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JSE market reaction to employee satisfaction survey: does the stock market fully value intangibles?

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JSE market reaction to employee satisfaction survey: Does the stock market fully value intangibles?

Richard Albert Alcock

A thesis submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management Finance and Investments

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ABSTRACT

For some people, it may seem obvious that companies perform better if their employees are happier, but this relationship is not as obvious as it might seem. Extensive research indicates that intangible-intensive assets such as a skilled workforce, patents and know-how, software, strong customer relationships, unique organisational design and processes, brand and employee satisfaction are often mispriced by markets. Investors, more often than not, undervalue intangibles.

This research report examines whether a positive relationship exists between employee satisfaction and firm value and whether this relationship is taken into account by the stock market. Using event study methodology, the study shows that within the South African context, a cross section of JSE listed companies, little evidence exists that would suggest a positive correlation between employee satisfaction and firm value. Where such a relationship does exist it is mispriced by the market.

The report concludes that, considering the high value placed on people as one of the most important assets of firms today, and based on the vast body of evidence presented by previous studies in favour of a positive correlation between intangible assets such as employee satisfaction and firm value, that one cannot dispel the fact that these findings have implications for human resource management workplace practises.

DECLARATION

I, Richard Albert Alcock, declare that the research report is my own work, except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Finance & Investment at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

_____

Richard Albert Alcock

Signed at _____

On the _____ day of _____ 2014

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CHAPTER 1: BACKGROUND AND CONTEXT

1.1 Introduction

Markets are efficient, or are they? The ultimate feature of an efficient market is characterised by the fact that stock prices fully reflect all the relevant information pertaining to the firm and should any new information become available, prices may (and sometimes do) change and can do so vastly. However, in the case where markets are efficient, at this moment as this sentence is being read, prices are considered a consensus opinion of value. This consensus is based on the information and intellect of thousands (or even millions) of investors collectively.

However, extensive research indicates that intangible-intensive assets such as skilled employees, patents and technical ability, software, strong customer relationships, unique organisational design and procedures and brand, among others, are often mispriced (Lev, 2004). So, what about an intangible firm feature like happy employees? For some people, it may be obvious that companies perform better if their employees are happier, but this relationship is not as obvious as it might seem. The idea that happy employees equate to better companies also contradicts some human resource (HR) theories on the relationship between workers and bosses. One such theory advocates that workers, similar to plant and equipment as well as raw material, is simply a production resource, and for that reason, should be used sparingly. Therefore, the firm should seek to pay minimum wage while drawing maximum benefit from employees (Taylor, 1911). Jensen and Meckling (1976) argue that every extra rand paid to a worker is a rand less for the shareholders and a happy worker is a sign that they are overpaid or underworked, to the detriment of the shareholder.

On the other hand, some arguments state that there is a very strong link between job satisfaction and how it can improve firm value (Becker & Gerhart, 1996; Likert, 1961; McGregor, 1960; Pfeffer, 1994). Recent human resource

management (HRM) theories state that the employees' role has changed dramatically since the early 1900s. Today's work environment requires imaginative and distinctive approaches for which human capital, not physical capital, is particularly important (Zingales, 2000). Human relations theories (Maslow, 1943; Hertzberg, 1959) view employees, rather than expendable commodities, as key organisational assets that create value by building client relationships or inventing new products. According to these theories, employee satisfaction improves motivation and retention, which in turn benefits the shareholders. There are many hundreds of companies today that are worth billions of rands but have very few physical assets, e.g. investment banks, software companies, pharmaceutical firms and venture capital companies. In the case of these companies their assets are their employees, not physical assets.

In the modern firm, it has become almost impossible to link the satisfaction of an employee simply to pay grade. Employee satisfaction in the 21st century encompasses a myriad of other measurements, which, *inter alia*, include:

- Primary benefits (monetary benefits, pay policy, performance pay);
- Secondary benefits and working conditions (non-monetary benefits, work-life balance, employee well-being);
- Training and development (talent management, employee competencies, development programs);
- Career development (succession planning, career paths, performance management); and
- Culture management (induction, organisation's ability to establish a strong culture, employer branding) (Top Employers: The Research).

Over the years the roles as well as the needs of employees has evolved to more than just extrinsic motivators such as 'pay-for-output', a methodology that has become far less effective to keep employee morale and motivation at high levels. However, even though modern HR approaches to the facilitation of employee satisfaction seem to be effective, underinvestment persists. Despite firms believing that human capital investment improves long-term firm

performance (compared with firm value), these results are intangible making market verification difficult.

1.2 Research problem

According to Lev (2004), intangible assets gives most of today's firms it competitive advantage. It accounts for over half the market capitalisation of public companies and creates corporate growth and shareholder value. Nevertheless, research has shown that investors systematically misprice the shares of these intangible asset based companies. Sometimes the market overvalues intangibles; the dot-com industry was a classic example. However, more often investors undervalue intangibles.

1.3 Research aim and objective

Every year, since 2000, the international auditing company Deloitte conducts a survey in South Africa on which company in South Africa is the 'Best Company to Work For' (BCTWF). Listed and unlisted companies participate and the results of the survey are announced publicly.

Deloitte purports that over the years this survey has become a 'must do' for companies. It identifies and recognises the BCTWF as rated by the most important stakeholders of these companies, the employees. Deloitte also claims

> "…each participating organisation gains invaluable insights into the reported employment priorities and experiences of its employees which can serve as the basis to optimise their overall employment experience and thereby enhance the organisation's performance and status as a recognised employer of choice" (Deloitte Best Company to Work for Survey 2013, para. 7).

Employee and Employer responses are captured and rated according to the 10 dimensions:

- sense of confidence in the organisation;
- organisational ethics and integrity;
- operational effectiveness;
- relationship with manager\supervisor;
- sense of inclusion in the organisation;
- overall job satisfaction;
- career development;
- work-life balance;
- performance and recognition; and
- remuneration.

The Deloitte Best Company To Work For (BCTWF) Excellence Award is bestowed on all official participating companies who achieve an overall mean score > 3.7 (Deloitte Best Company to Work for Roadshow 2013). Deloitte further claims that one of the consequences of participation in the BCTWF survey is higher productivity (because of happier employees) and improved profitability, i.e. firm value addition, (Deloitte Best Company to Work for Survey 2013).

The aim of this research was to examine, first, whether there exists a positive correlation between employee satisfaction and the share price of companies and, second, whether this relationship is taken into account by the market. Do these Johannesburg Stock Exchange (JSE) listed companies, which participate in the annual BCTWF survey, outperform the market?

The reasons for studying the long-run relationship between employee satisfaction and share price returns can be summarised as follows (Edmans, 2011):

- Returns suffer less reverse causality issues than valuation ratios or profits. A positive correlation between valuations and satisfaction takes

place if firm performance causes satisfaction. However, a firm should not have superior future returns since profits should be captured already by the current share price because profits are tangible by nature.

- Returns are linked to shareholder value more than profits, which is representative of all channels through which satisfaction may benefit shareholders by the returns they receive. In addition to profits, satisfaction can potentially lead to new products or contracts, which as intangibles, are valued by the market.
- Valuation ratios and event study returns could underestimate any relationship as prior empirical evidence shows that the market insufficiently incorporates intangibles.

1.4 Significance of the study

The main purpose of this research was to examine if there exists a positive correlation between employee satisfaction and the share price (firm value) of a cross section of JSE listed companies and if the stock market takes this relationship into account.

Edmans (2011) documented that should a positive link between employee satisfaction and shareholder value be perceived and incorporated into market prices, no superior returns would be evident after the survey's publication. However, outperformance of the portfolio might suggest that employee satisfaction and shareholder value are linked, but that this positive correlation is not incorporated by the market. This may therefore present an opportunity for arbitrage.

1.5 Research questions

The research questions addressed in this research were:

[1] Is employee satisfaction and firm value positively correlated or not?
[2] If so, is this relationship taken into account by the market?

This research report is divided into five chapters beginning with an introduction to the context of the research topic. Chapter 2 contains a review of the literature on the subject. Chapter 3 elaborates on the research methodology that underpins this report. Chapter 4 deals with the data description, empirical results and analysis thereof. The conclusion and possible recommendations is discussed in Chapter 5.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This section of the report reviews the literature on employee job satisfaction and firm performance. The theoretical literature on the link between the two is examined, followed by empirical evidence. The review takes a broad outlook and presents evidence of international studies. From the outset, it is important to point out that there is a dearth of published work in this area within the South Africa context. Furthermore, international research conducted specifically on the relationship between employee satisfaction and firm value is limited to mainly the S&P 100 (an annual survey conducted in the USA, published in the Fortune magazine, of the top 100 companies to work for in the USA, based on a 57-question survey created by the Great Place to Work Institute in San Francisco). The theoretical considerations and international evidence is discussed in an attempt to synthesise what existing studies have written on the subject. This inevitably informs this research as a key contribution to the literature in this area of academic research in South Africa.

2.2 Employee satisfaction and firm performance: Theory

Some people consider it obvious and factual that companies with happy employees perform better than those whose employees are disgruntled. Moreover, most people will tend to agree with this populist view; but is this relationship as obvious as it might seem? So, the questions beg:

- What makes workers happy?
- Is a happy worker and a one who claims to enjoy job satisfaction the same?
- Does job motivation relates at all to job satisfaction and if so, how?
- Is there any benefits for companies with employees who claim to enjoy job satisfaction, and if so, in what way?

According to Davies (1985), job satisfaction refers to the positive or negative feelings (attitude) that workers have towards their work. When an employee seeks employment and finally enters the job market, the employee takes with them various experiences, needs, desires and wants. The extent to which these aspirations are met determines the employee's level of job satisfaction. Thus, it can be argued that job satisfaction is closely linked to an employee's work place behaviour. From this explanation, it is apparent that job satisfaction can be a very elusive concept to define. According to George (2008), job satisfaction is the collection of beliefs and feelings that people have about their job. He further argues that an employee's degree of job satisfaction can range from extreme satisfaction to extreme dissatisfaction. Is it safe to assume that satisfied workers add value to a company?

Traditional HR theories hold radical views on the relationship between workers and bosses. According to Taylor (1911) workers, just like plant, equipment and raw material, are simply production resources, and for that reason, should be used sparingly. Furthermore, companies should seek to pay employees the minimum, while extracting the maximum benefit from them. Jensen and Meckling (1976) argue that every extra rand paid to a worker is a rand less for the shareholders and a happy worker is a sign that they are overpaid or underworked, to the detriment of the shareholder.

However, today there are many hundreds of companies that are worth billions of rand but have very few physical assets, e.g. investment banks, software companies, pharmaceutical firms and venture capital companies and for these companies their assets are their employees, not physical assets. Modern day HR theories state that the role of the employee has altered over the past century. Today's work environment emphasises human contribution in the form of quality and innovation, rather than physical capital, as being very important (Zingales, 2000). This view is strongly supported in research done by Maslow (1943) and Hertzberg (1959) who viewed employees, rather than being expendable commodities, as key organisational assets that can create value by building client relationships and inventing new products. According to these

theories, job satisfaction can benefit shareholders through two mechanisms, retention and motivation. Delaney and Huselid (1996) states that with the global advancement of technology, it is much easier to access capital assets in order to become competitive, however nothing can replace the human element in a business entity in terms of customer relationship, networking, leading a team, innovative thinking and so forth. They further argues tangible assets alone are not sufficient to guarantee the long-term success of a business and therefore there is a growing need globally to engage, up-skill and incentivise staff at all levels in order to develop these intangible resources within all companies.

Becker and Gerhart, (1996), Likert (1961), McGregor (1960) and Pfeffer (1994) have put forward arguments that there is a strong link between job satisfaction and its role in improving the value of firms.

2.3 Employee satisfaction and firm performance: Evidence

This section presents an overview of empirical studies that have been conducted in an effort to investigate the relationship between intangible assets, (i.e. innovation, organisational practices and HR practices) and firm value. It seeks to shed light on whether such a relationship exists and if so, whether it contributes to firm value or not. Current literature that looks at the link between job satisfaction and firm value is examined.

