock options over a golden parachute incentive scheme when they joined financially weak firms.

Researches have sought to link the granting of options to CEOs to a number of elements such as:

- Improving company performance by changing the form of compensation with an increased proportion of stock options (Kanagaretnam *et al*., 2009; Carroll & Griffith, 2007).
- The benefits gained by the target CEO in an acquisition transaction (Hartzell *et al.*, 2004; Fich *et al.*, 2009).
- Removing the liquidity restrictions on stock and option holdings (Cai & Vijh, 2007).
- Retaining intellectual capital (Evans & Hefner, 2008)

In New Zealand, a new law required corporate insiders to disclose their trades within five days. This law was found to be effective in reducing the overall profitability of insiders as well as forcing them away from the most profitable information (Gilbert & Tourani-Rad, 2008).

Following on from the findings in the literature review, there was an opportunity to analyse the timing of stock option grants to CEOs of target companies in the South African context. This study therefore attempted to identify the extent to which South African listed target companies award their CEOs more stock options prior to an acquisition. In order to gain insights into the practice of granting options, company disclosure was examined in the Securities Exchange News Statements (SENS) announcements in terms of director dealings. A greater deal of detail was however found in the target company annual reports.

In terms of the timing of options granted, the number of options issued prior to takeover as well as after the takeover was recorded. These comparisons were made in accordance with the data available from the annual reports in the five-year period from 2005 to 2009.

The anticipated outcome of this research was that recommendations could be made regarding CEO compensation that would be commensurate to their performance, especially with regard to the timing of issuing options. Furthermore, possible reasons were put forward for companies offering such benefits and what role CEO behaviour played in awarding options. To this end, two research propositions are considered below.

2.7 Research Propositions

1. There is a positive relationship between the timing and number of options granted to CEOs of South African listed companies and the year that the target company was acquired.
2. A positive relationship exists between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings.

Evidence found in line with the abovementioned matters shed light on the ethical behaviour of executives in listed South African companies. The results of the study were found to encourage further research on what measures can be put in place to alter executive behaviour, such that shareholder wealth would not destroyed.

3 Research Propositions

Although quantitative studies are usually synonymous with hypotheses, this study took the form of an event study and attempted to evaluate relationships between known concepts, as defined by the literature review. Propositions were used to explain the logical linkages between certain concepts and thereby asserted a universal connection between these concepts (Zikmund, 2003, p. 43).

Having reviewed the literature on the CEO remuneration and how compensation was linked to performance, this study endeavoured to find the relationship between acquisition transactions and the number of options to executives. This study put forward the propositions listed below and contributed to existing literature having highlighted certain behaviours of company executives as a result of the way in which they were remunerated.

The first proposition was that the annual total number of options granted to target company executives was higher before the acquisition deal took place than what was normally expected.

The second proposition then considered the relationship between the number of director’s dealings (as captured by the JSE SENS announcements) in the year that the takeover was announced and the actual takeover.

The study aimed to determine the effect of the takeover announcement on the practice of issuing share options, as well as determine whether the actual options granted were abnormal in nature when compared to expectations.

4 Research Methodology

For this study, stock option grants to executives (and CEOs, where such information was available) were evaluated before and after a takeover took place. Data from Ernst and Young, a reputable source of merger and acquisition deals, was used to consider all the acquisitions of listed South African companies over a five-year period, 2005 to 2009. The data was analysed to find the relationship between stock option grants and the actual takeover deal. The rationale for considering such time-based data was to establish whether or not the knowledge of an imminent takeover would cause a change in behaviour (around the issuing of options) of executives in target firms.

In light of the literature reviewed that investigated the aspects pertaining to the issuing of options prior to an acquisition deal taking place, some of the influencing factors were found to be:

- Remuneration of CEOs played a role in how acquisition deals were negotiated and what level of premium was negotiated (Fich *et al.*, 2009; Hartzell *et al.*, 2004).
- Acquisition transactions gave CEOs the opportunity to convert illiquid stock to immediate cash gains (Cai & Vijh, 2007).
- Perceptions of insider trading – abnormally high returns were earned by insiders (Betzer & Theissen, 2007) as well as insider trading that was used as a signalling device (Gilbert & Tourani-Rad, 2008).

- Intent of the acquisition – synergy or market efficiency? (Kanagaretnam *et al*., 2009; Tannous & Cheng, 2007)

Options granted to executives in the year of the takeover were captured and where possible, the options granted in the years preceding the official takeover announcement. These options were then graphically compared to options granted to executives in the years subsequent to the acquisition to see if there were any anomalies. This method was consistent with how Gilbert & Tourani-Rad (2008) measured how well insiders outperformed the market by calculating the cumulative abnormal returns earned by insiders of the 80 days following a trade.

It has been found that confounding events are prevalent in event studies and in order to account for this in his study, the researcher had to control the impact of the confounding events (Bowman, 1983). This notion was further supported by McWilliams & McWilliams (2000) where they highlighted the importance of coupling the right event to the reaction of the stock price. Zikmund (2003, p. 57) referred to the measurement "of concomitant variation between the presumed cause and the presumed effect" where variables are measured together. For this study however, this variation could not be accounted for due to the lack of consistency between companies in how their annual reports were compiled as well as the ranges in the number of options granted.

Having considered the behaviour of the CEO in terms of issuing stock options prior to an acquisition deal, the context of this study was related to an event, which was seen as the announcement of the takeover. By means of an event study, the aim was to understand the behaviour that would cause any abnormal returns for executives after the event. In this case, more options granted prior to the deal could lead to exercising these options and vesting the stock at a higher price. Bowman (1983) documented that the power of the event study tests conducted was very sensitive to how well the researcher could pin-point the actual event date. It was therefore essential to establish when the first public announcement was made regarding the imminent acquisition of a company. The announcement and warning dates were reflected in the Ernst and Young database used in this study.

The study by Mordant and Muller (2003) indicated that when evaluating the profitability of insider trading, the event study technique is preferred when the event of interest is the director’s share transaction – in this case, the dealings of the target company directors. The event study methodology was supported by McWilliams & McWilliams (2000) where they found this method of research appropriate in evaluating the reaction of a share price to a particular event that may have had a positive or negative effect for shareholders.

With this knowledge, it was determined whether any stock options were awarded to the CEO outside of the normal policy dictating the frequency of options issued. McWilliams & McWilliams (2000) found that test statistics used in event studies are sensitive to outliers, but they were not in agreement with other research findings that stated the best way to control for this phenomenon was to use nonparametric statistics. Due to the nature of the sample - limited size and ordinal scale - this study made use of a nonparametric statistical analysis (Zikmund, 2003, p. 507). The Chi-squared test of independence was used to evaluate the first proposition. As a result of the options data that was both sparse and erratic, it was deemed appropriate to use a median test rather than use the arithmetic mean of options granted. This methodology is discussed further in Chapter 5.

"Overconfident CEOs overestimate their ability to generate returns. As a result, they overpay for target companies and undertake value-destroying mergers. The effects are strongest if they have access to internal financing." (Malmendier & Tate, 2008, p. 20). This study aimed to examine the link between this finding of Malmendier & Tate (2008) and the behaviour of target company CEOs. It was argued that if this knowledge was known to CEOs, that this knowledge directed target CEO behaviour to award themselves more options prior to being taken over.

4.1 Scope and Unit of Analysis

The scope of this study was confined to the acquisitions of listed target companies across the various sectors of industry, irrespective of the financing mechanism. With such a scope, the study sought to consider all the companies that publicly traded their shares, where insiders stood to gain the most from dealings related to their equity holding. An event study can consider "price changes around a well-defined announcement of news." (Chauvin & Shenoy, 2001, p. 60) in relation to information leakage. Furthermore, the scope of this study was to evaluate a trend in behaviour around the event date. This was done by graphically representing the number of options granted to target company executives over a five-year period.

The unit of analysis for the study was therefore the number of options granted to a target CEO in the year of (or preceding) an acquisition deal.

4.2 Population and Sampling

In similar vein to the study done by Mordant & Muller (2003), the population of this study included all the JSE listed companies that were acquired during a five-year time period. These companies came from a variety of industries as categorised by the JSE. The population of relevance came from a database constructed by Ernst and Young, detailing acquisitions made in the period 2005-2009. The size of the population of relevance was 4456 mergers and acquisitions and included deals that did not materialise. This data on cancelled deals had to be included in the analysis to avoid survivor bias in the study.

Privately owned or unlisted company CEO stock option grants were not considered and would require further research.

The sample size was 1008 merger and acquisition transactions, after all AltX, foreign and Newco transactions were eliminated. This was done in order to keep within the original scope of the study. The final sample was 39 target companies that met the requirements of having a deal-value of greater or equal to R500 million and that they had greater or equal to 50% of their stocks acquired. The reasoning behind selecting these criteria was to establish a sample where executives would possibly have the motivation to gain materially from such significant deals by means of changes to their equity holding.

The sample of CEO and director dealings came from the public announcements made through SENS during the period of 2005 up until 2009. For the various acquisition deals, JSE SENS data was used as the sampling frame in considering director dealings in the study.

In order for management of the acquiring company to make informed decisions around the acquisition of the target company, they would typically want the minimum amount of research error so as to minimise the risk of making a poor decision regarding an acquisition. Common errors in research are random sampling error and systematic error or bias (Zikmund, 2003, pp. 176-177). In the case of this study, random sampling error was not introduced because of the way in which the sample was determined. With only the acquisitions of listed companies considered in the sample, there was a possibility of sampling frame error as described by Zikmund (2003, p. 380). Another administrative error that could have influenced the degree of researcher error is data processing error, which results from incorrect data entry, incorrect computer programming or other errors made during data processing (Zikmund, 2003, p. 184).

4.3 Sample Size and Method

A sample of 39 JSE listed target companies was obtained from the Ernst and Young sampling frame of JSE listed transactions that took place over a period of five years. The sample was used to focus on the number of options awarded prior to the announcement date of the takeover in relation to subsequent options awarded.

A controlled sample was taken by looking for acquisitions that met researcher defined criteria. These were:

- Consider only deals greater or equal to R500 million in order to capture transactions of the 160 largest companies on the JSE by market capitalisation. It was expected that executives could make the most material gains when involved with deals of such magnitude.
- Where bidding companies acquired greater or equal to 50% of the target company. The rationale for this criterion was to see what the effect of the

takeover was on executives being able to vest their options due to a change of control having taken place (Cai & Vijh, 2007).

In a similar vein to research done by North (2001), foreign targets and new companies (Newco's) were excluded from the sample because of the limited scope of the study and ease of access to financial information of locally listed firms. This study considered the announcement dates of the takeover deals as captured in the Ernst and Young database.

4.4 Data Collection Process

Director's dealings data was sourced from the JSE SENS announcements as captured with Sharenet software, which profiles media data. Information regarding the acquisition deals was obtained from the merger and acquisition database administered by Ernst and Young. Table 1 shows the data used for analysis and where this data was obtained.

Table 1: Data required for analysis and possible sources

Data required	Possible source
Population • Acquisitions database • Directors dealings	• Ernst and Young merger and acquisition database • JSE SENS announcements
For analysis • Options awarded prior to and after the takeover • Number of directors' dealings in the year that the takeover was announced	• McGregor BFA and INet-Bridge database for annual reports • SENS announcements

Source: Adapted from Christiaan Smit's (2005) research proposal

4.5 Method of Analysis

The method of analysis that was used is listed in table 2 and considered each of the propositions put forward in the study.

Table 2: Proposition method of analysis

Proposition 1	**Analysis**
There is a positive relationship between the timing and number of options granted to CEOs of South African listed companies and the year that the target company was acquired.	A graphical Pre- and post-test by tracking the stock options awarded prior to the acquisition as well as vested stocks after the transaction. Median test and Chi-squared test.
Proposition 2 A positive relationship exists between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings.	Comparison of number of directors' dealings of the target company to the Actual takeovers that were listed in the Ernst and Young database.

With this event study, it was found that the assumptions for parametric testing were not met and that nonparametric tests had to be performed. This methodology was in line with the recommendations of Bowman (1983). Once the data was analysed, it was found that the options awarded to CEOs and executives was noisy and that were large variations in the magnitude of options granted. These varied between zero and millions of options granted. Because of the difficulty in standardising options, it was decided to consider the median number of issues granted in order to make sense of the data. Cowan & Sergeant (1996) found that the nonparametric rank and generalised sign tests were more powerful for small samples than the standardised cross-sectional test used in thinly traded samples.

4.5.1 Proposition 1

The intent of the graphical representation was to identify anomalies in the awarding of options to executives. In order to graph these option grants, the researcher followed the steps listed below:

- Compiled a single database (for the five years under consideration) of all the Ernst and Young mergers and acquisitions – these were supplied in separate annual databases.
- Sorted all the deals according to “JSE target codes” and deleted all the foreign, unlisted, Newco’s and AltX companies.
- Sorted all the remaining deals according “Total value” to obtain all the transactions valued greater or equal to R500m.
- These transactions were then sorted according to “Percentage shares acquired”, so that only the deals where greater or equal to 50% of target shares acquired were considered.
- Company annual reports were obtained for the sample of 39 companies from the company websites and the McGregor BFA database.
- The number of options granted to the CEO and/or executives was captured for each year that annual reports were available.

In order to perform statistical analysis on the options granted for the sample companies, a median test and Chi-squared test was done. The detail of this process is further discussed in Chapter 5.

