The Impact of Employee Shareholding Option Plans on Company Performance in South Africa

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RESEARCH

A research report submitted to the Faculty of Commerce, Law and Management, University of Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration.

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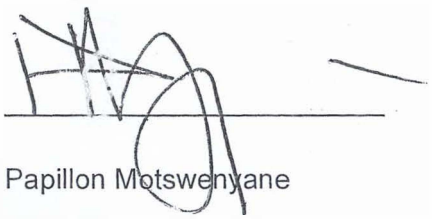
DECLARATION

Papillon Motswenyane hereby declares that this research project is his own work. The research is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



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ABSTRACT

Employee Share Option Plans (ESOPs) are widely applied in the South African context to disseminate wealth to Historically Disadvantaged South Africans (HDSAs). This opinion is affirmed by an increased application of the concept on a number of Broad Based Black Economic Empowerment (BBBEE) transaction deals concluded recently.

The research explored the impact of these schemes on company performance and also investigated the resultant economic impact on participating employees. Data was collected from JSE-listed companies that have implemented these schemes over an eight year period between the years 2000 and 2008. Tobin's Q ratios were constructed using data from various sources with annual reports as the primary source of data. An event analysis was undertaken by measuring Tobin's Q of the said companies before and after the implementation of the respective schemes.

A secondary process collated data from a survey of employees participating in the schemes to measure their increased productivity and also to ascertain financial employee spin-offs from the schemes.

The research found inconclusive evidence that ESOPs impact positively on company performance. However evidence of a strong correlation between potential productivity increases and the schemes was confirmed. Also, a relationship between an employee's level and term of participation to financial reward was established.

This research will assist companies in structuring their ESOPs in relation to individual employee contribution to enhance company performance and will also provide guidance on ESOPs financial impact on employees.

DEDICATION

To my parents Molifi and Phindile Motswenyane without whom none of this would have been possible. Your sustained love and wisdom has always been and will always be the base of my strength. To my beautiful daughter, Papillon, Daddy promise to spend more time with you! Lastly, to my family and all my people, your support in this project has not gone unnoticed. Much appreciated!

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1. INTRODUCTION

1.1 Purpose of Study

The purpose of this research was to assess and evaluate the impact of Employee Shareholding Option Plan (ESOP) transactions on company performance in South Africa. In addition, the research also investigated the key variables involved in the structuring of the schemes including the financial benefits to participating employees.

1.2 Context of Study

Over the past years, the South African Government has designed policies that have seen the formation of instruments that have the primary objective of redistributing the wealth of the country. One of these instruments is the Broad Based Black Economic Empowerment (BBEEE) Act (Act No. 53 of 2003) strategy aimed at addressing the economic legacies of apartheid. Under this strategy, companies are encouraged to consider selling off the shareholding of the companies to Historically Disadvantaged South Africans (HDSAs). Different industries have developed specific charters to address the redistribution of wealth such as the:

- Mining charter
- Construction charter
- Petroleum and liquid fuels industry charter
- Maritime charter
- Tourism charter
- Financial services charter

To date, both large and small companies have completed deals that have introduced HDSAs as equity partners. Some of the deals have led to South

African companies concluding ESOP transactions that have effectively made employees equity partners.

One of the key challenges is based on the historical design i.e. HDSAs credit worthiness. The majority of HDSAs had reached their debt capacity or were not credit worthy and were battling to cope with normal credit facilities such as house bond repayment and motor vehicle repayment. In addition, due to lack of participation in the mainstream of the economy, few HDSAs had companies with assets fit to be considered as collateral in any mergers and acquisition (M&A) transactions.

As stated earlier, the key challenge in most if not all BEE/ESOP transactions has always been access to funding by HDSAs. To address this challenge, various funding tools and models have been devised including:

- Dividend/profit repayment method
- Share options
- Normal credit facility with financial institutions

All these tools/model/methods have ensured that transactions with HDSAs were completed. However, the nature of these deals would mean that the BEE partners/employees could only realise true returns in the "extended" long term. In some cases the BEE partner/employee's true returns were only achieved after ten years or at retirement. This has started to become an issue as BEE/ESOPs beneficiaries are starting to complain of the long lead time before they can receive monies due to them.

Conversely, shareholders and directors of companies have entered into a debate regarding the impact of such transactions on company performance. The debates revolve around the opportunity cost and or the investment loss incurred by companies as these companies are required to stand surety and provide financial guarantees as sponsors of the ESOPs.

The research attempted to gain an in-depth understanding of these challenges by assessing the broad objectives of the various stakeholders in relation to the impact on company performance.

1.3 Problem Statement

1.3.1 Main Problem

The key objective of this research was to determine the impact ESOPs on company performance in the South African context. The literature review attempts to highlight the emergence of such schemes in South Africa and their varied perceptions relating to the impact on company performance. The research also investigated the financial spin-offs of an ESOP to participating employees and determined the current models/tool/funding structures being used in ESOP transaction.

Sub-problems

Sub-problem A : To determine the impact of an ESOP on company performance.

Sub-problem B : To determine the financial impact of an ESOP on an employee.

1.4 Significance of Study

HDSAs have enjoyed political freedom since 1994 and initiatives such as ESOPs seem best suited to address the economic freedom that is manifesting as a major challenge to the stability of the young South African democracy. According to Leoka (1990), ESOPs were first introduced in South Africa in 1987 following the disinvestment of international companies such as Ford Motor Company.

Mazibuko and Boshoff (2003) in their research on Employee Perceptions of Share Ownership Schemes state that there are approximately 200 listed and unlisted companies in South Africa that have implemented an ESOP.

In this way, ESOPs appear to be the preferred method of distributing wealth particularly to HDSAs. The research indicates whether this practice enhances company performance and offers true returns for the very beneficiaries it wishes to advance financially.

1.5 Delimitations

The first delimitation is that the research does not explore the impact of BBBEE as an Act (Act No. 53 of 2003). However, the research relates to the key principles of the Act to substantiate and give relevance to actions of South African companies. In addition, the research does not focus on the Affirmative Action Act (Act 29 of 1998), or Employment Equity (Act, 55 of 1998) but relevant principles driving the behaviour of SA companies are discussed.

Secondly, the research does not assess the impact of BBBEE generally on company performance in South Africa as most of ESOP transactions are presented as a subset of broader BBBEE transactions in South Africa.

The third delimitation is that the scope of the research is limited to ESOPs as a form of a BEE transaction for employees and not as a transaction that benefits external interest groups. Also, HDSAs are limited to the following groups for the purpose of this research:

- Employees participating in ESOP transactions; and
- Affected communities.

Lastly, the scope of the research is limited to ESOPs in South African companies only, even though the scheme originated in the USA and spread towards European countries.

1.6 Definition of Terms

1.6.1 Employee Stock Purchase Plans: ESPPS

Employee stock purchase plans (ESPPs) are designed to promote employee stock ownership broadly within the company and can also provide another tax-deferred vehicle for individual capital accumulation in addition to traditional pensions.

1.6.2 ESOS

Employer share ownership scheme (ESOS) is defined as the granting of shares in the company, in its holding company or its subsidiaries by an employer to its employees. These schemes can take the form of Employees loyalty schemes, stock option plans or other schemes with similar characteristics. The scheme has to be one where shares are offered by an employer to an employee. In addition, the shares may be offered by the employer company, its holding company, or a subsidiary.

1.6.3 ESOP

Employee share options plans are granted by companies to employees, giving them the right but not the obligation to purchase a company's shares at a specified price. Employee stock options are of two types: incentive stock options (ISOs or qualified options) and nonqualified stock options (Nisus). Employee stock options differ from a second option type-those publicly traded options that are bought and sold on the open market (puts and calls).

1.6.4 Shareholder

A shareholder is a person or organisation that owns shares in a company or a mutual fund. The person assumes the right to declared dividends and the right to vote on certain company matters, including on the board of directors.

1.6.5 Board of Directors

Individuals elected by the company's shareholders to oversee the management of the company. The members of the board of directors are paid in cash and or company shares. The members meet several times each year and assume legal responsibility for corporate activities.

1.6.6 Share

A share is a certificate representing one unit of ownership in a company, mutual fund or limited partnership.

1.6.7 Share Price

A share price is the price at which a share is quoted on the market. There are usually two prices quoted, the buy and sell prices. The buy price is lower and is the price at which a person is willing to purchase a share. The sell price is the price at which a person can purchase the share.

1.6.8 Dividends

Dividends are payments made to shareholders, based on the company's underlying performance or profits.

1.6.9 Historically Disadvantaged South African

HDSA refers to any person, category of persons or community, disadvantaged by unfair discrimination before the Constitution of the Republic of South Africa, 1993 (Act No 200 of 1993), came into operation. The definition of HDSAs includes employees who are classified as African, Asian, coloured or women, regardless of citizenship status.

1.6.10 BBBEE

"BBBEE" refers Broad-Based Black Economic Empowerment Act 2003, which seeks to economically empower all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies.

1.6.11 Tobin's Q

The ratio between two valuations of the same physical asset is referred to as Tobin's Q. One, the numerator, is the market valuation: the going price in the market for exchanging physical assets. The other, the denominator, is the replacement or reproduction cost: the price in the market for newly produced commodities.

1.6.12 Total Assets

Total assets are the entire property owned by a company. Total assets include current assets, fixed assets such as buildings and equipment, and other assets such as licenses and good will.

1.6.13 Market Capitalisation (market cap)

Market capitalisation is the value of the company. This value is calculated by taking the number of shares in issue (i.e. the company's shares that are in the hands of the public) and multiplying them by the current share price.

1.6.14 Study Period

Study period is the eight-year period between the years 2000 to 2008. This period includes the super cycle that the market has experienced from 2003 and early 2008.

1.7 Assumptions

The first assumption is that ESOPs have a direct bearing on company performance. The second assumption is that South African companies all understand and intend to be compliant with the said laws of the country. The third assumption is that white woman are part of the HDSA category as currently prescribed.

2 LITERATURE REVIEW

2.1 Introduction

Over the years, managerial schemes of profit sharing or employee share holding have been frequently used to enhance organisational outcomes in South Africa and abroad. Across organisations the goals, motivations and expectations for profit sharing schemes vary. The adoption of a particular perspective or approach is to some extent determined by the type, size and market situation of the company (D'Art and Turner 2003). These organisational outcomes are largely driven by the key principles of business which is to generate as much profit as possible for the shareholders. Therefore, any corporate activity that will result in increased profits will enjoy the support of management and the board of directors as many-if not all-such schemes are vetted and approved by the board of directors on behalf of shareholders. Potentially, the alignment of intent of employees and shareholders will have a positive impact to the company performance margins.

Gamble et al (2001) concluded their research on ESOPs and employee attitude by stating that ESOPs are most likely to contribute towards improved job involvement and a greater alignment between employees and shareholders interest when the ESOP participation offers psychological ownership. Gamble et al (2001) state that the financial value of ESOP participation is viewed as a meaningful component of employee compensation.

The literature review attempted to identify supporting and opposing views on this notion. The literature studied the introduction of ESOPs world wide and the resultant impact to company performance. The literature then looked for South African literature on ESOPs and their impact on company performance. The literature review approach followed the two sub-problems referred to earlier and discussed under sub-headings 2.2 and 2.3 below:-

2.2 Sub-problem A: To Determine the Impact of an ESOP on Company Performance

The first aspect of the research was to investigate the impact of ESOPs on company performance. For this reason the literature review assessed the origin and uses of the schemes. The literature revealed that ESOPs originated in the United States of America to mainly capitalise on the tax concessions and encourage increased performance from employees as part owners of organisations (Kahle and Shastri 2005). Some European countries adopted a similar approach at different stages (D'Art and Turner 2003).

The literature from Jones et al (2006) was studied to decipher the primary objective of the research-the impact of an ESOP on company performance. Jones et al (2006) looked at rich panel data sets consisting of all Finnish publicly traded companies and concluded that at the stock market level, general patterns concerning the adoption of options schemes correlated strongly with overall market developments-ESOP implementation improved company performance.

At the conceptual stages of the schemes, company owners imagined that the introduction or existence of such schemes might adversely affect company performance or have a negative impact. It was also imagined that the schemes might have no meaningful bearing on the company's performance.

The bulk of the literature studied shows strong evidence that the majority of the companies that have undertaken these schemes have experienced some kind of a positive impact on company performance. As an example, companies adopting these schemes realised between 4% and 5% higher productivity during the first year of implementation. The increased productivity levels were enhanced and maintained in the succeeding years according to Quarrey and Rosen (1987)

Quarrey and Rosen's (1987) results are supported by Sesil et al (2001) where they confirm evidence on employee attitudes and behaviour under employee ownership. Sesil et al (2001) outcomes from the studies on company

performance are split between neutral and favourable findings. But, as with Quarrey and Rosen (1987), the estimated increase in productivity following adoption of the scheme is recorded at 4.4 % with the average estimated productivity difference between ESOP and non-ESOP companies recorded as 6.2 %.

In addition to Quarrey and Rosen (1987) and Sesil et al (2001), Kruse and Blasi (1998) of Rutgers University in their Rutgers study analysed 105 publicly owned companies that introduced share schemes. The result was that productivity improved by 17%, with return on assets increasing by 2.3% in the three years after implementation. This opinion on increased productivity was again supported by Jones and Kato (1995) in their research. These last authors claimed "robust" findings that companies enjoy a 4% to 5% increase in productivity by introducing an ESOP and that the productivity effect of an ESOP does not appear immediately following its introduction but is delayed by three to four years.

Also, Frye (2004) in his research on Equity-Based Compensation for Employees used Tobin's Q as a proxy for company performance and also found that the use of equity-based compensation for employees is positively related to firm performance.

2.2.1 Neutral Impact

There have been recorded views that the implementation of ESOPs does not necessarily translate into increased production and profitability. Having stated that, it is clear that the worst case scenario is that the introduction of an ESOP will have a neutral impact on profitability and performance. Quarrey and Rosen (1987) looked at companies that offered the schemes and those that did not offer the schemes and the result was that in cases where no improved productivity or profitability was found the companies maintained their productivity levels.

The General Accounting Office conducted a study on this topic and the outcome was clear that the introduction of ESOPs had no impact on profits.

Gorm and Marens (1997) in their research on comparative growth performance of employee ownership discussed similar results; i.e. ESOP implementation does not necessarily result in increased profits. These authors studied 110 companies focusing on productivity and profitability and later concluded that ESOPs had little or no impact on profits. However, Gorm and Marens (1997) data analysis highlighted increased productivity.

2.2.2 Motivation

One of the key aspects of the literature has been around ESOP as an employee-motivating tool. ESOPs encourage workers to share the interests of the firm in improving profitability and share price, and stimulate greater worker cooperation with management. Specifically, workers would adopt more self-regulatory systems and effectively monitor each other and encourage greater effort from other employees to boost profitability (Development Bank of South Africa, 2000). Most of the literature highlighted common factors responsible for this increased performance. These are:

- employee morale
- a greater sense of ownership
- longer-than-average employment periods in companies

All these issues positively impacted on productivity, which in turn resulted in improved company performance.

To substantiate this causality, Sesil et al (2001) hypothesised that worker motivation is improved by giving workers a direct stake in the company by tying compensation and/or wealth more closely to worker performance. This theory is also supported by Quarrey and Rosen (1987), who affirm that employee ownership is associated with greater stability of employment without any corresponding reduction in economic efficiencies.

Gamble et al (2001) came to the same conclusion. Their research results suggested a weak but positive association that exists between the presence of an ESOP and an employee motivation. Gamble et al (2001) argue that this positive association between an employee and ESOP can be passively associated with company productivity. Quarrey and Rosen (1987) conclude that an ESOP does help on average to improve productivity, profitability, organisational commitment and other employee attitude.

This association between the presence of an ESOP and company, profitability was confirmed through other numerous research studies as shown in the Table below:-

TABLE 1: SUMMARY OF STUDIES INDICATING AN ASSOCIATION BETWEEN AN ESOP AND ORGANIZATIONAL OUTCOMES

Outcome Suggested	Association	Research Studies
Organizational	Commitment	Positive Oliver, 1990b; Ettling, 1988; Klein & Hall, 1988; Steers, 1977, Salacek, 1977
Absenteeism	Negative	NYSE, 1982; Marsh & McAllister 1981
Turnover	Negative	Ettling, 1988; Klein & Hall, 1988; Long, 1978a;
Productivity	Positive	BCI Group, 2002; Logue & Yates, 2001; Kruse & Blasi, 1998; Dunbar, 1989; GAO, 1987; Bloom, 1986; ESOP Assn., 1982; NYSE, 1982; Marsh & McAllister, 1981
Profitability	Positive	BCI Group, 2002; Sesil et al., 2002; Logue & Yates, 2001; Kruse & Blasi, 1998; GAO, 1987; Wagner & Rosen, 1985; Hamilton, 1983; Rose & Klein, 1981; U.S. Senate Finance Committee, 1980; Swad, 1979; Conte & Tannenbaum, 1978

Outcome Suggested	Association	Research Studies
Stock Performance	Positive	Sesil et al., 2002; Logue & Yates, 2001; Kruse & Blasi, 1998; Sellers, 1989; Ettling, 1988; Jiang, 1987; ESOP Assn., 1987 ; Pinder, 198

2.2.3 Job Satisfaction

ESOP participants who were empowered and involved in decision making in their jobs were found to be more satisfied with their jobs. (Gamble et al 2001).

This correlation between job satisfaction and improved company performance is apparent. Contributing factors to job satisfaction vary and include:

- Appropriate working conditions
- Ability to influence company decision making process
- Intimate knowledge and understanding of company's key business drivers
- Common goals between company and employees

Gamble et al (2001) refer to earlier research that disclosed relationships between:-

- Job satisfaction and workers off-the-job satisfaction and happiness
- Physical health, mental health, views of self-worth and achievement
- Job satisfaction and such job-related outcomes
- Performance-related factors such as motivation, job involvement and turnover

Ultimately, the combination of these factors as listed above lead to a stable workforce-according to Blair et al (2000), who proved through their research that companies that are 20% owned by an ESOP appear to be more organisationally stable. In support of the above, the General Accounting Office study findings on productivity were based on the principles as discussed by Gable at al (2001) and Blair et al (2000). The study stated that employee participation leads to increased motivation and this translated to a 52% increase in the productivity growth rate per year.

Gorm and Marens (1997) came to a similar conclusion. They state that these companies experience increased sales based on the concept of participative management. The Michigan University study on employee ownership found that employee-participation programmes increased 50% to 100% after the introduction of an employee ownership plan.

In the South African context, Mazibuko and Boshoff's (2003) research results indicated amongst other things that:

— Empowerment and responsibility both exerts a positive influence on employees following introduction of ESOPs

— Positive perceptions of ESOPs strongly influence organizational commitment following the introduction of ESOPs

— Empowerment based on authority does not exert significant influence on employee perceptions of share ownership scheme

2.3 Sub-problem B: To Determine the Financial Impact of an ESOP on an Employee

The secondary goal of the research was to examine if an ESOP transaction fully addresses employee-owner interests. Hallock et al's (2003) findings did not uncover evidence supporting an economic incentive for a particular ESOP

design. According to the literature, it appears that some ESOPs do not translate into financial benefit for employees.

2.3.1 Maturity/Vesting Period

Pamela et al (2003) define "maturity" as the term used for the time when options expire, meaning that employees no longer have the right to buy shares at the specified price. Pamela et al (2003) found that ESOP maturity periods range from between four and 15 years but that most companies adopt a ten-year period as a standard. Microsoft has experimented with a shorter maturity period of 7 years. Pamela et al's (2003) observation is supported by the Centre for Employee Ownership Stock Options study of 1986 that concluded that employees will normally forfeit their shares options if they voluntarily quit in 95% of organizations.

Hull and White (2004) discussed that the options usually have a vesting period during which they cannot be exercised. This vesting period can be as long as four years. When employees leave their jobs (voluntarily or involuntarily) during the vesting period, they forfeit unvested options. Hull and White (2004) also state that when employees leave (voluntarily or involuntarily) after the vesting period, they forfeit out-of-the-money options and have to exercise in-the-money options immediately.