Faleye and Trahan (2011) studied firms in order to understand the relationship between labour-friendly practices and shareholder value creation. They found that those firms that exhibit labour-friendly practices outperformed similar firms without such practises, both in long-run stock returns as well as operating results. Their empirical results show statistically significant average abnormal returns of 1.03 percent, thus suggesting that the market views labour-friendly programs as beneficial. They concluded that a genuine concern for employees' welfare equates to higher productivity and profitability, which in turn facilitates shareholder value creation. This argument supports the modern HR theories as discussed earlier.

Furthermore, Edmans (2011) found that the value-weighted portfolio of the '100 Best Companies to Work for in America' earned a four-factor alpha of 0.29 percent per month from 1984 to 2009, or 3.5 percent per year. He documented that, when compared to industry benchmarks, the alpha remains a statistically significant 2.1 percent. These best companies also exhibited significantly more positive earnings surprises and announcement returns. In another article, Edmans (2012) concluded that:

(1) job satisfaction is beneficial for firm value, which is consistent with HRM theories;
(2) corporate social responsibility can improve returns on stock; and
(3) the stock market fails to fully incorporate intangible assets and therefore it may be necessary to protect managers from short-term stock prices fluctuations in order to encourage long-term growth.

Faleye and Trahan (2011) and Edmans (2011; 2012) found a positive relationship between job satisfaction and firm value and concluded that job satisfaction (and therefore HR practises that promote job satisfaction) is indeed in the best interest of shareholder, i.e. the maximisation of returns.

Lev and Sougiannis (1996) documented a significant inter-temporal association between a firm's research and development (R&D) capitalisation and subsequent stock returns, suggesting a systematic mispricing of the shares of R&D-intensive companies, or a compensation for an additional market risk factor associated with R&D. Lev's (2004) research indicates that investors systematically misprice the shares of intangible-intensive firms and that more often than not investors undervalue intangibles. Lev (2004) is of the opinion that companies fail to comprehend the value of intangible assets, like investment in R&D, and what they add to a firm. Furthermore, companies need to generate better information about their investments in intangibles and they need to disclose at least some of this information to capital markets. This will improve managerial decisions and provide investors with a clearer picture of the company and its performance. Aboody and Lev (1998) conducted a study to establish whether there is relevance between firm value and the intangible

assets base of software firms and concluded that there is indeed, although such relevancy is not fully reflected in the share prices of these firms.

Frey and Kohlert (2001) considered the value drivers of firm performance (i.e. firm value), as postulated by Rappaport (1981; 1986), and whether this value, as the tangible asset base, exclusively drives firm performance. They also tested the effect of intangible assets, e.g. innovation (found in the pharmaceutical industry), organisational practices (unique distribution channels as in the case of Dell and Cisco), and HR (such as found in the services sector) as likely drivers of firm value. They concluded that intangible assets do in fact contribute to firm performance, that its relevancy will increase and that intangible assets should be considered together with tangible assets as drivers of firm value. Fulmer, Gerhart and Scott (2003) argue that positive employee relations effectively serve as an intangible and enduring asset and should therefore be considered as a source of sustained competitive advantage for companies. They conducted an empirical investigation where they compared the S&P 100 with companies in the broad market as well as a group of matched firms. They concluded that the S&P 100 enjoy not only a stable and highly positive workforce, but also performance advantages over the broad market. Indeed, this can be seen in most companies today, where often CEOs will be quoted as saying that people are the most valuable asset of their firms and machines, without the intervention of skilled and component people, are worthless.

Goenner (2008) investigated whether investment strategies that focus on the S&P 100 are able to outperform the market. His results indicate that portfolios, consisting of firms on this list, offer higher risk adjusted returns than the S&P 500 over the period 1998 to 2005. Chan, Lakonishok and Sougiannis (2001), examined whether stock prices fully value firms' intangible assets, specifically R&D. They found that companies with high R&D to equity market value tend to earn large excess returns. They also found that a similar relation exists between advertising and stock returns.

Another relevant and interesting topic linked to value creation for shareholders relates high performance work practices (HPWP) with firm performance. According to Jones and Wright (1992) and the US Department of Labour (1993), HPWP include aspects such as comprehensive employee recruitment and selection procedures, incentive compensation and performance management systems and extensive employee involvement and training. They argue that HPWP can improve the knowledge, skills and abilities of a firm's current and potential employees. Furthermore it can increase their motivation, reduce shirking, and enhance retention of quality employees while encouraging non-performers to leave the firm. Huselid (1995) provides broad evidence that supports the assertions of previous work that HPWP will be reflected in better firm performance. He found significant evidence that investments in such practices are associated with lower staff turnover, greater productivity and ultimately enhancement of corporate financial performance, which in turn creates shareholder value. Zimmerman (2004) discussed investors' concerns that Costco's high pay and good benefits to employees, compared with Wal-Mart, were excessive and stated that job satisfaction comes at the expense of shareholder value.

Another question that researchers attempt to answer is that of corporate social responsibility (CSR) and its link to firm value. According to Edmans (2012), CSR concerns itself with stakeholders other than shareholders, such as customers, employees and the environment. Since the '100 Best Companies to Work for in America' (Edmans, 2011; 2012) exhibits particularly high concern for employees, a study of job satisfaction and its link to firm value clearly has some implication in the link between CSR and the firm. However, to the extent that this report seeks to explore specifically the link between job satisfaction and firm value, reference to CSR and firm value is limited to what other empirical studies have found.

Various studies done on the link between CSR and firm value indicate that its correlation loosely follows that of job satisfaction and firm value, but contradictory arguments are also presented. Moskowitz (1972) asked whether

social issues should be considered when making investment decisions. He argues that socially sound investments need not be financially unsound. In fact, it is Moskowitz's (1972) view that socially aware corporations possess the special sensitivity required to enable it to surpass competition. He argues that socially responsible activities may increase firm value because CSR activities may:

- be demanded and valued by investors;
- raise firm productivity by satisfying workers;
- increase market share; and
- reduce costly consumer boycotts (Moskowitz, 1972).

The question remains, even though socially responsible companies tend to be more profitable, is it because they are profitable that they can afford to be more responsible, or did their profitability result from their social responsibility? Parket and Eilbirt (1975) found that

[1] the existence of supernormal profits is not only a necessary condition for firms to engage in socially responsible practices, but that it perhaps serves as a stimulant;
[2] profits represents some kind of a reward for virtue; and
[3] greater profits and social responsibility may point to management that is more efficient.

Turban and Greening (1997) showed that CSR ratings are positively related to a firm's reputation as employers, which might aid recruitment. Waddock and Graves (1997) as well as Orlitzky, Schmidt and Rynes (2003) argues in favour of a bidirectional relationship in that financial performance can result in CSR because well-performing companies have access to financial resources, which allows them to invest in the broader stakeholder base instead of limiting their investments to shareholders. Cochran and Wood (1984) as well as McGuire, Sundgren and Schneeweis (1988) concluded that a positive link between financial performance and CSR exists. The findings of Statman and Glushkov (2009) are consistent with the 'doing good while doing well' philosophy. They

found that investing in socially responsible stocks yielded higher returns than stock of conventional companies. However, some studies point out that reverse causality between CSR and performance might be an issue that will require further investigation.

In contrast to Moskowitz's (1972) view, there are numerous proponents against the argument of the positive link between financial performance (firm value) and CSR. Both Levitt (1958) and Friedman (1970) argue strongly that the only responsibility company executives have is that of maximising profits for the shareholders (within the ambit of the law and ethical behaviour) and that investing in socially responsible activities reduces shareholder value. Studies conducted by McWilliams and Siegel (2000) found no relationship between CSR and financial performance and Ullmann (1985) concluded that the more elaborate studies seem to concur, rejecting any relationship between social performance and financial success. Both Vance (1975) and Alexander and Buchholz (1978) found no relationship between CSR and firm value. Schröder (2007) found that risk-adjusted returns between socially responsible investments (SRI) stock indices and conventional benchmarks do not exhibit a significant different level of returns.

Regarding the contribution of CSR practises to firm value, existing research seems to be conflicting. Some researchers agree with Levitt (1958) and Friedman (1970) that these practises add no benefits to shareholders and that in fact it reduces shareholder value. On the other hand, popular opinion concurs with Moskowitz (1972) when he argued that socially sound investments are not necessarily financially unsound and that firms who are socially aware have something special, which will enable them to surpass their competition.

2.4 Conclusion

In conclusion, although the empirical studies related to the link between job satisfaction and firm value internationally are limited, it is clear that a positive relationship does exist and that markets fail to incorporate it fully into the value of these firms. Furthermore, there seems to be consensus among researchers

that the relationship between intangible assets and firm value is not clearly understood and as much as empirical studies have proved that there is a positive relationship, that it is often mispriced and undervalued by investors.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Every year, during the first week of October, Deloitte, an international auditing firm, releases the results of an annual survey they conduct in South Africa. The objective of the survey is to identify which companies (listed and unlisted) in the opinion of the employees, are the best companies to work for in the country. The survey is conducted nationally and it must be noted that only companies that are registered participate in the survey. The survey is branded “Best Company to Work For” (BCTFW) and Deloitte states that the survey is becoming a ‘must do’ for most top South African companies. They further claim that participation in the survey leads to greater productivity and profitability (thus shareholder value creation). This research analyses and aims to prove whether or not employees that enjoy job satisfaction have a positive influence on firm value and, if indeed it does contribute to firm value, if the market takes this relationship into account.

3.2 Data, data source and sample selection

The data used in the analysis was the stock prices of the companies listed on the JSE main board that participated in the BCTWF survey in the period 2009 to 2013 and were awarded recognition as the “Best Company To Work For” according to the opinions of their employees and the outcome of the survey (Deloitte BCTWF Award winners in 2009, 2010, 2011, 2012 & 2013). This list of companies is isolated from the list of all winners in a particular year for the five-year period under consideration. The five-year period is considered to be long enough to ascertain that the empirical results are valid and accurate. The daily returns (shares prices) for all the companies under analysis are sourced from Bloomberg for the complete trading period in the particular year (1 January to 31 December). Using this data, event study research methodology is used to analyse the information.

3.3 Event study methodology

The aim of this research was to assess the impact of the public announcement of the winners of the BCTFW survey on the share price movements for the listed firms. Fama, Fisher, Jensen and Roll (1969) introduced event studies as an important tool to analyse the adjustment of stock prices to new information content. Their research yielded considerable empirical evidence to support the conclusion that the stock market is efficient in the sense that stock prices adjust very rapidly to new information. For example, an announcement related to the split of shares by firms during abnormally good times, i.e. during a period when the price of shares have increased much more than what was implied by the normal relationship between their share price and general market price behaviour. This finding is consistent with the efficient market hypothesis (Fama, 1970) and with others and it can be said that markets respond rapidly to new information. According to the efficient market hypothesis (Fama, 1970) the abnormal return today should only relate to information released today. Any previously released information should have no effect on abnormal returns because the information has been available to the traders. Today's return cannot be influenced by information that traders do not know yet. If the stock price does not behave in this fashion, one can conclude that the market is inefficient and therefore does not capture all the factors that could result in stock price changes. This could result in arbitrage opportunities.

For the purpose of this research event study methodology as purported by Fama et al. (1969), MacKinlay (1997), McWilliams and Siegel (1997) and Bowman (1983) is used to examine the effect on the share prices for those JSE listed companies when the news of the BCTWF is announced. MacKinlay (1997) identifies and recommends the following six-step procedure when conducting an event study.

3.3.1 Clearly define the event of interest

This has a huge bearing on the research question(s) that the research seeks to address and the subsequent structuring of the null hypothesis.

3.3.2 Determine the event window

Identify the period over which the security prices of the firms involved in the event study will be examined. Dodd (1980) identified a serious problem when in previous studies of the relationship between stock prices and mergers, it failed to identify the relevant event period correctly. Instead of considering the time at which the public announcement of the merger was made, it selected the effective dates of the mergers. Attention should be paid to possible confounding effects and the problems that it may present to the study and subsequent conclusions (Bowman 1983). For example, when studying the effect of dividend announcements on stock prices, the possible confounding effects of earning announcements might need to be controlled for, if these two events accompany each other.

3.3.3 Determine the selection criteria for inclusion of the firm(s) into the study

This may for instance be a function of listing on a particular exchange, membership of a specific industry or exposure to a specific event occurrence, e.g. labour strike action.