4.5.2 Proposition 2

In order to determine whether there was a positive relationship between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings, the following was done:

- A JSE SENS database was compiled from information obtained from running the Sharenet software for the five years under consideration. The summary database used contained information pertaining to director position, date of the dealing and a note on what dealing was done (relating to volume and price).
- These numerous dealings were then grouped according to company, director and the total number of dealing transactions for the year.
- It was decided to consider all companies where their CEO had 10 or more dealings for the year. The rationale for this criterion was the expectation that companies that had CEOs who were actively dealing with their shares may be sending a signal to the market. The expected signalling would be related to the imminent acquisition of their company.
- This sample was then compared to the acquisition sample to determine if any of the target companies had a CEO whose director's dealings were greater or equal to 10 in the year the acquisition was made.

4.6 Research Limitations

Due to the nature and scope of this study, including time constraints, various limitations were identified. These included:

- A limited sample taken from acquisitions made over a five-year period, thereby excluding all acquisition deals made outside of this time frame.
- Only South African companies listed on the JSE were considered as target companies in acquisition transactions.
- The presence or absence of alternative plausible explanations or causal factors (Zikmund, 2003, p. 58) outside of those considered in this study. There may have been other factors that could have resulted in more options being granted to executives prior to the takeover.
- This study did not consider the tenure of other directors, or their relationship with the CEO. According to Bebchuk & Fried (2003), the CEO not only has influence over the board, but also plays an important role in nominating directors for re-election to the boar. As a result, directors would rarely challenge the compensation arrangements the CEO puts in place for herself.
- Although the original sample data was obtained from a single provider (Ernst and Young), the merger and acquisition data was not in an identical format for each of the years in the period under consideration. The researcher had to arrange the data in the spreadsheet so that each year was comparable. As a result, data input errors may have occurred in the initial spreadsheet as well as possible errors made by the

researcher by not considering some information due to the different formats of reporting from year to year.

In the context of South African business, further studies are required to investigate the effect of regulation changes (if any have been made recently) on company option timing policies. Regulatory requirements pertaining to option grants could be amended or improved in order to reduce the activity of executives awarding themselves more options prior to their company being taken over. Fich *et al.* (2009) found the introduction of the Sarbanes Oxley regulations did not deter CEOs from realising healthy payouts by the process of granting unscheduled options. An alternative view was held by Gilbert & Tourani-Rad (2008), where they saw "well constructed insider-trading laws could be effective in minimising the most harmful aspects of insider trading." (p. 407).

According to the findings of Mordant and Muller (2003) where the impact of market effects such as size, value and resources were stripped out of the director's returns, the actual returns were not that significant. Further research is required in terms of the impact of these market effects as a joint test related to this event study (Bowman, 1983). These joint effects were not considered in this study due to the researcher opting for a narrow scope.

Chauvin & Shenoy (2001) noted that by only considering the effect of the event on the day of the announcement, one would be neglecting to capture the complexity of how information is communicated from insiders to the rest of the market. Although the intention for this study was to consider options awarded to CEOs in an event window of -80 days, the information available in the annual reports only reflected total option granted in the year that the takeover deal was announced. According to Chauvin & Shenoy (2001), changes in stock price "constitute an excellent measure of the value of information being received by the market." (p. 55) since actual communication sent by insiders is difficult to measure. If the researcher were to have included share price changes in this study, it would have added complexity beyond the current scope.

5 Results

5.1 Sample Description

Results are listed according to data captured from the Ernst and Young merger and acquisitions database and then considered graphically where applicable. The size of the sampling frame was 4456 merger and acquisition transactions for the period 2005-2009.

The Ernst and Young database was filtered by removing all AltX listed companies, unlisted companies, foreign targets as well as targets listed as new companies (Newco). As a result, the data set was therefore reduced to 1208 merger and acquisition transactions. The final sample size of 39 companies was obtained by only considering those takeovers that were large in nature (deals greater or equal to R500 million) as well as where the bidding company acquired a controlling stake (greater or equal to 50%) in the target.

5.2 Data

Table 3 shows a summary of how options were awarded across the sample of 39 companies that were acquired over the five-year period.

Table 3: Option granting in the sample

		%
Number of Companies that granted **More** options to CEOs or Executives	**12**	30.8%
Number of Companies that **Granted** options to CEOs or Executives	**21**	53.8%
Number of Companies N**ot Granting** options to CEOs or Executives	**16**	41.0%

It is noted that of the 16 companies not granting options, nine of these companies were in the property industry. The property sector works with units and not options. One of the companies in the sample had no annual report data available.

5.2.1 Proposition 1

There is a positive relationship between the timing and number of options granted to CEOs of South African listed companies and the year that the target company was acquired.

The tables 4-8 below document the options granted to CEOs or executives on an annual basis as reflected in the annual reports. Upon closer consideration, the tables highlight the occurrence of target companies awarding their CEO or executives more options prior to an acquisition.

In analysing the options awarded to CEOs and executives, it is seen that the data is noisy and that there are large variations in the magnitude of options granted. These vary between zero and millions of options granted. In order to make sense of the data, the median number of options granted was considered per company for the period that information was available. The reason being that the median number of options would be a better representation of the sparse data than considering only the average number of options granted.

For each company, the event date was the year the acquisition took place. Taking the option grant information from the annual reports, the median grants per year for each company were estimated. This data was then split into pre- and post-event data, with the actual date of acquisition data included in pre-event. Table 9 was then constructed with each cell showing a 1 if the options granted was greater than the median number of options granted. A zero was recorded in the year that options granted were less than the median.

The expectation was that the number of options awarded prior to the company being taken over would be similar (relative to the median number options) to the options granted after the acquisition. Although the sample size of actual companies awarding more options prior to takeover is considered to be small, a

Chi-squared test was found to be appropriate in analysing the difference between pre- and post-event option grants. As a non-parametric test, the Chi-squared test was seen as robust. If this test were to indicate statistical significance with a small sample size, then by having a larger sample, parametric tests such as the t-test are expected to yield similar results. McWilliams & McWilliams (2000) found that test statistics used in event studies are sensitive to outliers, but they were not in agreement with other research findings that stated the best way to control for this phenomenon was to use nonparametric statistics. From the results of this study, it is difficult to identify outliers due to the large variation in options granted. Furthermore, due to the nature of companies reporting options granted in their annual reports, it is difficult to standardise the number of options granted. This is because each company has a different reporting structure and format.

Table 4: Options granted to Executives in 2005

ID	Year		2003		2004		2005		2006		2007		2008		2009	
			Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised
1	2005	**Total Options to Executives**	201 342	-	0	0	0	0								
		Options to CEO	-	-	0	0	0	9160								
2		**Total Options to Executives**			9 575 239	123 665	12 759 147	997 130	2 926 443	2 518 309	11 855 000	550 000	1 935 000	1 866 807	2 559 948	1 043 016
		Options to CEO			560 000	390 000										
3		**Total Options to Executives**	1 082 586	-	592 493	-	666 289	658 246								
		Options to CEO	366 761	-	207 161	-	162 715	-								
4		**Total Options to Executives**			813 832		822 550	15 021	188 276	83 711	-	89 423	-	662 416	-	-
		Options to CEO			219 428	-	-							219 428		
5		**Total Options to Executives**	-	-							7 100 000	-	3 800 000	-	3 700 000	
		Options to CEO	-	-												
6		**Total Options to Executives**	5 080 000	4 473 000	3 719 000	1 403 000										
		Options to CEO	1 300 000	1 020 000	-	1 580 000										

The anomaly seen in the options granted by company 2 in 2007 was because of acquisition agreement regarding a joint venture with another company.

On 12 Nov 2007, the CEO of company 4 was released from undertaking not to dispose of shares. He exercised 219 428 shares at R28 and made a gain of R4 799 673. These shares were awarded to him in 2004, the year preceding the takeover of his company.

Table 5: Options granted to Executives in 2006

			2003		2004		2005		2006		2007		2008		2009	
ID	**Year**		**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**
7	**2006**	**Total Options to Executives**			-	-	-	-	-	-	-	-	-	-	-	-
		Options to CEO			-	100 000	-	-	-	-	-	-	-	81 250	-	162 500
8		**Total Options to Executives**	7 172 000	12 571 000	1 094 000	2 556 000	246 000	1 646 000	103 000	12 849 000	-	6 122 000			-	
		Options to CEO	-	-												
9		**Total Options to Executives**					473 409	111 000	1 281 900	-						
		Options to CEO					356 763	-	191 600	-						
10		**Total Options to Executives**														
		Options to CEO														
11		**Total Options to Executives**			3 791 500	2 062 400	2 193 500	3 012 200	-	3 949 600	-		-	-	-	-
		Options to CEO			35 000	-	215 000	13 000	-	-	-		-	-		
12		**Total Options to Executives**				-	-		5 190 000		-		-			
		Options to CEO			500 000	-	-	42 000	300 000	1 570 600	-	166 732	-	166 668		
13		**Total Options to Executives**	-	-	-	-	-	-	-	-	-	-			no info in AFS	
		Options to CEO	-	-	-	-	-	-	-	-						
14		**Total Options to Executives**	335 000	220 333	50 000	238 787	610 000	303 333	-	137 668						
		Options to CEO	60 000	66 667	-	66 666	80 000	53 334	-	-						
15		**Total Options to Executives**	-	-	-	-										
		Options to CEO	-	-	-	-										
16		**Total Options to Executives**			9 838 069	1 066 876	8 771 193	1 066 876	-	-	-	1 120 000	-	334 000	-	-
		Options to CEO	-	-	-	-										
17		**Total Options to Executives**									3 160 000	148 756				
		Options to CEO							801 600		1 000 000					
18		**Total Options to Executives**	48 915 070	-	-	2 091 038	7 218 800	5 377 851								
		Options to CEO														

For company 11, the option scheme was closed in 2007, other than for future exercising of existing unexpired options. In that same year, the managing director exercised 1 504 600 options.

Table 6: Options granted to Executives in 2007

			2003		2004		2005		2006		2007		2008	
ID	**Year**		**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**
19	**2007**	**Total Options to Executives**	2 155 000	-	160 000	-	-	909 500	60 000	420 000				
		Options to CEO	825 000	-	-	-	-	344 500	-	15 000				
20		**Total Options to Executives**												
		Options to CEO			95 000	415 200	47 500	136 400	95 000	61 700	-	69 000	42 270	39 000
21		**Total Options to Executives**					-	-			-	-		
		Options to CEO					-	-			-	-		
22		**Total Options to Executives**					-	-	-	-				
		Options to CEO					-	-	-	-				
23		**Total Options to Executives**	3 045 000	1 550 000	1 250 000	3 916 000	-	2 580 000	-	-				
		Options to CEO	-	-	350 000	1 500 000	-	1 166 000	-	-				
24		**Total Options to Executives**	-	-	-	-								
		Options to CEO	-	-	-	-								
25		**Total Options to Executives**												
		Options to CEO												

Table 7: Options granted to Executives in 2008

ID	Year		2003		2004		2005		2006		2007		2008	
			Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised	Granted	Exercised
26	**2008**	**Total Options to Executives**	-	1 075 000	-	-	-	-	-	-	-	-	No SARs issued to directors	
		Options to CEO	500 000	500 000	-	-	-	-	-	-	-	-		
27		**Total Options to Executives**	-	-	-	-	-	-	-	-	-	-		
		Options to CEO	-	-	-	-	-	-	-	-	-	-		
28		**Total Options to Executives**	-	-										
		Options to CEO	-	-										
29		**Total Options to Executives**	-	-	-	-			-	-	-	-		
		Options to CEO	-	-	-	-			-	-	-	-		
30		**Total Options to Executives**	-	-	-	-	-	-	-	-	-	-		
		Options to CEO	-	-	-	-	-	-	-	-	-	-		
31		**Total Options to Executives**	-	4 245 000	-	11 820 000	-	12 338 000	-	5 950 000	-	5 837 000		
		Options to CEO	-	-	3 000 000	-	-	-	-	-	-	-		
32		**Total Options to Executives**							-	-				
		Options to CEO							-	-				
33		**Total Options to Executives**							-	-	-	-	-	-
		Options to CEO							-	-	-	-	-	-
34		**Total Options to Executives**	4 820 924	-	4 191 780	33 333								
		Options to CEO	2 219 405	-	2 000 000	-								
35		**Total Options to Executives**					-	-	-	-				
		Options to CEO					-	-	-	-				

Table 8: Options granted to Executives in 2009

			2003		2004		2005		2006		2007		2008		2009	
ID	**Year**		**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**	**Granted**	**Exercised**
36	**2009**	**Total Options to Executives**	-	-	-	-										
		Options to CEO	-	-	-	-										
37		**Total Options to Executives**									-	-	4 350 000	-	3 285 000	-
		Options to CEO									-	-	-	-	-	-
38		**Total Options to Executives**							-	-	-	-				
		Options to CEO							-	-	-	-				
39		**Total Options to Executives**											-	-	-	-
		Options to CEO											-	-	-	-