Pamela et al (2003) stated that ESOP transactions yielded positive returns within limited periods and conversely so in the majority of cases. As background, the two important aspects of share options are vesting and maturity where vesting is the time that must pass between the date of the grant and the date when the options can be exercised. For example, waiting periods range from immediate vesting to five or more years. Occasionally, companies use cliff vesting, in which all shares are exercisable at the end of the vesting period, especially with one-time grants designed to retain a key executive. However, Pamela et al (2003) reported that incremental vesting, in which options vest in

25% increments over a four-year period, is much more prevalent (e.g., in a grant of 1000 share options, 250 options can be exercised in each year of four years).

The following two examples of South African transactions span periods of more than six years.

a. **Woolworths**

As stated in the Mail & Guardian newspaper article (2007) Woolworths created a new class of convertible, redeemable, non-cumulative participating preference shares with a value 15 cents each, and the ESOP shares. Woolworths will at appropriate times issue ESOP shares, up to a maximum of R89,4 million worth of shares, to the Woolworths Employee Share Ownership Trust (ESOP trust). The ESOP trust will hold the ESOP shares for the benefit of the vested beneficiaries for the eight year term of the scheme, following which the ESOP shares will be distributed and converted into ordinary shares on a one-for-one basis. Accordingly, employees will only own Woolworths ordinary shares in 2015

b. **Newshelf 664 (MTN)**

According to MTN Group Limited annual report (2003) Newshelf is a special purpose vehicle established for the benefit of eligible MTN management and staff and is funded through a long-term six-year funding structure involving redeemable preference shares, participating preference shares and promissory notes. The shares in Newshelf will be held for the benefit of approximately 2 400 MTN staff. (*See overview of ESOP transactions in Appendix 1).*

2.3.2 Employee Compensations

Various researchers have worked on the employee compensation aspect of ESOPs. The researchers have attempted to correlate the introduction of these plans to employee wealth accumulation. Frye (2004) suggests that companies should consider using greater amounts of share option plans to attract, retain, and motivate key employees on the basis of the additional remuneration benefits linked to them.

Kardas et al (1998) looked at close to 500 companies and compared them with close to 100 companies that implemented an employee ownership plan. Kardas et al (1998) concluded that employees were significantly better compensated in companies that have implemented ESOPs. This compensation was in terms of wages with the medium hourly rate in ESOPs firms 5% to 12% better than in the companies which did not have these schemes.

Conte and Kruse's (1991) results from their analysis ESOPs and employee compensation imply that, employee's direct income from ESOPs and profit-sharing plans is significantly and positively conditioned by shareholder returns. Conte and Kruse (1991) continued to state that the extent of an ESOPs direct pay contingency is typically quite small. In their conclusion, these authors affirmed that the net impact of ESOPs improves total employee pay.

Engelhardt and Madrian (2004) agreed with Conte and Kruse's (1991) research findings. The duo discovered that for most plans participation is essentially a risk–free way to increase gross compensation for employees. Additionally, Chen (2003) states that ESOPs are expected to provide incentives to employees because the employees' payoff is linked to the firm's performance.

Another form of employee compensation is retirement and Kardas et al (1998) found the average value of the retirement benefit in these ESOP companies to be much higher than at companies that do not have ESOPs.

2.3.3 Common Models/Tool/Funding Structures Being Used in ESOP Transactions.

a. ***Legal Entity***

Mchugh, Cutcher-Gershenfeld and Bridge (2004) suggested that a new entity should be created that will hold the entire shares of the participating employees. This approach seems to be the most applied according to the literature review. Generally, an ESOP company donates firm shares (or cash to buy shares) to an ESOP trust which, in turn, makes share contributions to individual employee accounts based on either employee salary, hours worked, or seniority. Employee-owners receive their vested ESOP shares when they leave the firm. At that point, employee-owners may sell their shares back to the company (i.e. if the company is privately held) or through the shares market (Mchugh, Cutcher-Gershenfeld and Bridge 2004). This is in line with the analysis of some ESOP transactions in South Africa which forms part of this research. The models/tool/funding structures of these South African ESOP transactions are given in Appendix 1.

b. ***Valuation of the ESOP***

According to the literature, valuation and pricing of stock warrants can be done by using a dilution-adjusted version of the Black-Scholes-Merton (1973) (BSM) model or the Merton Miller model (1973). However, Benhamou (2001) agues that these two methods are just favoured by modern finance and are not necessarily as good as the previous option evaluation models. Crouhy and Galai (1991), among others, show that the value of a stock warrant that gives the holder the right to acquire a share of the underlying common stock.

Alternatively, Hull and White (2004) proposed a three-step valuation procedure as follows:

1. Estimate the expected life of the option

2. Use either the Black and Scholes (1973) model or the Cox, Ross, and Rubinstein (1979) binomial tree to value the option, with the expected life as the time to maturity

3. Adjust the value to allow for the possibility of the employee leaving the company during the period

Maris et al's (2003) research focused on establishing the accurate value of the employee's ESOP for internal management and control as well as for external reporting. Maris et al's (2003) argued that ESOPs should be measured at "fair value" using an option pricing model, and that their value should be recognised in the financial statements, with a corresponding charge to the income statement. These authors conclude that the Black-Scholes (1973) model overstates the value of ESOP for non-dividend-paying firms at the grant date, as well as later in the option life.

Maris et al's (2003) continued their concluding remarks by stating that in some cases, the Black-Scholes (1973) model actually understates the initial ESOP value for dividend- paying companies and frequently understates the value of deep in-the-money ESOPs once the vesting date is reached. Maris et al's (2003) emphasise that the result is particularly important for companies that wish to market the value of outstanding ESOPs over time.

On the event of the exercising of the option by the employee, Ciccotello et al (2004) delivered a striking result. In their research on the impact of employee stock options on cash flow, Ciccotello et al (2004) proved that ESOPs actually increase operating cash flow. Their reason was based on the fact that the exercise of nonqualified stock options creates a tax-deductible expense.

2.4 Literature Review Summary

The literature has strongly indicated a link between the introduction of an ESOP to company performance. This link was largely positive but at times generated neutral results as indicated in figure 1 below from research data compiled by

Buxton and Gilbert (2004). However, the combination (78%) of the strongly and somewhat improved results is too significant to be ignored.

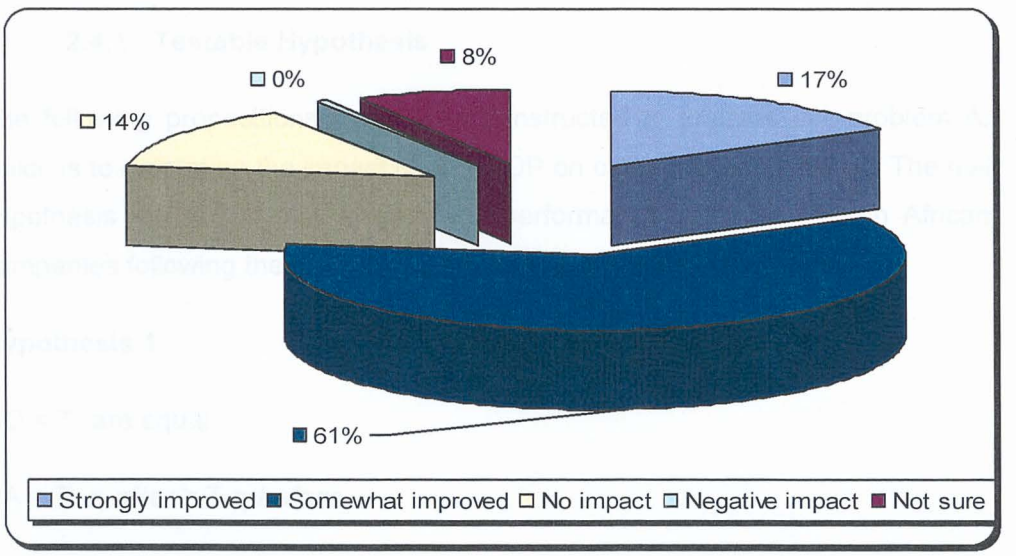

FIGURE 1: PRODUCTIVITY AFTER ESOP

The indication is that when employees assume imaginary ownership status they act, think and respond positively to the company's objectives. This response in turn yields increased production that translates into better company performance. Some of the literature isolated job satisfaction as a key driver to the renewed motivation.

There are diverse opinions by the authors reviewed on the financial turn around time of ESOPs. However, it has become abundantly obvious that financial benefits are rather delayed-there were no schemes that yielded results in the first year. It is noted that dividends or returns from ESOPs will improve the disposable income of an average South African.

In terms of the modelling of such plans, a variety of companies opted for an entity that held the options on behalf of participants. In some instances, the new entity was a shell company with the exclusive purpose of administering the

shares/options. According to the literature review, this method seemed to be the most popular.

2.4.1 Testable Hypothesis

The following propositions have been constructed to address sub-problem A, which is to determine the impact of an ESOP on company performance. The null hypothesis is used to test whether the performance of several South African companies following the issuing of ESOPs remains static.

Hypothesis 1

HO = T- are equal.

HA = T- q ***after*** ≥ T-q ***before***

Subsequently, a proposition that employee job satisfaction or happiness leads to increased productivity (thus improved performance) is made. A set of hypotheses attempt to assess this link between employee happiness following the issuing of ESOPs as discussed by a number of researchers in the literature including Sesil et al (2001), Quarrey and Rosen (1987) and Gamble et al (2001). This is done by testing the association between the level of employee happiness to other performance linked factors; i.e. when employees are happy they become more motivated, contribute more, feel empowered, and tend to stay longer with the company. The statement is hypothesised as follows:

Hypothesis 2

HO = ESOPs do not motivate employees

HA = ESOPs motivate employees

Hypothesis 3

HO = Individual employee contribution does not impact positively on company performance

HA = Individual employee contribution impacts positively on company performance

Hypothesis 4

HO = ESOPs do not empower employees

HA = ESOPs empower employees

Hypothesis 5

HO = ESOPs do not prolong employee's intended stay at the company.

HA = ESOP prolong employee's intended stay at the company

The next hypotheses are focused on addressing the second sub-problem B in relation to the financial impact of an ESOP on employees

Hypothesis 6

HO = ESOPs do not improve employees finances

HA = ESOPs improve employee finances

Then it is hypothesised that employees who have participated in their ESOP schemes for a longer period are financially better off as compared to employees who have just joined their respective organisations schemes

Hypothesis 7

HO = Timing of participation in ESOPs does not give employees more access to money

HA = Timing of participation in ESOPs give employees more access to money

Hypothesis 8

HO = Timing of participation in ESOPs does not changes employees spending patterns

HA = Timing of participation in ESOPs change employees spending patterns

Hypothesis 9

HO = Timing of participation in ESOPs does not change employees savings patterns

HA = Timing of participation in ESOPs change employees savings patterns

TABLE 2: SUMMARY OF TESTABLE HYPOTHESES

	HYPOTHESIS	SUB-PROBLEM
1	HO = T- are equal. HA = T- q ***after*** ≥ T-q ***before***	A
2	HO = ESOPs do not motivate employees. HA = ESOPs motivate employees.	A
3	HO = Individual employee contribution does not impact positively on company performance. HA = Individual employee contribution impact positively on company performance.	A
4	HO = ESOPs do not empower employees. HA = ESOPs empower employees.	A
5	HO = ESOPs do not prolong employee's intended stay at the company. HA = ESOP prolong employee's intended stay at the company.	A
6	HO = ESOPs does not improve employees finances. HA = ESOPs improve employee finances.	B
7	HO = Timing of participation in ESOPs does not give employees more access to money HA = Timing of participation in ESOPs give employees more access to money	B
8	HO = Timing of participation in ESOPs does not change employees spending patterns HA = Timing of participation in ESOPs change employees spending patterns	B
9	HO = Timing of participation in ESOPs does not change employees savings patterns HA = Timing of participation in ESOPs change employees savings patterns	B

3 RESEARCH METHODOLOGY

3.1 Research Methodology/Paradigm

The research approach was a mixed method approach (i.e. quantitative and qualitative) to be able to cater for the assortment of the data. The primary research data include company performance measures and respondent's data from a questionnaire is secondary. This method assisted in providing general findings to a population and developed a detailed view of the meaning of a phenomenon or concepts for individuals as stated by Creswell (2003). Therefore the sub-problems are approached from both a quantitative level and qualitative level.

3.2 Research Design

The performance of an ESOP is predominately uncertain because of a futuristic view of the scheme. Various factors act in concert in determining the level of profitability, these may include:

1. The duration of the option
2. The performance of the company

Similarly, the nature of the sector contributes to the level of uncertainty in determining the performance of the scheme. For instance, the mining industry is in its very nature extremely volatile. The commodity prices are intimately influenced by a cocktail of economic fundamentals including:-

2.1. Health of the global economy-The USA and China in particularly

2.2. State of global peace-The Middle East and USA in particular

2.3. Supply of skilled and unskilled labour

The first two points stated above could also be applicable to a certain degree to the financial sector. However, some sectors such as manufacturing provide high levels of stability. Essentially, one would then apply factors to cater for the uncertainty per sector. For these reasons, the research was designed to cater for the prevailing economic conditions as discussed above.

3.3 Research Methodology Roadmap

The last two chapters discussed the literature review and concluded with the hypotheses of the study as summarised in Table 2. The current chapter describes the approach followed for successfully responding to these hypotheses. The roadmap shown in Figure 2 Below presents the qualitative and quantitative approaches used.

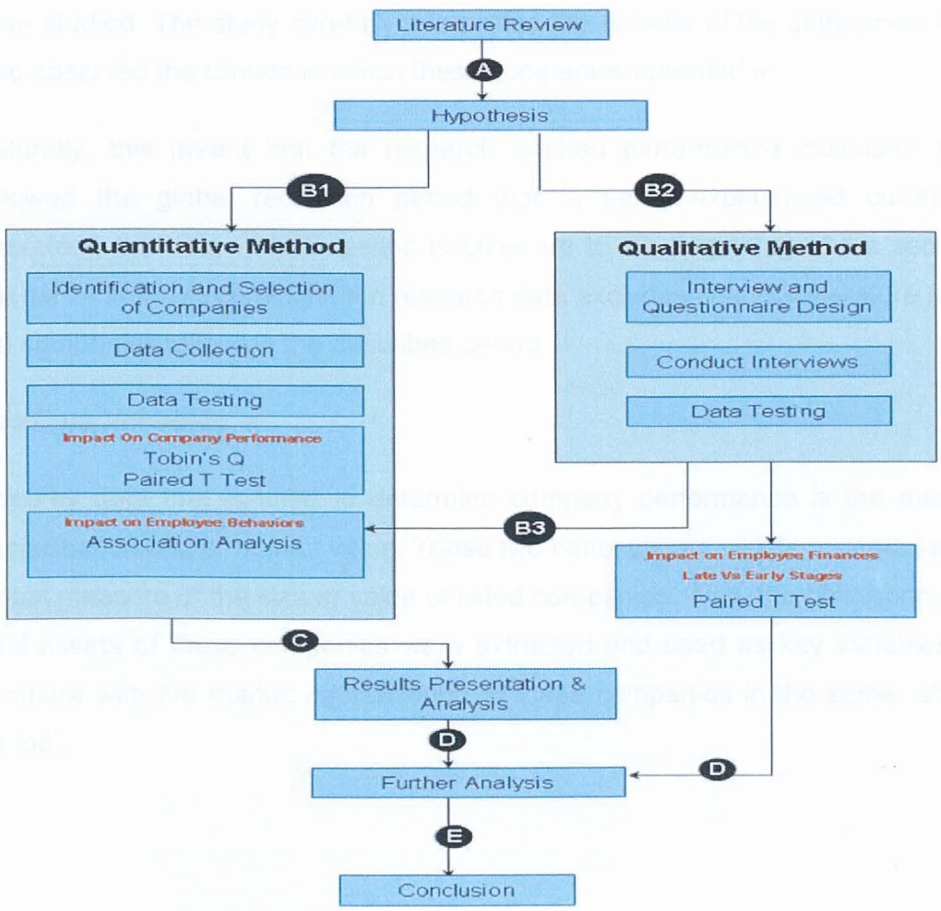

FIGURE 2: RESEARCH METHODOLOGY ROADMAP

The letters A; B; C; D and E in the sections that follows refer to the labelling in Figure 2.

B1: The Qualitative Method

Identification and Selection of Companies

The qualitative approach sought to study sub-problem A by collecting the associated data and then analysing it using qualitative methods. In this respect, the financial records as reported by the respective organisations over a period which they did not have ESOPs and a period following the issuing of ESOPs were studied. The study carefully interpreted the records of the companies and also observed the climate in which these companies operated in.

Naturally, this meant that the research omitted performance indicators that followed the global recession period that is being experienced currently. Therefore, the data window period is taken up to the beginning of the second quarter of 2008. Accordingly, the research data excludes financial literature from the companies following the described period.

The Data Variables

The key data that is used to determine company performance is the market capitalisation and or market value. These two concepts are widely accepted as a global measure of the size or value of listed companies. Also, the corresponding total assets of these companies were extracted and used as key variables to compare with the market capitalization of these companies in the same "study period".

Data Testing

The ratios between these values were subjected to a two-tailed T test to determine the significance of the outcome; i.e. the differences between the means of the data set of the companies before and after the introduction of the ESOPs were compared. Improved means of the T-values following the introduction of the ESOP were interpreted positively. Similarly, worse means of the T-values following the introduction of the ESOP were interpreted negatively.

Afterwards, employee's individual impressions on matters seen to promote company performance were observed-if they feel that they were motivated and that their performance improves company performance. Also was determined if participating employees were happier and would want to extend their employment period should they be given the opportunity. The last two aspects were of importance as they have a direct link to improved productivity as discussed in the literature review. An association matrix compared the data received to measure the association between these variable.

B2- The Quantitative Method

Interview and Questionnaire Design

The quantitative methods were used to measure sub-problem B. Employees of various companies that had been issued with ESOPs were interviewed and questioned on their financial pattern following the issuing of ESOPs. The primary objective of this activity was to validate the information as received by from the qualitative method i.e. positive relationship between employee's improved financial behaviour and companies that have shown an increase in Tobin's Q. To achieve this, a questionnaire was designed to capture the employee's responses and identify patterns of individual behaviours following the issuing of ESOPs. These patterns tracked whether these employees felt that they had more access to money, given they had received shares/options or dividends. The patterns include their spending and saving behaviours.

B3 - Data Testing

The data received from employee interviews was tested in collaboration with data received on the impact of ESOPs on employee behaviours. The test used was the association Analysis and Kappa testing.

C - Results Presentation and Analysis

This section summarised the result and discussed them in relation to the specific hypothesis. The results from the two data sets from the company financial reports and the results from the employee responses from the survey was merged and interpreted in relation to one another.

D - Further Data Testing

The data received from the interviews by employees was further analysed to compare employees that joined ESOPs in the early and late stages. The primary objective was to establish the timing of participation in ESOPs has an added financial advantage. This step was important given that it might have explained the perceptions from the responses of employees based on when they started to participate in their various schemes.

In addition, the further analysis sought to measure the association of employee's perception and level of commitment given their entry into the scheme. The result of this further analysis substantiated the impact of the ESOPs from a timing perspective. Further studies could attempt to establish a link between employee performance and company performance based on long standing schemes. All the companies included in the research were used for the purposes of this analysis. In addition Anglo Platinum was used as a test case for a closer analysis to test the hypothesis. Anglo Platinum was chosen given that it had the most number of respondents that had a good spread in relation to the hypothesis.

A paired T Test was conducted to measure the difference in the employees spending behaviours.

E- Conclusion

A conclusion was reached based on the outcome from the financial results as reported by the various companies and the related Tobin's Q. In addition, the employee's perceptions of the ESOPs and their related impact on the spending, saving patterns was observed to support the conclusion.

3.4 Population and Sample

3.4.1 Population

The population of the study was defined as all South African companies listed on the Johannesburg Stock Exchange (JSE) that has concluded ESOPs. This included the JSE's top 40 stocks as listed on the main board and also small-and medium-sized companies that are listed on the alternative exchange (AltX).

3.4.2 Sample Selection

During the study period 339 and 78 companies were listed on the main board and AltX respectively. In principle, random selection was used to select the sample for the research. This was done by identifying annual reports and newspaper articles and selecting companies that have implemented a share ownership scheme. The research used the following criteria to build the sample:

- The companies that had implemented ESOPs
- The available company data on the respective companies that had implemented ESOPs.
- The schemes that had been active for at least a minimum period of two financial years to enable the study of the ESOPs before and after implementation.
- The scheme had been continuously active in the study period

The majority of the companies were eliminated as they did not have ESOPs. It was noted that the majority of the companies had the schemes under consideration. The second eliminator was the lack of credible company information with regard to the schemes. This included the year of implementation of the scheme. The first year is deemed important as it bears the most impact on the implementation of ESOPs. Again, this meant that several companies were not considered based on the reasons as stated.