3.3.4 Determine the estimation period

Many studies focus on short event windows for the calculation of the returns. The advantage of this is that daily expected returns are close to zero and therefore the model for expected returns $[E]R_{i,t}$ does not have a big effect on inferences about abnormal returns ($AR_{i,t}$). Further to this, the assumption in studies that focus on short-term windows is that any lag in the response of prices to an event will be short lived. For the purpose of this research report the event period was 11 days, thus, five days prior to the event (T = -5), the event (T = 0) and five days after the event (T = +5), denoted as [-5; 0; +5].

3.3.5 Calculating the returns

Normal returns

Normal returns can be calculated in two ways (MacKinlay, 1997). First, the *constant mean-adjusted return* model, which, as the name implies, assumes that the mean return of a given security remains constant through time. Second, the *market-adjusted return* model, which assumes a linear relation between the market return and the security return.

For the purpose of this report, the market-adjusted return model is used. The model was estimated over the 150 days prior to the event period. The JSE All Share Index is used in the calculation of the market-adjusted returns. The returns are estimated using:

$$[E]R_{i,t} = \alpha + (\beta_i^{*} R_{m,t}) + \varepsilon_{i,t} \qquad [1]$$

Where,

$[E]R_{i,t}$ = Expected return of the market in period t

$R_{m,t}$ = Return on the market index in period t

$\varepsilon_{i,t}$ = zero mean disturbance / random error term

α and ß are the parameters to be estimated over a 150 day period.

The benefit of using the market-adjusted model is dependent on the R^2 of the regression. The higher the R^2 the greater the variance of the abnormal returns and the larger is the gain (Raja & Sudhahar, 2010).

The daily returns $R_{i,t}$ for the individual securities is calculated as follows:

$$R_{i,t} = \frac{P_t - P_{t-1}}{P_{t-1}} \times 100 \qquad [2]$$

Where,

$R_{i,t}$ = Return on the security i in period t

P_t = Price of the security at time t

P_{t-1} = Price of the security at time t-1

Abnormal returns

Abnormal returns (ARs) under market-adjusted abnormal returns are calculated by using the equation below:

Abnormal return = Observed Return – Expected Return

Thus,

$$AR_{i,t} = R_{i,t} - [E]R_{i,t} \qquad [3]$$

Where,

$AR_{i,t}$ = Abnormal returns on security i at time t

$R_{i,t}$ = Actual return on the security i in period t

$[E]R_{i,t}$ = Expected return of the market in period t

Cumulative abnormal returns (CAR) are computed using the following formula:

$$CAR = \Sigma AR_{i,t} \qquad [4]$$

3.3.6 Testing for statistical significance

To judge the statistical significance of the abnormal returns the Dodd and Warner (1983) methodology is used to compute standardised abnormal returns and their test statistics. To test the null hypothesis that the mean is equal to zero for a sample of n firms, the conventional t-statistic is utilised:

$$t = \frac{AR_{mean}}{\sigma(AR_t) / \sqrt{n}} \qquad [5]$$

Where

AR_{mean} = the sample mean

$\sigma(AR_t)$ = the cross-sectional sample standard deviation of abnormal returns for the sample of n firms

(Lyon, Barber and Tsai, 1999)

The null hypothesis (H_0) was constructed from the two research questions:

[1] Is employee satisfaction and firm value positively correlated or not?
[2] If so, is this relationship taken into account by the market?

The null hypothesis reads as follows:

H_0: There is *no* positive correlation between employee satisfaction and firm value.

If the p-value < 0.05, the null hypothesis would be rejected and it can therefore conclude that there is indeed a positive correlation between employee satisfaction and firm value.

3.4 Problems with heteroskedasticity and dependence

There are several potential problems in hypothesis testing owing to the fact that frequently the AR estimators are not independent or they do not have identical variance. For instance, often the AR estimators:

[1] are correlated in the cross-section (in event time);
[2] have different variances across firms;
[3] are not independent across time for a given firm; or
[4] have greater variance during the event period than in the surrounding periods (Binder, 1998).

Cross-sectional dependence is not a problem when the event periods are randomly dispersed through calendar time, i.e. the event dates are not, in the terminology of Brown and Warner (1980), ‘clustered’. In the case of this study, the issue of interdependence was avoided in that it is a single event that happens at a specific date on an annual basis.

3.5 Conclusion

Using event study methodology as purported by Fama et al. (1969), MacKinlay (1997), McWilliams and Siegel (1997) and Bowman (1983) cumulative abnormal returns were calculated to examine the effect on the share prices of those JSE listed companies, of the news of the BCTWF winners were announced.

CHAPTER 4: DATA DESCRIPTION, EMPIRICAL RESULTS AND ANALYSIS

4.1 Introduction

This chapter of the report presents results on the models estimated, and answers the research questions that the research sought to answer:

[1] Is employee satisfaction and firm value positively correlated or not?
[2] If so, is this relationship taken into account by the market?

From these two questions, the null hypothesis (H_0) was constructed:

H_0: There is *no* positive correlation between employee satisfaction and firm value.

The rest of the chapter is organised as follows: First, the data set used in this research, the sample size as well as the companies chosen for best performance in the employee satisfaction survey is presented. Inferences about some of the descriptive statistics of the sample are also made. Second, the share price performance in relation to the H_0 is discussed and attempt to address the first research question is made. Third, conclusions are drawn about the market efficiency in South Africa. The final section concludes the chapter.

The analysis of the results is included in this chapter, which attempts to shed light on the existence of a link between employee satisfaction and firm value. Any implications about the efficiency of the JSE are discussed.

4.2 Description of the sample data

The data used consists of the stock prices of the JSE listed companies that participated in the BCTWF survey, conducted annually by the international auditing firm Deloitte in South Africa, in the period 2009 to 2013 and were awarded the recognition of ‘Best Company To Work For’ according to the

opinions of their employees and the outcome of the survey. This list of companies was isolated from the list of all winners in a particular year for the five-year period under consideration. The daily returns (shares prices) for all the listed companies under analysis were sourced from Bloomberg for the complete trading period (1 January to 31 December) in the particular year. Table 1 consists of the list of all the companies in the sample.

Table 1: Study sample

Company	Ticker
AdvTech Limited	ADH
Barclays Africa Group / Absa Group Ltd	BGA
Bidvest Panalpina Logistics	BVT
Cadiz Holdings Limited	CDZ
Cashbuild SA (Pty) Ltd	CSB
Exxaro Resources Ltd	EXX
Grindrod Bank Limited	GND
Kelly a division of Kelly Group Limited	KEL
Kumba Iron Ore	KIO
Mustek Limited	MST
Netcare Limited	NTC
Santam Limited	SNT
Tiger Brands Limited	TBS

Note: List was compiled by extracting the JSE listed firms in a particular year from the list of all the winners in that specific year (Deloitte BCTWF Award winners in 2009, 2010, 2011, 2012 & 2013).

Because some companies made the BCTWF list more than once during the period under investigation, the total sample size, based on the relevant companies, consist of 21 stock prices in total.

Table 2: Descriptive Statistics

Descriptive statistics	ADH 2011	ADH 2012	ADH 2013	BGA 2009	BVT 2012	CDZ 2009	CDZ 2010
Mean	-0.563066	0.793330	-1.746912	-3.227273	-1.291111	-0.716953	-2.956700
Standard Deviation	0.946585	0.411251	2.178926	2.127386	1.650411	2.874159	2.571778
Kurtosis	1.709527	1.338570	-1.345317	0.427327	0.230177	-0.555341	-0.941107
Skewness	1.188174	-1.111271	-0.264640	-0.648111	-1.119481	-0.274401	0.593365

Descriptive statistics	CSB 2012	CSB 2013	EXX 2009	EXX 2012	GND 2012	GND 2013	KIO 2012
Mean	0.581049	6.206801	-2.641421	4.770647	2.576207	-0.449865	0.671153
Standard Deviation	3.160695	3.890464	1.576918	2.049643	1.385238	0.575873	2.096888
Kurtosis	-1.292933	-1.026721	-0.831544	-0.663246	0.612724	3.266603	-0.077022
Skewness	-0.623528	-0.586868	0.211605	0.741623	0.307571	-1.290456	-0.992005

Descriptive statistics	KEL 2009	KEL 2010	MST 2013	NTC 2009	SNT 2009	SNT 2010	TBS 2009
Mean	0.885682	-4.848683	-0.897786	-0.264662	1.820624	-0.197828	-1.835433
Standard Deviation	0.482852	3.711362	3.424157	3.714588	2.348118	0.688695	1.691608
Kurtosis	-1.464346	-1.930076	2.772763	2.656819	1.764671	-0.780191	-0.730387
Skewness	-0.164474	0.476623	1.591861	1.524677	1.590867	-0.377453	0.300916

Table 2 summarises key descriptive statistics during the event period for the sampled firms such as mean, standard deviation, skewness and kurtosis and the following key findings should be noted:

- 61.9 percent of the cumulative average abnormal returns are negative.
- *Skewness*: measures the extent to which a distribution is asymmetric about its mean value. Generally, the CARs show a far greater tendency to yield negative returns over the period under investigation than what it does to yield positive returns.
- *Kurtosis*: One of the main features common to financial data is that it is not normally distributed. Some of the characteristics of a normal distribution are a mean of zero, a skewness of zero and kurtosis of three. The descriptive statistics summarised in Table 2 indicate that the kurtosis of the sampled data points are < 3. This implies that the distribution is platykurtic, thus with less peakedness around the mean and with thinner tails. These results therefore confirm that the returns of the sampled companies are not normally distributed and exhibits one of the typical financial data features.
- Standard deviation in finance on the rate of return is a measure of volatility (riskiness) of the returns. It measures the risk associated with price (return) fluctuations of a certain asset or a portfolio or assets. The higher the standard deviation, the riskier the asset. The fundamental is that higher risk assets should yield higher returns. When investors therefore evaluate a certain asset, they should *inter alia*, concern themselves with both the expected return and the uncertainty of future returns. Standard deviation is that measure which provides a quantified estimate of the uncertainty of future returns. In contrast to this, the mean return of the stock over a given period is indicative of the expected return.

Based on the results of the descriptive statistics it can be seen that only eight (38.1 percent) of the 21 securities yield positive cumulative average abnormal returns for the period under investigation. Of these eight, five (62.5 percent)

have a standard deviation greater than two but yield returns that do not match the level of associated volatility/riskiness. Further to this, of the 21 stocks, 14 (66.7 percent) has a standard deviation in excess of 1.65, yet only five (35.7 percent) yield positive returns.

4.3 Share price performance

From Table 3 it is clear that no statistically significant cumulative abnormal returns (CAR's) have been observed during the event period (T-5, T0, T+5).

At the five percent significance level the null hypothesis could not be rejected on the basis of two-sided t-test results as well as due to the fact that the p-values for all the stocks under analysis were greater than 0.05. Of the 21 stocks that make up the sample size, only three showed marginal significant positive CAR's.

Based on this empirical evidence, it can therefore be concluded, contrary to other empirical studies (Becker & Gerhart, 1996; Edmans, 2011; 2012; Faleye & Trahan, 2011; Frey and Kohlert, 2001; Fulmer, Gerhart & Scott, 2003; Lev, 2004; Likert, 1961; McGregor, 1960; Pfeffer, 1994), that within the South African context there exists no positive correlation between employee satisfaction and firm value, thus confirming the null hypothesis.

