# Executive remuneration and company performance for South African companies listed on the Alternative Exchange (AltX)

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ABSTRACT

It is often believed that it is the role of the executive directors of a company to create value and profits for the company. The question arises: should directors then receive an increase and performance-related remuneration if value is not created? This article examines the relationship between short-term executive compensation and company performance for a sample of companies listed on the Alternative Exchange (AltX) in South Africa between 2003 and 2010. Evidence is provided that there is a strong relationship between executive remuneration and some company performance variables, such as total assets, turnover and share price. The corporate governance measures and disclosure requirements applicable to executive remuneration are also examined.

**Key words:** executive remuneration, corporate governance, performance-based remuneration, alignment of interests

## Introduction and background

The history of companies dates back to Roman times when salaried managers coordinated the flow of goods, services and information. As companies grew in the 19th century and with the establishment of the first joined stock exchange in 1856, it became evident that a different style of manager was needed to look after the interests of shareholders (often referred to as the principal or the provider of capital). These managers became known as the directors of a company (and act as the agents). The

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problem created by this situation was that directors of the company could abuse power to their own advantage and to the disadvantage of the shareholders. Corporate governance measures (including measures surrounding executive remuneration) were introduced to ensure that directors control companies in a way that will be acceptable to the shareholders of the company (Carlos & Nicolas 1996).

It is often believed that it is the role of executive directors of a company to create growth and generate profits for the shareholders. The question arises: if the directors fail to create value and profits, should they be entitled to a salary increase and performance-related remuneration? (Woodburn 2008). *The Economist* (2004) also emphasised that huge salaries for executives would be much less controversial if there was evidence that the executives earned these salaries.

With the King III Report on corporate governance, which requires disclosure between salary and performance-related elements as well as an explanation of the basis on which remuneration is measured, it will become increasingly difficult for executive directors not to be remunerated according to performance. The fact that the King III Report also suggests that shareholders approve the remuneration policy of a company will increase the accountability of executive directors to shareholders. Furthermore, the King III Report recommends that remuneration committees, consisting of non-executive directors, be established to determine and monitor executive remuneration (IoD 2009).

Executive remuneration remains a controversial topic, especially in South Africa where the wealth gap between rich and poor is still on the increase (Wray 2008). In view of the current financial crisis, it is not surprising that executive remuneration has attracted the attention of investors, the media, the public at large, trade unions and researchers (PWC 2009). The following quotations from the media illustrate this interest:

- “Corporate reports should illustrate a company’s strategy, which include the link between executive reward and the delivery of the strategy” (Temkin 2007)
- “Shareholders should be required to approve the level of remuneration paid to company directors” (Crotty 2008)
- “What are the key performance indicators against which executives are measured?” (Claasen & Planting 2008)
- “Shareholders will tend to argue that pay increases should match performance, but executives ... rewarded for their efforts and risk” (Anderson 2008)
- “Shareholders vetoing directors’ pay increases while profits are falling” (Rose 2009)
- “Boards compelled to review remuneration strategies” (Temkin 2009a)
- “King 3 Report opposes excessive pay for executives” (Temkin 2009b)

- "Executive pay will take centre stage when boards and remuneration committees will have to prove their effectiveness to shareholders" (Temkin 2010).

In the past two decades, there has been an increase in the research done on executive remuneration. There seems to be no real consensus on the extent of the problem and whether there is indeed one. This article looks at executive compensation of small to medium-sized companies listed on the Alternative Exchange (AltX) in South Africa.

The article is structured as follows: first, the research objective, methodology and value design are explained, and the current research available on executive remuneration and company performance, including the agency theory, is discussed. This is followed by an investigation into the current corporate governance requirements for executive remuneration. Next, the research design is described and the results are discussed. The conclusion follows after some additional testing. Finally, areas for further research are suggested.

## Research objective, methodology and value design

It was the objective of the study to investigate the link between company performance and short-term executive remuneration for companies listed on the AltX. The second objective was to examine the corporate governance and disclosure requirements that are currently applicable (and will become applicable with the implementation of the 2008 Companies Act and King III Report) to executive remuneration, as prior research on the inclusion of corporate governance has indicated that these have an effect on the linking of executive remuneration to performance of the company (Rankin 2007).

Literature in the field of executive remuneration was reviewed, with a specific focus on research on the alignment of interests between the shareholders and executive management, as well as research on the link between executive remuneration and company performance. The literature comprised a wide range of articles published in accredited journals, working papers of universities, articles in popular publications and regulations. This was followed by an empirical study of the link between short-term executive remuneration and company performance for small and medium-sized companies.

The relevance of this study is that it extends the boundaries of the current study field. Unlike other studies that included long-term elements of executive remuneration (for example, O'Neill & Iob 1999; Merhebi, Pattenden, Swan & Zhou 2006), this study concentrated on short-term elements of remuneration. The inclusion of only short-term elements is important, because long-term items such as share options

seem to be used as rewards for risk and for the retention of employees, as discussed in the media (Brand-Jonker 2009; Van Zyl 2008). In addition, this article focuses on smaller to medium-sized companies, whereas prior research was conducted on larger companies. This article adds to the ongoing debate on the link between company performance and executive remuneration.

## Literature review

### Principal-agent problem

The structure of executive remuneration has changed considerably over time, and research has therefore been conducted on whether executive remuneration is an effective way of aligning the interests of shareholders and executive directors.