Consequently, a total of 54 companies formed part of the sample that addressed the main sub-problem A *(Appendix 2).*

3.5 Data Collection

Annual Reports

During the data collection, it emerged that even though share options are generally regulated based on the prevailing JSE rules relating to the broader share options, the JSE does not keep a dedicated record of all companies that have ESOPs. In addition, a single source of data listing companies that have ESOPs was not found. As a secondary approach, firms that offer ESOP structuring services were consulted for data including, The **ESOP Shop** and **Ownership Solutions** as subject matter experts. It also emerged that the two companies also restricted their official data to "client" companies and not all companies that have structured ESOPs. As a result, the companies were identified using various business and financial websites, i.e.:

I. http://www.moneyweb.co.za

II. http://www.sharenet.co.za/

III. http://www.sharedata.co.za/

IV. http://www.mcgregorbfa.com

V. http://www.whoownswhom.co.za/

VI. http://www.busrep.co.za/

VII. http://www.topcompanies.co.za/

In addition to the above, the JSE's company announcements/SENS system was extensively used to extract historical data linked to ESOP activities. Lastly, published annual reports of the selected companies were assessed to fill in the gaps related to ESOPs. Most importantly, the annual reports provided raw data related to market capitalisation, the number of shares issued, the share price, and the total assets. This data was used to construct the equations to address sub-problem A.

Tobin's Q was used to analyse the impact of ESOPs to company performance. An attempt was made to collect the data in a manner that facilitated the computation of this ratio, as shown below.

$$\text{Tobin's Q} = \frac{\text{MVE + PS + DEBT}}{\text{TA}}$$

Where:-

MVE =	Company share price * Number of common stock shares outstanding
PS =	The liquidating value of the firm's outstanding preferred stock
DEBT =	Value of company's short-term liabilities net of its short-term assets + book value of the firm's long-term debt
TA =	Book value of the total assets of the Company

FIGURE 3A: TOBIN'S Q

However, given the variety of the manner in which companies present their financial information, a decision was made to simplify the equation as shown below.

Where:-

$$\text{Tobin's Q} = \frac{\text{Market Cap}}{\text{TA}}$$

Market Cap	As reported by JSE/Annual Company Results
	OR
Market Cap	Taken as Number of Shares multiplied by Share Price
TA =	Book value of the total assets of the Company

FIGURE 3B: TOBIN'S Q

The Questionnaire

The secondary source of the data was a questionnaire and interviews with the professionals and interest groups within this area of research. The questionnaire was constructed using survey software that is web based. Some questionnaires were completed manually with lower level employees to validate the spread of the responses (most employees that have both computers and access to the web might be employed in higher levels in their respective organisations). A good spread of responses between all levels was required to get a balanced response to the questionnaire *(Appendix 4:)*.

The questionnaire used was based on a five point Likert scale as it satisfied both the qualitative and quantitative approach. The respondents were clustered based on the "age" of the specific plans; i.e. respondents in the early or late stages on the option plans were grouped together. This grouping provided an

additional sober measure of the responses. Late stage employees denoted employees that had entered their ESOPs during the previous three years i.e. from 2007 to date. Similarly, early stage denoted employees who had entered their respective schemes before 2007.

Individual items in Likert's sample scale consisted of five-response alternatives: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. Likert noted that descriptors could be anything (Likert 1932). All the questions were closed as these were efficient and specific (Cooper and Schindler 2008). The approach followed was that:-

- The purpose of the research was explained to the potential respondents
- For manual responses (lower level employees)
    - A full explanation of the Likert scale was given to the respondents
    - Respondents were then asked if they had received ESOPs
    - Respondents were individually interviewed
    - All questions were explained to the respondents

A dry run of the interview and questionnaire process was conducted to limit potential oversight by the researcher during the data collection.

3.6 Data Analysis and Interpretation

The data was treated as ordinal data and was analysed separately by item. A T-Test was employed to analyse the data for sub-problem A where an event analysis or a "pre-post" design of Tobin's Q before and after the implementation of employee share option schemes was made. Figure 4 below presents the equation that was used:

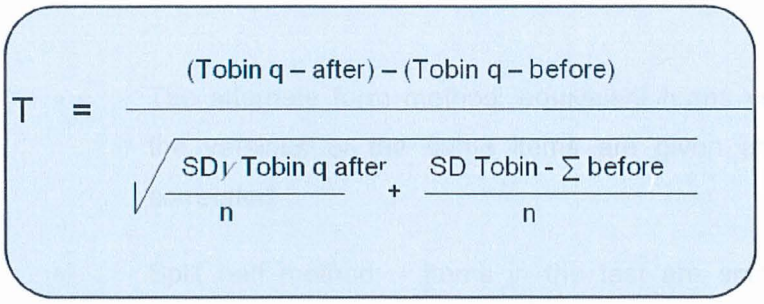

FIGURE 4: T-TEST EQUATION

The average difference between the measurements was computed following the issuing of ESOPs. When the issuing of ESOPs had no effect on the Tobin's Q then the average difference was equal to 0 and the null hypothesis was assumed. The null hypothesis was rejected when the issuing of ESOPs resulted in the average difference not being equal to 0. All the hypotheses were tested at the 5% error level, using two-tailed t-tests.

3.7 Validity and Reliability

3.7.1 External Validity

Item analysis was employed to improve the validity of the questionnaire. The outcome of the analysis resulted in the review of the questionnaire. In addition, validity interviews were conducted to assess high agreement of categorisation and low levels of difficulty in categorising the items.

3.7.2 Reliability

Bell (2006) states that there are two devices for checking reliability in scales and tests. These are:

Test-retest: administering the same tests some time after the first test.

a. The alternate form method: equivalent forms versions of the versions of the same items are given and results correlated

b. Split half method: - Items in the test are split into two matched halves and scores are then correlated. However, Bell (2006) concedes that these methods are not always feasible and may not be necessary

As discussed earlier, a 5 point Likert scale was used to increase the reliability of the data collected. In addition, Alpha (Cronbach) reliability testing techniques were used to confirm reliability.

4 RESULTS PRESENTATION AND ANALYSIS

This section discusses the analysis of the data and commences with data collated from various sources from which the Tobin's Q was computed *(Appendix 2).* An independent secondary analysis was undertaken on the partial survey results data. *(Appendix 4)*Lastly the residual survey results data was subjected to various statistical techniques. Accordingly, the data analysis section also maintained the established logic of addressing sub-problem A then followed by sub-problem B.

4.1 Data Summary

Two independent data sets were compiled. The first set was a list of 54 JSE-listed companies that have implemented ESOPs (*See Appendix 3*). Below is the descriptive summary of the sample:

Tobin's Q was derived from a ratio of the sample companies market capitalisation and total assets. Tobin's Q appeared to vary substantially in the companies that were included in the sample. It is assumed that this phenomenon could be owing to the distortion experienced over the study period. As detailed in Table 3 below, the descriptive summary indicates the midpoint of the distribution of Tobin's Q before the issuing of ESOPs as lower than after. The standard deviation of the data indicates that Tobin's Q before had a wider spread than after.

TABLE 3: DESCRIPTIVE SUMMARY OF THE 54 SAMPLE FIRMS

			Statistic	Std. Error
Tobin's Q Before	Mean		1.5035	.18522
	95% Confidence Interval for Mean	Lower Bound	1.1320	
		Upper Bound	1.8750	
	5% Trimmed Mean		1.3357	
	Median		1.1800	
	Variance		1.853	
	Std. Deviation		1.36109	
	Minimum		.03	
	Maximum		6.54	
	Range		6.51	
	Interquartile Range		1.40	
	Skewness		2.005	.325
	Kurtosis		4.786	.639
Tobin's Q After	Mean		1.4733	.15365
	95% Confidence Interval for Mean	Lower Bound	1.1652	
		Upper Bound	1.7815	
	5% Trimmed Mean		1.3878	
	Median		1.3850	
	Variance		1.275	
	Std. Deviation		1.12907	
	Minimum		.02	
	Maximum		5.56	
	Range		5.54	
	Interquartile Range		1.54	
	Skewness		1.164	.325
	Kurtosis		2.141	.639

The secondary data was compiled from a survey carried out on a selected list of JSE listed companies that had implemented ESOPs. Figure 5 presents a summary of the companies and the associated responses from the survey.

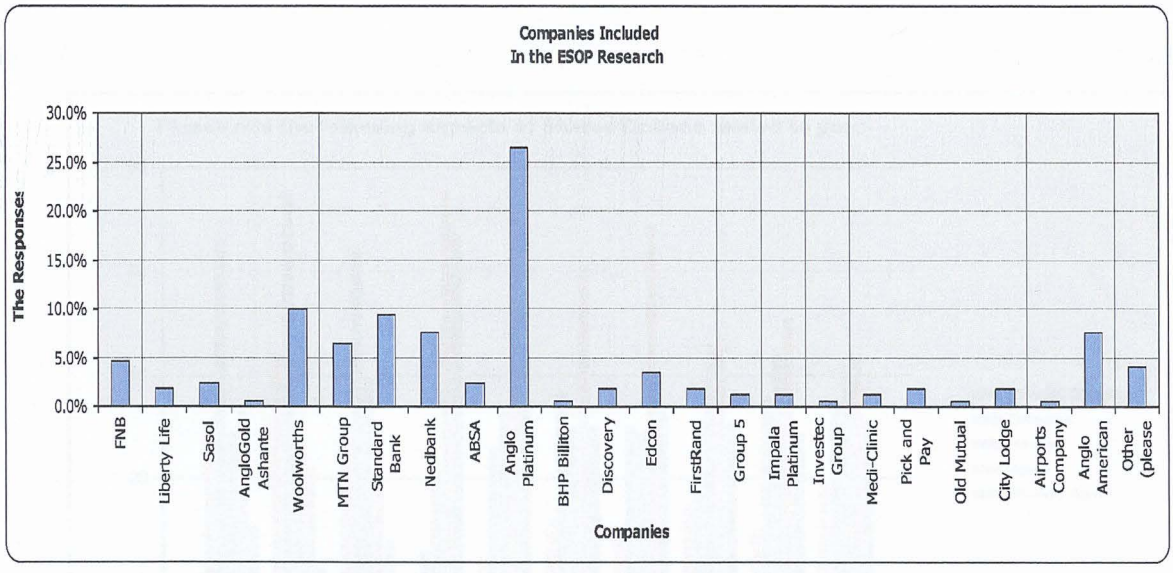

FIGURE 5: COMPANIES INCLUDED IN THE RESEARCH

Anglo Platinum responses represented 26% (45 employees) of the total sample. Woolworths, Standard Bank and Nedbank employees followed with 10%, 9% and 7% respectively.

The Likert scale responses from the survey were ranked according to Table 4 below

TABLE 4: LIKERT SCALE LEGEND

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

These rankings were used as the unit measure to analyse the survey response in the data analysis sections that follow. Figure 6 depicts a ranked summary of the responses from the questions asked.

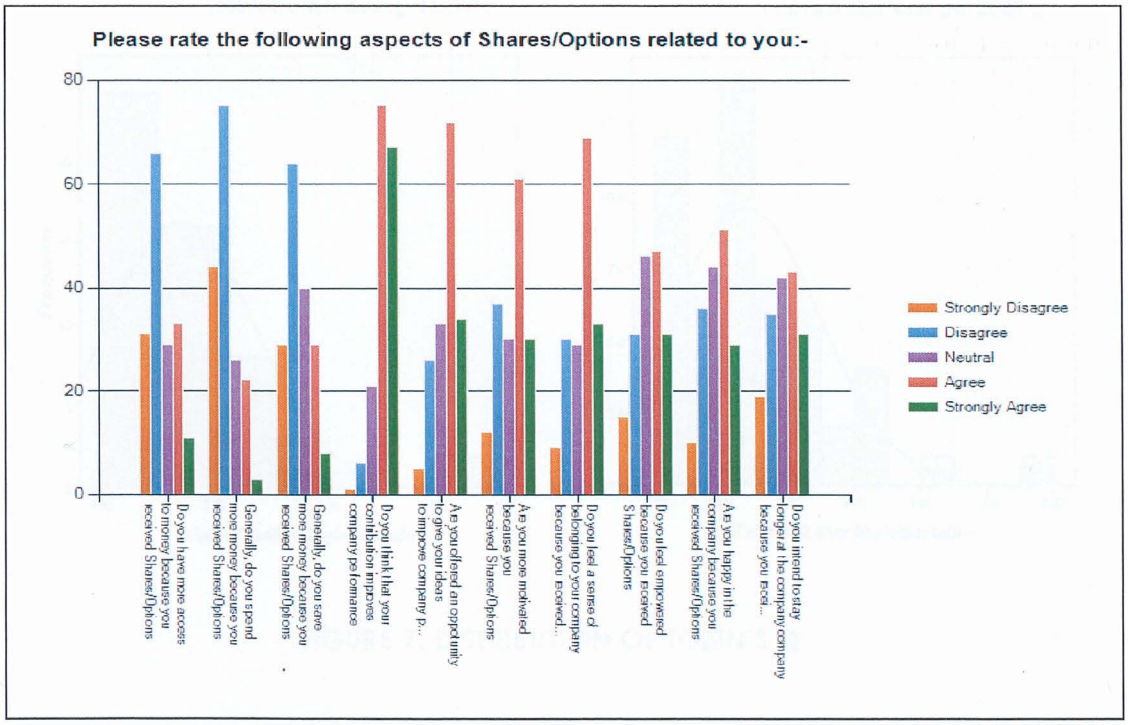

FIGURE 6: SUMMARY OF THE RESPONSES

The highest raking was achieved from the question on the employee's individual contribution in relation to company performance. This was closely followed by the question relating to employees spending following the issuing of ESOPs.

4.2 Hypothesis 1 - Tobin's Q

4.2.1 Statistics and Plots

The distribution of data of both variables appeared to be a positively skewed distribution and, therefore, data normality could not be assumed.

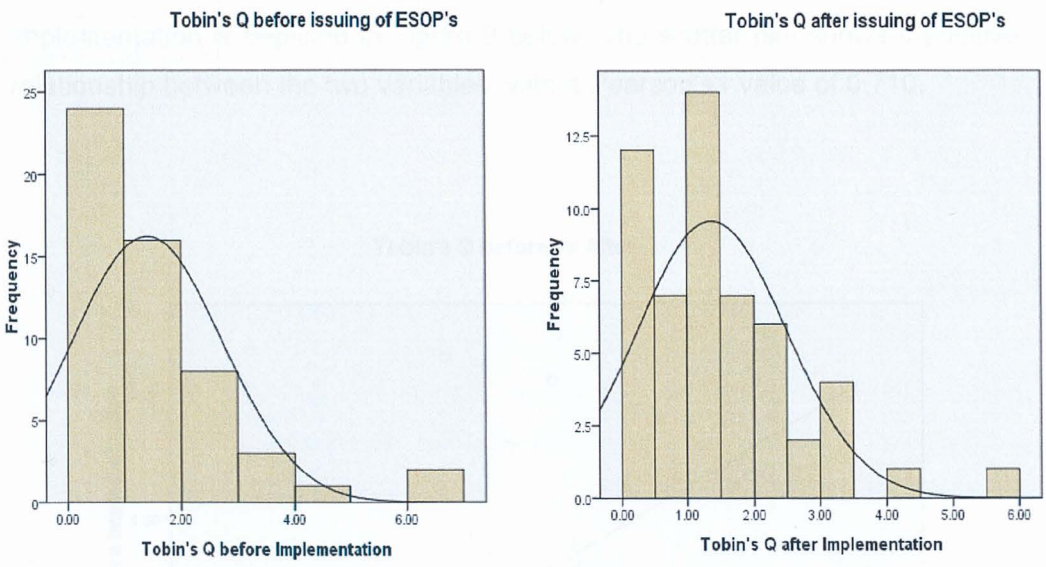

FIGURE 7: DISTRIBUTION OF TOBIN'S Q

In an effort to further test for normality of the variables, Q-Q plots were constructed, as depicted in Figure 8 below. The data struggled to follow the normal distribution statistical 45 degree line requirement. There were also a few outliers, as indicated in the plots. The deviation seemed to be significant particularly in the Tobin's Q before implementation variable.

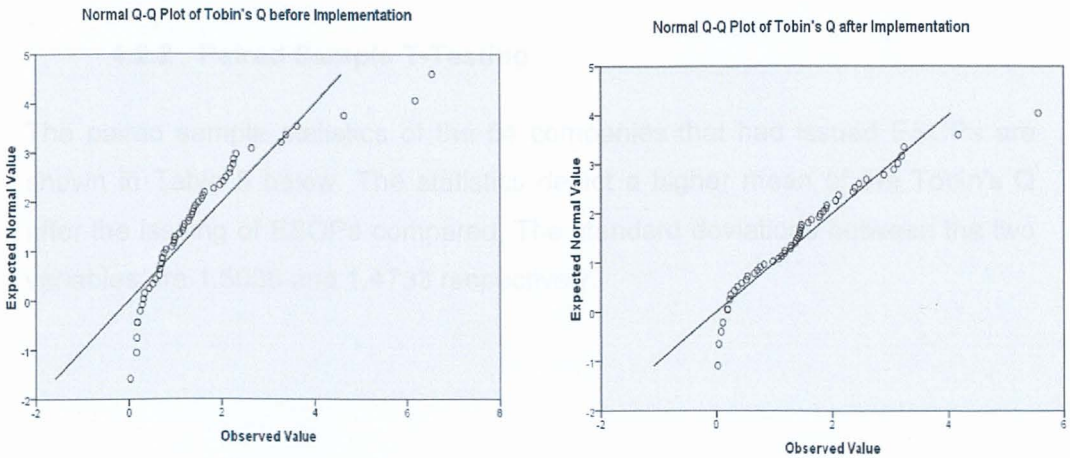

FIGURE 8: Q-Q PLOT OF TOBIN'S Q

The relationship between Tobin's Q before implementation and after implementation is depicted in Figure 9 below. The scatter plot shows a positive relationship between the two variables, with a Pearson's r value of 0.710.

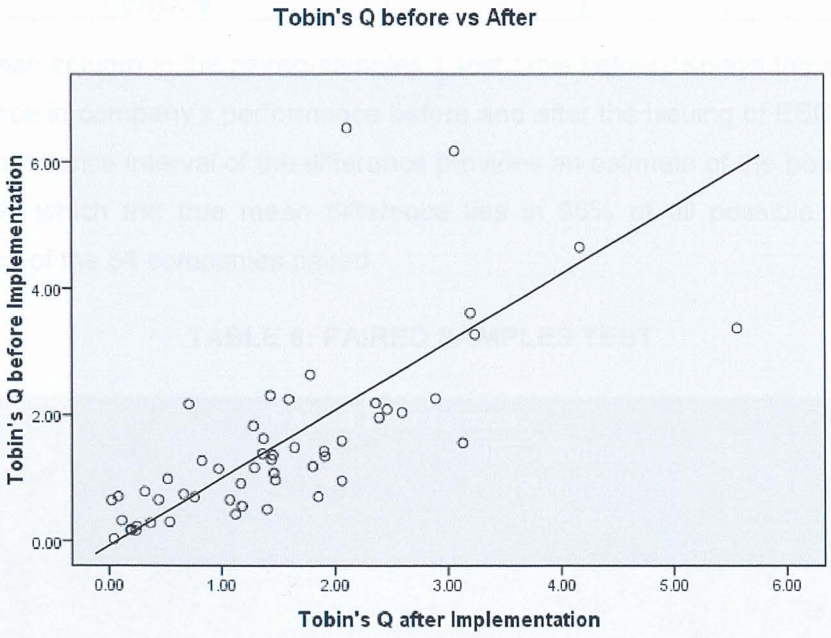

FIGURE 9: SCATTER PLOT OF TOBIN'S Q

4.2.2 Paired Sample T-Testing

The paired sample statistics of the 54 companies that had issued ESOPs are shown in Table 5 below. The statistics depict a higher mean of the Tobin's Q after the issuing of ESOPs compared. The standard deviations between the two variables are 1.5035 and 1.4733 respectively.