Table 3: Cumulative Abnormal Returns

Event Period	ADH 2011		ADH 2012		ADH 2013		BGA 2009		BVT 2012		CDZ 2009		CDZ 2010	
	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test
T-5	-0.6993	-0.5240	-0.1276	-0.0664	-0.9072	-0.4898	0.1016	0.0379	-0.3232	-0.2591	-0.5121	-0.1870	1.4339	0.6929
T-4	-0.8452	-0.1093	0.8434	0.5051	-1.1503	-0.1313	-1.9244	-0.7566	0.0555	0.3035	-0.9464	-0.1586	-3.1803	-2.2298
T-3	0.0398	0.6631	0.3989	-0.2312	-4.8509	-1.9981	-2.8857	-0.3590	0.5581	0.4029	-1.4124	-0.1702	-4.7895	-0.7776
T-2	-0.1723	-0.1589	0.9250	0.2737	-4.3281	0.2823	-3.9707	-0.4052	-0.5600	-0.8963	3.1578	1.6690	-4.9078	-0.0571
T-1	0.2242	0.2971	1.1327	0.1081	-4.4131	-0.0459	-6.2901	-0.8662	-0.1160	0.3560	2.7247	-0.1582	-5.1828	-0.1329
T 0	**-0.8861**	**-0.8320**	**0.9642**	**-0.0876**	**-3.6713**	**0.4005**	**-7.3341**	**-0.3899**	**-0.8562**	**-0.5934**	**-2.2388**	**-1.8126**	**-6.0822**	**-0.4346**
T+1	-0.9372	-0.0383	1.2171	0.1315	1.5877	2.8395	-3.8253	1.3103	-2.4571	-1.2833	1.9952	1.5462	-5.2180	0.4176
T+2	-1.7035	-0.5741	0.8191	-0.2070	0.0767	-0.8158	-2.1270	0.6342	-3.7954	-1.0728	1.6139	-0.1392	0.8205	2.9180
T+3	-1.4080	0.2214	0.7924	-0.0139	-0.0832	-0.0863	-3.3033	-0.4393	-4.5905	-0.6374	-3.2270	-1.7678	-0.7862	-0.7764
T+4	-1.4189	-0.0081	1.2857	0.2566	-0.5667	-0.2610	-2.6146	0.2572	-1.4708	2.5008	-2.9667	0.0951	-2.2499	-0.7073
T+5	1.6129	2.2718	0.4757	-0.4214	-0.9097	-0.1852	-1.3264	0.4811	-0.6467	0.6606	-6.0746	-1.1350	-2.3814	-0.0635
t-test	insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level	
p-value	0.67162		0.99218		0.96285		0.81950		0.84527		0.90130		0.70311	
***H_o**	**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**	

***if p-value <0.05, reject H_0**

Event Period	CSB 2012		CSB 2013		EXX 2009		EXX 2012		GND 2012		GND 2013		KIO 2012	
	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test
T-5	0.3201	0.2725	-0.6310	-0.4270	0.0232	0.0082	3.7835	1.8047	0.1983	0.1565	-0.2226	-0.1226	1.7384	0.8084
T-4	2.7527	2.0707	0.9516	1.0710	-1.8968	-0.6773	3.7579	-0.0122	2.0222	1.4396	-0.1648	0.0319	1.7984	0.0279
T-3	2.5425	-0.1789	8.2045	4.9081	-2.2045	-0.1085	6.9498	1.5225	2.0043	-0.0142	-0.2601	-0.0525	2.1068	0.1434
T-2	3.8430	1.1071	5.0498	-2.1348	-0.6123	0.5617	4.5693	-1.1355	1.1427	-0.6800	-1.0237	-0.4204	1.4568	-0.3022
T-1	3.3953	-0.3811	2.9759	-1.4035	-4.9121	-1.5168	2.2902	-1.0871	2.0373	0.7061	-0.4806	0.2990	-3.2491	-2.1883
T 0	**3.8303**	**0.3703**	**4.3484**	**0.9288**	**-4.5092**	**0.1421**	**3.6833**	**0.6645**	**3.3861**	**1.0646**	**-0.3356**	**0.0798**	**-2.7361**	**0.2386**
T+1	1.7395	-1.7798	8.0966	2.5365	-1.6192	1.0195	2.9662	-0.3421	5.3107	1.5190	-0.3104	0.0139	-0.3623	1.1038
T+2	-0.4625	-1.8745	10.3518	1.5262	-3.2746	-0.5840	3.0019	0.0170	3.8649	-1.1411	-0.2556	0.0302	-0.3960	-0.0157
T+3	-4.3122	-3.2771	10.4635	0.0756	-2.4792	0.2806	5.6404	1.2586	3.3716	-0.3894	0.4621	0.3952	3.2749	1.7070
T+4	-4.0370	0.2343	8.6889	-1.2009	-3.4943	-0.3581	7.2310	0.7587	2.7417	-0.4971	-1.8317	-1.2629	1.7870	-0.6919
T+5	-3.2201	0.6954	9.7748	0.7348	-4.0766	-0.2054	8.6036	0.6547	2.2583	-0.3815	-0.5255	0.7192	1.9640	0.0823
t-test	insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level	
p-value	0.85397		0.21978		0.83162		0.19053		0.64164		0.41978		0.82182	
***H_o**	**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**	

***if p-value <0.05, reject H_0**

Event Period	KEL 2009		KEL 2010		MST 2013		NTC 2009		SNT 2009		SNT 2010		TBS 2009	
	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test	CAR	t-test
T-5	0.4345	0.1557	-0.0385	-0.0178	2.7931	1.6365	-0.1364	-0.0679	0.2058	0.1126	0.6114	0.4861	0.6308	0.3820
T-4	1.2628	0.2968	0.1619	0.0926	7.3939	2.6956	-2.6738	-1.2631	0.7094	0.2755	0.7971	0.1476	-1.2905	-1.1637
T-3	1.3610	0.0352	-0.0610	-0.1029	-0.5643	-4.6627	-4.4192	-0.8689	-0.4220	-0.6190	-0.0172	-0.6474	-1.6470	-0.2159
T-2	1.2193	-0.0508	-1.8412	-0.8223	-1.2379	-0.3947	-3.4874	0.4639	0.6359	0.5788	0.0119	0.0231	-3.4148	-1.0707
T-1	0.3156	-0.3239	-4.0114	-1.0024	-1.1846	0.0312	-2.4719	0.5056	0.6758	0.0218	0.0614	0.0394	-4.1970	-0.4738
T 0	**1.5616**	**0.4466**	**-8.0631**	**-1.8715**	**-2.0968**	**-0.5344**	**-1.6656**	**0.4014**	**0.6700**	**-0.0031**	**0.0762**	**0.0118**	**-3.7556**	**0.2673**
T+1	1.3111	-0.0898	-8.0679	-0.0022	-0.1357	1.1490	-0.9521	0.3552	0.5892	-0.0442	0.1861	0.0874	-3.1066	0.3931
T+2	0.7915	-0.1862	-7.8448	0.1030	-2.9131	-1.6273	-0.7983	0.0766	2.0846	0.8182	-1.0496	-0.9825	-0.8722	1.3533
T+3	0.5659	-0.0808	-7.7574	0.0404	-3.8166	-0.5294	1.6632	1.2254	2.4613	0.2061	-0.6272	0.3358	-1.6797	-0.4891
T+4	0.7846	0.0784	-7.9474	-0.0878	-4.1078	-0.1706	3.3380	0.8337	5.2800	1.5421	-0.8422	-0.1709	-1.8277	-0.0896
T+5	0.1345	-0.2330	-7.8645	0.0383	-4.0059	0.0597	8.6923	2.6655	7.1369	1.0160	-1.3839	-0.4306	0.9706	1.6948
t-test	insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level		insignificant at 5% level	
p-value	0.61959		0.11118		0.83446		0.19705		0.05587		0.99637		0.64061	
***H_o**	**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**		**Cannot reject H_0**	

***if p-value <0.05, reject H_0**

**NOTE:*

If p-value <0.05, reject H_0. All of the p-values are greater than 0.05 which implies that the H_0 cannot be rejected. Therefore, one can conclude that there is in fact NO positive correlation between employee satisfaction and firm value.

To collaborate on these results, practitioners, who participate in share trading, were asked if they believe that employee satisfaction surveys impact on share price performance. They all stated that employee satisfaction surveys do not have an impact on share price performance. The practitioners were asked a simple question, whether they were willing to pay a premium when investing in companies that were known to be treating their employees well (resulting in employee satisfaction) and the response of all of them was “no”. Although this exercise is by no means representative of any credible standards of research, it possibly reflects an attitude that South Africa investors do not consider intangible assets as adding any significant value to a firm. This loose assumption is however confirmed by the empirical results presented in Table 3.

4.4 Market efficiency

The second research question concerns whether the relationship (positive or negative) between employee satisfaction and firm value is taken into account by the market and if so, how the market responds to such a relationship.

Appendix A shows a graphical representation of CAR fluctuations for the companies being researched during the event period under study. What is most evident from these graphs is that, notwithstanding the fact that the empirical results show no evidence of a positive correlation between employee satisfaction and firm value, in cases where the pre-event (T-1 ; T-5) CARs were negative, that the post-event (T+1 ; T+5) CARs, although not very significantly, are performing slightly better after the announcement date (See ADH 2013, BGA 2009, CDZ 2009, CDZ 2010, KIO 2012, GND 2013, KEL 2010, MST 2013, EXX 2009, NTC 2009, TBS 2009). This trend is hardly evident where the pre-event (T-1 ; T-5) CARs are already positive. One might therefore argue that post the event, investors are willing to give a slight benefit (though not very significant) to the firms whose stocks were already exhibiting negative pre-event CARs.

Studies conducted by Fama et al. (1969) on the adjustment of stock prices to new information content yielded considerable empirical evidence to support the conclusion that the stock market is efficient in the sense that stock prices adjust very rapidly to new information. These findings are consistent with the efficient market hypothesis (Fama, 1970) and it can be emphatically stated that markets respond rapidly to new information. According to the efficient market hypothesis (Fama, 1970) the abnormal return today should only relate to information released today. Thus, any previously released information should have no effect on abnormal returns because the information has been available to the traders. In addition, the return today cannot be influenced by information that traders do not yet know. If the stock price does not behave in this fashion, one can conclude that the market is inefficient and therefore does not capture all the factors that could result in stock price changes. This of course will result in arbitrage opportunities.

From the graphs presented in Appendix A one can conclude that there is a slight delay in the adjustment of stock price response (between two and three days) to the new information content contained in the BCTWF announcement, thus implying that the market is inefficient. However, the potential benefits of possible arbitrage opportunities is limited in that (1) the period of delay is very brief and (2) transactional costs may erode whatever small arbitrage benefits may have accrued.

4.5 Conclusion

From the results presented above it is evident, contrary to other empirical studies, that within the South African context there is no positive correlation between employee satisfaction and firm value. This relationship is more often than not mispriced by the market and notwithstanding the delayed response by the market, such delays are too brief to present any arbitrage opportunities to opportunistic investors.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The aim of this research report is to examine, first, whether a positive correlation exists between employee satisfaction and firm value of JSE listed companies that participated and were awarded the excellence award in the Deloitte's annual Best Company To Work For survey and, second, whether this relationship is taken into account by the stock market.

This chapter presents the empirical evidence by this and previous studies on this relationship and what it infers about market efficiency. This is followed by a reference to the relevance of such evidence to modern HRM workplace practises and is concluded with possible areas for future research.

5.2 The relationship between employee satisfaction and firm value

The empirical results presented in the previous chapter add to the body of knowledge because it provides empirical proof that within the South African context little evidence exists that would suggest a positive correlation between employee satisfaction and firm value. Furthermore, that where such a relationship does exist, as insignificant as it might be, it is mispriced by the market and presents very limited arbitrage opportunities to investors. It further suggests that, using the efficient market hypothesis, one can deduce that the JSE is an inefficient market that is at best semi-strong.

5.3 Implications for HRM workplaces practices

Does the outcome of this study imply that one can ignore the vast body of evidence from previous studies that present empirical arguments in favour of a positive correlation between intangible assets (of which employee satisfaction is one, the others being software, skilled work force, patents and know-how,

strong customer relationships, brand etc.) and firm value. Are the traditional HR theory arguments put forward by Taylor (1911) and Jensen and Meckling (1976) still valid in today's competitive environment? These authors argued that workers, similar to raw materials and machinery, are simply a production resource, and should therefore be used sparingly. Firms should seek to extract maximum benefit from employees while paying them the lowest possible wage (Taylor, 1911). Jensen and Meckling (1976) argue that every extra rand paid to a worker is a rand less for the shareholders and a happy worker is a sign that they are overpaid or underworked, to the detriment of the shareholder.

Modern HRM theories argue that that the role of the employee has dramatically changed over the past century. Maslow, (1943), Hertzberg (1959) and Zingales, (2000) argue that the work environment of today emphasises quality and innovation for which humans, rather than physical assets are particularly important. It views employees, rather than expendable commodities, as key organisational assets that can create substantial value by inventing new products or building client relationships. There are many hundreds of companies today worth billions of rand, which have few physical assets.