Table 9: Median test of the options granted to the sample companies

	ID	No. of Yrs Data	Total Options Granted	Median	Caution Date	Announce Date	Effect Date	Yr - 5	Yr - 4	Yr - 3	Yr - 2	Yr - 1	Yr 0	Yr + 1	Yr + 2	Yr + 3	Yr + 4	Yr + 5
	1	3	201 342	-	09 June 2005	11 March 2005	11 March 2005				1	0	0					
	2	6	41 610 777	6 250 841	16 May 2005	07 May 2005	27 December 2005					1	1	0	1	0	0	
2005	3	3	2 341 368	666 289	14 February 2005	08 October 2005	12 December 2005				1	0	1					
	4	5	1 824 658	188 276	17 May 2005	17 May 2005	17 May 2005				1	1	1	1	0	0		
	5	3	14 600 000	3 800 000	23 December 2004	20 May 2005	20 May 2005								1	1	0	
	6	2	8 799 000	4 399 500	14 July 2005	08 January 2005	19 December 2005				1	0						
	7		-		12 April 2006	27 November 2006	27 November 2006											
	8	5	8 615 000	246 000	07 June 2006	19 October 2006	19 October 2006			1	1	1	0	0				
	9	2	1 755 309	877 655	21 July 2006	18 December 2006	18 December 2006					0	1					
	10		-		18 July 2006	21 November 2006	20 March 2007											
	11	6	5 985 000	-	14 February 2006	19 May 2006	19 May 2006				1	1	0	0	0	0		
2006	12	5	800 000	-	22 March 2006	22 March 2006	22 March 2006				1	0	1	0	0			
	13		-		27 February 2006	27 February 2006	27 February 2006											
	14	4	995 000	192 500	11 May 2006	27 July 2006	13 November 2006			1	0	1	0					
	15		-		15 November 2006	18 December 2006	18 December 2006											
	16	6	18 609 262	-	28 March 2006	12 April 2006	12 April 2006				1	1	0	0	0	0		
	17	2	1 801 600	900 800	11 July 2006	19 December 2006	19 December 2006						1	1				
	18	3	56 133 870	7 218 800	24 January 2006	10 February 2006	10 February 2006			1	0	1						
	19	4	2 375 000	110 000	20 August 2007	20 August 2007	20 August 2007		1	1	0	0						
	20	5	279 770	47 500	05 November 2007	05 November 2007	05 November 2007			1	1	1	0	0				
	21		-		07 August 2007	07 August 2007	07 August 2007											
2007	22		-		12 April 2007	25 May 2007	17 October 2007											
	23	4	4 295 000	625 000	24 April 2007	21 May 2007	01 September 2007		1	1	0	0						
	24		-		16 March 2007	02 May 2007	02 May 2007											
	25		-		08 May 2007	11 June 2007	01 September 2007											
	26	5	500 000	-	17 March 2008	17 March 2008	17 March 2008	1	0	0	0	0						
	27		-		04 July 2008	04 August 2008	04 July 2008											
	28		-		22 February 2008	02 April 2008	22 February 2008											
	29		-		02 September 2008	02 September 2008	02 September 2008											
2008	30		-		14 February 2008	26 February 2008	14 February 2008											
	31	5	3 000 000	-	18 March 2008	24 April 2008	18 March 2008	0	1	0	0	0						
	32		-		09 June 2008	09 June 2008	09 June 2008											
	33		-		18 December 2008	18 December 2008	18 December 2008											
	34	2	9 012 704	4 506 352	20 November 2008	20 November 2008	20 November 2008	1	0									
	35		-		26 September 2008	26 September 2008	26 September 2008											
	36		-		15 January 2009	09 March 2009	15 January 2009											
2009	37	2	7 635 000	3 817 500	15 September 2009	15 September 2009	15 September 2009					1	0					
	38		-		15 January 2009	09 March 2009	15 January 2009											
	39		-		11 August 2009	30 September 2009	11 August 2009											
										n						n		
							> median			34						5		
							Total			61						21		
							Total Sample						82					

Table 9 shows that in 61 instances of option grants prior to the company takeover, the number of options granted greater than the median occurred in 34 cases. In the case of post-takeover, only five instances of option grants greater than the median were recorded. By considering the number of options granted on an ordinal scale and performing a median test on the data (refer to table 9), the researcher could use a Chi-squared test to evaluate the statistical significance of the independence considered in proposition 1.

The Chi-square test for the actual results against the expected results is shown in table 10 below. The null hypothesis for this test is as follows:

> H_0: CEOs or company executives are not granted more options prior to acquisition of their company.

The alternative hypothesis is:

> H_1: CEOs or company executives are granted more options prior to acquisition of their company.

Table 10: Chi-squared test results

Actual

	Pre-Event	Post-Event	
> median	34	5	39
< median	27	16	43
	61	21	82

Expected

	Pre-Event	Post-Event	
> median	29.0122	9.987805	39
< median	31.9878	11.0122	43
	61	21	82

The expected values for the four cells were calculated using the equation below:

$$Expected\ Value\ Cell\ 1 = \frac{Total\ Column\ 1 \times Total\ Row\ 1}{Grand\ Total}$$

The Chi-squared test results as indicated in table 10 yield a p-value of 0.0115, which is significant at the 95% confidence level. The null hypothesis is therefore rejected and the alternative hypothesis is accepted. The researcher finds strong evidence that more options are granted to CEOs or company executives prior to their companies being taken over.

5.2.2 Proposition 2

A positive relationship exists between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings.

Considering proposition 2, analysis was done regarding the directors dealings as captured in the JSE SENS opposite those companies actually acquired in that year of exceptional director dealings. The findings indicated that none of the highlighted directors' companies were acquired in that year (Please refer to Appendix 2).

The data therefore does not support proposition 2 and no relationship is observed between a large (greater than 10 dealings per annum) number of director dealings and their company being acquired.

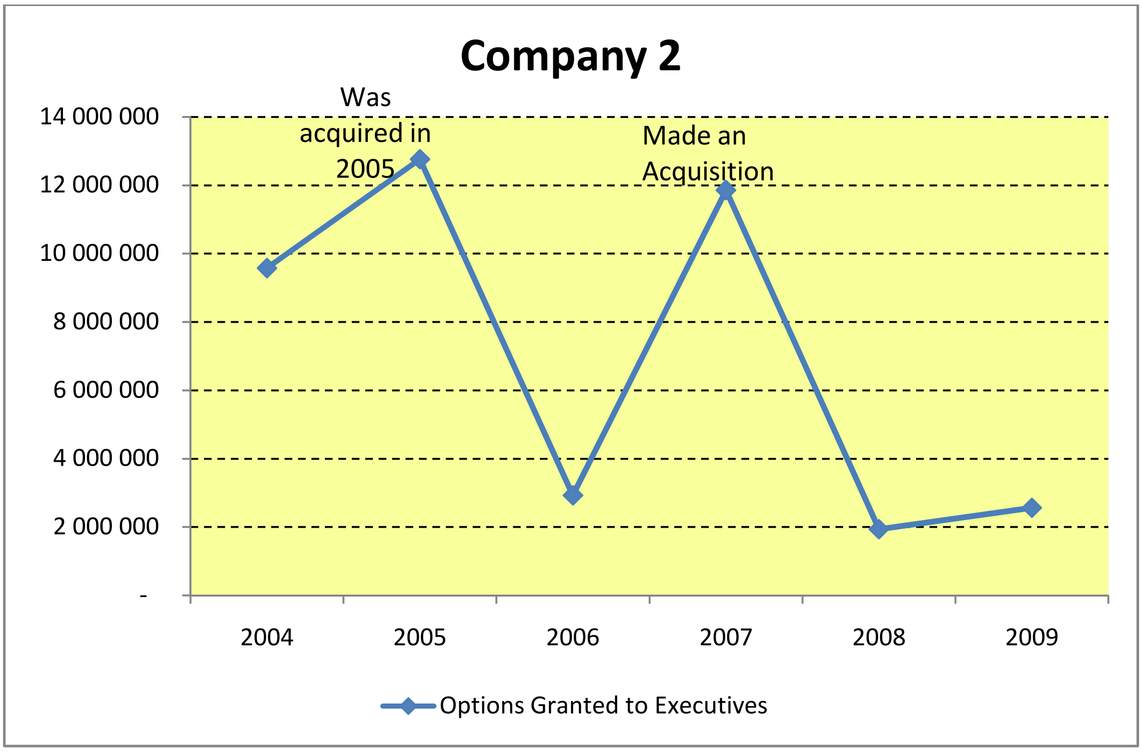
5.3 Graphical examination

The data gathered for the analysis of proposition 1 is represented graphically to show the anomalous instances where options granted to CEOs or company executives differ from what is seen to be the norm.

5.3.1 Proposition 1

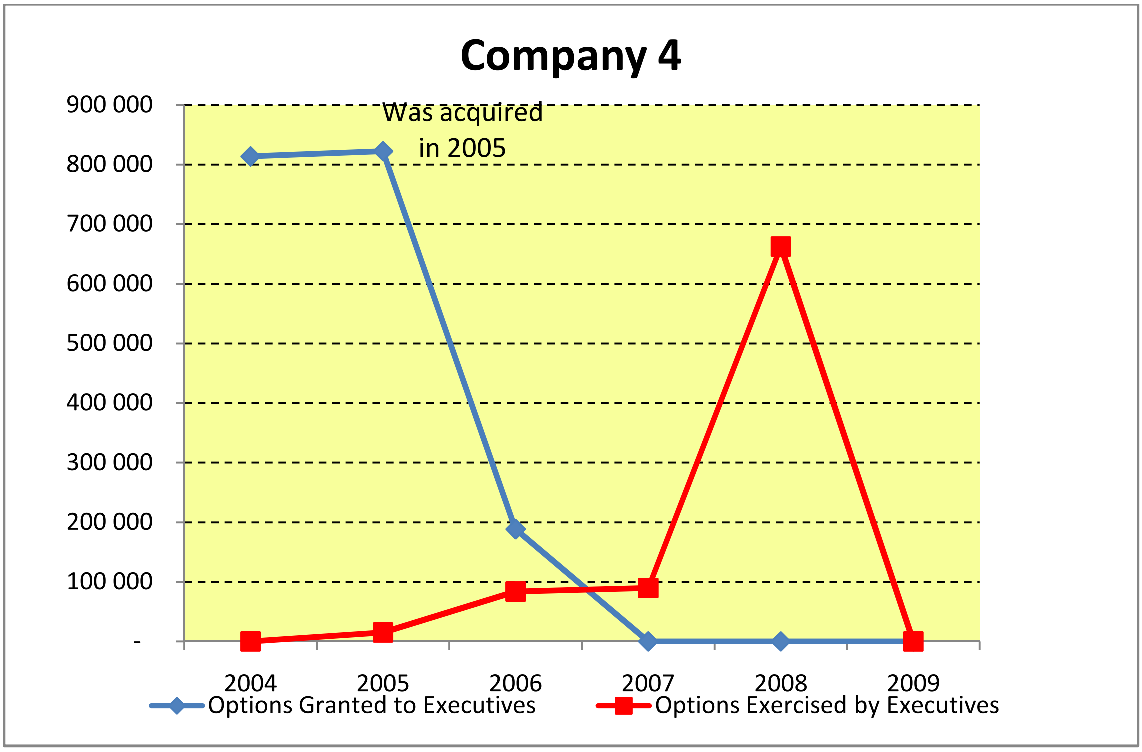
The graphs below show the number of options granted to CEOs and executives over the period where the data is available in the annual reports. Only the companies awarding options are considered and the most dramatic results are discussed below. The remaining graphs are found in appendix 1.

Figure 1: Options granted to Company 2 Executives



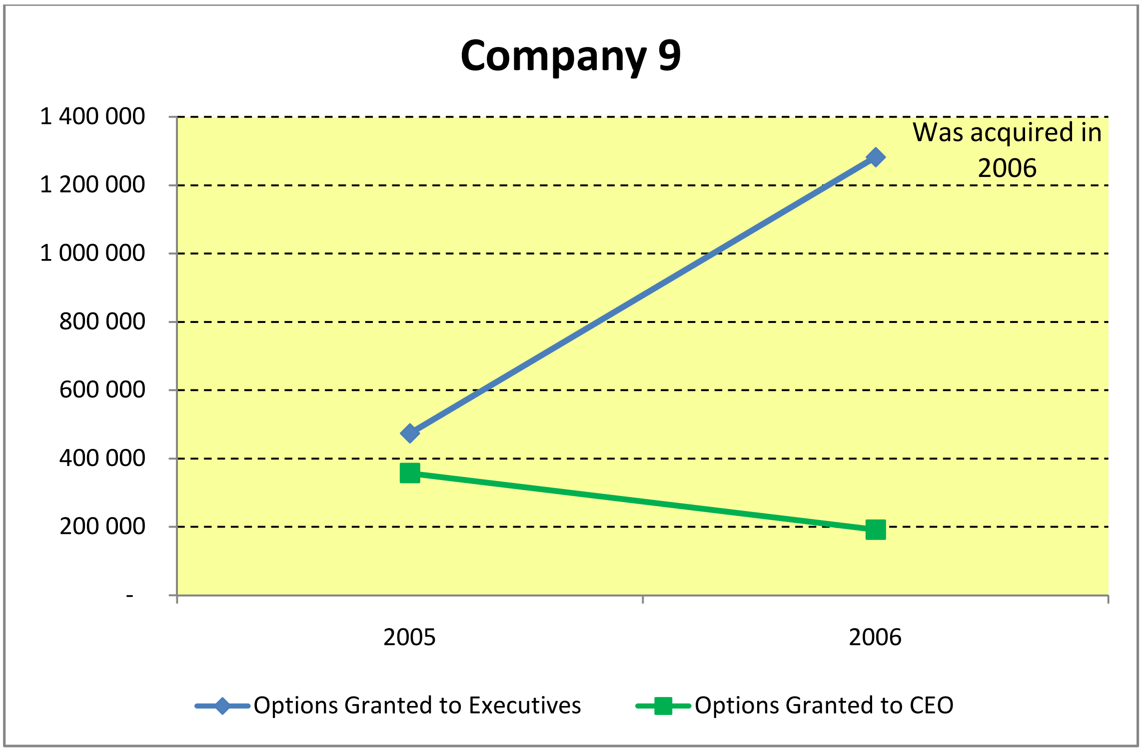
It is interesting to note that in figure 1 there are two anomalies in the number of options granted – the first in the year that the acquisition was made and then again, two years later when the company sought to grow further by making another acquisition.