TABLE 5: PAIRED SAMPLES STATISTICS

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Tobin's Q before ESOPs	1.5035	54	1.36109	.18522
	Tobin's Q after ESOPs	1.4733	54	1.12907	.15365

The mean column in the paired-samples T test table below displays the average difference in company's performance before and after the issuing of ESOP'. The 95% confidence interval of the difference provides an estimate of the boundaries between which the true mean difference lies in 95% of all possible random samples of the 54 companies paired.

TABLE 6: PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Tobin's Q before ESOPs - Tobin's Q after ESOPs	.03019	.97215	.13229	-.23516	.29553	.228	53	.820

The significance value of the companies performances before and after implementing the share schemes is 0.820, which is significantly higher than 0.05. This does not fully explain the impact of the issuing of ESOPs on company performance. Therefore, the increase mean value of the company performance following implementation of ESOPs is not fully explained by the model. The critical value of t "Table Value" associated with the probability levels and degrees of freedom of 53 is 2.011.

4.2.3 Decision from Analysis

Although there seems to be statistical data supporting the notion that company performance increases after ESOP implementation the null hypothesis will be assumed. This decision is taken after the consideration of the data normality violations and also the results of the paired sample T testing.

4.3 Hypothesis 2 - Employee Happiness vs. Motivation

4.3.1 Normality Testing

The histogram below indicates that the data gathered to investigate employee motivation following the issuing of ESOPs has got normal distribution characteristics and a tight spread of the data, with a standard deviation of 1.2. There is a hint of skewness to the right but not significant enough to suggest that normality assumptions were not violated

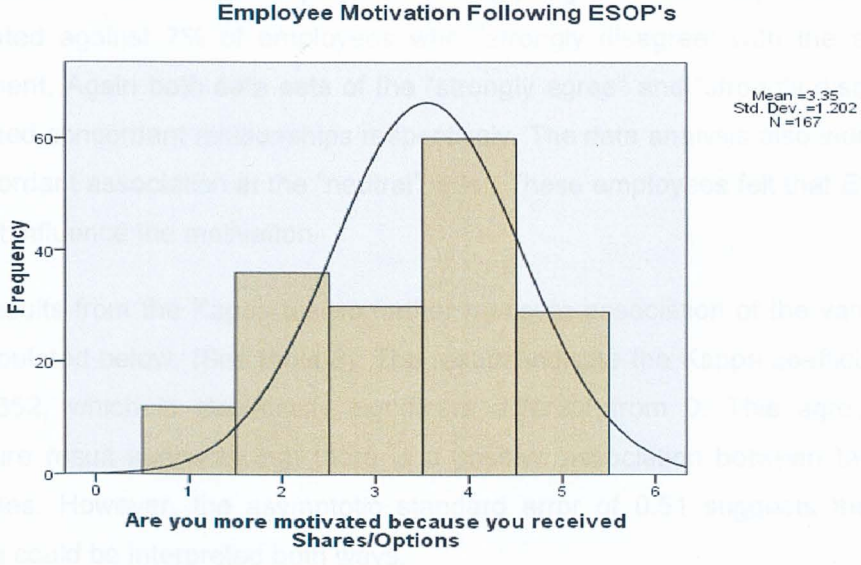

FIGURE 10: DITRIBUTION OF EMPLOYEE HAPPINESS VS. MOTIVATION

4.3.2 Association Analysis

The cross-tabulation exercise between happiness versus motivation revealed a concordant pairwise association between the two variables. This is demonstrated by the positive association of (36%) of the employees who "agree" their motivation improved because they had received ESOPs. In contrast, 22% of the employees "disagree".

TABLE 7: ASSOCIATION ANALYSIS

		Are you more motivated because you received Shares/Options					
		1	2	3	4	5	Total
Are you happy in the company because you received shares/options	1	5	4	1	0	0	10
	2	2	19	6	7	1	35
	3	2	4	17	18	3	44
	4	2	6	6	27	9	50
	5	1	3	0	8	16	28
Total		12	36	30	60	29	167

In addition 17% of the employees "strongly agree" that they were more motivated against 7% of employees who "strongly disagree" with the similar statement. Again both data sets of the "strongly agree" and "strongly disagree" assumed concordant relationships respectively. The data analysis also indicated a discordant association at the "neutral" level. These employees felt that ESOPs did not influence the motivation.

The results from the Kappa test to further measure association of the variables are tabulated below. (See table 8). The results indicate the Kappa coefficient to be 0.352, which is statistically significant different from 0. This agreement measure result suggests that there is a positive association between the two variables. However, the asymptotic standard error of 0.51 suggests that the results could be interpreted both ways.

TABLE 8: SYMMETRIC MEASURES

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.352	.051	8.536	.000
N of Valid Cases		167			

4.3.3 Decision from Analysis

Even though the asymptotic standard error might influence an assumption of the null hypothesis there is significant statistical evidence of association between the employee's level of happiness and their increased motivation after they received ESOPs. Therefore, the null hypothesis is rejected in favour of the alternative hypothesis i.e. ESOPs motivate employees.

4.4 Hypothesis 3 - Employee Happiness vs. Contribution

4.4.1 Normality Testing

The data on employee sense of contribution data displayed normal distribution characteristics but with a clear skewness to the right (See Figure 11). The standard deviation of 0.83 indicated a narrow spread. It appeared that the normality assumption might have been violated in this case; therefore, further statistical testing was required to ascertain the degree of the violation.

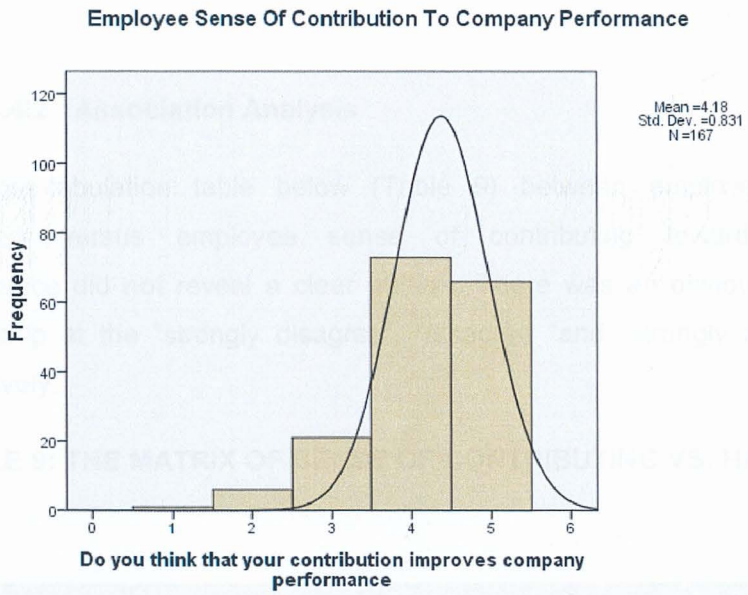

FIGURE 11: DISTRIBUTION OF EMPLOYEE HAPPINESS VS. CONTRIBUTION

Box plots provide a different visual image of the distribution's location, spread, shape tail, length and outliers. They also offer "resistant statistics" that provide insensitivity to localised misbehaviour in data and are unaffected by outliers(Cooper and Schindler 2008). The box plot *(See figure 12)* found the data to have a few outliers and therefore deemed Insignificant. Accordingly, the decision was made that the normality assumption was not violated.

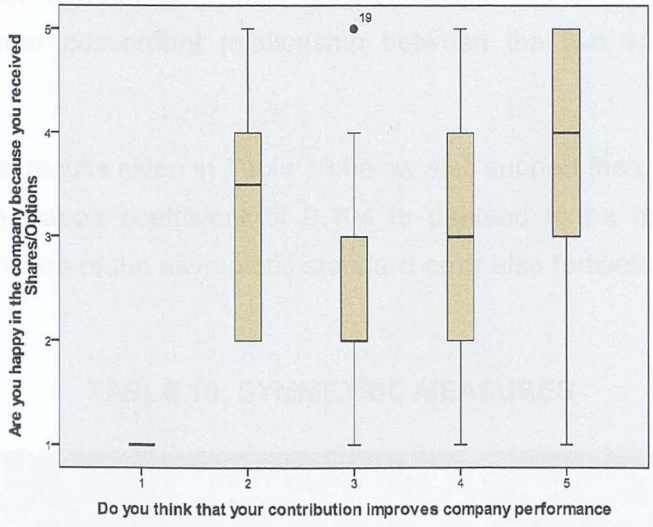

FIGURE 12: BOX PLOT OF EMPLOYEE HAPPINESS VS. CONTRIBUTION

4.4.2 Association Analysis

The cross-tabulation table below (Table 9) between employee levels of happiness versus employee sense of contributing towards company performance did not reveal a clear pattern. There was an obvious discordant relationship at the "strongly disagree", "disagree "and "strongly agree" levels respectively.

TABLE 9: THE MATRIX OF SENSE OF CONTRIBUTING VS. HAPPINESS

		Sense of contributing towards company performance					
		1	2	3	4	5	Total
Are you happy in the company because you received shares/options	1	1	0	3	3	3	10
	2	0	2	8	19	6	35
	3	0	1	6	19	18	44
	4	0	2	3	25	20	50
	5	0	1	1	7	19	28
Total		1	6	21	73	66	167

There was also a weak association at the "neutral" level. The analysis also indicated a near concordant relationship between the two variables at the "agree" level.

The Kappa test results given in Table 10 below also support the cross-tabulation outcome. The Kappa coefficient of 0.104 is deemed to be not significantly different. The value of the asymptotic standard error also fortifies this weakened association.

TABLE 10: SYMMETRIC MEASURES

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.104	.042	2.675	.007
N of Valid Cases		167			

4.4.3 Decision from Analysis

As with the previous measure given above, the asymptotic standard error might suggest that the null hypothesis should be accepted. However, the converse was adopted. Therefore, the null hypothesis was rejected and the claim is made that employees believe that their contribution is aligned to company performance.

4.5 Hypothesis 4 - Employee Happiness vs. Empowerment

4.5.1 Normality Testing

Figure 13 represents responses of employees towards feeling a sense of empowerment after they had received ESOPs and displays near perfect distribution characteristics. Therefore, the normality assumption was not violated. The standard deviation of 1.21 indicated a tight spread

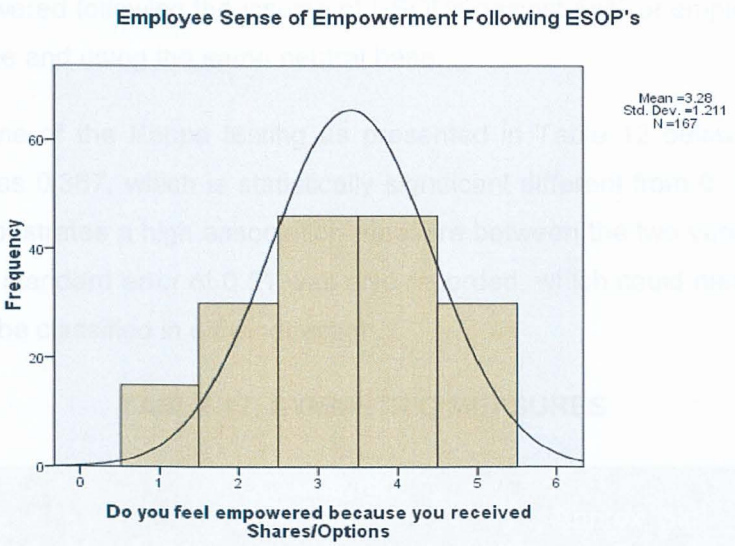

FIGURE 13: DISTRIBUTION OF EMPLOYEE HAPPINESS VS. EMPOWERMENT

4.5.2 Association Analysis

The matrix as given in Table 11 below between employee happiness and employee sense of empowerment indicated concordat relationships at all level. However a stronger positive association of these variables was recorded at the "agree" level.

TABLE 11: THE MATRIX OF EMPLOYEE EMPOWERMENT VS. EMPLOYEE HAPPINESS

		Do You Feel Empowered Because You Received Shares/Options					
		1	2	3	4	5	Total
Are you happy in the company because you received shares/ options	1	8	2	0	0	0	10
	2	4	15	12	4	0	35
	3	2	7	21	10	4	44
	4	1	5	12	25	7	50
	5	0	1	1	7	19	28
Total		15	30	46	46	30	167

In context, most employees (73% from the neutral base) believe that they are truly empowered following the issuing of ESOPs against 54% of employees who do not agree and using the same neutral base.

The outcome of the Kappa testing as presented in Table 12 below gives the coefficient as 0.387, which is statistically significant different from 0. Again, this result demonstrates a high association measure between the two variables. The asymptotic standard error of 0.51 was also recorded, which could mean that the data could be classified in either direction.

TABLE 12: SYMMETRIC MEASURES

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.387	.051	9.424	.000
N of Valid Cases		167			

4.5.3 Decision from Analysis

Given the strong positive association of the variables as indicated by the data analysis the null hypothesis was rejected notwithstanding the asymptotic standard error. This outcome should be interpreted as that employees feel a sense of empowerment after they have received their share options.

4.6 Hypothesis 5: Employee Happiness vs. Stay at the Company

4.6.1 Normality Testing

The data representing responses of employees wanting to extend their stay at their respective companies after they had received ESOPs displayed perfect distribution characteristics (Figure 14). Therefore the population was assumed to be normal. The standard deviation of 1.266 indicated a tight spread.

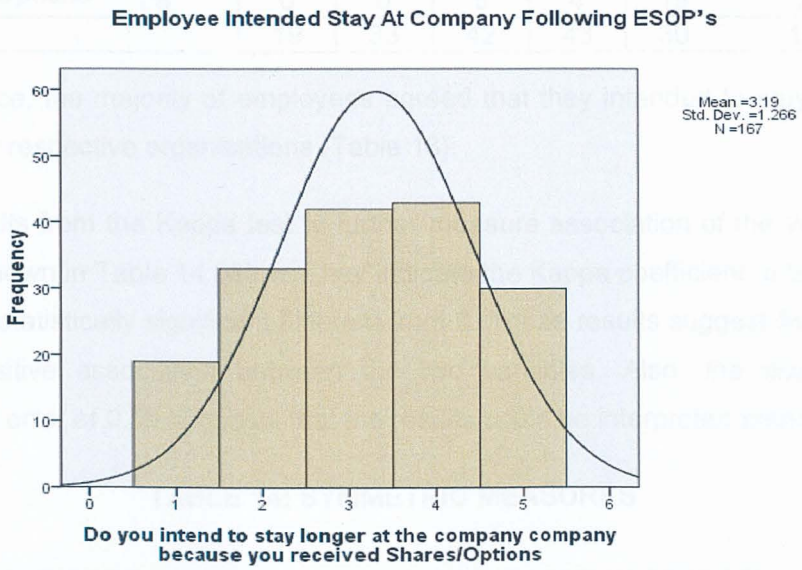

FIGURE 14: DISTRIBUTION OF EMPLOYEE HAPPINESS VS. STAY AT THE COMPANY

The cross-tabulation exercise between employee happiness level and employee continued stay at the company indicated concordat relationships at the disagree, "strongly disagree" and "agree" level. There was an element of a tied pairwise comparison between the remaining variables.

4.6.2 Association Analysis

TABLE 13: CORRELATION EXERCISE BETWEEN EMPLOYEE HAPPINESS LEVEL AND INTENTION TO STAY AT THE COMPANY

Do You Intend To Stay Longer At The Company Because You Received Shares /Options Cross Tabulation Count							
							Total
		1	2	3	4	5	
Are you happy in the company because you received Shares/Options	1	8	1	0	1	0	10
	2	7	16	8	3	1	35
	3	3	11	19	10	1	44
	4	1	5	10	25	9	50
	5	0	0	5	4	19	28
Total		19	33	42	43	30	167

In essence, the majority of employees agreed that they intended to stay longer with their respective organisations (Table 13).

The results from the Kappa test to further measure association of the variables are as shown in Table 14 below. They indicate the Kappa coefficient to be 0.385 which is statistically significant different from 0. These results suggest that there is a positive association between the two variables. Also, the asymptotic standard error of 0.50 suggests that the results could be interpreted both ways.

TABLE 14: SYMMETRIC MEASURES

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.385	.050	9.512	.000
N of Valid Cases		167			

4.6.3 Decision from Analysis

Although the asymptotic standard error might warrant the null hypothesis to be considered, there seemed to be significant statistical reference not to reject the null hypothesis in this regard. Accordingly, it is deemed fair to pronounce that the issuing of ESOPs encouraged employees to extend their employment should they be given that opportunity by their respective companies.

4.7 Hypothesis 6 - Employee Financial Impact

4.7.1 Normality Testing

Figure 15 below represents the data of employee financial patterns following ESOPs and the standardised residual represents revealed a standard deviation very close to 1 which means that the data spread was not wide enough. Also, the data displayed a near perfect "bell-shaped" distribution which satisfies the probability theory.

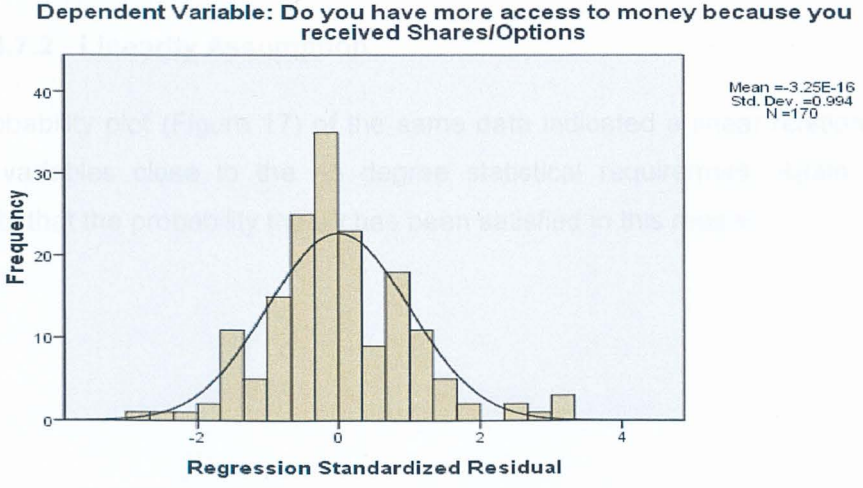

FIGURE 15: DISTRIBUTION OF THE EMPLOYEE FINANCIAL IMPACT

According to the scatter plot of residuals by the predicted values (Figure 16), the variance of the errors increases with increasing predicted employee responses

to the question on their financial patterns following the implementation of ESOPs. This is considered to be a good scatter.

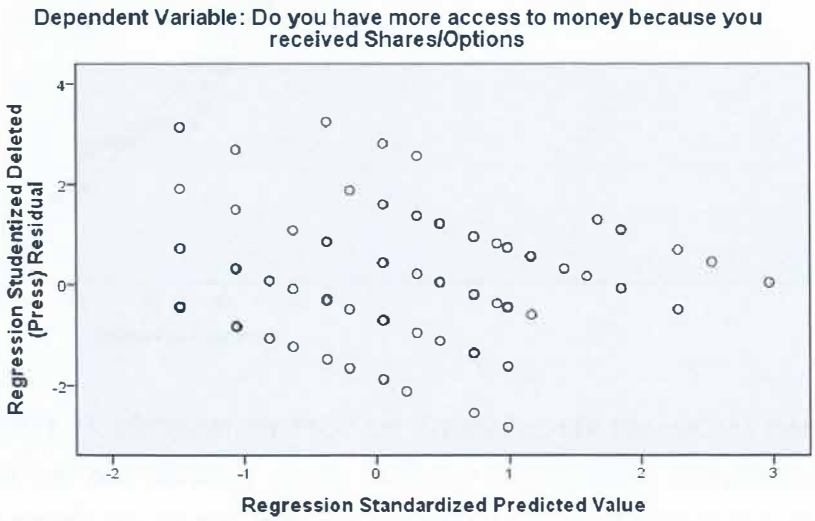

FIGURE 16: SCATTER PLOT OF EMPLOYEE FINANCIAL IMPACT

4.7.2 Linearity Assumption

The probability plot (Figure 17) of the same data indicated a linear relationship of the variables close to the 45 degree statistical requirement. Again, this suggests that the probability theory has been satisfied in this regard.