Many researchers mentioned in Chapter 2 have presented statistically significant results arguing that there is a very strong link between job satisfaction and firm value and that investors systematically misprice the shares of intangible-intensive firms. More often than not, such intangibles are undervalued. More so, it can be emphatically stated that there is a significant positive correlation between employee satisfaction and firm value.

So what do these conflicting results imply for the company and its view on labour practices? Is it worth investing in labour-friendly practises or should management meet the basic minimum requirements? This is in line with the views of Levitt (1958) and Friedman (1970) who argue that the only responsibility company executives have is that of maximising profits for the shareholders (within the ambit of the law and ethical behaviour) and that investing in socially responsible activities reduces shareholder value.

Considering the high value placed on people as one of the most (if not the most) important (intangible) assets of firms today, the choice is a simple one.

5.4 Recommendations and concluding remarks

One of the limitations of this study is the small sample size of participating listed entities in the BCTFW survey. Further to this, as much as previous event study research papers promote the use of smaller event periods, it will be of interest to research the effect of the information content of future employee satisfaction survey announcements over different iterations of event periods. However, it should be kept in mind that longer periods may have implications of reverse causality.

Although this study finds no positive correlation between employee satisfaction and firm value for those participating companies listed on the JSE; Edmans (2011; 2012), in a similar study for the S&P 100 “100 best Companies to Work For in America” yielded statistically significant results. These companies earned an annual four-factor alpha of 3.5 percent from 1984 to 2009. His study underpins that as purported by modern HR theories, workers are an important intangible asset, employee satisfaction and shareholder returns are positively correlated and stock markets fail to fully value intangibles.

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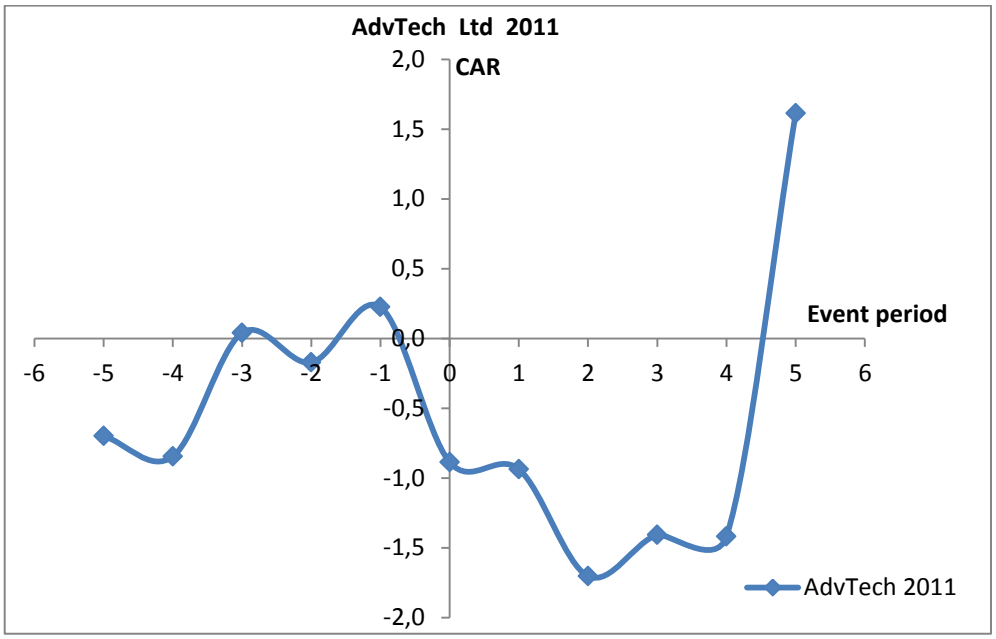
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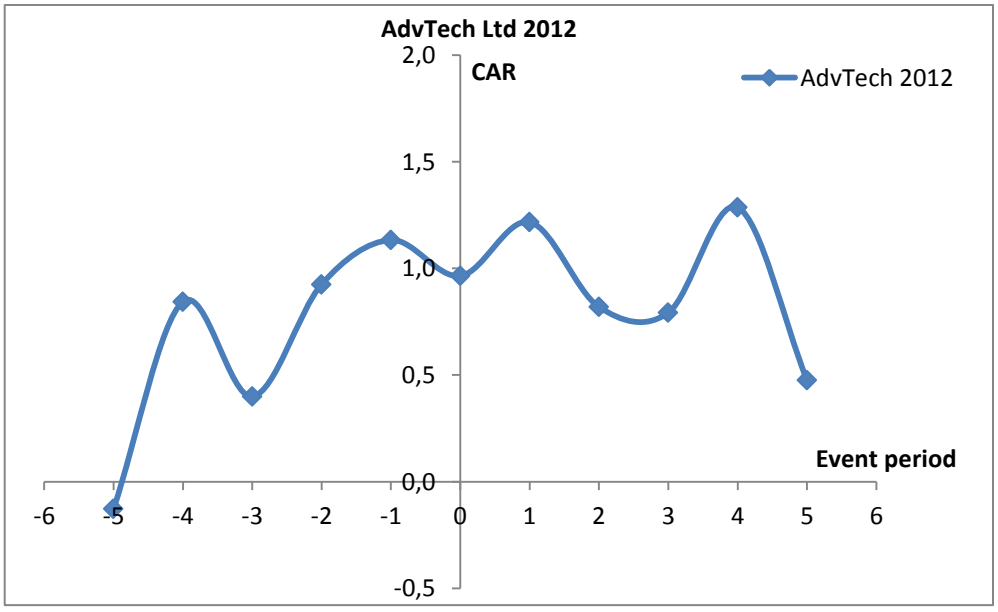
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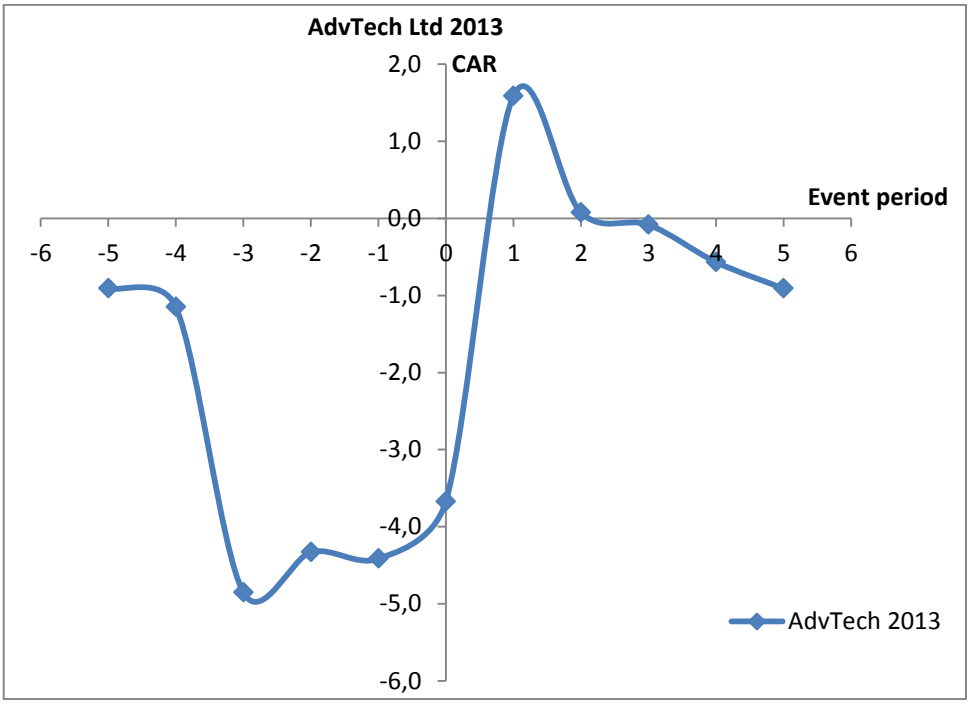
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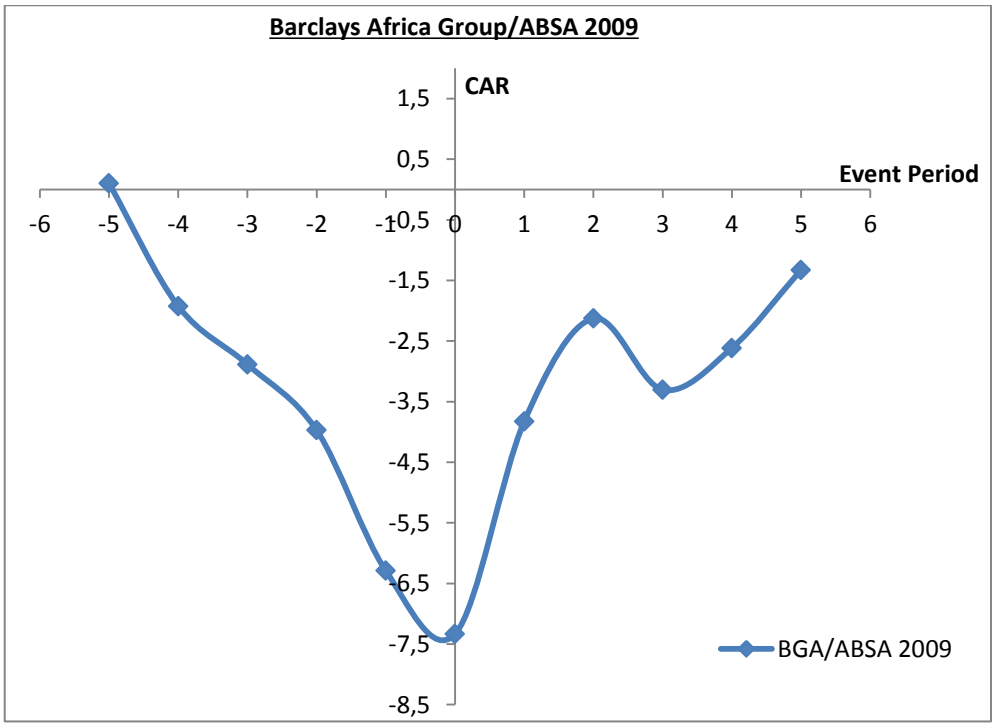
APPENDIX A

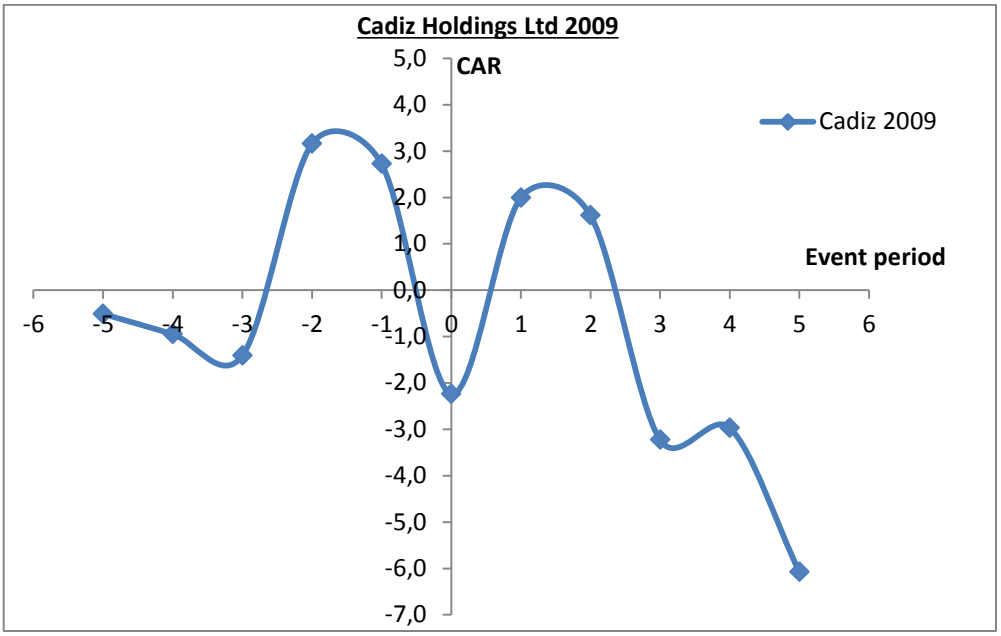
Graphical presentation of CARs during event period (T-5, 0, T+5)