Figure 2: Options granted to Company 4 Executives



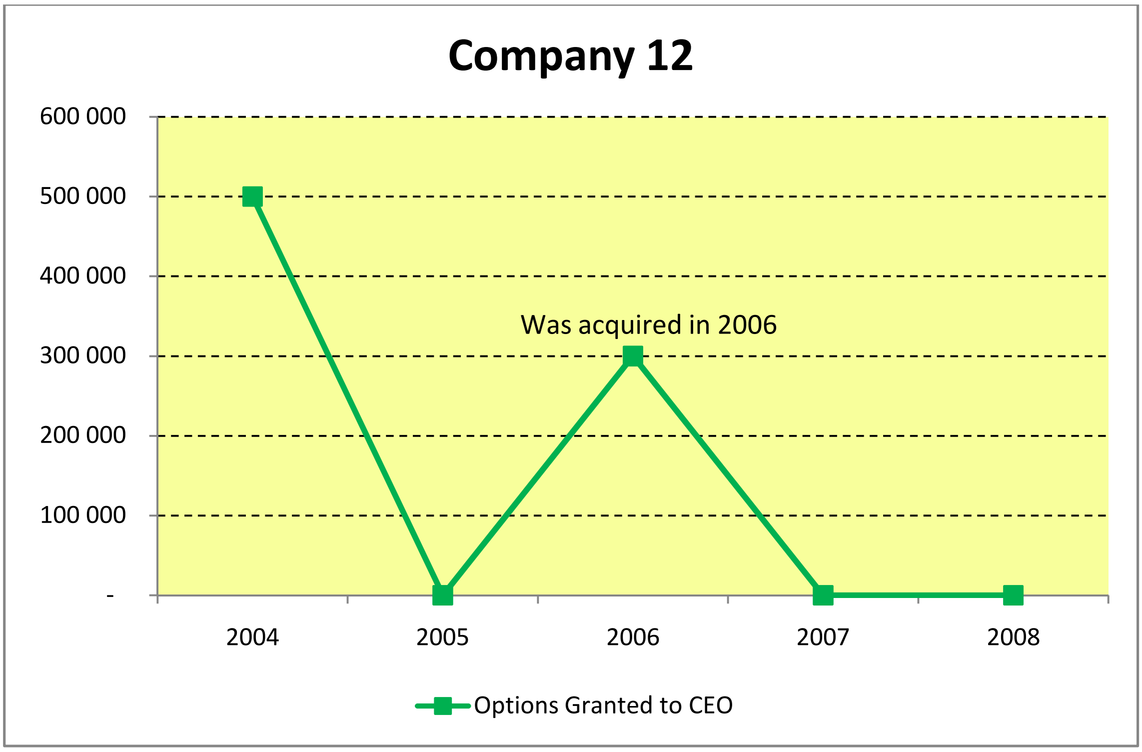
Company 4 (as seen in figure 2) issued slightly more options in the year the company was taken over than the previous year, but what stood out in the analysis was how the number of options exercised by executives started to increase in the year of the acquisition and then peaked three years later.

Figure 3: Options granted to Company 9 Executives and CEO



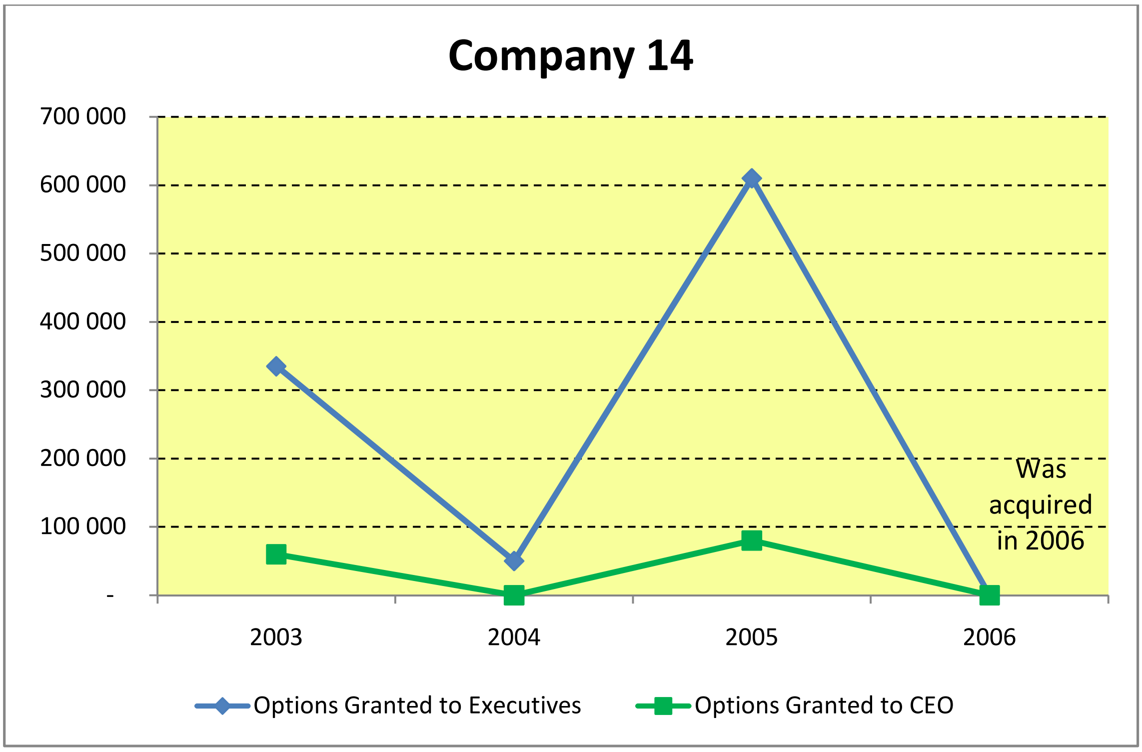
With limited data, it is evident that company 9 (figure 3) awarded its executives more options, although the options awarded to the CEO declined from the previous year.

Figure 4: Options granted to the CEO of Company 12



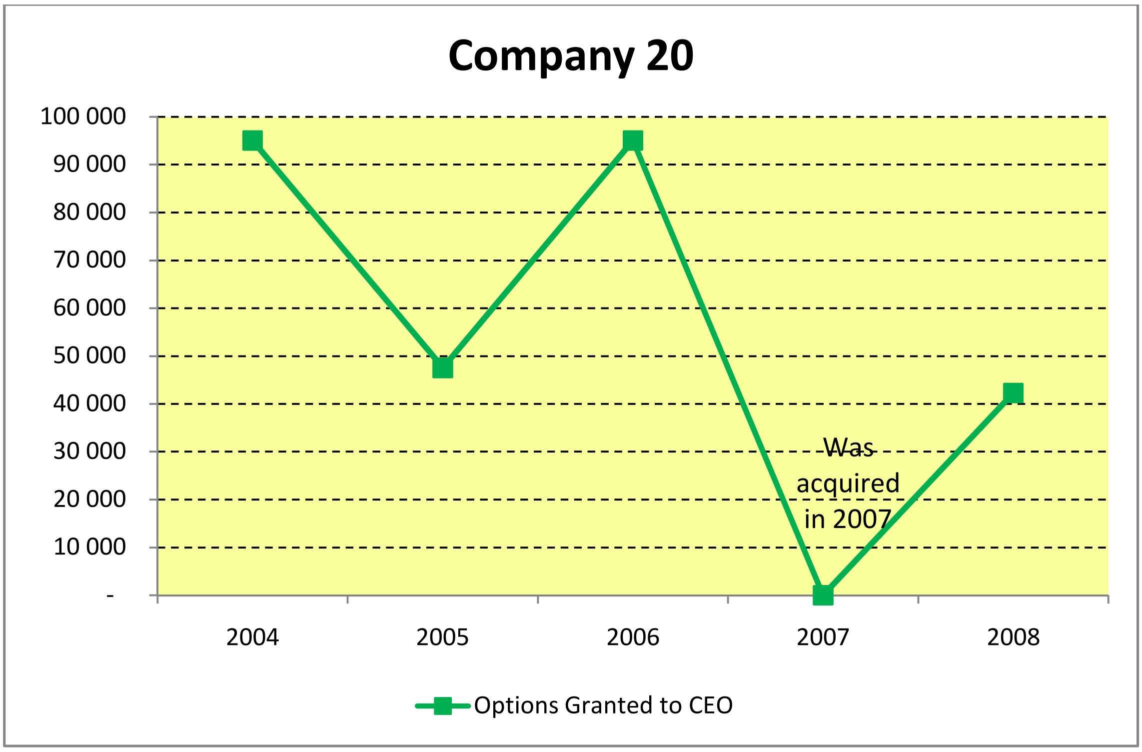
Company 12, as depicted in figure 4 awarded its CEO more options in the year of the acquisition than the previous year.

Figure 5: Options granted to Company 14 Executives and CEO



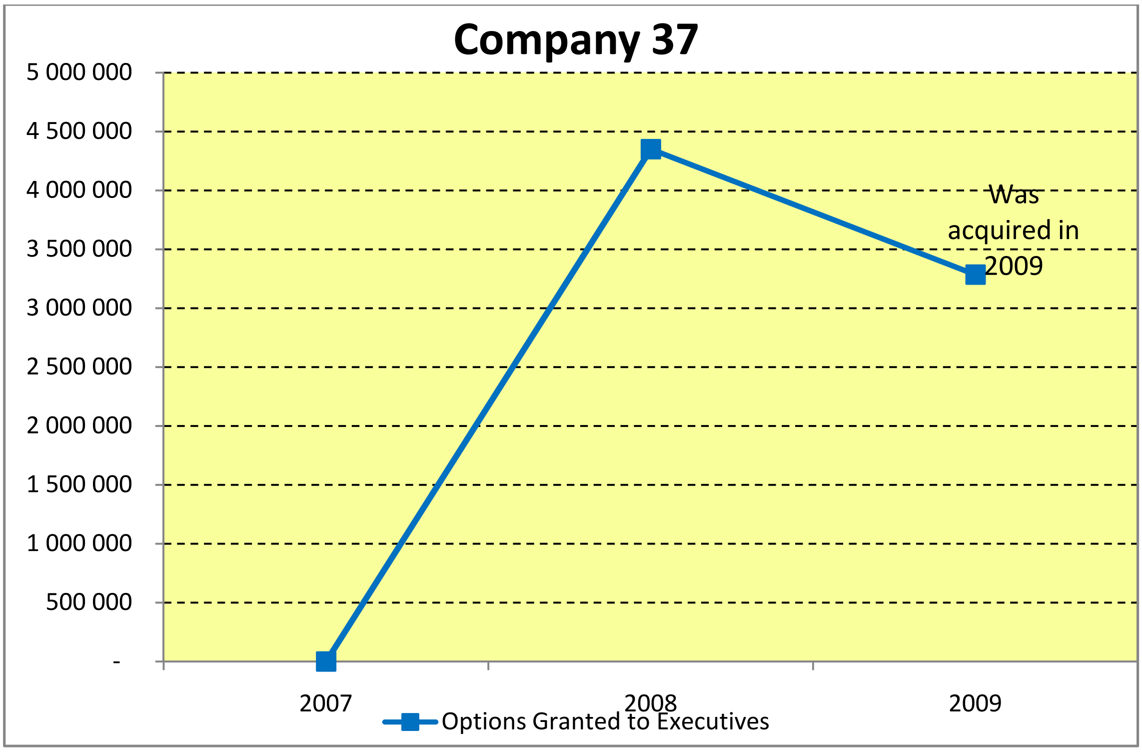
More options were granted to both the CEO and company executives of company 14 (figure 5) in the year preceding the company takeover.

Figure 6: Options granted to the CEO of Company 20



Company 20 (figure 6) almost doubled the number of options granted the previous year in the year prior to the takeover.

Figure 7: Options granted to Company 37 Executives



Company 37 as shown in figure 7 issued more options to its executives in the year of acquisition as well as in the preceding year than two years before the takeover.

5.3.2 Proposition 2

For the second proposition considered, there is no data that can be represented graphically.

5.4 Summary of Findings

Having considered the data collected from company annual reports as well as the graphical representation of the data where relevant, a strong case is put forward in support of proposition 1. The results showed no evidence in favour of proposition 2. The findings are summarised in table 11.

Table 11: Summary of findings in terms of Propositions

Proposition	Accept/Reject
Proposition 1: There is a positive relationship between the timing and number of options granted to CEOs of South African listed companies and the year that the target company was acquired.	**Accept:** Found evidence that indicates that CEOs or their executives do award themselves more options prior to their companies being taken over.
Proposition 2: A positive relationship exists between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings.	**Reject:** There was no evidence that supported the relationship between director's dealings and their company being taken over.

6 Discussion of Results

6.1 Introduction

This research set out to determine whether CEOs or company executives of target companies awarded themselves more options prior to being taken over. From the review of the existing literature, themes were identified relating to CEO compensation, the notion of insider trading and the effect of acquisitions on company share price. The other theme of interest is the concept of timing the option grants, which may form part of the executive remuneration package.

Previous literature focused on abnormal returns made by company executives by dealing in the shares of their companies. Where these returns were significant, the actions of executives were tied to insider trading and the debate was around whether CEO compensation is reasonable. Moreover, the argument made is one of executives pursuing value-destroying projects in order to extract maximum personal gain – this at the expense of the shareholder.