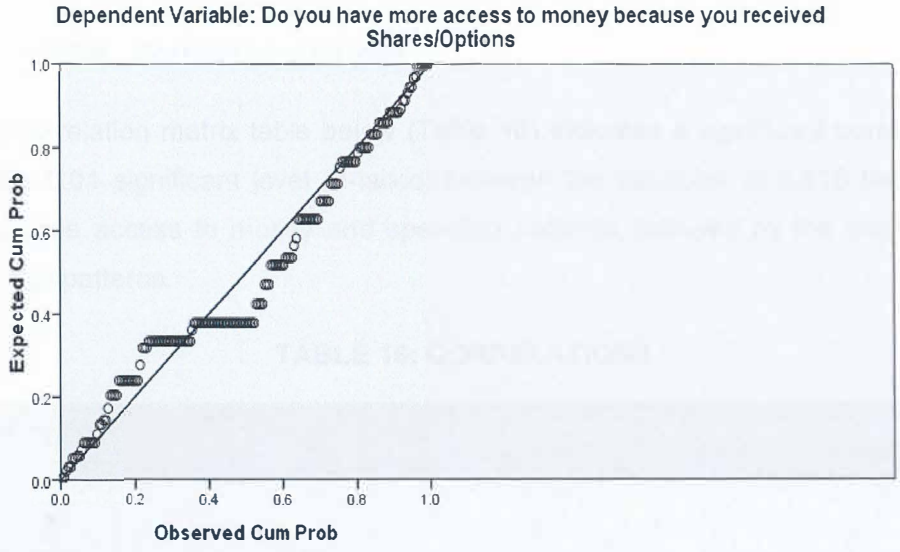

FIGURE 17: PROBABILITY PLOT OF THE EMPLOYEE FINANCIAL IMPACT

The data set has provided strong evidence of normality, independence and linearity based on all the tests as discussed above therefore the data was considered to have met regression data assumptions with no violations.

4.7.3 Reliability Testing

The data was subjected to an Alpha (Cronbach) reliability test to study the properties of measurement scales and the items that compose the scales. The computed inter-rater reliability estimates based on Cronbach's Alpha and Cronbach's Alpha based on standardized items were 0,765 and 0,766 respectively. This result is favourable under the assumption that the item variances should be all equal.

TABLE 15: RELIABILITY STATISTICS

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.765	.766	3

4.7.4 Correlation Analysis

The correlation matrix table below (Table 16) indicates a significant correlation at the 0.01 significant level (2-tailed) between the variables at 0.616 between employee access to money and spending patterns, followed by the employee savings patterns.

TABLE 16: CORRELATIONS

		Do you have more access to money because you received Shares/Options	Generally, do you spend more money because you received Shares/Options	Generally, do you save more money because you received Shares/Options
Do you have more access to money because you received shares/options	Pearson Correlation	1	.616**	.526**
	Sig. (2-tailed)		.000	.000
	N	170	170	170
Generally, do you spend more money because you received shares/options	Pearson Correlation	.616**	1	.422**
	Sig. (2-tailed)	.000		.000
	N	170	170	170
Generally, do you save more money because you received shares/options	Pearson Correlation	.526**	.422**	1
	Sig. (2-tailed)	.000	.000	
	N	170	170	170

5 FURTHER DATA ANALYSIS

This section responds to the proposition that compares employees that participated in ESOPs during early and late stages, as described in the methodology roadmap under section 3.2 (D).

5.1 Hypotheses 7, 8, 9 – Timing of participation vs. Employee Financial Impact.

Below is the summary of the data from the questionnaire of employees participating in the scheme during late and early stages respectively (*Appendix 4).*

TABLE 17: SUMMARY STATISTICS

Answer Options	Late-Stage Rating Average	Early-Stage Rating Average	Late-Stage Response Count	Early-Stage Response Count
Do you have more access to money because you received shares/options	2.89	2.37	65	105
Generally, do you spend more money because you received shares/options	2.40	2.09	65	105
Generally, do you save more money because you received shares/options	2.66	2.48	65	105
answered question			**65**	105
skipped question			**0**	**0**
TOTAL			***170***	

Out of a total of 170 respondents, 65 employees participated in ESOPs during the late stages, with a sample mean of 2.66. Similarly, 105 employees were included in their respective schemes during the early stages of their schemes and scored a sample mean of 2.48

Figure 18 below depicts direct data comparison of the employees who had received their ESOPs during the late stages against employees who had

received their ESOPs in early stages. The bar chart indicates that the late stage employees are more financially expressive compared to early stage employees.

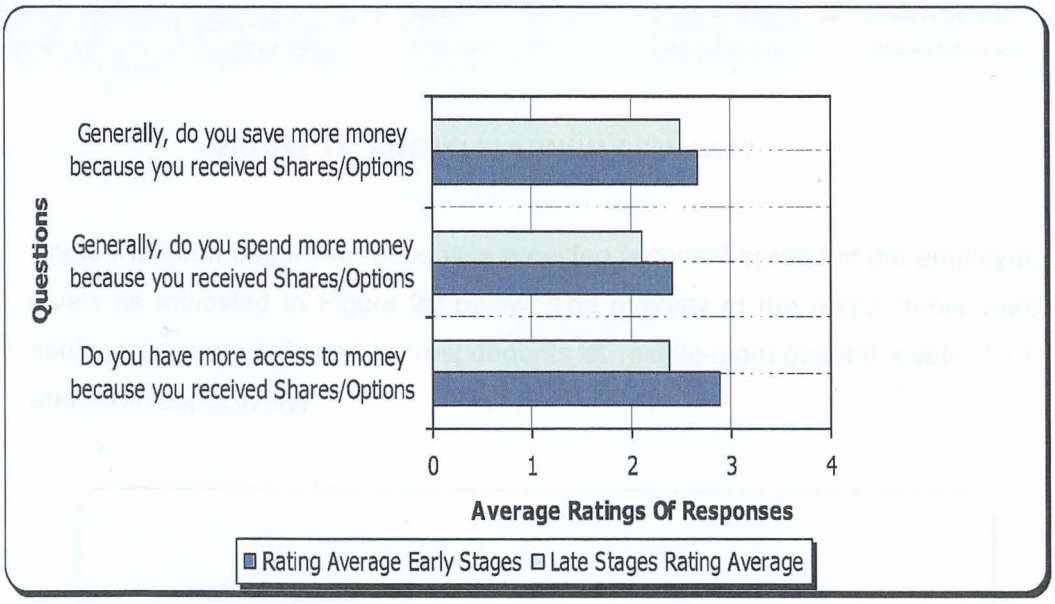

FIGURE 18: EARLY VS. LATE-STAGES RESPONSES

The comparison indicated an 18% variance between the averages on respondent's access-to-money responses. A matched pair approach was adopted to take one measurement on data between late and early stages. According to Cooper and Schindler (2008), matching each experimental and control subject should match on every characteristics used in the research. This was satisfied through the survey. In addition, only the first 65 early-stage respondents were considered for the analysis to balance the model.

5.1.1 Anglo Platinum

The data was further tested at company level, using Anglo Platinum employee responses only. The data filtering with the cross tabulation indicated that Anglo Platinum was represented by 45 employees with a split of 21 and 24 between late and early stages respectively.

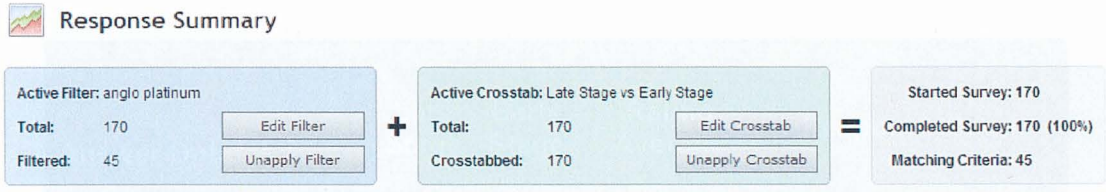

FIGURE 19: ANGLO PLATINUM SUMMARY

Anglo Platinum employee responses provided a decent spread of the employee levels as indicated in Figure 20 below. The majority of the respondents were senior managers followed by respondents at middle-management levels (51% and 36% respectively).

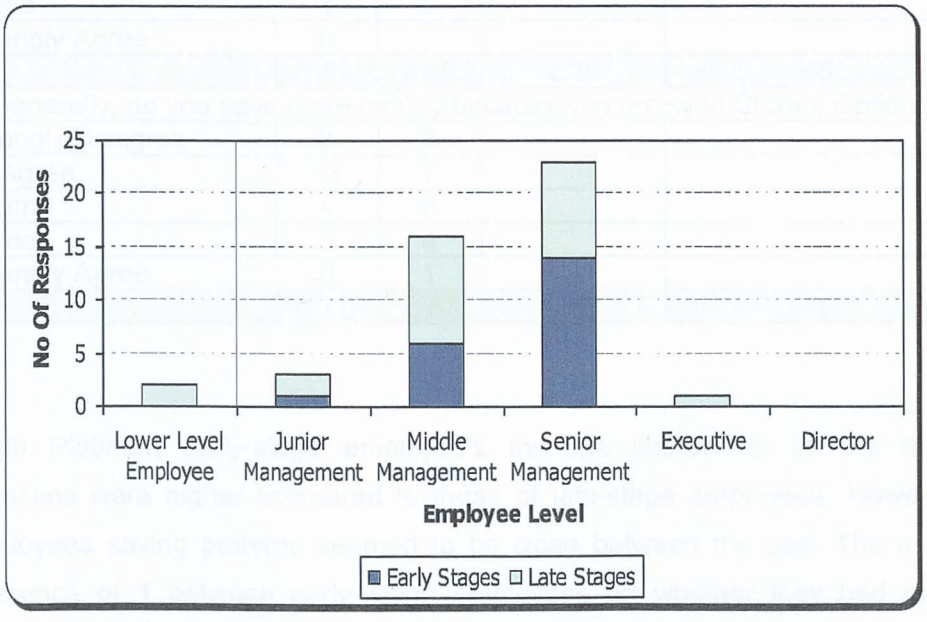

FIGURE 20: ANGLO PLATINUM'S EMPLOYEE RESPONSES

Again, a late-versus early-stage comparison was made and the following responses were recorded as depicted in Table 21 below.

TABLE 18: ANGLO PLATINUM EMPLOYEES

Answer Options	Late Stage	Early Stage	Rating Average	Response Count
Do you have more access to money because you received Shares/Options				
Strongly Disagree	5	1		
Disagree	10	7		
Neutral	5	2		
Agree	4	6		
Strongly Agree	0	5		
	2.33	3.33	2.80	45
Generally, do you spend more money because you received Shares/Options				
Strongly Disagree	5	5		
Disagree	17	7		
Neutral	1	3		
Agree	1	5		
Strongly Agree	0	1		
	1.92	2.52	2.20	45
Generally, do you save more money because you received Shares/Options				
Strongly Disagree	2	3		
Disagree	13	7		
Neutral	4	6		
Agree	5	4		
Strongly Agree	0	1		
	2.50	2.67	2.58	45

Anglo Platinum early-stage employee's average scores on all the three questions were higher compared to those of late-stage employees. However, employees saving patterns seemed to be close between the pair. The mean difference of 1 between early stage employees on whether they had more access to money following issuing of ESOPs is significant. *(Appendix 7)*

5.1.2 Paired Sample T-Testing

In Table 22 below the first paired sample indicates early-stage employee increased level of satisfaction in relation to them having more access to money. This pattern is observed in the employee expenditure and savings behaviours.

The standard deviation between the first pair shows early-stage employee responses with better spread as compared to late stage employees with a tighter spread. Again this pattern is repeated on pair 2 and pair 1 respectively.

TABLE 19: PAIRED SAMPLES STATISTICS

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Early-Access	2.89	65	1.371	.170
	Late-Access	2.32	65	.970	.120
Pair 2	Early-Spend	2.40	65	1.196	.148
	Late-Spend	2.15	65	.870	.108
Pair 3	Early-Save	2.66	65	1.228	.152
	Late-Save	2.45	65	.902	.112

The Pearson Correlations of the three pairs are shown in Table 23 below. The results from pair one and two are not statistically insignificant. However, pair three demonstrates a weak correlation between the employees. This can be interpreted as that employees would save more due to the ESOP windfall regardless of the ESOPs issue stage.

TABLE 20: PAIRED SAMPLES CORRELATIONS

		N	Correlation	Sig.
Pair 1	Early-Access & Late-Access	65	-.114	.364
Pair 2	Early-Spend & Late-Spend	65	-.150	.233
Pair 3	Early-Save & Late-Save	65	.237	.057

The mean column in the paired-samples t test table below displays the average difference in employee financial patterns between late and early stage following the issuing of ESOPs. The 95% confidence interval of the difference provides an estimate of the boundaries between which the true mean difference lies in 95% of all possible random samples of 65 paired subjects.

TABLES 21: PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	Early-Access and Late-Access	.569	1.767	.219	.131	1.007	2.596	64	.012
Pair 2	Early-Spend and Late-Spend	.246	1.581	.196	-.146	.638	1.255	64	.214
Pair 3	Early-Save and Late-Save	.215	1.340	.166	-.117	.548	1.296	64	.200

The significance value of the employee's behaviour regarding access to more money is 0.012, which is less than 0.05. Therefore, it is concluded that the average increased assertion (0.569, mean) by employees should be accredited

to the timing of participation in ESOPs. The critical value of t "Table Value" associated with the probability levels and degrees of freedom of 64 is 1.99.

5.1.3 Decision from Analysis

The null hypothesis is rejected. Early-stage employees have more access to money compared to their counterparts. However, the null hypotheses is assumed on the save and spend behaviours. This means that employee's savings and expenditure patterns remain largely similar regardless of the timing of participation in ESOPs.

6 CONCLUSIONS

ESOPs have increasingly been used as a mechanism to support the South African government's BBBEE agenda. To demonstrate this, SAB and Spar announced deals with an emphasis on ESOPs during July of 2009. This research investigated the impact of such schemes on both the company and employees.

The research carried out an event analysis of the impact of an ESOP on company performance and the impact of these ESOPs on employees as a parallel process. The sample of the former was based on all companies in the JSE that had issued shares or options to their employees. The secondary data was gathered from a survey that targeted employees participating in the various ownership schemes.

6.1 Impact of ESOPs on Company Performance

Tobin's Q was utilised as a measure of company performance. The Tobin's Q ratio was computed by dividing the company's market capitalisation by its total assets. Whilst appreciating Tobin's Q theory, questions were raised about the rigidness of the applied equation against external events that might render the model flawed. In particular to this statement, is the research's study focus area of listed companies that are naturally influenced by high market volatility. This focus meant that the company's valuations might have been under or overstated and the latter is assumed, given the super cycle that has been experienced during the study period and that might have caused a distortion in the market.

Accordingly, the data collated on company performance indicated strong gains of Tobin's Q after the implementation of ESOP schemes. However, the data also revealed strong decreases of Tobin's Q in certain companies as well. Steep movements of the various companies market capitalisation was observed whilst the associated total assets experienced modest appreciation. These movements

led to extreme Tobin's Q ratios at both ends. A paired T test process further supported the recorded extremes of Tobin's Q ratios.

Rudimentary assessment of the sample data also revealed inconclusive evidence of a positive outcome following the issuing of ESOPs. Half of the companies sampled recorded negative growth following the issuing of ESOPs. Based on this statistic, the result may be interpreted as "neutral". This finding is in line with the literature by Quarrey and Rosen (1987) who concluded on their research that ESOPs had a neutral impact on company performance. However it is concluded that based on the sample data studied and using the research methodology as discussed ESOPs do not have a positive impact on company performance in South Africa.

In construct to the decision as discussed above, ESOPs seem to impact on employee behaviours. Employees generally recorded an increased level of satisfaction on all the measured behaviours *(Appendix 6)*. These behaviours are correlated to company performance; i.e.

- Years of service of employees generally improve employee productivity
- Employees that feel empowered by their companies would tend to give more to the companies
- Production levels of happy employees tend to be more than those of unsatisfied employees

Therefore, it is reasonable to conclude that even though the impact of ESOPs on company performance has been recorded as weak, ESOPs have an indirect positive contribution to company performance. This conclusion is similar to that of Gorm and Marens (1997) who, from their data analysis, highlighted a neutral impact on company performance but increased employee productivity.

Thus this concept that employees tend to be more content, stay longer, and increase their contribution as discovered from Woolworths employees (A*ppendix 9*) has been proven to be true in this research. Consequently, these features will

drive productivity leading to increased performance as affirmed by Blair et al (2000) in their research conclusions.

This significant correlation between employee morale, motivation, contribution and company performance emanate from the issuing of ESOPs. The literature has emphasised this causality as definitive. Therefore, in summary, even though the impact of ESOPs might be neutral at best, it is concluded that the issuing of ESOPs impacted positively on employee productivity, thus company performance.

6.2 Impact of ESOPs on Employee Finances

The data revealed that employee's finances are marginally improved by ESOPs. The data analysis indicated that employees will tend to spend more because they might have received additional (or on in lieu of pending income) income from ESOPs. However, when the similar question was isolated to early stage employees the results were in favour of a financial benefit emanating from ESOPs; i.e. 40% of the employees agree on strongly agree that they have more access to money as compared to the late stage employees (*Appendix 6*). It is therefore assumed that sampling error might have resulted in the alternative result; i.e. the sample included 65 early-stage employees compared to 105 late stage employees. It can be hypothesised that the longer the employees participate in their respective share options schemes, the more they will financially benefit as revealed by Pamela et al (2003) in the literature. In addition, this notion that ESOP improves employee's income was amplified by senior employee's when compared to junior employees.

Again, this notion is logical given that the size of the option/share allocation is largely based on seniority. It is therefore concluded that ESOPs increase employees financial interests.

The outcome of the qualitative and quantitative approaches to the data analysis led to a resounding conclusion on both the spending and savings behaviours

following the implementation of ESOPs. All employees displayed similar patterns throughout the various data analysis techniques on the two behaviours.

An interesting observation was the early-stage employees and senior employees who both agreed that they enjoy additional income due to the issuing of ESOPs. However the spending and saving patterns of both groups are marginally different from those of their counterparts. It is logical for the late-stage and junior employees to continue with their patterns given that they disagreed on the question that they received additional income following the issuing of ESOPs.

Despite a significant correlation recorded between access to money and employee spending, an impression is created by employees that they spend cautiously. The significant correlation recorded between employee access to money and employee savings is supported by the employees at all levels and stages.

Therefore, it is concluded that the issuing of ESOPs result in marginal increases in the saving behaviours of employees.

7 FURTHER RESEARCH

The research concluded that the implementation of ESOPs may not have a positive impact on company performance. It is assumed that the aspects as listed below may have influenced the research findings and should be investigated further:

1. The research methodology should be able to sieve external factors that might influence company performance beyond individual employee contribution. Examples of these factors may be:

    a. Market influences such as commodity prices

    b. Economic factors such as interest rates linked to the South African business cycle related to the health of the world economy vis-à-vis the performance of a particular sector.

2. A more comprehensive alternative process of computing Tobin's Q should be considered.

3. The research should make a comparison between listed and non-listed companies to intimately study the individual employee productivity in the purest form versus company performance.

4. The impact of management philosophies (good or bad) in relation to company performance should be studied. In addition, the impact of education or the lack of it on the "prospective" owners could be a topic worthy of research.

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Woolworths in R292m BEE employee deal, *Mail & Guardian*, 21 May 2007.

APPENDIX 1
OVERVIEW OF ESOP TRANSACTIONS
(SOURCE-ESOP SHOP)

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
ABIL	ABIL's BEE transaction involved a grant of 4.3% of the company's stock to an investment vehicle (herein after referred to as "SPV") which raised additional funding from BEE investors and external funders to acquire a further 3% stake in the company. Employees, existing shareholders, customers and members of the public (all HDSA) were invited to subscribe for shares at between 15% and 40% of the value of the shares. Dividends earned on the shares will be reinvested over the scheme period in order to increase the stake held by the SPV to an unencumbered stake of at least 10% after 10 years. This scheme did not require a separate ESOP, but employees were accommodated as preferred participants in the SPV and were entitled to acquire up to 60% of the shares owned by the vehicle.	Ownership in the SPV is immediate and there is no 'vesting period', but the SPV shares cannot be sold **for five years**. After five years a participant can only sell his SPV shares to other HDSA parties for a further 5 years. **After ten years** it is anticipated that the ABIL shares would be unbundled to the SPV shareholders. An employee who left prior to the expiry of the 5 or 10 year periods, would be entitled to keep his shares in the SPV, but disposal is subject to the restrictions as set out above	The donation of shares to the value of c. R360m enabled the SPV to attract significant external funding at a rate of c. 9.8%. The funding in the structure accounted for less than 25% of the value and the weighted cost of funding is considerably lower than the 9.8%.	Participants would receive no dividends for the ten-year period. Dividends on the shares purchased by the SPV would be used to service the external funding or reinvested to acquire further shares.
ABSA	Employees participated in the transaction as part of the BEE consortium. Its stake in the consortium gave employees an effective 1% interest in ABSA. A general ESOP for all employees (not only HDSA) provided a further 1% of participation outside of the BEE consortium. Senior and executive management shared c.	Vesting over 5 years and lock in for a period of 7 years.	The option was structured such that the strike price varies depending on the spot price of ABSA shares at given future dates. The effect of this was that the maximum implied funding rate would be 7.5% per year	The participants will not earn dividends on the ordinary shares prior to the shares being acquired in terms of the options.