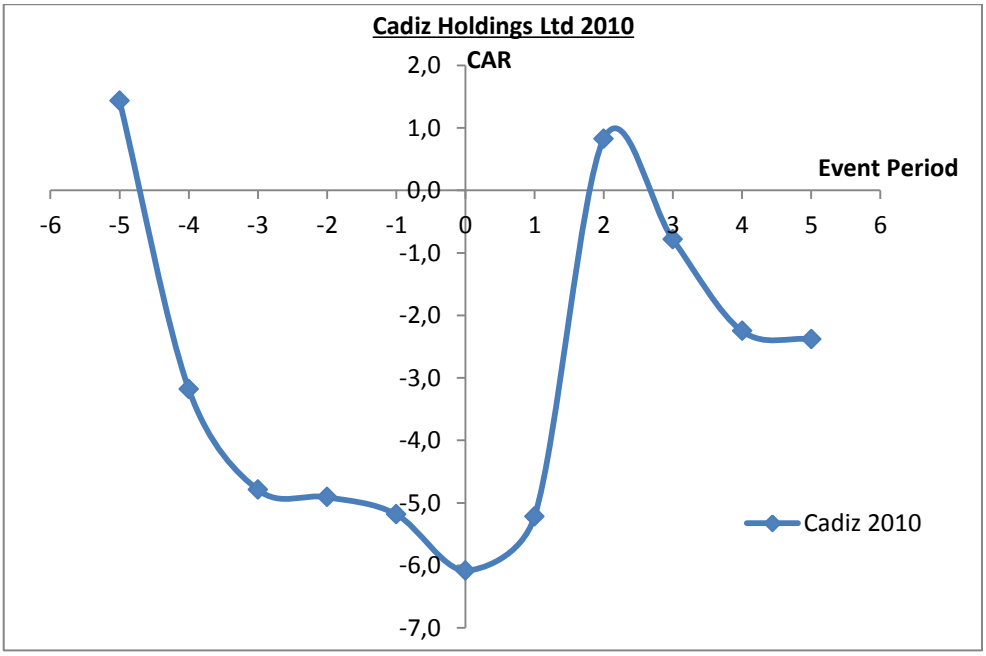


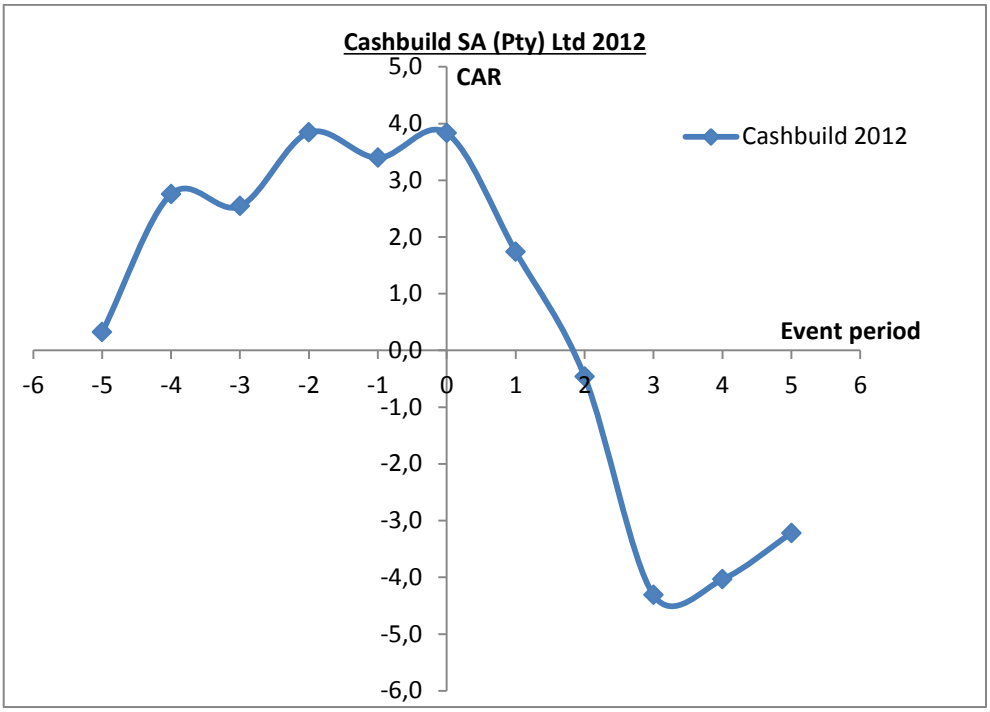


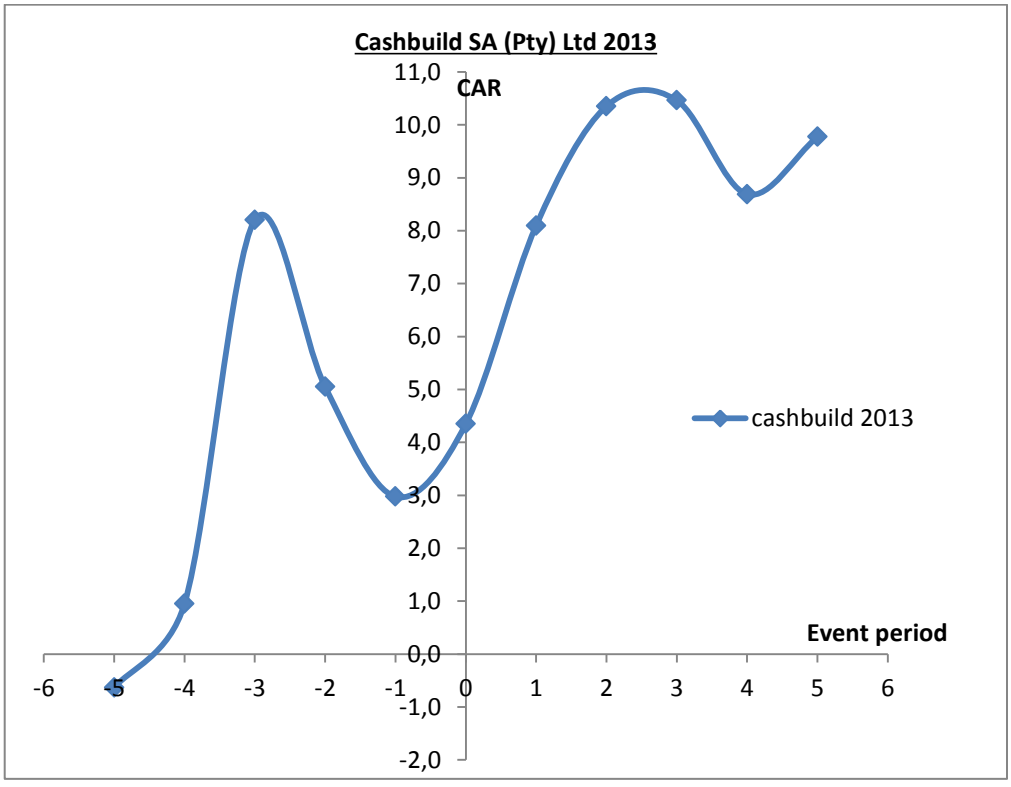

AdvTech Ltd 2013
CAR
Event period
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
-6,0
-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
AdvTech 2013

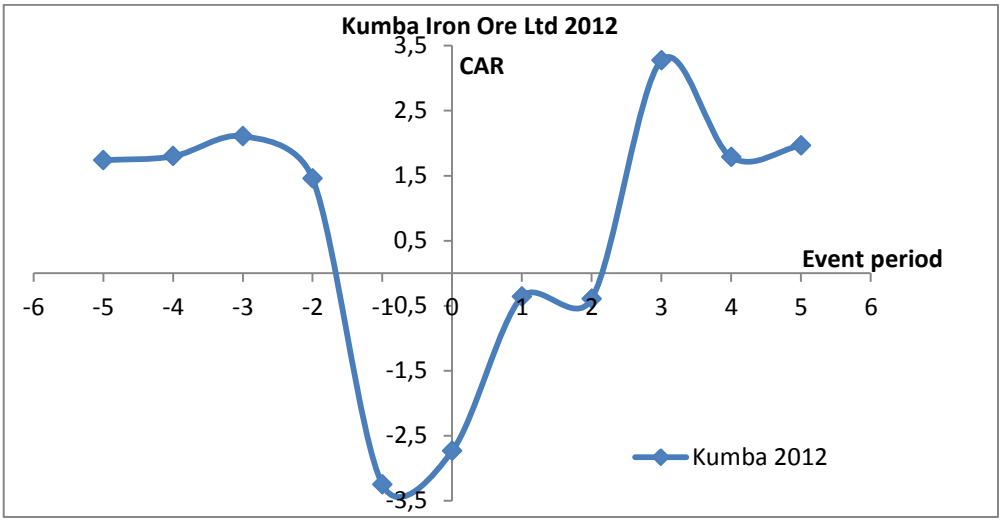

Barclays Africa Group/ABSA 2009
CAR
Event Period
1,5
0,5
-0,5
-1,5
-2,5
-3,5
-4,5
-5,5
-6,5
-7,5
-8,5
-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6
BGA/ABSA 2009

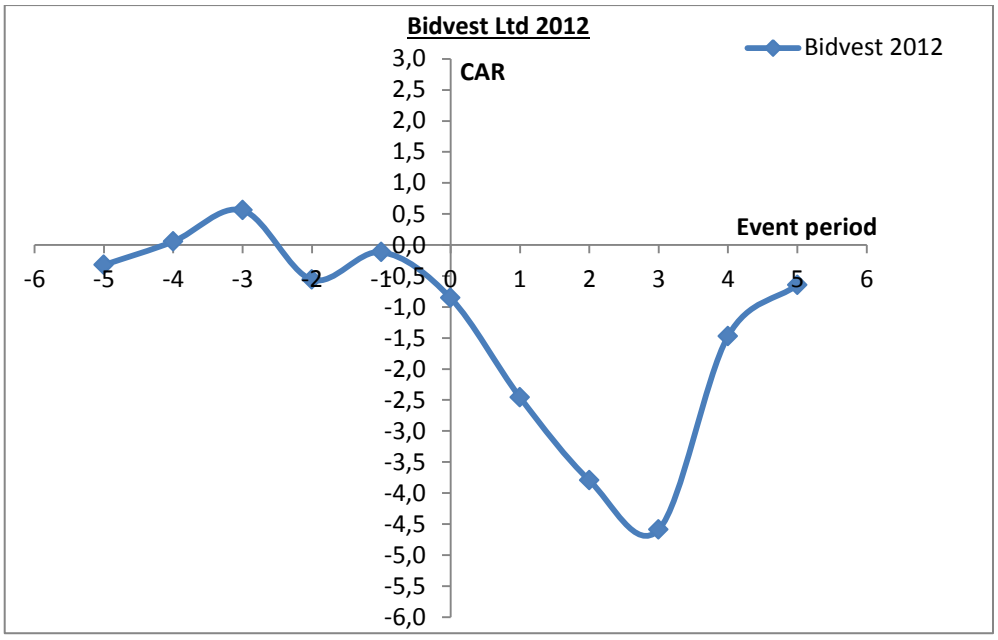

Cadiz Holdings Ltd 2009
CAR
Event period
Cadiz 2009
5,0
4,0
3,0
2,0
1,0
0,0
-1,0
-2,0
-3,0
-4,0
-5,0
-6,0
-7,0
-6
-5
-4
-3
-2
-1
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1
2
3
4
5
6