This section considers how the findings of this study relate to previous work done by highlighting differences and similarities applicable to the South African context.

6.2 Proposition 1

There is a positive relationship between the timing and number of options granted to CEOs of South African listed companies and the year that the target company was acquired.

In the context of international company business practices, researchers have identified the tendency for these companies to award stock options, either scheduled or unscheduled, to CEOs prior to merger and acquisition deals (Fich, Cai & Tran, 2009; Hartzell, Ofek & Yermack, 2004). This study aimed to contribute to existing literature by determining if this practice is prominent in takeover deals in the South African context. Furthermore, links between options grants and executive behaviour, as described by Harris & Bromiley (2005) and Fung, Jo & Tsai (2009), are explored.

Executives are appointed by shareholders to maximise shareholder wealth in a sustainable manner. The debate is how these custodians of shareholders' interests should be measured in order to bring about the desired effect – bearing in mind that measurement drives behaviour. The research by Kanagaretnam, Lobo & Mohammad (2009) examines the link between executive compensation schemes and unethical behaviour. In this study, an argument is made for the case that where CEOs stand to make excess returns (relative to other shareholders) from their option scheme, the practice is seen as unethical.

Although a rich merger and acquisitions data set was used to obtain a sample, it was found that the information needed to determine CEO behaviour relating to option grants could only be found in certain of the annual reports of the companies concerned. These reports were seen to vary between companies in terms of what was reported pertaining to options. In some instances the documents would report on options awarded to actual directors. In other instances, only the total number of options granted to executives as per the incentive scheme was reflected. As a result of this reduced resolution around the actual event of announcing the takeover of a company, this study was not able to determine when exactly options would be awarded to the executives – particularly the CEO. Options granted were therefore considered on a year-by-year basis. In their study Chauvin & Shenoy (2001) note that "Only a few companies reported the actual number of option grants and exercise price during the year." (p. 62). This limitation of standardising options awarded to executives remains an issue.

In analysing the results (and though it was only one instance in the sample), it is interesting to note that company 2 had two anomalous option grants during the period under consideration. The first anomaly occurred in the year the acquisition took place and the second, two years later when an acquisition was made. This may suggest a behavioural trend of management that whenever there is an opportunity to realise personal financial gain, executives make the most of it. In considering the graphical representation of company 4, there is evidence that subsequent to the takeover deal, the number of options exercised increased substantially. Although this phenomenon is not considered in the scope of this study, it may be an avenue worthwhile pursuing with further research to examine returns made opposite the option holding period.

The results of this study show strong evidence that CEOs of South African listed companies are indeed similar to their international counterparts, whereby they award themselves more options prior to a takeover. The implication for business is therefore that where such CEO behaviour is prevalent, shareholders are at the losing end. Executives are seen to be in a position where they can manipulate the share price of their companies prior to being taken over and then award themselves more options at a lower vesting price. Williams, Michael & Waller (2008) also found that target firms stand to gain more from an acquisition deal than the acquiring company.

It was observed in the final sample, that nine companies meeting the selection criteria were from the property sector. These companies did not have an option awarding policy, but rather dealt with units. From the annual company reports, it was seen that the allocation of these units was done at a high level. It could not be determined which of the company executives held which proportion of units. From the analysis it appears that the property sector has a different executive incentive scheme (linked to property appreciation) compared to the rest of the sample.

From the results (figures 3 and 8) there were instances where the number of options granted to CEOs trended in the opposite direction to the number of options granted to executives. A possible reason for this could be the difference in positional power between a new CEO and executives who have a longer tenure and are in position of power to influence remuneration committees. This behaviour would be similar to that found by Chauvin & Shenoy (2001). Evans & Hefner (2008) however argued that newly hired executives would be reluctant to accept stock options over a golden parachute incentive scheme when they joined financially weak firms.

Should the takeover deal be successful, there is an increased probability that the CEO will not remain in the new company (Tannous & Cheng, 2007). Since a change of control has been effected, the CEO can then vest her options and sell them into the market at a higher price because of the increased value of synergies present in the new entity (Cai & Vijh, 2007). Such behaviour would be consistent with previous research, which documented that an acquisition will result in synergies and greater shareholder value (Kanagaretnam *et al*., 2009; Goergen & Renneboog, 2004).

Where CEOs are in a position to generate wealth for themselves, as found by Del Brio & Perote (2007), their behaviour is questioned since their knowledge is not used to the benefit of all the shareholders, only themselves. Bidding companies would tend to overpay on the acquisition deal and still have to incur great expense in terms of a severance package, should they choose not to keep the previous CEO. Malmendier & Tate (2008) also found that bidding CEOs tend to be overconfident and overestimate the returns to be generated from an acquisition. Consequently, they can destroy shareholder value by overpaying for a target. In this study it is therefore argued that if target CEOs are aware of this tendency, this knowledge can direct target CEO behaviour to award themselves more options prior to being taken over. In the process, they stand to gain financially by vesting their options at an inflated price.

The study did not account for whether or not the CEO survived the acquisition and as a result, the motivation for awarding more options to CEOs and company executives needs to be investigated further. In light of how the option grants data was reflected (varying degree of detail) it was not possible to determine whether or not the options granted were indeed unscheduled. Only the number of options awarded could be captured and anomalies identified. This was done identifying cases where there was an increase in options granted greater than the median number of options granted. Executives are in a position to take advantage of their inside information by having discretion of when to vest their stock options as was seen by Laux (2010). Such was the case as highlighted by the graphical representation of company 4 (figure 2), where an increasing number of options were exercised after the takeover was completed.

The study done in the context of the South African market does not consider the importance or relevance of the method of funding. Fung *et al.* (2009) note that as long as the acquiring firm has overvalued stocks, they prefer to finance the merger or acquisition transaction with their own shares rather than cash. The funding mechanism of acquisition deals may also explain why a particular executive behaviour emerges. According to Grinstein & Hribar (2004), CEO compensation should be based on measures that are observable – such as market returns or profitability ratios. They also take a view on managerial power, whereby they argue that CEOs are in a position to influence board decisions as well as incentive or compensation decisions.

6.3 Proposition 2

A positive relationship exists between the increased number of director's dealings of the target company and the actual acquisition of that company in that particular year of dealings.

Gilbert & Tourani-Rad (2008) reflect on previous research that showed where insider trading laws are enforced, there is actually an increase in the profitability and the level of illegal insider trading prior to acquisitions. A similar argument is put forward by Fich *et al* (2009) with regard to CEOs vesting shares after an acquisition, despite the requirements of regulations such as Sarbanes-Oxley. The difference for South African listed companies is that they are not subject to regulations such as Sarbanes-Oxley and that there appear to be no regulations in place that prescribe when and how options may be granted or vested. For locally listed companies, these matters fall into the domain of corporate governance and internal company policy.

Where there are talks of an acquisition taking place, the rationale for such a deal is the benefit of synergies created from such a deal, as well as greater shareholder value (Kanagaretnam *et al*., 2009; Goergen & Renneboog, 2004).

The reason for formulating Proposition 2 was to examine director dealings and establish if directors were enjoying some of this expected shareholder value. Would the director's dealings show that it was just a case of enriching themselves as found by Del Brio & Perote (2007)?

Manne (2005) confirmed that the share price moves in the desired direction when insider trading is prevalent. In a study by Del Brio & Perote (2007), they posited that insiders traded their own firm's shares (dependent on timing policy) exclusively for their own gain.This study intended on finding evidence that supported the notion of linking director dealings in a target company to the acquisition of that company. There was an expectation that director's dealings would signal a trend in executives' behaviour with regard to option grants, but this was not the case. From the results, none of the target companies (sample of 39) came up in the sample of director's dealings, where excessive dealings were recorded. The notion of director's dealings as a signal to the market is therefore not seen to be effective in communicating that a potential acquisition is on the horizon.

In similar vein to discussions under Proposition 1, a reason for this ineffective signal could be that option grants are not currently required to be reported to the market via SENS.

7 Conclusion

In light of the findings of international research pertaining to CEO remuneration and option grants prior to merger and acquisition deal, this research set out to determine if these issues were relevant to South African listed companies. In particular, the timing of option grants has an impact on various stakeholders in an organisation. With inside information relating to a likely acquisition deal in the future, CEOs are in a position realise significant financial gain by awarding themselves more stock options at a lower exercise price.

The findings of this research indicate that there is a pattern in the timing of options granted to CEOs of South African listed companies that have been acquired in the last five years (2005 to 2009). From the sample of 39 target companies selected, evidence showed the actual options granted were abnormal in nature when compared to what could be expected. This study also attempted to determine the relationship between the director's dealings of the target company and whether their company was acquired in that particular year of dealings. It was found that there was no connection between these two activities and therefore it is seen that CEOs do not signal the market of a likely acquisition deal by means of their director's dealings.

By gaining insight into the practices of stock option grants to CEOs, acquiring companies can ensure paying a fair practice and not an undue premium for the target company (Hartzell, Ofek & Yermack, 2004; Cai & Vijh, 2007). Bidding companies need to know that they are acquiring a company at the appropriate market price. Knowing that a likely behaviour of the target CEO is to award herself more options prior to takeover, the management of the bidding company will know what to look for in the due diligence exercise. They will then also be in a better position to take the appropriate action so that they are acting in the best interest of shareholders.

This study contributed to existing literature by highlighting the possibility that executives may misrepresent the financial position of their firms or pursue value-destroying projects where these executives receive options as part of their compensation. Such behaviour would be consistent with the findings of Harris & Bromiley (2005) and Fung, Jo & Tsai (2009).

Based on the links made between CEO power, remuneration and behaviour, the researcher would like to put forward some recommendations regarding compensation packages containing options as an incentive:

- Executives need to be remunerated for the shareholder value they create over the long-term. Where CEO compensation has an options component, there needs to be a contractual clause whereby options can be reclaimed should the CEO have engaged in practices whereby she enriched herself at the expense of shareholders. In order to monitor such a process, the shareholders may need to appoint an independent party to the remuneration committee. A further requirement of the shareholders would be that they agree on what level of individual financial gain is acceptable. In the event of individual gain greater than what was gained by shareholders, a penalty should be payable.

- Where options are granted to the CEO or other company executives, the reporting of such grants need to be communicated through SENS. Standardised reporting on options granted should be a requirement for JSE listed companies. This would further place directors' dealings in the public domain and allow the market to react accordingly, to the benefit of all shareholders.
- Current local regulations addressing insider trading need revision and these regulations need to form part of company corporate governance policy.

Existing literature puts forward possible reasons for CEO behaviour relating to option grants (as covered in Chapter 2, section 2.6), certain of which may be applicable in the South African context. Having found evidence that executives of South African listed companies are awarding themselves more options prior to a takeover, it is proposed that these reasons be validated. Further research in this field would therefore have to be qualitative in nature.

7.1 Suggestions for Further Research

In light of the findings of this study, evidence exists that more options are awarded to CEOs or company executives prior to their companies being taken over. This seems to be a behavioural issue and future research could be done to better understanding this behaviour and developing measures to change this behaviour of senior management. A qualitative study could be done, whereby local CEOs are interviewed to establish the extent of their knowledge regarding what their international colleagues are doing in acquisition deals. More insight can also be gained into how ethical CEOs view themselves and where they would draw the line in terms of personal wealth creation.

Future research may give insight to effectiveness of current regulation and propose measures that would promote transparency. Ultimately, the option polices in place in organisations should not encourage unethical behaviour.