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	50% of the ESOP participation. The terms of the transaction equated to an option with a strike price that is variable depending on the price of ABSA shares at a future date. At the time of the announcement of the transaction, the value attributable to employees through (calculated using option pricing theory) their participation in the investment consortium was c. R78m, equating to an average amount per participant of R173k / employee (ABSA disclosed that 450+ participants in this scheme). It should however be assumed that this benefit was not shared equally between participants. The general scheme for all employees entitled each employee to 200 free shares at a value of c. R8, 400 (pre-tax) at the time.		in the event that the share price increased by a compound rate of at least 16% per year over the option period (an increase from R48 to R100 per share over 5 years). The strike price would however remain static should the share price increase at more than this rate and the 7.5% funding rate will not increase further. (the ABSA share price increased beyond the 5-year 'barrier level' within 18 months resulting in very significant upside for option holders)	
AngloGold Ashanti	ESOP for all employees in AngloGold's South African operations, including the corporate office, who are not participants of in any current share incentive scheme (i.e. Patterson grades A, B and C) – c.30, 000 employees, 91.5% HDSA. 1.4% of the then issued share capital was issued to beneficiaries. Each eligible beneficiary was allocated 30 "free shares" and 90	7-year term with vesting in five annual tranches from year 3.	7% applicable only to the loan shares	50% of dividends from loan shares will flow to beneficiaries. The balance will go towards servicing the 'loan'. Beneficiaries will receive net dividends after settling some of

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	"loan shares" at a 10% discount to the market value at the commencement of the scheme. Both classes of shares will have full voting and dividend rights. On each vesting date, eligible employees will receive the full benefit of the free shares and the loans shares will be calculated on the basis of the difference between the exercise price and the share price on the relevant vesting date, taking into account an escalation factor or 7% pa and reduced by any applicable dividend flow. 9 Trustees (1 AGA, 4 Union, 4 Independent). Trustees vote on behalf of beneficiaries.			the trust expenses. 100% of dividends from the free shares will flow to the beneficiaries
Discovery	The Discovery BEE transaction made provision for two ESOPs – the one similar to THGs LTIP scheme and the other similar to the SARS scheme. In terms of the first scheme, targeted employees would receive free shares which would vest after a period of time. The second scheme was an option scheme through which employees are allocated options to purchase shares at pre-determined prices. Two non-executive directors received free shares valued at c. R5m in recognition of the value and direction they contributed to the	Options vest in 25% tranches over four years from year two to year five	**No funding cost**. The free shares had no cost and the strike price of the shares acquired in terms of the option scheme had a strike price equal to the market value of the shares at the time of grant – i.e. no implied funding cost.	No dividends received until shares are owned by the employee following either the receipt of such shares as a grant or through the exercising of an option and subsequent purchase of the shares subject to the option.

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	process.			
Distell	Employees were the primary beneficiaries of Distell's 15% BEE transaction. Employees participated as 45% stakeholders in the BEE SPV which acquired 15% of Distell on a vendor-funded basis. As was the case in the ABSA and ABIL transaction, employees did not participate through a separate ESOP, but were involved as a key component of the BEE investment vehicle.	8 – 10 years	Inflation plus 7% less dividends.	As outright owners of the shares – on a funded basis – the SPV will be entitled to dividends, but dividends will be used to service the vendor loan.
Edcon	Employees were the sole beneficiaries of Edcon's 10.6% BEE transaction. Employees' participation was effectively through 'deep out of the money' options, but with access to periodical cash payments similar to dividends.	Vesting period of 3 and 6 years	c. **26%** for shares vesting in 3 years and **12.3%** for shares vesting in 6 years	Employees will receive artificial dividends semi-annually throughout the transaction period. These semi-annual payments accounted for 85% of the economic cost of the transaction (R455m in total) with the value of the options comprising the remaining 15%.
FirstRand	FirstRand black employees acquired 3.5% of the company through its BEE transaction which transferred a	Vesting of shares from the 4th year up to the 10th year of the scheme	80% prime less dividends received over	Dividends are used to service the vendor

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	total of 10% of the company to BEE parties. Both current and future employees will be eligible for the ESOP. All HDSA employees received free shares to the value of c. R6,000 at the outset of the transaction and the remainder of the stake was used to incentivise and retain targeted employees. Non-executive directors were granted up to 1 million shares each on a vendor-funded basis. Based on option pricing theory and certain assumptions, an option over 1m shares would have been worth c. R2.5m at the time of grant, but the subsequent increase in the FirstRand share price makes the current value of these rights worth multiples of their original value.	on a sliding scale basis. Lock up period of 10 years.	the funding period	funding provided to the employee investment vehicles.
Group 5	Group 5 sold 4.5% of its shares to an employee share scheme. The ESOP comprised a management scheme (comprising 87% of the shares in the ESOP) and a broad-based scheme for all employees. The management tranche was sold on loan account at market value and the loan will become repayable upon the vesting of the shares. This ESOP was established for the benefit of current as well as future managers.	2 – 4 years	None (interest rate was set equal to the dividend yield)	Dividends received will be equal to interest charged on the vendor loan and no residual cash flows will be available to employees prior to the purchase price of the shares being settled.

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	A broad-based scheme was established for non-management employees. Only existing employees qualified for this scheme and the value of the incentive amounted to R2, 000 per employee.			
Impala Platinum	Issue c.3% (2.86% HDSA) of Implats Ore Shares to Trust at market value. Consideration funded by SA Subsidiaries via interest-free capital contributions. All SA employees in Patterson A, B & C grades and any new employees who join within two years. Benefits of capital appreciation of shares will accrue to beneficiaries after payment of expenses, taxes and repayment of capital contributions. 9 trustees (1 Implats, 8 elected by beneficiaries, min 3 must be independent). Trustees vote on behalf of beneficiaries.	10 years	None (interest free capital contributions from SA subsidiaries)	
Kumba (Newco)	ESOP for all employees that do not currently participate in share incentive scheme. 3% stake with an option value per employee of c.R12, 000.	5 year term	8%	50% of dividends flow through to employees.
Medi-Clinic	Non-management employees of Medi-Clinic acquired a 4% stake in the company as a part if Medi-Clinic's 15% BEE transaction. The transaction was vendor funded by Medi-Clinic at the market price at	Employees will be locked in for 10-year lock in.	Not disclosed	Employees receive 20% of dividends for the 10 year period, with the remainder of the

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	the time of the transaction.			dividend utilised to repay the vendor funding.
Murray & Roberts	Murray and Roberts sold 10% of its shares to a number of broad-based trusts, two of which were established for the benefit of employees. One trust was for the benefit of HDSA mangers and the other for general employees. The HDSA executive trust acquired 3% of the shares on an interest free loan basis and 40% of this was allocated to current HDSA executives. The value of the 40% stake (effective 1.2%) amounted to c. R60m and using option pricing theory and certain assumptions, we estimate that the average value for each of the 120 HDSA executives would have amounted to R200k. It is however fair to assume that the benefits of the scheme were not shared proportionately between all 120 participants. The broad-based trust entitled employees to at least 200 shares each for no consideration amounting to c. R3, 200 per participant at the date of the transaction.	Staggered vesting in year 3, 4 and 5, but shares cannot be sold until 2015 – i.e. 10 year lock in.	Interest free.	Dividends are used to repay the vendor loan on the shares acquired by the executive trust – while participants will therefore not actually receive dividends until the loan is repaid, dividends are applied for the benefit of the participants.
Mutual & Federal	Mutual and Federal's ESOP comprises of two components – one which entitles targeted employees to free shares (similar to LTIP) and	4 – 6 years vesting with 5 – 8 year lock-in	Interest free	Dividends are received on the free shares, but only on the

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	another which entitles participants to share options (similar to SARS). Senior management received only free shares, middle management received 23% of their entitlement as free shares and the remainder through options while all other employees received limited participation through free shares. The scheme for all employees entitles each employee to free shares to the value of c, R7, 500.			shares under option once these are acquired.
Nedcor	As for the Mutual and Federal scheme, participants were entitled to free shares and share options. In terms of the senior management scheme, participants received 25% of their shares as a grant with the remainder of the shares being received as share options. The proportion of free shares for middle management (annual salary > R278k) was lower at 10% with 90% made up by share options. All employees also participated through a broad-based scheme in terms of which employees received shares to the value of R7, 500 for no consideration.	4 – 6 years vesting period, lock in period of 5 – 7 years	Interest free	Only to the extent that shares are owned – not for shares under option.
Old Mutual	Three separate schemes – one for senior black management, one for black middle management and one for all other staff. Senior black	3 – 6 years vesting, lock in up to 10 years. The lock in period was longest for senior	Interest free	

APPENDIX 1 : OVERVIEW OF ESOP TRANSACTIONS SOURCE - ESOP SHOP				
COMPANY	**DESCRIPTION**	**TERM**	**FUNDING RATE**	**DIVIDENDS**
	management participated through free shares only, middle management received 50% of shares as a grant (free shares) and the remainder through options while the general scheme granted free shares of R7, 500 to all qualifying employees..	management and shortest for the general scheme		
Shishen Iron Ore Company (SIOC)	ESOP for all employees below existing ESOP level. 3% stake with an n option value per employee of c.R12, 000.	2 x 4 year scheme	8%	50% of dividends flow through to employees.
Standard Bank and Liberty Life	ESOP acquired shares on a vendor-funded basis on the same terms as the third party investors.	10 year lock-in or until Charter review date if this is earlier	8.5%	Dividends used to service the vendor loan.
Woolworths	Woolworths employees will acquire approximately 10% of the group's ordinary issued share capital. Woolworths will at appropriate times issue Esos shares, up to a maximum of 89, 4-million shares, to the Woolworths Employee Share Ownership Trust (Esos trust). In the Esos Trust, a new class of participating convertible, redeemable, non-cumulative preference shares which will be held in an Employee Share Ownership (ESOS) Trust for the duration of the scheme	8 years	None disclosed	The ESOS payment will be equal to a percentage of the ordinary dividend, which percentage will increase over the term of the scheme to 100% in the penultimate year of the scheme.

APPENDIX 2

COMPANY MARKET CAPITALIZATION AND TOTAL ASSETS

Market Capitalization							
2001	2002	2003	2004	2005	2006	2007	2008
	20784.3	29199.8	49391.2	93744.5	68894	73572.1	
4006	2610	3604	6198	10590	11004	15590	20625
	334.6	551.1	992	1582.5	1555	1555	
	1373.8	2318.9	1653.8	2304.6	2377.8	2930.5	2242.8
	2314.8	3577.6	4.928E+09	5.293E+09	7091.1	7130.1	5594.1
	222799173	562302676	1.241E+09	1.082E+09	1.358E+09		
	154922.5	206154	200120.3	571985.4	645270	283342.5	
	43870.3	52103.3	51973.4	122283.3	269466.3	281704.4	
	46224.2	51583	86958.2	89909.8	75540.6	89077.8	
	591.6	1457.5	2422.9	3884.8	5072.1	6445.1	4045.1
	10735.3	15451.6	22729.6	30238.7	41213.9	21957	9478.8
	92308.7	136488.5	206954.1	277641.9	400950.5	512387.3	396291.7
	336	386.4		781.2	1554	1545.6	798
	254.8	463	808.6	2279.1	2150.9	1450	430
	122.2	278.1		612.8	207.8	58.6	
	272.2	459.7	625.1	517.3	831.3	983.2	574.7
	40471095	95107074	313650989	677.9	1143.3	2074.5	947.2
	2415.6	6054.2	5123	7906	11201.5	13285	9828.7
	3239.9	3239.9	4726.5	7106.2	10274.4	12440.9	10255.7
	2623.8	7188.2	13682.5	21502.7	25357.5		
	113908501	141304216	302794750	432.6	541.6	687.1	471.4
	245.1	422.2	426.3	742.1	1212.2	1567.4	
	38768.3	52419.1	72999.4	112300.6	138619.8	111331.1	90827.2
	508.1	883.5	656.4	502.8	435.3	335.9	
	34693.4	34518.2	35691.3	66135.3	66189.4	64588.8	60033
	1655.7	2923	3331.1	5834.9	6978.6	5255.8	
	14160.5	19915.1	19543.6	39436.9	40499.4	28194.4	40803.2
	2097.3	2603.6	2718.1	5636.3	6626.2	7814.1	7892.2
	23963.1	31545.1	35026.6	78265.3	143851.3	149680.8	85263.1
		5411.9	7831.9	13771.9	4105.2	13456.5	
	1111.3	1492.3	2313.1	3772.8	4930.8	3533.7	2774.9
	3944.4	6962.8	10731.8	16625.2	15895.4	9180	6248.8
	14619.9	17931.5	24740.7	22878.2	21212.3		
	11314.3	17119.7	16286.3	40692.3	67798.8	20329.8	
	2660.5	4407.3	5356	8143.4	9897.9	13580	12067.8
	910.2	1205		2043.9		884.7	
	20159.3	48271.1	73149.9	163918.5	229379.6	202679.1	
	7256	9133.6	10168.6	10923.6	14549.3	14103.6	8687.5
	16552.7	29592.4	57912.6	65005.4	53936.3	44783.7	
	1403.8	1756	1488.5	1680.4	1882.7	2353.8	2669.7
	45771.1	56581.3	117641.6	128445.9	16597.2	41911	
	686.2	1325.5	1899.7	1992.3	2981.7	3252.8	2292.8
	8795.5	11101.5	10962.3	14681.2	16713.3	19040.8	18225.9
	26.4	38.3	33	77.9	110.9		

	880.1	1481.6	1790.4	2652.6	4693.1	5800.1	5355.2
	52738	70035.5	98030.6	158715.7	151404.8	213786.2	178306.9
	3043.5	5271.8	7527.2	12228.3	15081.6	23396.8	28804.4
	53853.8	82337.5	114899.2	144708	134589	126575.6	
	5045.8	9758.1	15091.5	25190.2	28602	26184.6	17186.2
	1828.7	3933.3	4210.4	5182	5384.4	4696.2	911
	1253.8	1228.9	1104.4	1411.6	2009.4		
	1843.7	2863.5	2.299E+09	3.327E+09	4811.6	3673	
	135.2	318.2	318.2	465.4	1247.6	1220.5	538.1
	4852.9	6783.9	8644.4	14528.3	19586.7	14384.2	10150.9

TOTAL ASSETS									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
1			247016	269020	306878	409555	494743	640288	
2	5772.31	5350.918	7023.898	6478.142	7335	7309	8163	11752	29392
3			362	340.7	377.1	438.5	486.4	621	
4			2388	3343.7	2650.6	3516.6	3618.1	6799	8739
5			1684.8	2102	2.251E+09	2.24E+09	2605	2500	3191
6			467569	563015	762417	792396	937490		
7			269658.1	277160	281971.6	308670.9	306845.1	290741	
8			21601.3	28064.8	32777.2	36303.3	48455.6	54047	
9			30788	29637	43881	49722	59143	108701	
10			1371.8	1297.7	1710.9	1660.6	2029.3	2707	3008
11			25310	22111	24757	25085	31559	27920	30879
12			299752.6	255621.6	208600	274261.7	294897.4	385352	567763
13			789.5	717.7		801.7	1059.6	1144	1442
14			522.1	710	842.9	1109	1586	2184	2067
15			160.2	166.8		306.6	630.2	521	
16			230.5	281.2	277.8	324.6	420.4	426	507
17			113.089	115.571	127.812	184.4	223.4	317	449
18			12841.4	8047	7887	9108.5	12034.8	13601	18797
19			4361.5	4648.2	4811.6	4956.1	5403.4	5749	6505
20			4151.2	4170	5041.7	6570	7833		
21			77726	82131	148640	167.3	224.7	310	386
22			369	396.1	467	528.4	671.3	841.3	
23			373550.7	395030	424263	460595	582566	720814	819265
24			1569.6	1029.3	803.8	711.8	5787.5	6030.3	
25			20371.3	19278.7	23268	23997.4	30493.5	92926	103989
26			1238.2	1162.1	1231.3	1255	1675	2974	
27			14076	14989	27792	28399	29873	45125	49299
28			5962.9	6002.2	5208.7	4346.5	4595.1	5413	7392
29			14772.4	16269.3	17028.5	20816.4	23304.6	48938	61091
30				201394	175437.2	208063.2	173656	373328	
31			554.6	626.1	801.1	960.4	1113	1337	1558
32			4160	6454	7337	8106	9378	9067	7981
33			86066.3	96281.9	109326	162915	199625		
34			14400	12472.2	11259.7	12915.2	16290.8	25627	
35			2167.3	2628.4	3082.9	3599.3	3426	4950	35375
36			987.9	1030.2		1429.9		1866	
37			12904.4	15441	20244	36714	54147	75273	
38			12290.1	9981.9	9822.4	9305	11268.5	11876	14991
39			267067	304349	321624	346830	419785	483541	
40			1116.8	1243.6	1396.9	1403.3	1262.8	1436	1504
41			661069.4	667750	703880.4	862824.2	25500	1869986	
42			970.4	1300.6	1644.9	2052.1	2039.9	2683	3914
43			4215.4	4515.2	5161.9	5460	5757.4	6737	7974
44			110.5	90.7	65.3	55.7	77.8		

45			1242	1643.2	1829.8	1957.8	2456.4	2790	3541
46			62523	67688	71589	85571	101462	117010	139781
47			6199.5	6763.8	7702.2	8126.5	9456.9	11332	14262
48			388848	538996	628528	752507	965038	1174366	
49			8094	9004.2	12896.4	20146.9	23587.1	26519	33794
50			3281.4	3326.8	3959.1	5133.4	6639.1	7603	8725
51			824.1	925.2	563	590.9	775.1		
52			8950.6	7249.1	7.923E+09	9.2E+09	11334.9	9312	
53			200.2	267.6	267.6	258.9	267.6	510	577
54			4029.4	4740.7	5655.3	6825.3	8484.9	10063	10594