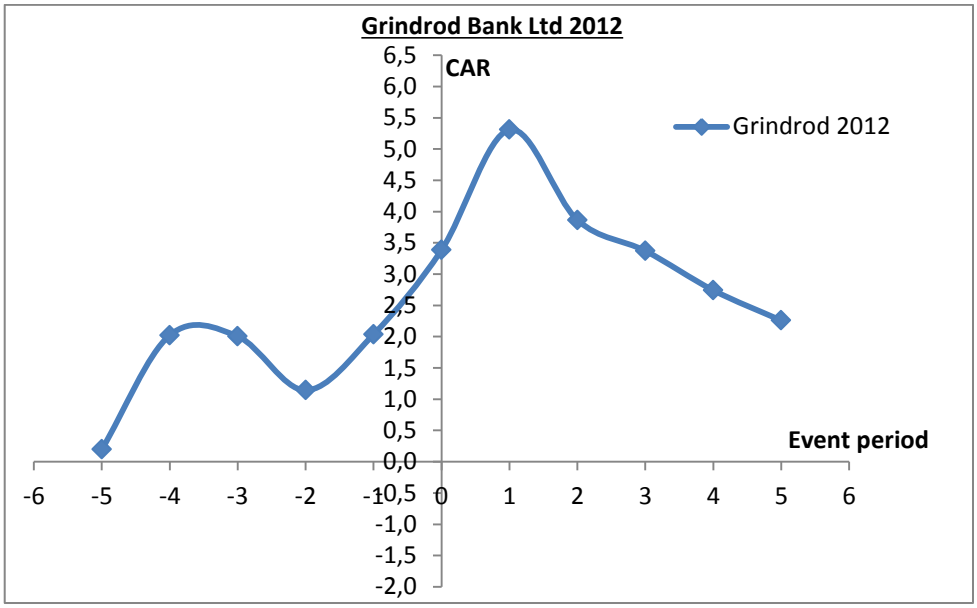

Cadiz Holdings Ltd 2010
CAR
Event Period
Cadiz 2010
2,0
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-3,0
-4,0
-5,0
-6,0
-7,0
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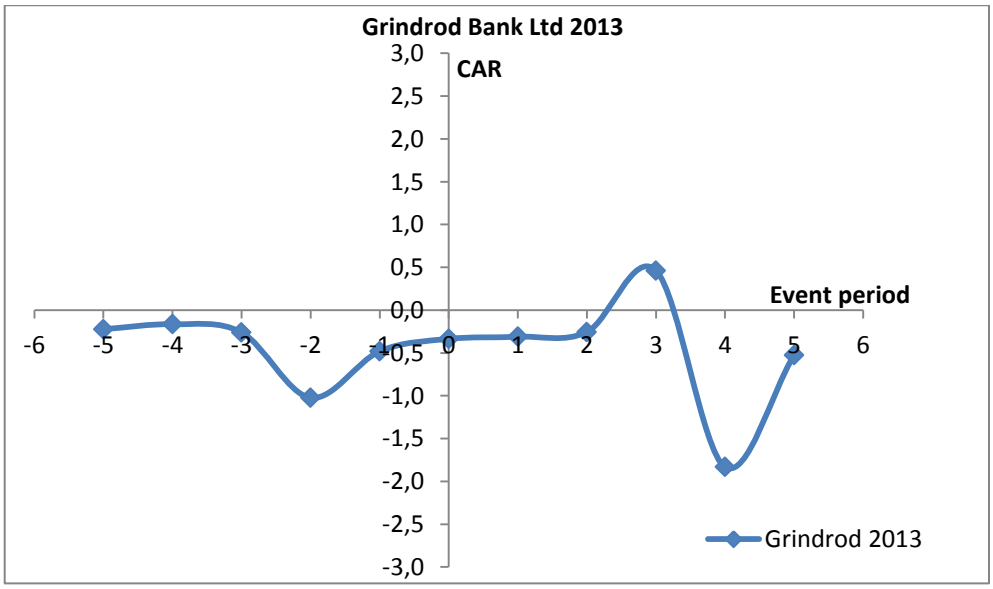

Cashbuild SA (Pty) Ltd 2012
CAR
Cashbuild 2012
Event period
5,0
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-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

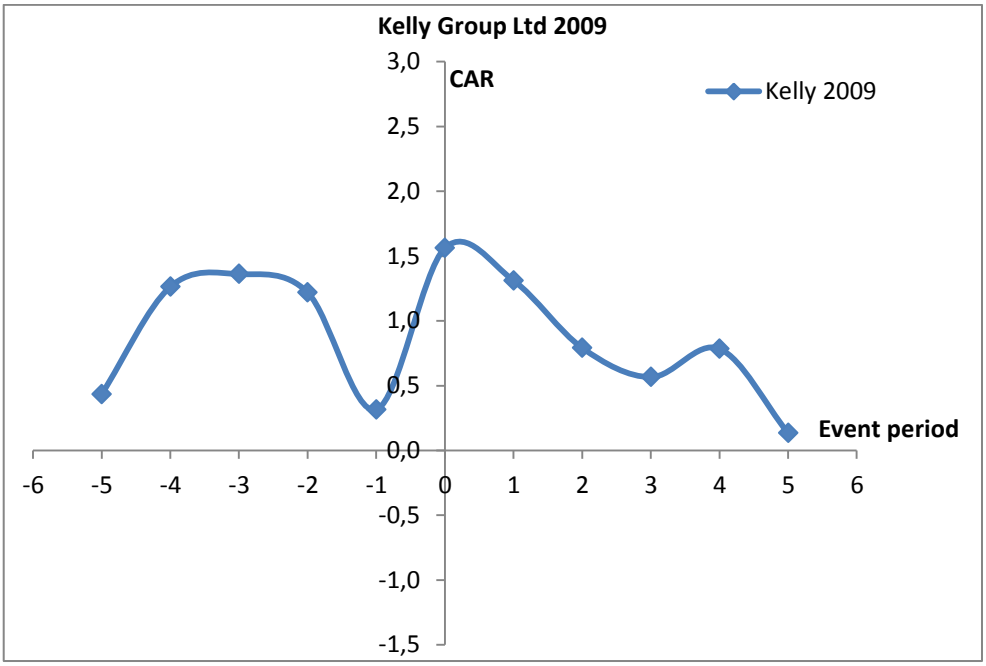

Cashbuild SA (Pty) Ltd 2013
CAR
cashbuild 2013
Event period
11,0
10,0
9,0
8,0
7,0
6,0
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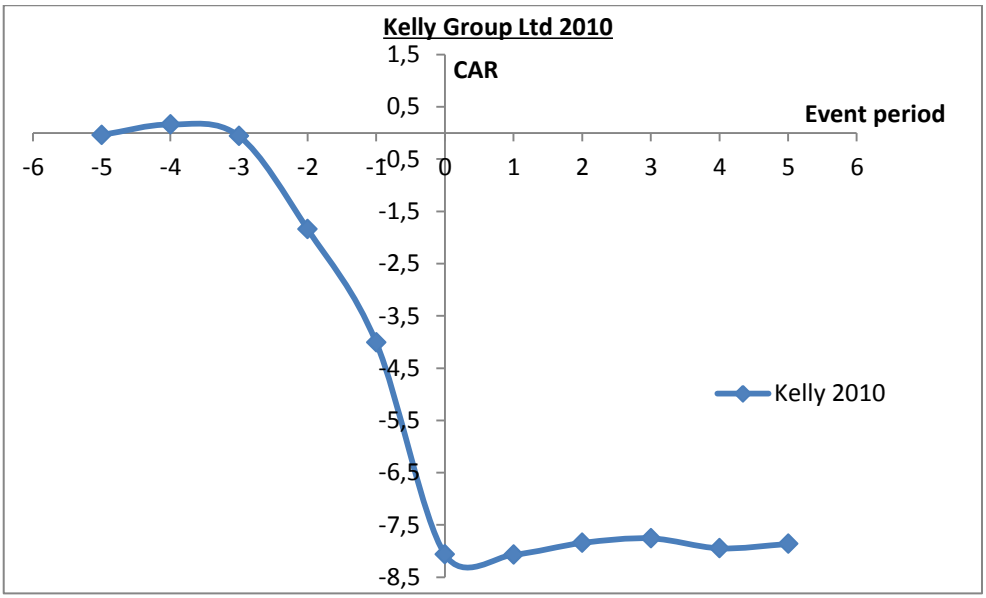

Kumba Iron Ore Ltd 2012
CAR
Event period
Kumba 2012
3,5
2,5
1,5
0,5
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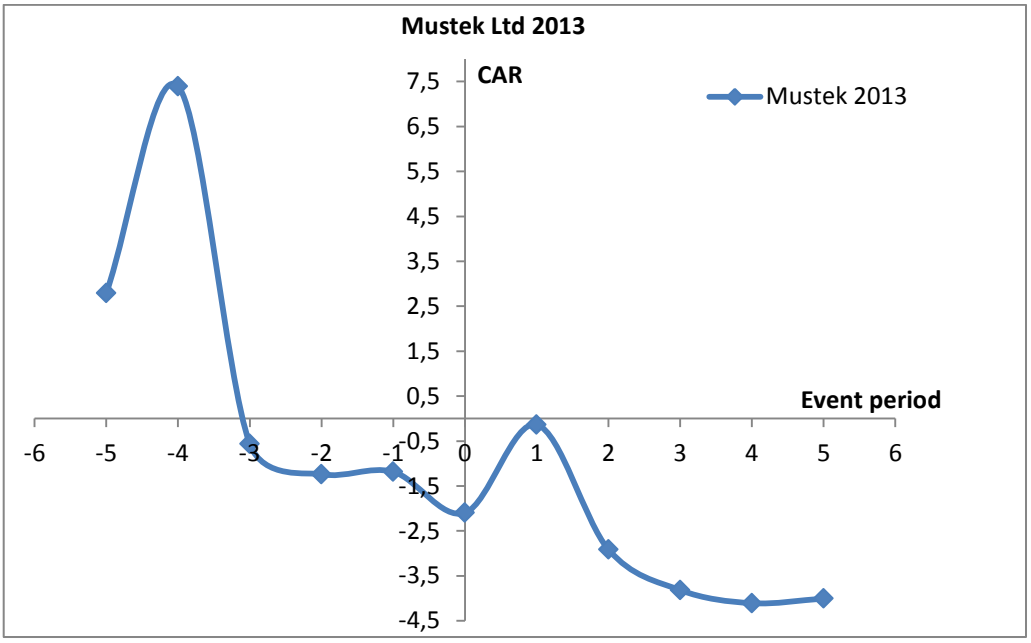

Bidvest Ltd 2012
CAR
Event period
Bidvest 2012
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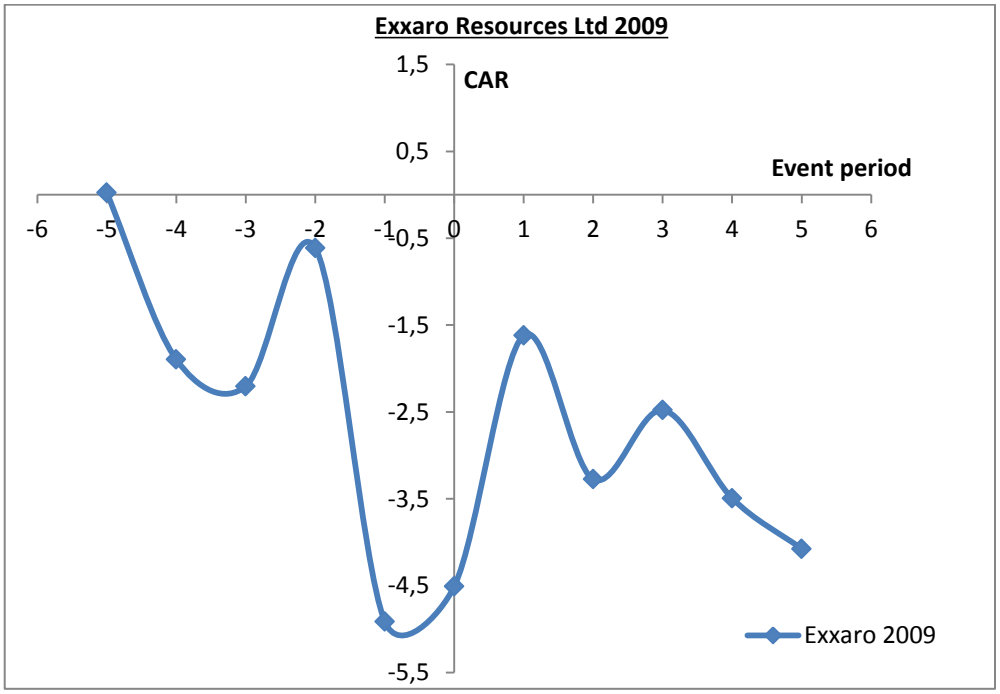