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9 Appendices

9.1 Appendix 1: Graphical Representation of Options granted to CEOs and Company Executives

Figure 8: Options granted to Company 3 Executives and CEO

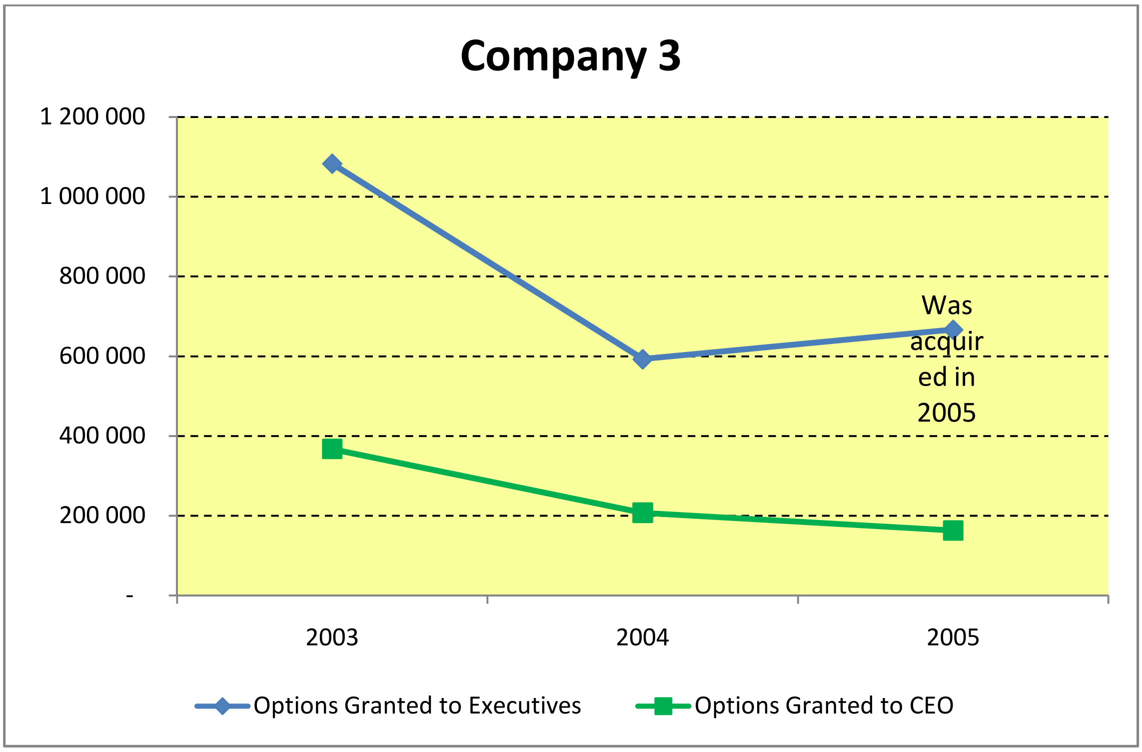


Figure 9: Options granted to Company 6 Executives and CEO

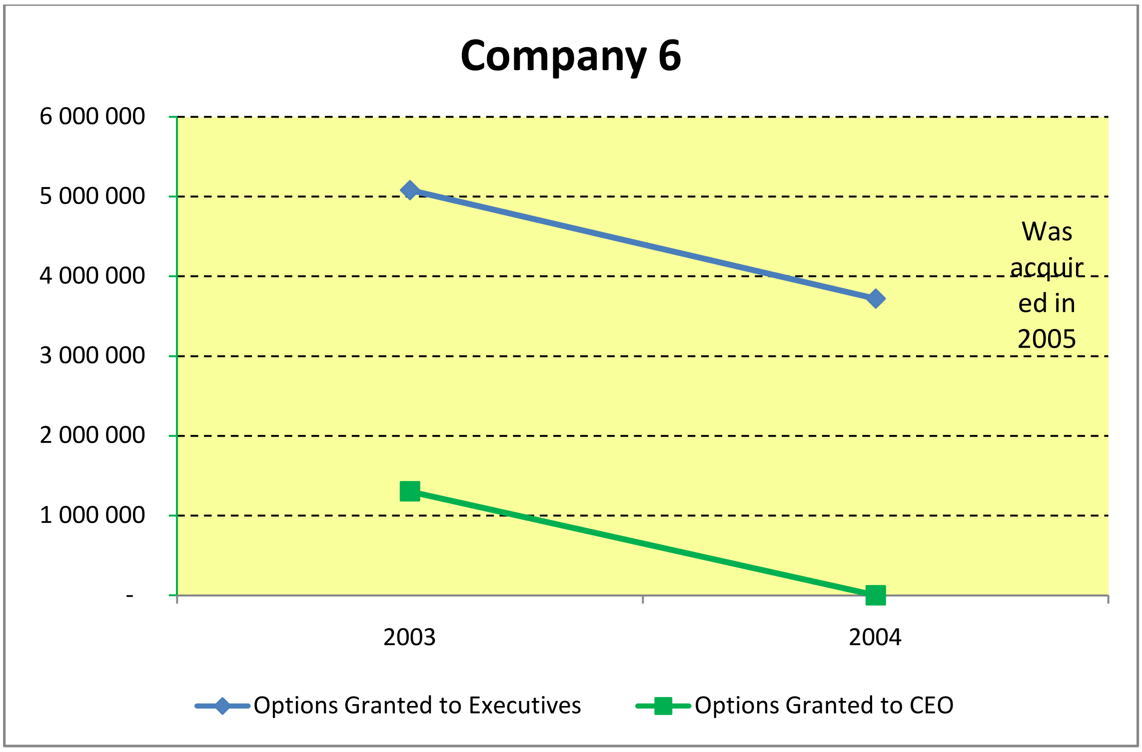


Figure 10: Options granted to Company 8 Executives

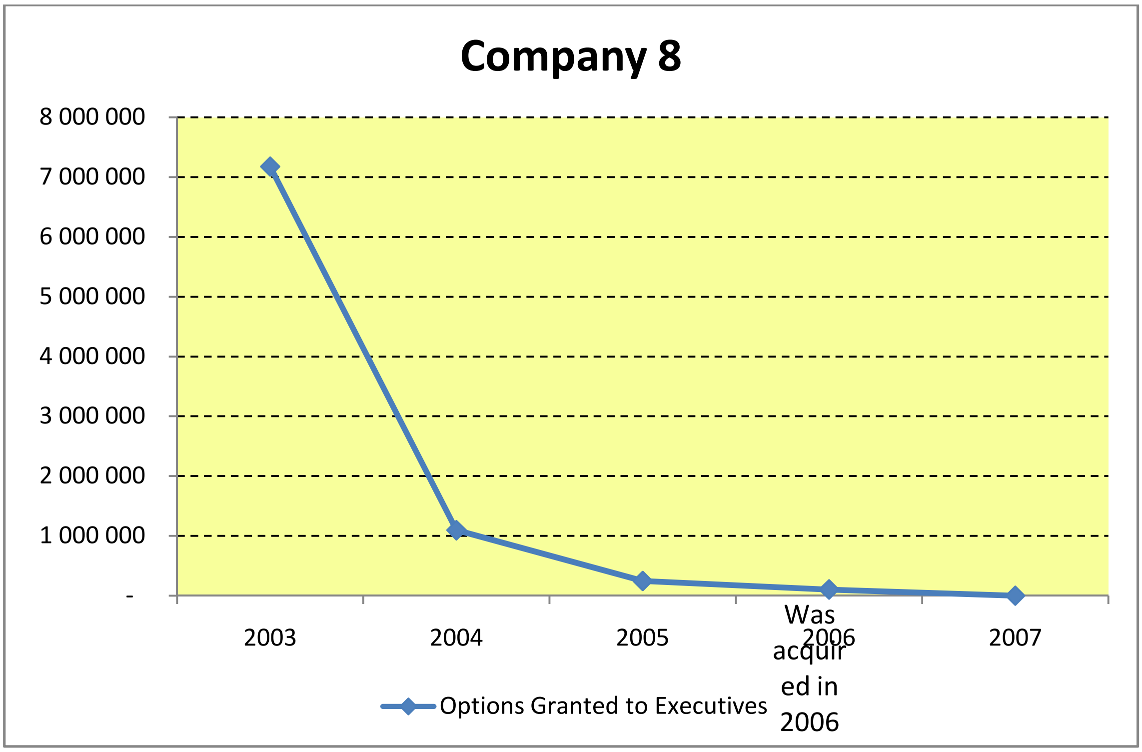


Figure 11: Options granted to Company 11 Executives and CEO

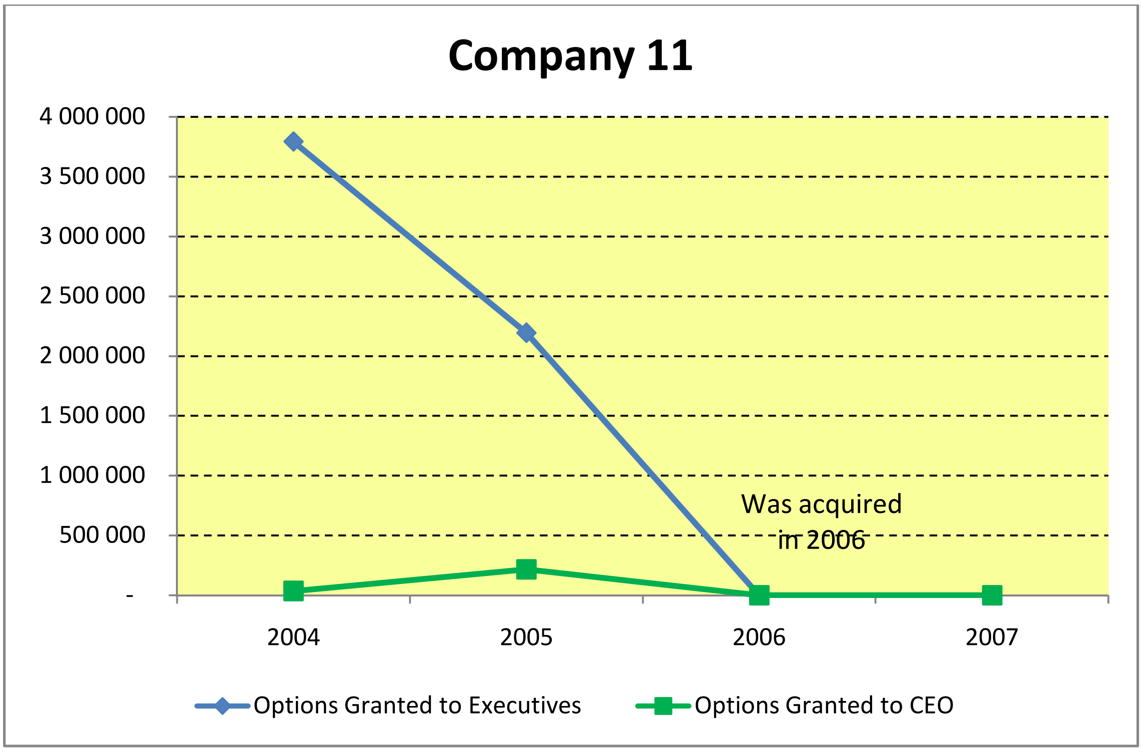


Figure 12: Options granted to Company 16 Executives

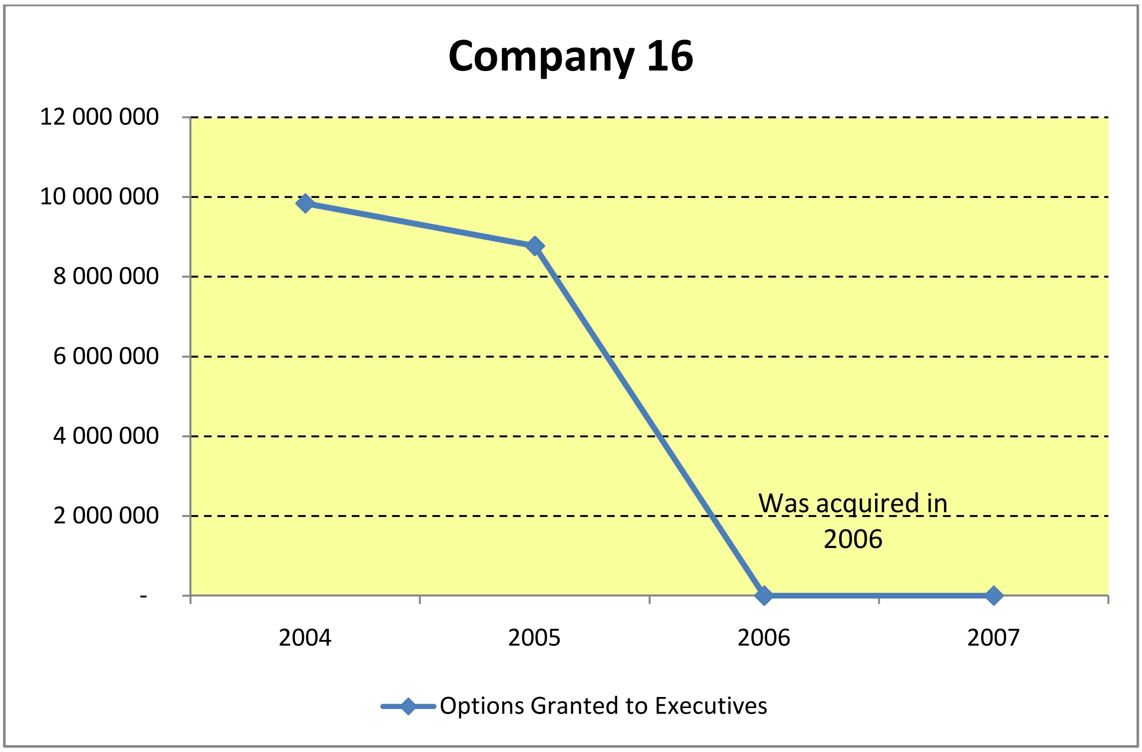


Figure 13: Options granted to Company 17 Executives

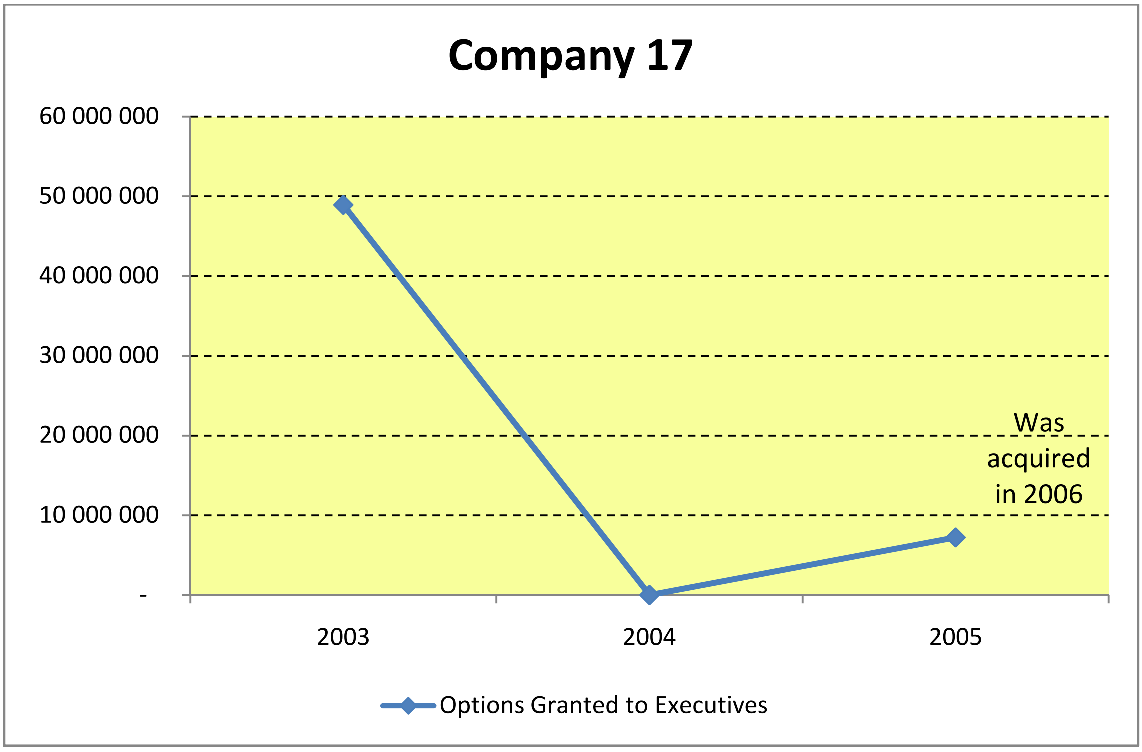


Figure 14: Options granted to Company 19 Executives and CEO

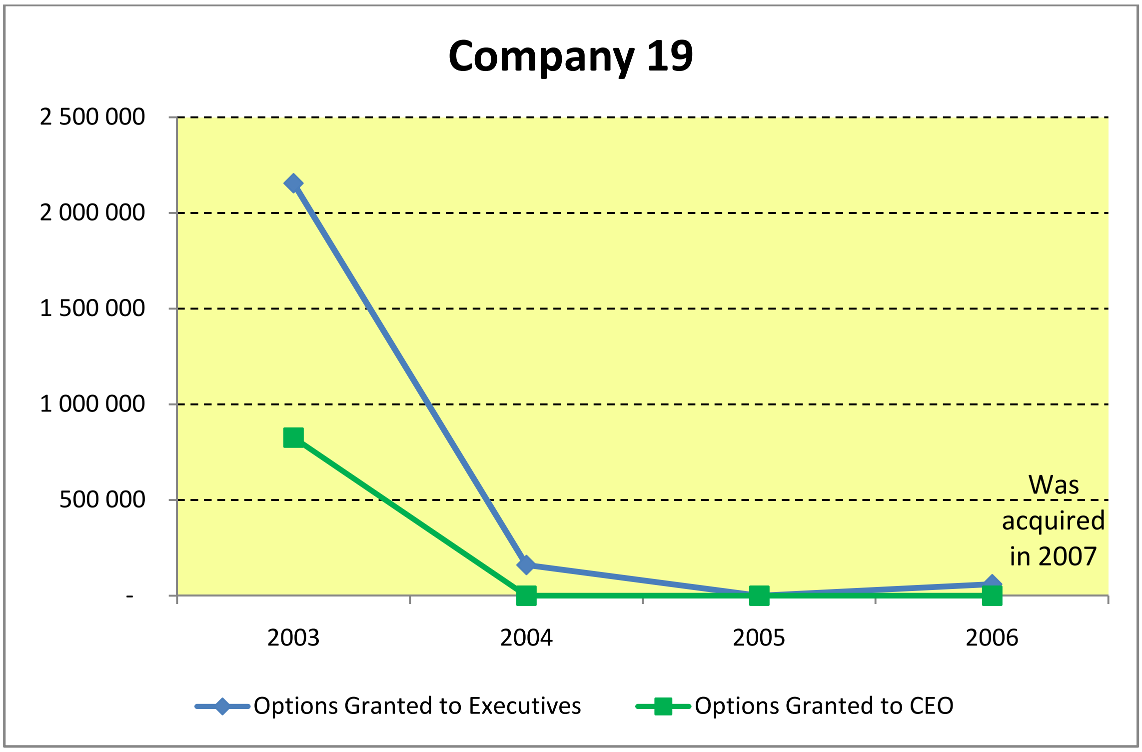


Figure 15: Options granted to Company 23 Executives and CEO

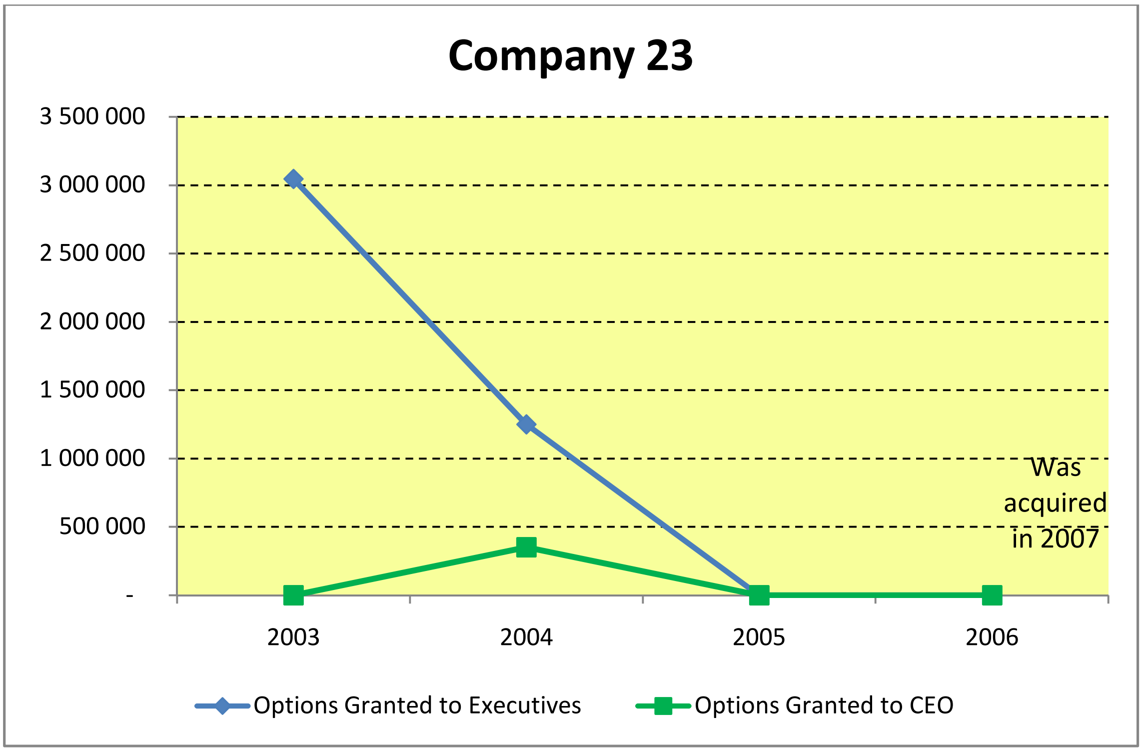
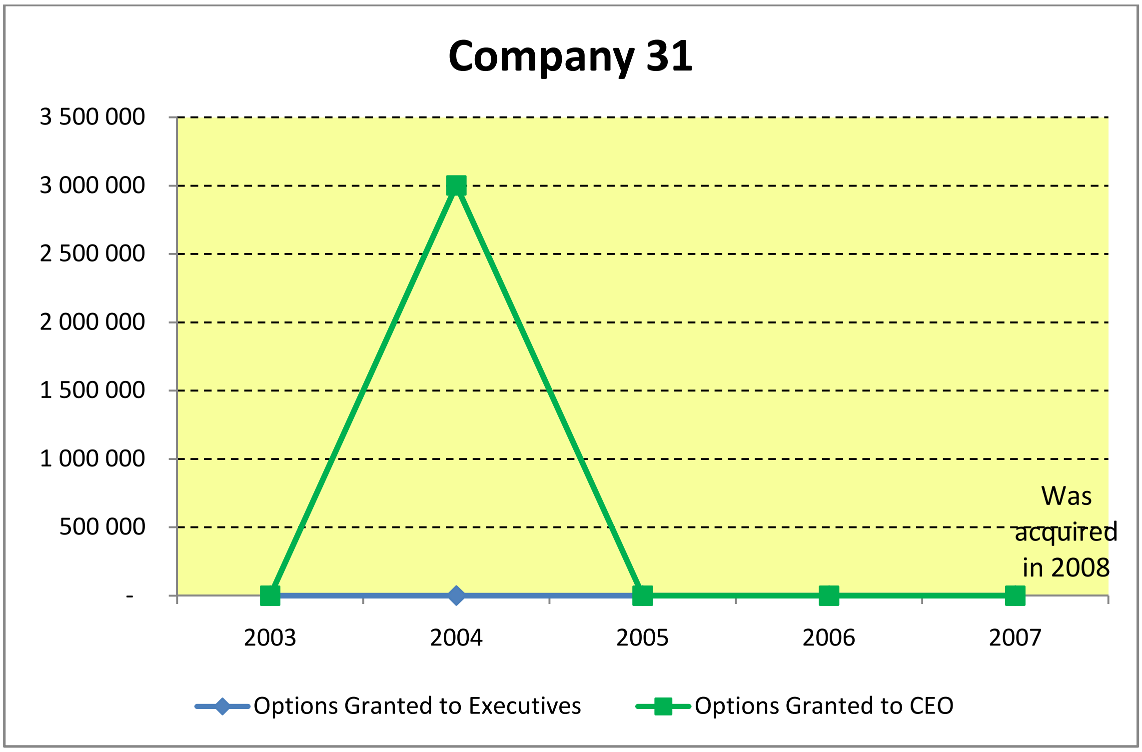


Figure 16: Options granted to Company 31 Executives and CEO



9.2 Appendix 2: Directors Dealings in the Year before being taken over

Table 12: Directors dealings in 2005

Trans No	Sequence	Status	Acquirer N	Acquirer C	Acquirer J	Target Name	Target Geograph	Target JSE Code	Seller Name	Seller Geo	Seller JSE	Transaction Desc	Sponsors		
734	734		Vodafone Group Plc		Foreign	VENFIN LTD - B ordinary shares		INVESTMENT COMPANIES	Rembrandt Trust (Pty) Ltd		Unlisted	Offer to acquire 35,5 million B ordinary shares.		Rand Merch	Pricewaterhouse(
374	374		Southern Cross Resource		Foreign	SXR URANIUM ONE INC formerly AFLEASE GOLD & URANIUM RESOURCES LTD		GOLD MINING	Shareholders		Undisclosed	Merger with Toronto-listed Southern Cross Resources Inc to form a new $300m company / Section 311 scheme of arrangement / Reverse takeover.		Nedbank Ca	Nedbank Capital