APPENDIX 3

TOBIN'S Q

LEGEND	
BEFORE	AFTER

Impact Of ESOPs on Company Performance									
No	2000	2001	2002	2003	2004	2005	2006	2007	2008
1			0.08	0.11	0.16	0.23	0.14	0.11	
2	0.70	0.75	0.37	0.56	0.84	1.45	1.35	1.33	0.70
3			0.92	1.62	2.63	3.61	3.20	2.50	
4			0.58	0.69	0.62	0.66	0.66	0.43	0.26
5			1.37	1.70	2.19	2.36	2.72	2.85	1.75
6			0.48	1.00	1.63	1.37	1.45		
7			0.57	0.74	0.71	1.85	2.10	0.97	
8			2.03	1.86	1.59	3.37	5.56	5.21	
9			1.50	1.74	1.98	1.81	1.28	0.82	
10			0.43	1.12	1.42	2.34	2.50	2.38	1.34
11			0.42	0.70	0.92	1.21	1.31	0.79	0.31
12			0.31	0.53	0.99	1.01	1.36	1.33	0.70
13			0.43	0.54		0.97	1.47	1.35	0.55
14			0.49	0.65	0.96	2.06	1.36	0.66	0.21
15			0.76	1.67		2.00	0.33	0.11	
16			1.18	1.63	2.25	1.59	1.98	2.31	1.13
17			0.36	0.82	2.45	3.68	5.12	6.54	2.11
18			0.19	0.75	0.65	0.87	0.93	0.98	0.52
19			0.74	0.70	0.98	1.43	1.90	2.16	1.58
20			0.63	1.72	2.71	3.27	3.24		
21			1.47	1.72	2.04	2.59	2.41	2.22	1.22
22			0.66	1.07	0.91	1.40	1.81	1.86	
23			0.10	0.13	0.17	0.24	0.24	0.15	0.11
24			0.32	0.86	0.82	0.71	0.08	0.06	
25			1.70	1.79	1.53	2.76	2.17	0.70	0.58
26			1.34	2.52	2.71	4.65	4.17	1.77	
27			1.01	1.33	0.70	1.39	1.36	0.62	0.83
28			0.35	0.43	0.52	1.30	1.44	1.44	1.07
29			1.62	1.94	2.06	3.76	6.17	3.06	1.40
30				0.03	0.04	0.07	0.02	0.04	
31			2.00	2.38	2.89	3.93	4.43	2.64	1.78
32			0.95	1.08	1.46	2.05	1.69	1.01	0.78
33			0.17	0.19	0.23	0.14	0.11		
34			0.79	1.37	1.45	3.15	4.16	0.79	
35			1.23	1.68	1.74	2.26	2.89	2.74	0.34
36			0.92	1.17		1.43		0.47	
37			1.56	3.13	3.61	4.46	4.24	2.69	
38			0.59	0.92	1.04	1.17	1.29	1.19	0.58
39			0.06	0.10	0.18	0.19	0.13	0.09	
40			1.26	1.41	1.07	1.20	1.49	1.64	1.78
41			0.07	0.08	0.17	0.15	0.65	0.02	
42			0.71	1.02	1.15	0.97	1.46	1.21	0.59
43			2.09	2.46	2.12	2.69	2.90	2.83	2.29
44			0.24	0.42	0.51	1.40	1.43		
45			0.71	0.90	0.98	1.35	1.91	2.08	1.51
46			0.84	1.03	1.37	1.85	1.49	1.83	1.28
47			0.49	0.78	0.98	1.50	1.59	2.06	2.02
48			0.14	0.15	0.18	0.19	0.14	0.11	
49			0.62	1.08	1.17	1.25	1.21	0.99	0.51
50			0.56	1.18	1.06	1.01	0.81	0.62	0.10
51			1.52	1.33	1.96	2.39	2.59		
52			0.21	0.40	0.29	0.36	0.42	0.39	
53			0.68	1.19	1.19	1.80	4.66	2.39	0.93
54			1.20	1.43	1.53	2.13	2.31	1.43	0.96

APPENDIX 4

QUESTIONNAIRE AND RESPONSES INCLUDING RAW DATA

The Impact of Employee Shareholding Options on Company Performance in South Africa

1. Which company do you work for?		
	Response Percent	Response Count
FNB	4.7%	8
Liberty Life	1.8%	3
Sasol	2.4%	4
AngloGold Ashante	0.6%	1
Woolworths	10.0%	17
MTN Group	6.5%	11
Standard Bank	9.4%	16
Nedbank	7.6%	13
ABSA	2.4%	4
Anglo Platinum	**26.5%**	**45**
AngloGold Ashanti	0.0%	0
BHP Billiton	0.6%	1
Discovery	1.8%	3
Edcon	3.5%	6
FirstRand	1.8%	3
Group 5	1.2%	2
Impala Platinum	1.2%	2
Investec Group Limited	0.6%	1
Medi-Clinic	1.2%	2

Pick and Pay	1.8%	3
Old Mutual	0.6%	1
City Lodge	1.8%	3
Airports Company South Africa (ACSA)	0.6%	1
Anglo American	7.6%	13
Other (please specify)	4.1%	7
	answered question	**170**
	skipped question	**0**

2. How long have you worked for your company?

	Response Percent	Response Count
Less than 3 years	27.1%	46
More than 3 years	**72.9%**	**124**
	answered question	**170**
	skipped question	**0**

3. What level is your position in the company?		
	Response Percent	Response Count
Lower Level Employee	21.2%	36
Junior Management	22.9%	39
Middle Management	**29.4%**	**50**
Senior Management	25.3%	43
Executive	1.2%	2
Director	0.0%	0
	answered question	170
	skipped question	0

4. When did you receive your Shares/Options?		
	Response Percent	Response Count
Less than 3 years ago	**61.8%**	**105**
More than 3 years ago	38.2%	65
	answered question	170
	skipped question	0

5. Please rate the following aspects of Shares/Options related to you:-

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Rating Average	Response Count
Do you have more access to money because you received Shares/Options	18.2% (31)	**38.8% (66)**	17.1% (29)	19.4% (33)	6.5% (11)	2.57	170
Generally, do you spend more money because you received Shares/Options	25.9% (44)	**44.1% (75)**	15.3% (26)	12.9% (22)	1.8% (3)	2.21	170
Generally, do you save more money because you received Shares/Options	17.1% (29)	**37.6% (64)**	23.5% (40)	17.1% (29)	4.7% (8)	2.55	170
Do you think that your contribution improves company performance	0.6% (1)	3.5% (6)	12.4% (21)	**44.1% (75)**	39.4% (67)	4.18	170
Are you offered an opportunity to give your ideas to improve company performance	2.9% (5)	15.3% (26)	19.4% (33)	**42.4% (72)**	20.0% (34)	3.61	170
Are you more motivated because you received Shares/Options	7.1% (12)	21.8% (37)	17.6% (30)	**35.9% (61)**	17.6% (30)	3.35	170
Do you feel a sense of belonging to your company because you received Shares/Options	5.3% (9)	17.6% (30)	17.1% (29)	**40.6% (69)**	19.4% (33)	3.51	170
Do you feel empowered because you received Shares/Options	8.8% (15)	18.2% (31)	27.1% (46)	**27.6% (47)**	18.2% (31)	3.28	170
Are you happy in the company because you received Shares/Options	5.9% (10)	21.2% (36)	25.9% (44)	**30.0% (51)**	17.1% (29)	3.31	170
Do you intend to stay longer at the company because you received Shares/Options	11.2% (19)	20.6% (35)	24.7% (42)	**25.3% (43)**	18.2% (31)	3.19	170
					answered question		**170**
					skipped question		**0**

APPENDIX 5
RESPONSES OF ALL-
EARLY vs. LATE STAGE COMPARISON

The Impact of Employee Shareholding Options on Company Performance in South Africa

1. Which company do you work for?

	When did you receive your Shares/Options?		
	Less than 3 years ago	More than 3 years ago	Response Totals
FNB	1.0% (1)	10.8% (7)	4.7% (8)
Liberty Life	2.9% (3)	0.0% (0)	0.0% (3)
Sasol	3.8% (4)	0.0% (0)	2.4% (4)
AngloGold Ashante	1.0% (1)	0.0% (0)	0.6% (1)
Woolworths	16.2 % (17)	0.0% (0)	10.0% (17)
MTN Group	5.7% (6)	7.7% (5)	6.5% (11)
Standard Bank	5.7% (6)	15.4% (10)	9.4% (16)
Nedbank	2.9% (3)	15.4% (10)	7.6% (13)
ABSA	3.8% (4)	0.0% (0)	2.4% (4)
Anglo Platinum	**22.9% (24)**	**32.3% (21)**	**26.5% (45)**
AngloGold Ashanti	0.0% (0)	0.0% (0)	0.0% (0)
BHP Billiton	0.0% (0)	1.5% (1)	0.6% (1)

Discovery	2.9% (3)	0.0% (0)	1.8% (3)
Edcon	1.9% (2)	6.2% (4)	3.5% (6)
FirstRand	1.9% (2)	1.5% (1)	1.8% (3)
Group 5	1.9% (2)	0.0% (0)	1.2% (2)
Impala Platinum	1.0% (1)	1.5% (1)	1.2% (2)
Investec Group Limited	0.0% (0)	1.5% (1)	0.6% (1)
Medi-Clinic	1.9% (2)	0.0% (0)	1.2% (2)
Pick and Pay	2.9% (3)	0.0% (0)	1.8% (3)
Old Mutual	1.0% (1)	0.0% (0)	0.6% (1)
City Lodge	2.9% (3)	0.0% (0)	1.8% (3)
Airports Company South Africa (ACSA)	1.0% (1)	0.0% (0)	0.6% (1)
Anglo American	10.5% (11)	3.1% (2)	7.6% (13)
Other (please specify)	5 replies (4.8%)	2 replies (3.1%)	4.1% (7)
answered question	105	65	**170**
		skipped question	**0**

2. How long have you worked for your company?

	When did you receive your Shares/Options?		
	Less than 3 years ago	**More than 3 years ago**	**Response Totals**
Less than 3 years	43.8% (46)	0.0% (0)	27.1% (46)
More than 3 years	**56.2% (59)**	**100.0% (65)**	**72.9% (124)**
answered question	105	65	**170**
		skipped question	**0**

3. What level is your position in the company?

	When did you receive your Shares/Options?		
	Less than 3 years ago	**More than 3 years ago**	**Response Totals**
Lower Level Employee	**27.6% (29)**	10.8% (7)	21.2% (36)
Junior Management	26.7% (28)	16.9% (11)	22.9% (39)
Middle Management	**27.6% (29)**	32.3% (21)	**29.4% (50)**
Senior Management	16.2% (17)	**40.0% (26)**	25.3% (43)
Executive	1.9% (2)	0.0% (0)	1.2% (2)

Director	0.0% (0)	0.0% (0)	0.0% (0)
answered question	105	65	**170**
		skipped question	**0**

4. When did you receive your Shares/Options?

	When did you receive your Shares/Options?		
	Less than 3 years ago	**More than 3 years ago**	**Response Totals**
Less than 3 years ago	**100.0% (105)**	0.0% (0)	**61.8% (105)**
More than 3 years ago	0.0% (0)	**100.0% (65)**	38.2% (65)
answered question	105	65	**170**
		skipped question	**0**

5. Please rate the following aspects of Shares/Options related to you:-

		When did you receive your Shares/Options?		
		Less than 3 years ago	More than 3 years ago	Response Totals
Do you have more access to money because you received Shares/Options	**Strongly Disagree**	19.0% (20)	16.9% (11)	
	Disagree	**42.9% (45)**	**32.3% (21)**	
	Neutral	21.0% (22)	10.8% (7)	
	Agree	16.2% (17)	24.6% (16)	
	Strongly Agree	1.0% (1)	15.4% (10)	
rating average		2.37 (105)	2.89 (65)	2.57(170)
Generally, do you spend more money because you received Shares/Options	**Strongly Disagree**	24.8% (26)	27.7% (18)	
	Disagree	**52.4% (55)**	**30.8% (20)**	
	Neutral	12.4% (13)	20.0% (13)	
	Agree	10.5% (11)	16.9% (11)	
	Strongly Agree	0.0% (0)	4.6% (3)	

rating average		2.09 (105)	2.40 (65)	2.21 (170)
Generally, do you save more money because you received Shares/Options	**Strongly Disagree**	15.2% (16)	20.0% (13)	
	Disagree	**42.9% (45)**	**29.2% (19)**	
	Neutral	23.8% (25)	23.1% (15)	
	Strongly Agree	0.0% (0)	0.0% (0)	
rating average		3.00 (3)	2.79 (14)	2.82 (17)
Do you think that your contribution improves company performance	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	33.3% (1)	0.0% (0)	
	Neutral	0.0% (0)	7.1% (1)	
	Agree	0.0% (0)	28.6% (4)	
	Strongly Agree	**66.7% (2)**	**57.1% (8)**	
rating average		4.00 (3)	4.29 (14)	4.24 (17)

Are you offered an opportunity to give your ideas to improve company performance	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	0.0% (0)	21.4% (3)	
	Neutral	33.3% (1)	14.3% (2)	
	Agree	**66.7% (2)**	**28.6% (4)**	
	Strongly Agree	0.0% (0)	**28.6% (4)**	
rating average		3.67 (3)	3.50 (14)	3.53 (17)
Are you more motivated because you received Shares/Options	**Strongly**	0.0% (0)	7.1% (1)	
	Disagree	**33.3% (1)**	14.3% (2)	
	Neutral	**33.3% (1)**	0.0% (0)	
	Agree	**33.3% (1)**	**42.9% (6)**	
	Strongly	0.0% (0)	35.7% (5)	
rating average		3.00 (3)	3.86 (14)	3.71 (17)
Do you feel a sense of belonging to your company because you received Shares/Options	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	**33.3% (1)**	0.0% (0)	

	Neutral	0.0% (0)	21.4% (3)	
	Agree	**33.3%** **(1)**	**42.9%** **(6)**	
	Strongly Agree	**33.3%** **(1)**	28.6% (4)	
rating average		3.67 (3)	3.86 (14)	3.82 (17)
Do you feel empowered because you received Shares/Options	**Strongly Disagree**	0.0% (0)	14.3% (2)	
	Disagree	0.0% (0)	0.0% (0)	
	Neutral	**66.7%** **(2)**	21.4% (3)	
	Agree	33.3% (1)	**35.7%** **(5)**	
	Strongly Agree	0.0% (0)	28.6% (4)	
rating average		3.33 (3)	3.64 (14)	3.59 (17)
Are you happy in the company because you received Shares/Options	**Strongly Disagree**	0.0% (0)	14.3% (2)	
	Disagree	**66.7%** **(2)**	0.0% (0)	
	Neutral	0.0% (0)	**35.7%** **(5)**	
	Agree	33.3% (1)	21.4% (3)	

	Strongly Agree	0.0% (0)	28.6% (4)	
	rating average	2.67	3.50	3.35

APPENDIX 6
RESPONSES OF ALL EMPLOYEES BY LEVEL

The Impact of Employee Shareholding Options on Company Performance in South Africa

1. Which company do you work for?

	What level is your position in the company?				
	Lower Level Employee	Junior Management	Middle Management	Senior Management	Response Totals
FNB	0.0% (0)	2.6% (1)	2.0% (1)	14.0% (6)	4.8% (8)
Liberty Life	5.6% (2)	2.6% (1)	0.0% (0)	0.0% (0)	1.8% (3)
Sasol	0.0% (0)	5.1% (2)	4.0% (2)	0.0% (0)	2.4% (4)
AngloGold Ashante	0.0% (0)	2.6% (1)	0.0% (0)	0.0% (0)	0.6% (1)
Woolworths	**30.6% (11)**	**12.8% (5)**	0.0% (0)	2.3% (1)	10.1% (17)
MTN Group	5.6% (2)	10.3% (4)	6.0% (3)	4.7% (2)	6.5% (11)
Standard Bank	2.8% (1)	**12.8% (5)**	14.0% (7)	7.0% (3)	9.5% (16)
Nedbank	19.4% (7)	5.1% (2)	8.0% (4)	0.0% (0)	7.7% (13)
ABSA	2.8% (1)	2.6% (1)	4.0% (2)	0.0% (0)	2.4% (4)
Anglo Platinum	5.6% (2)	7.7% (3)	**32.0% (16)**	**53.5% (23)**	**26.2% (44)**
AngloGold Ashanti	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
BHP Billiton	0.0% (0)	0.0% (0)	0.0% (0)	2.3% (1)	0.6% (1)

Discovery	0.0% (0)	5.1% (2)	2.0% (1)	0.0% (0)	1.8% (3)
Edcon	5.6% (2)	0.0% (0)	6.0% (3)	2.3% (1)	3.6% (6)
FirstRand	0.0% (0)	2.6% (1)	2.0% (1)	2.3% (1)	1.8% (3)
Group 5	0.0% (0)	0.0% (0)	0.0% (0)	4.7% (2)	1.2% (2)
Impala Platinum	0.0% (0)	0.0% (0)	4.0% (2)	0.0% (0)	1.2% (2)
Investec Group Limited	0.0% (0)	2.6% (1)	0.0% (0)	0.0% (0)	0.6% (1)
Medi-Clinic	2.8% (1)	2.6% (1)	0.0% (0)	0.0% (0)	1.2% (2)
Pick and Pay	8.3% (3)	0.0% (0)	0.0% (0)	0.0% (0)	.8% (3)
Old Mutual	0.0% (0)	2.6% (1)	0.0% (0)	0.0% (0)	0.6% (1)
City Lodge	2.8% (1)	5.1% (2)	0.0% (0)	0.0% (0)	1.8% (3)
Airports Company South Africa (ACSA)	0.0% (0)	2.6% (1)	0.0% (0)	0.0% (0)	0.6% (1)
Anglo American	2.8% (1)	7.7% (3)	14.0% (7)	4.7% (2)	7.7% (13)
Other (please specify)	2 replies	2 replies	1 reply	1 reply	3.6% (6)
answered question	36	39	50	43	**168**
				skipped question	**0**

2. How long have you worked for your company?

	What level is your position in the company?				
	Lower Level Employee	Junior Management	Middle Management	Senior Management	Response Totals
Less than 3 years	36.1% (13)	33.3% (13)	18.0% (9)	20.9% (9)	26.2% (44)
More than 3 years	**63.9% (23)**	**66.7% (26)**	**82.0% (41)**	**79.1% (34)**	**73.8% (124)**
answered question	36	39	50	43	**168**
				skipped question	**0**

3. What level is your position in the company?

	What level is your position in the company?				
	Lower Level Employee	Junior Management	Middle Management	Senior Management	Response Totals
Lower Level Employee	**100.0% (36)**	0.0% (0)	0.0% (0)	0.0% (0)	21.4% (36)
Junior Management	0.0% (0)	**100.0% (39)**	0.0% (0)	0.0% (0)	23.2% (39)
Middle Management	0.0% (0)	0.0% (0)	**100.0% (50)**	0.0% (0)	**29.8% (50)**
Senior Management	0.0% (0)	0.0% (0)	0.0% (0)	**100.0% (43)**	25.6% (43)
Executive	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Director	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
answered question	36	39	50	43	**168**

skipped question	**0**

4. When did you receive your Shares/Options?

	What level is your position in the company?				
	Lower Level Employee	**Junior Management**	**Middle Management**	**Senior Management**	**Response Totals**
Less than 3 years ago	**80.6% (29)**	**71.8% (28)**	**58.0% (29)**	39.5% (17)	**61.3% (103)**
More than 3 years ago	19.4% (7)	28.2% (11)	42.0% (21)	**60.5% (26)**	38.7% (65)
answered question	36	39	50	43	**168**
				skipped question	**0**

5. Please rate the following aspects of Shares/Options related to you:-

		What level is your position in the company?				
		Lower Level Employee	Junior Management	Middle Management	Senior Management	Response Totals
Do you have more access to money because you received Shares/Options	**Strongly Disagree**	33.3% (12)	10.3% (4)	16.0% (8)	14.0% (6)	
	Disagree	**36.1% (13)**	**51.3% (20)**	**46.0% (23)**	20.9% (9)	
	Neutral	19.4% (7)	20.5% (8)	16.0% (8)	14.0% (6)	
	Agree	11.1% (4)	15.4% (6)	12.0% (6)	**39.5% (17)**	
	Strongly Agree	0.0% (0)	2.6% (1)	10.0% (5)	11.6% (5)	
rating average		2.08 (36)	2.49 (39)	2.54 (50)	3.14 (43)	2.58 (168)
Generally, do you spend more money because you received Shares/Options	**Strongly Disagree**	33.3% (12)	23.1% (9)	20.0% (10)	25.6% (11)	
	Disagree	**38.9% (14)**	**53.8% (21)**	**52.0% (26)**	**32.6% (14)**	
	Neutral	19.4% (7)	10.3% (4)	10.0% (5)	23.3% (10)	
	Agree	8.3% (3)	10.3% (4)	16.0% (8)	16.3% (7)	

	Strongly Agree	0.0% (0)	2.6% (1)	2.0% (1)	2.3% (1)	
rating average		2.03 (36)	2.15 (39)	2.28 (50)	2.37 (43)	2.22 (168)
Generally, do you save more money because you received Shares/Options	**Strongly Disagree**	22.2% (8)	17.9% (7)	14.0% (7)	16.3% (7)	
	Disagree	**25.0% (9)**	**43.6% (17)**	**48.0% (24)**	**32.6% (14)**	
	Neutral	**25.0% (9)**	17.9% (7)	28.0% (14)	23.3% (10)	
	Agree	**25.0% (9)**	12.8% (5)	8.0% (4)	20.9% (9)	
	Strongly Agree	2.8% (1)	7.7% (3)	2.0% (1)	7.0% (3)	
rating average		2.61 (36)	2.49 (39)	2.36 (50)	2.70 (43)	2.53 (168)
Do you think that your contribution improves company performance	**Strongly Disagree**	2.8% (1)	0.0% (0)	0.0% (0)	0.0% (0)	
	Disagree	11.1% (4)	2.6% (1)	2.0% (1)	0.0% (0)	
	Neutral	19.4% (7)	23.1% (9)	6.0% (3)	4.7% (2)	
	Agree	**36.1% (13)**	**38.5% (15)**	**58.0% (29)**	41.9% (18)	
	Strongly Agree	30.6% (11)	35.9% (14)	34.0% (17)	**53.5% (23)**	
rating average		3.81 (36)	4.08 (39)	4.24 (50)	4.49 (43)	4.17 (168)