Grindrod Bank Ltd 2012
CAR
Grindrod 2012
Event period
6,5
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4,0
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1,5
1,0
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-0,5
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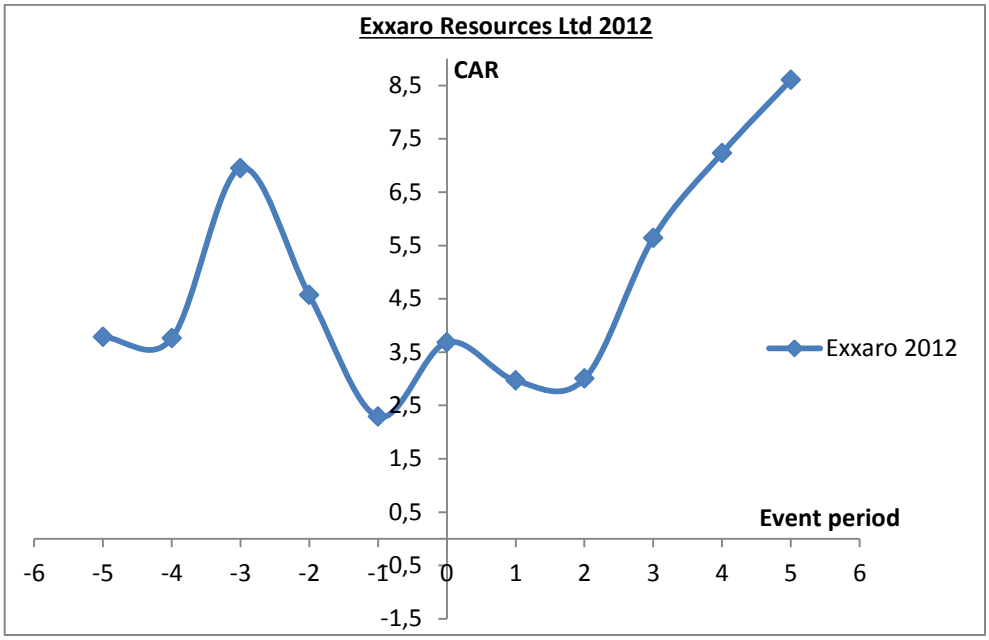

Grindrod Bank Ltd 2013
CAR
Event period
Grindrod 2013
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-1,5
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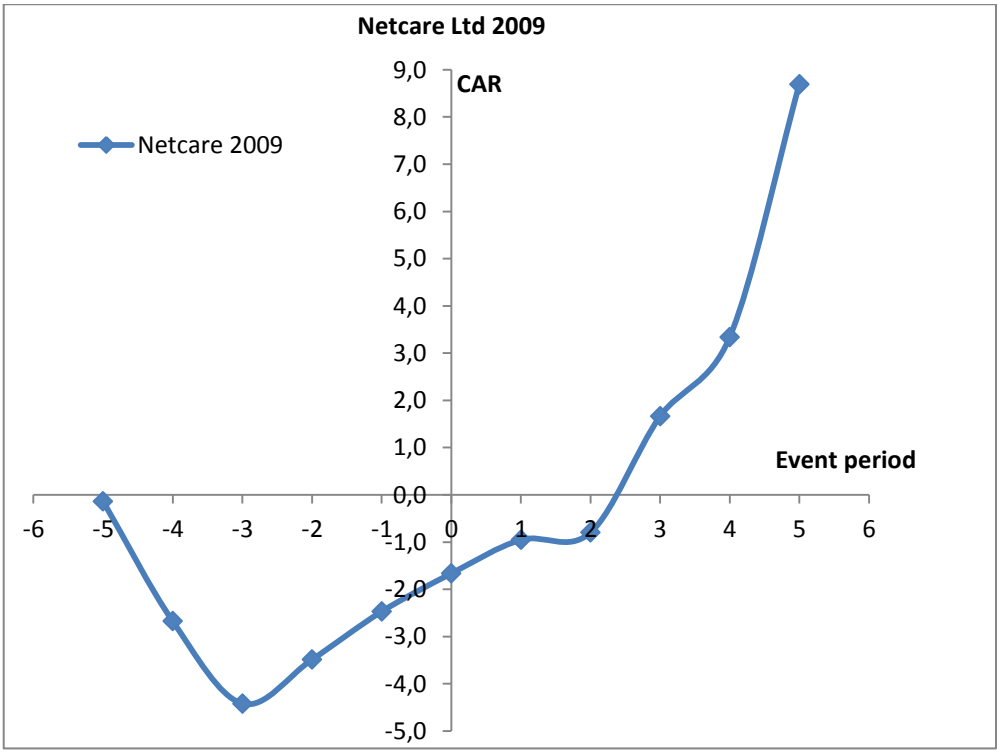

Kelly Group Ltd 2009
CAR
Kelly 2009
Event period
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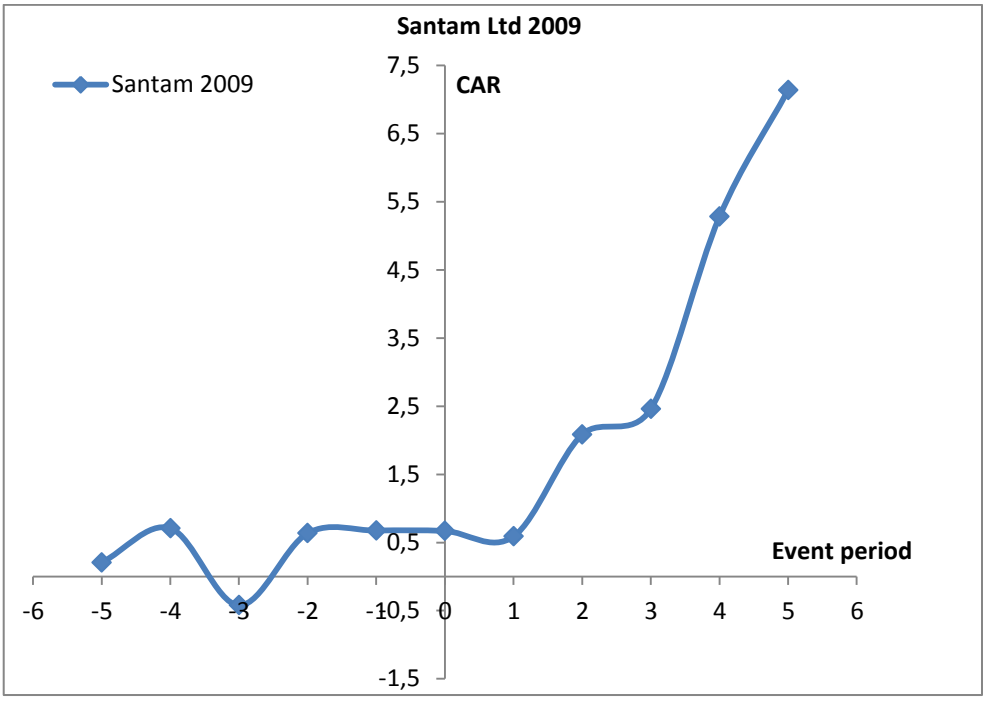

Kelly Group Ltd 2010
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Event period
Kelly 2010
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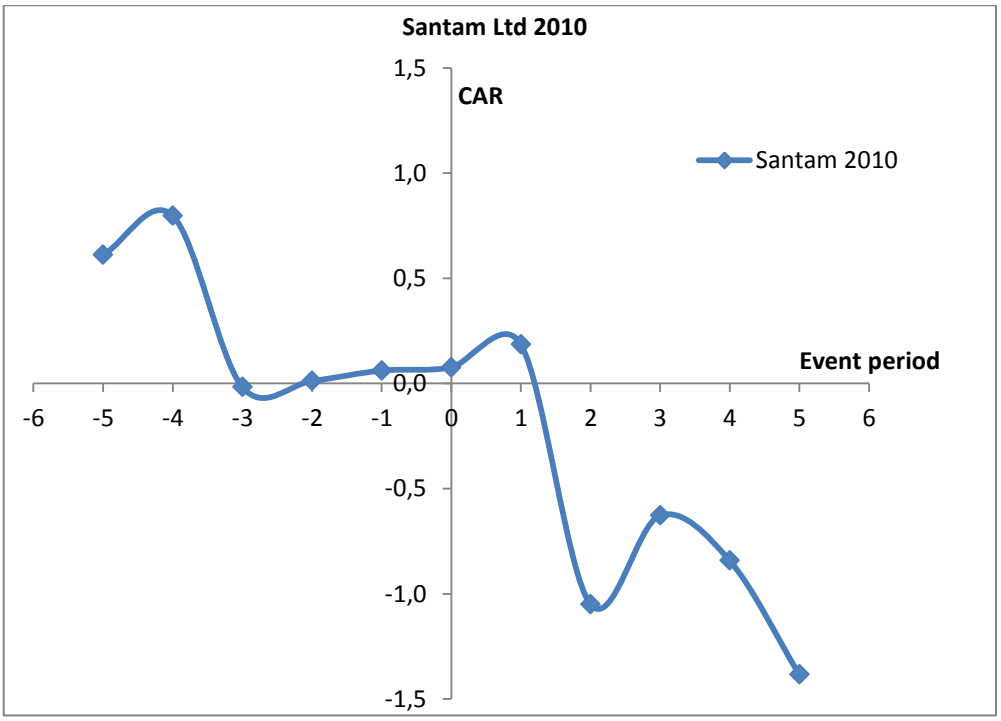

Mustek Ltd 2013
CAR
Mustek 2013
Event period
7,5
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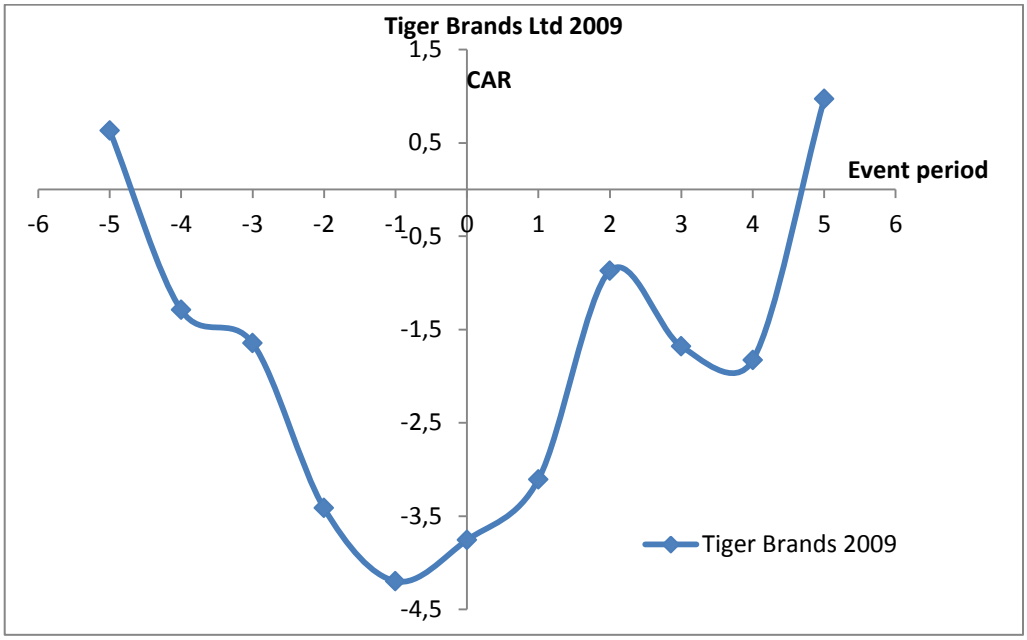

Exxaro Resources Ltd 2009
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Event period
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Exxaro Resources Ltd 2012
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Event period
Exxaro 2012


Netcare Ltd 2009
CAR
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Event period
Netcare 2009


Santam Ltd 2009
Santam 2009
CAR
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Event period
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Santam Ltd 2010
CAR
Santam 2010
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Tiger Brands Ltd 2009
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Tiger Brands 2009