377	377		SANLAM LTD		LIFE ASSURA	AFRICAN LIFE ASSURANCE COMPANY LTD		LIFE ASSURANCE	Shareholders		Undisclosed	Section 311 scheme of arrangement		ABSA Corpo	ABSA Corporate &
266	266		Undisclosed		Undisclosed	LEWIS GROUP LTD		GENERAL RETAILERS	GUS Holdings BV		Foreign	Disposal of remaining stake of 50 million shares (50 % interest).		Investec Bar	UBS South Africa (
277	277		FIRSTRAND		BANKS	SAGE GROUP LTD		LIFE ASSURANCE	Shareholders		Undisclosed	Section 311 scheme of arrangement by Momentum Group Ltd, a wholly-owned subsidiary of FirstRand / Delisting.		Rand Merch	Grant Thornton Cc
507	507		JD GROUP LTD		GENERAL RE	CONNECTION GROUP HOLDINGS LTD		GENERAL RETAILERS	Shareholders		Undisclosed	Section 311 scheme of arrangement and delisting.		ABSA Corpo	ABSA Corporate &

2005

TransPerYr	DirID	Surname	FirstName	Qualification	Position	Type	Date	Qty	Price	Note	ShareID	Type	MainID	JSECode	CompanyName
15	008572	Lewis	Glyn T	BSc (Mining Eng), MBA	CEO	Executive	24-Jun-05	120000	1050		863	Directly Beneficial	000793	NHM	NORTHAM
13	001802	Goldberg	Jeffrey A	BSc(Eng)(Wits)	CE	Executive	13-Jun-05	-2000	2935		903	Directly Beneficial	000732	NWL	NUWORLD
13	004471	Friedland	Richard H	BVSC, MBCBH, Dip Fin Man, MBA	CEO	Executive	19-Jan-05	310	497	Grant by Netcare of paid-up options in terms of the leveraged Bonus Scheme to acquire ordinary shares in Netcare	1574	Indirectly Beneficial	002750	NTC	NETCARE
12	004188	Shevel	Jack	MBBCh	CEO	Executive	19-Jan-05	3723	497		1574	Indirectly Beneficial	002750	NTC	NETCARE
11	003141	Montanana	Jens P	BSc	CEO	Executive	01-Jun-05	110000	1204		383	Indirectly Beneficial	000779	DTC	DATATEC
10	010344	von Zeuner	Louis L	B Econ	Deputy Group CE	Executive	14-Jun-05	10400	3047		98	Indirectly Beneficial	000134	ASA	ABSA