Are you offered an opportunity to give your ideas to improve company performance	**Strongly Disagree**	8.3% (3)	0.0% (0)	4.0% (2)	0.0% (0)	
	Disagree	22.2% (8)	17.9% (7)	20.0% (10)	2.3% (1)	
	Neutral	**33.3% (12)**	17.9% (7)	24.0% (12)	4.7% (2)	
	Agree	**33.3% (12)**	**41.0% (16)**	**36.0% (18)**	**60.5% (26)**	
	Strongly Agree	2.8% (1)	23.1% (9)	16.0% (8)	32.6% (14)	
rating average		3.00 (36)	3.69 (39)	3.40 (50)	4.23 (43)	3.60 (168)
Are you more motivated because you received Shares/Options	**Strongly Disagree**	11.1% (4)	2.6% (1)	10.0% (5)	4.7% (2)	
	Disagree	22.2% (8)	25.6% (10)	22.0% (11)	18.6% (8)	
	Neutral	25.0%	17.9%	22.0%	4.7%	
	Agree	**27.8% (10)**	**35.9% (14)**	**36.0% (18)**	**44.2% (19)**	
	Strongly Agree	13.9% (5)	17.9% (7)	10.0% (5)	27.9% (12)	
rating average		3.11 (36)	3.41 (39)	3.14 (50)	3.72 (43)	3.35 (168)
Do you feel a sense of belonging to your company because you received Shares/Options	**Strongly Disagree**	11.1% (4)	0.0% (0)	6.0% (3)	4.7% (2)	
	Disagree	19.4% (7)	23.1% (9)	18.0% (9)	11.6% (5)	

	Neutral	25.0% (9)	12.8% (5)	20.0% (10)	11.6% (5)	
	Agree	**30.6% (11)**	**43.6% (17)**	**42.0% (21)**	**44.2% (19)**	
	Strongly Agree	13.9% (5)	20.5% (8)	14.0% (7)	27.9% (12)	
rating average		3.17 (36)	3.62 (39)	3.40 (50)	3.79 (43)	3.50 (168)
Do you feel empowered because you received Shares/Options	**Strongly Disagree**	11.1% (4)	0.0% (0)	16.0% (8)	7.0% (3)	
	Disagree	16.7% (6)	20.5% (8)	26.0% (13)	9.3% (4)	
	Neutral	**41.7% (15)**	23.1% (9)	18.0% (9)	27.9% (12)	
	Agree	19.4% (7)	25.6% (10)	**32.0% (16)**	**32.6% (14)**	
	Strongly Agree	11.1% (4)	**30.8% (12)**	8.0% (4)	23.3% (10)	
rating average		3.03 (36)	3.67 (39)	2.90 (50)	3.56 (43)	3.27 (168)
Are you happy in the company because you received Shares/Options	**Strongly Disagree**	11.1% (4)	0.0% (0)	4.0% (2)	9.3% (4)	
	Disagree	22.2% (8)	**35.9%**	20.0% (10)	9.3% (4)	
	Neutral	**36.1% (13)**	25.6% (10)	28.0% (14)	14.0% (6)	
	Agree	19.4% (7)	17.9% (7)	**34.0% (17)**	**46.5% (20)**	

	Strongly Agree	11.1% (4)	20.5% (8)	14.0% (7)	20.9% (9)	
rating average		2.97 (36)	3.23 (39)	3.34 (50)	3.60 (43)	3.30 (168)
Do you intend to stay longer at the company because you received Shares/Options	**Strongly Disagree**	**25.0% (9)**	10.3% (4)	6.0% (3)	7.0% (3)	
	Disagree	**25.0% (9)**	**25.6% (10)**	24.0% (12)	9.3% (4)	
	Neutral	22.2% (8)	23.1% (9)	**30.0% (15)**	23.3% (10)	
	Agree	13.9% (5)	**25.6% (10)**	24.0% (12)	**34.9% (15)**	
	Strongly Agree	13.9% (5)	15.4% (6)	16.0% (8)	25.6% (11)	
rating average		2.67 (36)	3.10 (39)	3.20 (50)	3.63 (43)	3.17 (168)
answered question		36	39	50	43	**168**
					skipped question	**0**

APPENDIX 7
RESPONSES OF ANGLO PLATINUM EMPLOYEES EARLY vs. LATE STAGE

The Impact of Employee Shareholding Options on Company Performance in South Africa

1. Which company do you work for?

	When did you receive your Shares/Options?		
	Less than 3 years ago	More than 3 years ago	Response Totals
FNB	0.0% (0)	0.0% (0)	0.0% (0)
Liberty Life	0.0% (0)	0.0% (0)	0.0% (0)
Sasol	0.0% (0)	0.0% (0)	0.0% (0)
AngloGold Ashante	0.0% (0)	0.0% (0)	0.0% (0)
Woolworths	0.0% (0)	0.0% (0)	0.0% (0)
MTN Group	0.0% (0)	0.0% (0)	0.0% (0)
Standard Bank	0.0% (0)	0.0% (0)	0.0% (0)
Nedbank	0.0% (0)	0.0% (0)	0.0% (0)
ABSA	0.0% (0)	0.0% (0)	0.0% (0)
Anglo Platinum	**100.0% (24)**	**100.0% (21)**	**100.0% (45)**
AngloGold Ashanti	0.0% (0)	0.0% (0)	0.0% (0)
BHP Billiton	0.0% (0)	0.0% (0)	0.0% (0)

Discovery	0.0% (0)	0.0% (0)	0.0% (0)
Edcon	0.0% (0)	0.0% (0)	0.0% (0)
FirstRand	0.0% (0)	0.0% (0)	0.0% (0)
Group 5	0.0%	0.0%	0.0%
Impala Platinum	0.0% (0)	0.0% (0)	0.0% (0)
Investec Group Limited	0.0% (0)	0.0% (0)	0.0% (0)
Medi-Clinic	0.0% (0)	0.0% (0)	0.0% (0)
Pick and Pay	0.0% (0)	0.0% (0)	0.0% (0)
Old Mutual	0.0% (0)	0.0% (0)	0.0% (0)
City Lodge	0.0% (0)	0.0% (0)	0.0% (0)
Airports Company South Africa (ACSA)	0.0% (0)	0.0% (0)	0.0% (0)
Anglo American	0.0% (0)	0.0% (0)	0.0% (0)
Other (please specify)	0 replies (0.0%)	0 replies (0.0%)	0.0% (0)
answered question	24	21	**45**
		skipped question	**0**

2. How long have you worked for your company?

	When did you receive your Shares/Options?		
	Less than 3 years ago	More than 3 years ago	Response Totals
Less than 3 years	**50.0% (12)**	0.0% (0)	26.7% (12)
More than 3 years	**50.0% (12)**	**100.0% (21)**	**73.3% (33)**
answered question	24	21	**45**
		skipped question	**0**

3. What level is your position in the company?

	When did you receive your Shares/Options?		
	Less than 3 years ago	More than 3 years ago	Response Totals
Lower Level Employee	8.3% (2)	0.0% (0)	4.4% (2)
Junior Management	8.3% (2)	4.8% (1)	6.7% (3)
Middle Management	**41.7% (10)**	28.6% (6)	35.6% (16)
Senior Management	37.5% (9)	**66.7% (14)**	**51.1% (23)**
Executive	4.2% (1)	0.0% (0)	2.2% (1)
Director	0.0% (0)	0.0% (0)	0.0% (0)

answered question	24	21	**45**
		skipped question	**0**

4. When did you receive your Shares/Options?

	When did you receive your Shares/Options?		
	Less than 3 years ago	**More than 3 years ago**	**Response Totals**
Less than 3 years ago	**100.0% (24)**	0.0% (0)	**53.3% (24)**
More than 3 years ago	0.0% (0)	**100.0% (21)**	46.7% (21)
answered question	24	21	**45**
		skipped question	**0**

5. Please rate the following aspects of Shares/Options related to you:-

		When did you receive your Shares/Options?		
		Less than 3 years ago	**More than 3 years ago**	**Response Totals**
Do you have more access to money because you received Shares/Options	**Strongly Disagree**	20.8% (5)	4.8% (1)	
	Disagree	**41.7% (10)**	**33.3% (7)**	
	Neutral	20.8% (5)	9.5% (2)	
	Agree	16.7% (4)	28.6% (6)	
	Strongly Agree	0.0% (0)	23.8% (5)	

rating average		2.33 (24)	3.33 (21)	2.80 (45)
Generally, do you spend more money because you received Shares/Options	**Strongly Disagree**	20.8% (5)	23.8% (5)	
	Disagree	**70.8% (17)**	**33.3% (7)**	
	Neutral	4.2% (1)	14.3% (3)	
	Agree	4.2% (1)	23.8% (5)	
	Strongly Agree	0.0% (0)	4.8% (1)	
rating average		1.92 (24)	2.52 (21)	2.20 (45)
Generally, do you save more money because you received Shares/Options	**Strongly Disagree**	8.3% (2)	14.3% (3)	
	Disagree	**54.2% (13)**	**33.3% (7)**	
	Neutral	16.7% (4)	28.6% (6)	
	Agree	20.8% (5)	19.0% (4)	
	Strongly Agree	0.0% (0)	4.8% (1)	
rating average		2.50 (24)	2.67 (21)	2.58 (45)
Do you think that your contribution improves company performance	**Strongly Disagree**	0.0% (0)	0.0% (0)	

	Disagree	0.0% (0)	0.0% (0)	
	Neutral	4.2% (1)	9.5% (2)	
	Agree	**58.3%** **(14)**	**52.4%** **(11)**	
	Strongly Agree	37.5% (9)	38.1% (8)	
rating average		4.33 (24)	4.29 (21)	4.31 (45)
Are you offered an opportunity to give your ideas to improve company performance	**Strongly Disagree**	0.0% (0)	0.0% (0)	
	Disagree	20.8% (5)	4.8% (1)	
	Neutral	12.5% (3)	28.6% (6)	
	Agree	**41.7%** **(10)**	**47.6%** **(10)**	
	Strongly Agree	25.0% (6)	19.0% (4)	
rating average		3.71 (24)	3.81 (21)	3.76 (45)
Are you more motivated because you received Shares/Options	**Strongly Disagree**	4.2% (1)	9.5% (2)	
	Disagree	29.2% (7)	19.0% (4)	
	Neutral	12.5% (3)	9.5% (2)	

	Agree	**45.8% (11)**	**38.1% (8)**	
	Strongly Agree	8.3% (2)	23.8% (5)	

rating average		3.25 (24)	3.48 (21)	3.36 (45)
Do you feel a sense of belonging to your company because you received Shares/Options	**Strongly Disagree**	4.2% (1)	4.8% (1)	
	Disagree	20.8% (5)	14.3% (3)	
	Neutral	8.3% (2)	14.3% (3)	
	Agree	**50.0% (12)**	**47.6% (10)**	
	Strongly Agree	16.7% (4)	19.0% (4)	
rating average		3.54 (24)	3.62 (21)	3.58 (45)
Do you feel empowered because you received Shares/Options	**Strongly Disagree**	4.2% (1)	14.3% (3)	
	Disagree	16.7% (4)	19.% (4)	
	Neutral	**33.3% (8)**	23.8% (5)	
	Agree	**33.3% (8)**	**28.6% (6)**	
	Strongly Agree	12.5% (3)	14.3% (3)	
rating average		3.33 (24)	3.10 (21)	3.22 (45)
Are you happy in the company because you received Shares/Options	**Strongly Disagree**	4.2% (1)	14.3% (3)	

	Disagree	16.7% (4)	23.8% (5)	
	Neutral	**29.2%** **(7)**	**28.6%** **(6)**	
	Agree	**29.2%** **(7)**	**28.6%** **(6)**	
	Strongly Agree	20.8% (5)	4.8% (1)	
rating average		3.46 (24)	2.86 (21)	3.18 (45)
Do you intend to stay longer at the company because you received Shares/Options	**Strongly Disagree**	8.3% (2)	9.5% (2)	
	Disagree	12.5% (3)	19.0% (4)	
	Neutral	25.0% (6)	**23.8%** **(5)**	
	Agree	**37.5%** **(9)**	**23.8%** **(5)**	
	Strongly Agree	16.7% (4)	**23.8%** **(5)**	
rating average		3.42 (24)	3.33 (21)	3.38 (45)
answered question		24	21	**45**
			skipped question	**0**

APPENDIX 8
WOOLWORTHS EMPLOYEE RESPONSES

The Impact of Employee Shareholding Options on Company Performance in South Africa

1. Which company do you work for?

	How long have you worked for your company?		
	Less than 3 years	More than 3 years	Response Totals
FNB	0.0% (0)	0.0% (0)	0.0% (0)
Liberty Life	0.0% (0)	0.0% (0)	0.0% (0)
Sasol	0.0% (0)	0.0% (0)	0.0% (0)
AngloGold Ashante	0.0% (0)	0.0% (0)	0.0% (0)
Woolworths	**100.0% (3)**	**100.0% (14)**	**100.0% (17)**
MTN Group	0.0% (0)	0.0% (0)	0.0% (0)
Standard Bank	0.0% (0)	0.0% (0)	0.0% (0)
Nedbank	0.0% (0)	0.0% (0)	0.0% (0)
ABSA	0.0% (0)	0.0% (0)	.0% (0)
Anglo Platinum	0.0% (0)	0.0% (0)	0.0% (0)
AngloGold Ashanti	0.0% (0)	0.0% (0)	0.0% (0)
BHP Billiton	0.0% (0)	0.0% (0)	0.0% (0)

Discovery	0.0% (0)	0.0% (0)	0.0% (0)
Edcon	0.0% (0)	0.0% (0)	0.0% (0)
FirstRand	0.0% (0)	0.0% (0)	0.0% (0)
Group 5	0.0%	0.0%	0.0%
Impala Platinum	0.0% (0)	0.0% (0)	0.0% (0)
Investec Group Limited	0.0% (0)	0.0% (0)	0.0% (0)
Medi-Clinic	0.0% (0)	0.0% (0)	0.0% (0)
Pick and Pay	0.0% (0)	0.0% (0)	0.0% (0)
Old Mutual	0.0% (0)	0.0% (0)	0.0% (0)
City Lodge	0.0% (0)	0.0% (0)	0.0% (0)
Airports Company South Africa (ACSA)	0.0% (0)	0.0% (0)	0.0% (0)
Anglo American	0.0% (0)	0.0% (0)	0.0% (0)
Other (please specify)	0 replies	0 replies	0.0% (0)
answered question	3	14	**17**
		skipped question	**0**

2. How long have you worked for your company?

	How long have you worked for your company?		
	Less than 3 years	**More than 3 years**	**Response Totals**
Less than 3 years	**100.0% (3)**	0.0% (0)	17.6% (3)
More than 3 years	0.0% (0)	**100.0% (14)**	**82.4% (14)**
answered question	3	14	**17**
		skipped question	**0**

3. What level is your position in the company?

	How long have you worked for your company?		
	Less than 3 years	**More than 3 years**	**Response Totals**
Lower Level Employee	**66.7% (2)**	**64.3% (9)**	**64.7% (11)**
Junior Management	33.3% (1)	28.6% (4)	29.4% (5)
Middle Management	0.0% (0)	0.0% (0)	0.0% (0)
Senior Management	0.0% (0)	7.1% (1)	5.9% (1)
Executive	0.0% (0)	0.0% (0)	0.0% (0)
Director	0.0% (0)	0.0% (0)	0.0% (0)

answered question	3	14	17
		skipped question	0

4. When did you receive your Shares/Options?

	How long have you worked for your company?		
	Less than 3 years	More than 3 years	Response Totals
Less than 3 years ago	**100.0% (3)**	**100.0% (14)**	**100.0% (17)**
More than 3 years ago	0.0% (0)	0.0% (0)	0.0% (0)
answered question	3	14	17
		skipped question	0

5. Please rate the following aspects of Shares/Options related to you:-

		How long have you worked for your company?		
		Less than 3 years	More than 3 years	Response Totals
Do you have more access to money because you received Shares/Options	**Strongly Disagree**	**33.3% (1)**	**28.6% (4)**	
	Disagree	0.0% (0)	21.4% (3)	
	Neutral	**33.3% (1)**	**28.6% (4)**	
	Agree	**33.3% (1)**	21.4% (3)	

	Strongly Agree	0.0% (0)	0.0% (0)	
rating average		2.67 (3)	2.43 (14)	2.47 (17)
Generally, do you spend more money because you received Shares/Options	**Strongly Disagree**	33.3% (1)	21.4% (3)	
	Disagree	**66.7% (2)**	**57.1% (8)**	
	Neutral	0.0% (0)	21.4% (3)	
	Agree	0.0% (0)	0.0% (0)	
	Strongly Agree	0.0% (0)	.0% (0)	
rating average		1.67 (3)	2.00 (14)	1.94 (17)
Generally, do you save more money because you received Shares/Options	**Strongly Disagree**	33.3% (1)	14.3% (2)	
	Disagree	0.0% (0)	21.4% (3)	
	Neutral	0.0% (0)	**35.7% (5)**	
	Agree	**66.7% (2)**	28.6% (4)	
	Strongly Agree	0.0% (0)	0.0% (0)	
rating average		3.00 (3)	2.79 (14)	2.82 (17)

Do you think that your contribution improves company performance	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	33.3% (1)	0.0% (0)	
	Neutral	0.0% (0)	7.1% (1)	
	Agree	.0% (0)	28.6% (4)	
	Strongly Agree	**66.7% (2)**	**57.1% (8)**	
rating average		4.00 (3)	4.29 (14)	4.24 (17)
Are you offered an opportunity to give your ideas to improve company performance	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	0.0% (0)	21.4% (3)	
	Neutral	33.3% (1)	14.3% (2)	
	Agree	**66.7% (2)**	**28.6% (4)**	
	Strongly Agree	0.0% (0)	**28.6% (4)**	
rating average		3.67 (3)	3.50 (14)	3.53 (17)
Are you more motivated because you received Shares/Options	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	**33.3% (1)**	14.3% (2)	

	Neutral	**33.3%** **(1)**	0.0% (0)	
	Agree	**33.3%** **(1)**	**42.9%** **(6)**	
	Strongly Agree	0.0% (0)	35.7% (5)	
rating average		3.00 (3)	3.86 (14)	3.71 (17)
Do you feel a sense of belonging to your company because you received Shares/Options	**Strongly Disagree**	0.0% (0)	7.1% (1)	
	Disagree	**33.3%** **(1)**	0.0% (0)	
	Neutral	0.0% (0)	21.4% (3)	
	Agree	**33.3%** **(1)**	**42.9%** **(6)**	
	Strongly Agree	**33.3%** **(1)**	8.6% (4)	
rating average		3.67 (3)	3.86 (14)	3.82 (17)
Do you feel empowered because you received Shares/Options	**Strongly Disagree**	0.0% (0)	14.3% (2)	
	Disagree	0.0% (0)	0.0% (0)	
	Neutral	**66.7%** **(2)**	21.4% (3)	
	Agree	33.3% (1)	**35.7%** **(5)**	

	Strongly Agree	0.0% (0)	28.6% (4)	
rating average		3.33 (3)	3.64 (14)	3.59 (17)
Are you happy in the company because you received Shares/Options	**Strongly Disagree**	0.0% (0)	14.3% (2)	
	Disagree	**66.7% (2)**	0.0% (0)	
	Neutral	0.0% (0)	**35.7% (5)**	
	Agree	33.3% (1)	21.4% (3)	
	Strongly Agree	0.0% (0)	28.6% (4)	
rating average		2.67 (3)	3.50 (14)	3.35 (17)
Do you intend to stay longer at the company because you received Shares/Options	**Strongly Disagree**	**33.3% (1)**	14.3% (2)	
	Disagree	**33.3% (1)**	14.3% (2)	
	Neutral	**33.3% (1)**	14.3% (2)	
	Agree	0.0% (0)	**42.9% (6)**	
	Strongly Agree	0.0% (0)	14.3% (2)	
rating average		2.00 (3)	3.29 (14)	3.06 (17)

	answered question	3	14	**17**
			skipped question	**0**