Table 13: Directors dealings in 2006

2006																	
Trans No	Sequen	Status	Acquirer	Acquire	Acquire	Target Name	Target C	Target JSE Cod	Seller N	Seller G	Seller JS	Transaction Desc	Sponsors			Corporate Advisors	Legal A
664	664		Brait		Unlisted	Shoprite Holdings Ltd		Food Retailers & Wh	Undisclosed		Undisclos	Acquisition of Shoprite Holdings by Brait Private Equity		Nedbank Capital;Ran		bravura;JAVELIN CAPITA	Hofmeyr H
763	763		Consortium led by Act		Foreign	Alexander Forbes Ltd		Insurance Brokers	Shareholders		Undisclos	S311 acquisition of 100% of Alexander Forbes		JP Morgan		JP Morgan;Rand Mercha	Edward Na
677	677		Brait		Unlisted	Consol Ltd		Containers & Packag	Shareholders		Undisclos	Consol has accepted a takeover bid from investors led by private equity firm Brait		Standard Bank		Standard Bank;citigroup	Tabacks;re
653	653		MIC Consortium		Unlisted	Peermont Global Ltd		Gambling	Undisclosed		Undisclos	A black economic empowerment consortium led by the Mineworkers Investment Company made an offer for the entire shareholding other than the shares held by Marang in Peermont Global		JP Morgan;KPMG;Ra		JP Morgan;Rand Mercha	mj king in
153	153		Associated British Foo		Foreign	Illovo Sugar Ltd		Food Products	Shareholders		Undisclos	ABF plc makes an offer to acquire 51% of diluted ordinary issued share capital of Illovo		JP Morgan		Standard Bank;Rothschil	Bowman G
8	8		Telkom SA Ltd		Fixed Line	Business Connexion Group Ltd		Computer Services	Shareholders		Undisclos	Offer to acquire the entire share capital of BCX		Investec Bank Ltd;Ra		Deloitte & Touche Chan	Werksman
43	43		Growthpoint Properti		Real Estat	Metboard Properties Ltd		Real Estate Holding	Shareholders		Undisclos	Offer to acquire all the issued linked units of Metboard, 1 Growthpoint unit for every 1.9 Metboard linked unit		Ernst & Young Spons		Ernst & Young Corporate	Jowell Gly
412	412		Redefine Income Fund		Real Estat	Spearhead Property Holdings Ltd		Real Estate Holding	Undisclosed		Undisclos	Acquisition of 100% of Spearhead by Redefine and the delisting of Spearhead		Bridge Capital;Java C		Bridge Capital;JAVACAP	Hofmeyr H
737	737		Emira Property Fund		Real Estat	Freestone Property Holdings Ltd		Real Estate Holding	Undisclosed		Undisclos	Offer by Emira to acquire all the linked units of Freestone		Rand Merchant Bank		Rand Merchant Bank - A	JAVACAPI
31	31		Sun International Ltd		Gambling	Real Africa Holdings Ltd		Equity Investment I	Shareholders		Undisclos	Offer to acquire entire shareholding		Investec Bank Ltd;Ra		Rothschild;Investec Ban	Deneys Re
775	775		Shareholders		Undisclos	Tiger Wheels Automotive		AUTO PARTS	Tiger Wheels Ltd		Auto Parts	Unbundling of Tiger Wheel's shareholding in Tiger Automotive		Sasfin Capital		Sasfin Capital	Fluxmans
3	3		Net1 Applied Technol		Unlisted	Prism Holdings Ltd		Software	Shareholders		Undisclos	Acquisition of 100% of Prism Holdings by Nasdaq listed company subsidiary		Java Capital (Pty) Ltd		Morgan Stanley;JAVACA	Cliffe Dek
	TransPerY	DirID	Surname	FirstName	Qualificatio	Position	Type	Date	Qty	Price	Note	ShareID	Type	MainID	JSECode	CompanyName	
	24	008089	Wentzel	Nick C	BCom, CA	CEO	Executive	02 June 2006	-11775	8825	Exercise o	6349	Directly B	006128	ARL	ASTRAL	Food Proc
	15	008572	Lewis	Glyn T	BSc (Minin	CEO	Executive	06 February 2006	50000	1925		863	Directly B	000793	NHM	NORTHAM	Mining
	10	006508	Brown	David H	CA(SA)	CEO	Executive	21 February 2006	-2363	1103	Sale of 40	619	Directly B	000536	IMP	IMPLATS	Mining

Table 14: Directors dealings in 2007

2007															
Trans No	Sequen	Status	Acquire	Acquirer Geo	Acquirer JES Code	Target Name	Target	Target JSE Code	Seller Name	Seller C	Seller JSE Cod	Sponso	Corpora	Legal A	Caution Date
Trx Nr	Seq		Acquirer		Acquirer Code	Target		Target Code	Seller		Seller Code	Brokers	Corporate	Legal Adv	Caution Date
331	331		American Plc		Unlisted	Alaskan Copper Mining Project (Pebble Project)		Assets	Undisclosed		Undisclosed				02/08/2007
406	406		Bank		General Financial	Ellerine Holdings Ltd		General Retailers	Undisclosed		Undisclosed	Nedbank Capital;Rand I		Cliffe Dekke	20/08/2007
539	539		Bafokeng		Unlisted	Mutual & Federal Insurance Co Ltd		Nonlife Insurance	Old Mutual Plc		Life Insurance				05/11/2007
422	422		South		Unlisted	Eland Platinum Holdings Ltd		Mining	Undisclosed		Undisclosed	Nedbank C	Merrill Lyncl	Routledge	07/08/2007
43	43		Investmen		Unlisted	CBS Property Portfolio Ltd		Real Estate	CBS Property Portfolio Ltd		Real Estate	Investec	Nedbank C	Jowell Glyn	12/04/2007
231	231		Private		Unlisted	Brandcorp Holdings Ltd		General Retailers	Undisclosed		Undisclosed	Java Capita	Hyde Park (	Fluxmans ;J	25/04/2007
286	286		Properties		Real Estate	Atlas Properties Ltd		Real Estate	Undisclosed		Undisclosed	Java Capita	Java Capita	Edward Nat	16/03/2007
135	135		Ambit Properties		Real Estate	Property Portfolio		Assets	Cape Empowerment Trust (CET) and African Alliance		Unlisted	Exchange S	ABSA Capit	Cliffe Dekke	08/05/2007

	TransPerY	DirID	Surname	FirstName	Qualification	Position	Type	Date	Qty	Price	Note	Type	MainID	JSECode	CompanyName
	11	002378	de Jager	G D		CEO	Executiv	19 June 2007	2000	18670	100 single stock fu	Directly B	005885	REM	REMGRO
	11	005280	Abel	Merrick	BA (Hons), MBA	CEO	Executiv	04 May 2007	25000	60	Award of shares fı	Directly B	003511	PMV	PRIMESERV
	10	003141	Montanar	Jens P	BSc	CEO	Executiv	28 February 2007	100005	3297		Indirectly	000779	DTC	DATATEC
	10	011656	Carroll	C B	MSc, MBA	CE	Executiv	08 June 2007	4	2906	SIP	Directly B	000238	AGL	ANGLO

Table 15: Directors dealings in 2008

2008																	
Trans No	Sequen	Status	Acquire	Acquire	Acquire	Target Name	Target Geogra	Target JSE Code	Seller N	Seller G	Seller JS	Transac	Sponso	Corpora	Legal A	Caution Date	Announce Date
55	55	Signed-of	Clientele Limited		LIFE INSUF	Clientele Life Assurance Company Ltd		Life Insurance	Shareholders		Undisclos	Restructu	Pricewate	Pricewate	Edward N	2008/03/17	2008/03/17
231	231	Signed-of	Absa Capital - Parchr		Private Eq	Enviroserv Holdings Ltd		Waste & Disposal Services	Enviroserv Sharehol		Undisclos	Enviroser	Investec E	KPMG Ser	DLA Cliffe	2008/07/04	2008/08/04
50	50	Signed-of	Resilient Property In		Real Estat	Diversified Property Income Fund Ltd		Real Estate Holding & Dev	Undisclosed		Undisclos	Resilient	Java Capit	Java Capit	Java Capit	2008/02/22	2008/04/02
187	187	Signed-of	Zambia Copper Inves		Nonferrou	Zambia Copper Investments Ltd		Nonferrous Metals	Shareholders		Unlisted	Share rep	Bridge Ca	icapital ad	Maitland 8	2008/09/02	2008/09/02
213	213	Signed-of	Pangbourne Propert		Real Estat	Ifour Properties Ltd		Real Estate Holding & Dev	iFour shareholders		Undisclos	Acquisitio	Java Capit	Java Capit	Fluxmans	2008/02/14	2008/02/26
154	154	Signed-of	Acquirers		Undisclos	Tourism Investment Corporation Ltd		Travel & Tourism	Imperial Holdings Lt		Transport	Disposal c	Investec E	Deloitte 8	DLA Cliffe	2008/03/18	2008/04/24
41	41	Signed-of	Pangbourne Propert		Real Estat	Siyathenga Property Fund Ltd		Real Estate Holding & Dev	Undisclosed		Undisclos	Acquired	Deloitte 8	Java Capit	Java Capit	2008/06/09	2008/06/09
534	534	Signed-of	Vale do Rio Doce (Va		Foreign	Teal Exploration & Mining Incorporated		Nonferrous Metals	Shareholders		Unlisted	Acquisitio	Deutsche	JP Morgan		2008/12/18	2008/12/18
502	502	Signed-of	BMA Gold Limited		Foreign	Aflease Gold Ltd		Gold Mining	Undisclosed		Undisclos	Acquisitio	Macquarie	KPMG Ser	Deneys Re	2008/11/20	2008/11/20
143	143	Signed-of	Capital Property Fun		REAL ESTA	Monyetla Property Fund Ltd		REAL ESTATE HOLDING & D	Shareholders		Unlisted	Acquisitio	Deloitte 8	Java Capit	Java Capit	2008/09/26	2008/09/26

	TransPerY	DirID	Surname	FirstName	Qualificatio	Position	Type	Date	Qty	Price	Note	ShareID	Type	MainID	JSECode	CompanyName	
	20	011097	Nel	Ronald Jol	NTC4 Dipl	CEO	Executive	30 January 2008	1500000	80	Call optioı	13137	Indirectly	007998	MMH	MIRANDA	Mining
	19	003141	Montanar	Jens P	BSc	CEO	Executive	07 February 2008	500000	323		383	Indirectly	000779	DTC	DATATEC	Software & Computer Services
	11	010465	Wilkens	André J	Mine Man	CEO	Executive	11 March 2008	56888	2700		105	Directly B	000494	ARI	ARM	Mining
	10	005133	Hathorn	David A	BCom, CA	CEO	Executive	28 March 2008	5299	0		17307	None	009279	MNP	MONDIPLC	Forestry & Paper
	10	011368	Brody	Hubert Re	CA	CEO	Executive	01 September 2008	18732	5445	Imperial E	630	Directly B	000675	IPL	IMPERIAL	Industrial Transportation

Table 16: Directors dealings in 2009

2009																
Trans No	Sequen	Status	Acquire	Acquire	Acquire	Target Name	Target Geograph	Target JSE Code	Seller N	Seller G	Seller J!	Transac	Sponso	Corpora	Legal Advis	Caution Date
24	24B	Signed-of	Redefine Income Fu	Real Estat		ApexHi Properties Ltd		Real Estate Holding & Developme	Undisclosed		Undisclos	Redefine	Deloitte 8	Deloitte 8	Fluxmans Atto	2009/01/15
24	24	Signed-of	Redefine Income Fu	Real Estat		ApexHi Properties Ltd		Real Estate Holding & Developme	Undisclosed		Undisclos	Redefine	Deloitte 8	Deloitte 8	Fluxmans Atto	2009/01/15
21	21	Signed-of	ApexHi Properties Lt	Real Estat		Ambit Properties Ltd		Real Estate Holding & Developme	Undisclosed		Undisclos	ApexHi ac	Grindrod I	Grindrod I	DLA Cliffe Dek	2009/02/20
24	24C	Signed-of	Redefine Income Fu	Real Estat		ApexHi Properties Ltd		Real Estate Holding & Developme	Undisclosed		Undisclos	Redefine	Deloitte 8	Deloitte 8	Fluxmans Atto	2009/01/15
351	351	Signed-of	First Quantum Mine	Unlisted		Kiwara plc		Industrial Metals	Kiwara shareholders		Unlisted	First Quan	Sasfin Cap	Finncap,M	Eversheds	2009/09/15
24	24D	Signed-of	Redefine Income Fu	Real Estat		Madison Property Fund Managers Holdings Ltd		Real Estate	Undisclosed		Undisclos	Redefine	Deloitte 8	Deloitte 8	Fluxmans Atto	2009/01/15
173	173	Signed-of	Basil Read Holdings	Constructi		TWP Holdings Ltd		Construction & Materials	Shareholders		Sharehold	Acquisitio	Nedbank	Moore Ste	Ramsay Webb	2009/08/11

TransPerYr	DirID	Surname	FirstName	ualificatio	Position	Type	Date	Qty	Price	Note	ShareID	Type	MainID	JSECode	CompanyName	
12	003313	Ross	Clifford		CE	Executive	05 May 2009	16000	875		255	Directly B	000602	CLH	CITYLDG	Travel & Leisure
11	006035	Vlok	Nicholaas	B.Comm	CEO	Executive	25 May 2009	20000	360	Sale in ter	348	Directly B	003742	DGC	DIGICORE	Electronic & Electrical Equipment
11	011760	Murray	A D		CEO	Executive	02 March 2009	116666	36	Delivery c	469	Directly B	000246	FOS	FOSCHINI	General Retailers
11	012836	Adams	Paul		CE	Executive	08 January 2009	7	25	Share Sch	21926	None	010837	BTI	BATS	Tobacco
11	013043	Mouton	Piet		CEO	Executive	20 April 2009	140935	1561	Ave price	936	Directly B	000561	PSG	PSG	Financial Services
10	011656	Carroll	C B	MSc, MBA	CE	Executive	06 February 2009	18	715	SIP	3743	None	000238	AGL	ANGLO	Mining