Research carried out by Jensen and Meckling (1976) investigated the alignment of interests and the alleviation of agency costs between stakeholders and executive management and found the agent's remuneration package to be an effective way of monitoring the agent. This provides evidence of what the literature proposed in the 1970s, namely that various markets, for example the market for managers, provided incentives for managers to work in the interest of the owners (Deegan 2009). Barber, Ghiselli and Deale (2006) found that executives had personal goals that conflicted with the interests of shareholders, which led to the perception that there may be little relationship between company performance and the compensation of chief executive officers. They conclude that the conflict can be resolved by aligning the incentives of executives with the interests of shareholders, thus creating value for the shareholders through the pay–performance relationship.

Research by Murphy (1986) found that the rationale for introducing performance-related remuneration for executives is to create a shared vision for the interests of shareholders (principals) and executives (agents). If managers are assumed to need (and respond to) financial incentives to act in shareholders' interests, then shareholders can gain by introducing appropriately structured performance-related remuneration.

### Link between company performance and executive remuneration

Murphy (1986) wrote one of the first influential articles on the link between company performance and executive remuneration. In Murphy's study, which included large publicly held USA companies, it was found that executive remuneration is statistically linked to the performance of the company, measured in terms of shareholder return

and growth in sales. Following Murphy's research, other studies were conducted in which company performance was compared to executive remuneration.

Studies in the early 1990s included that of Jensen and Murphy (1990), who studied a sample of large US companies and tested the relationship between CEO wealth and shareholder wealth. They found little evidence of a relationship between executive compensation and performance. Conyon and Leech (1994) investigated the agency theory's prediction that CEO compensation is positively related to corporate performance in large UK companies. The results showed that it is possible to find a positive, statistically significant relationship between executives' pay and company performance. Main, Bruce and Buck (1996) and Benito and Conyon (1999) studied large UK companies where remuneration included share options, and found a link between executive remuneration and company performance. A study conducted by O'Neill and Iob (1999), on determinants of remuneration for Australian organisations, also showed a link between remuneration and performance, where remuneration included share options.

More recently, in the UK, Stathopoulus, Espenlaub and Walker (2005) found that there was a link between higher-performing companies and executive remuneration, and that the link between poorer-performing companies and executive remuneration was weak. Gregg, Jewell and Tonks (2005) also found the link between executive remuneration and company performance to be weak. Girma, Thomson and Wright (2007) excluded share options in their sample and found a weak link between executive remuneration and company performance. Eichholtz, Kok and Otten (2008) studied UK property companies and found company size to be the most important variable and that executive shareholdings provide a stronger link between compensation and performance.

More recent research in the USA is mostly specific to a company or industry. A study by Barber et al. (2006) examined the correlation between company performance and executive compensation in the restaurant industry. Executive compensation was regressed over gross revenue, net income and stock price. The results show a positive correlation between executive remuneration and share price for larger restaurant companies. The relationship between executive remuneration and gross revenue was stronger for smaller restaurant companies. For older restaurant companies, net income was a predictor of executive remuneration. The 2010 BDO study of compensation trends by city examined the link between executive pay and company performance in ten cities across the USA. From their findings, it appears that pay and performance are connected. With few exceptions, personnel at companies with a positive return on shareholder value received salary increases, and personnel at companies with negative shareholder returns showed salary decreases (BDO 2010).

Izan, Sidhu and Taylor (1998) investigated listed Australian companies and compared CEO salaries and bonuses to sales and rates of return and found that there was no evidence of a link between the remuneration of CEOs and company performance, measured as sales and rates of return. More recent research in Australia by Sharma and Smith (2001) compared base salary growth with revenue growth and profit growth and found a link between revenue growth and the growth in executive remuneration. They reported that profit growth does not seem to have influenced the growth of executive remuneration. Merhebi et al. (2006) compared CEO compensation with accounting and market returns and found a significant positive relationship between CEO remuneration and company performance. Their study included share options. Rankin (2007) included firm performance, economic characteristics and corporate governance characteristics and found that executive remuneration is currently more strongly tied to performance and that corporate governance structures are beneficial in establishing this link.

## Corporate governance and executive remuneration

### Background

There is growing concern that company directors and executives are using their position in the company to pursue their own objectives rather than focusing on what is best for the company and its shareholders. The growing distrust of and scepticism towards company executives has led to the establishment of corporate governance principles (McConvill 2005). The Cadbury Committee was established in the UK in 1991 after the Maxwell Communications, Bank of Credit and Commerce International, and Polly Peck scandals (Matsumura 2005). In South Africa, the King Committee on Corporate Governance was established in 1993 to promote good corporate governance. The King Reports on corporate governance – in 1994 (King I), 2002 (King II) and 2009 (King III) – dealt with executive remuneration among other things.

Executive compensation has been a sensitive issue for a long time. The current financial crisis has a tendency to focus increased attention on executive remuneration. In 1929, much attention was focused on Eugene Grace, the president of Bethlehem Steel who received a basic salary of $12 000 and a bonus of $1.6 million (Cooley 2009). In 1933, the American Congress demanded that a list of top executive salaries be included in the corporate income tax returns. Congress decided that this practice needed to be curbed by legislation, taxation and publicity. The most important

court case in that era involved George Washington Hill, the president of American Tobacco, and the other senior executives who received excessive performance bonuses. The majority shareholders had approved an executive plan in 1912 stating that if the profit of the company exceeded $8.2 million, the directors would receive performance bonuses. These bonuses finally amounted to 10% of the company's profit. The minority shareholders were not in favour of this, and the case was referred to the Supreme Court. In Rodgers v Hill (1933) the Supreme Court ruled that overall compensation needs to be reasonable in proportion to the value of services rendered. The judge also ruled that if a bonus payment has no relation to the value of services rendered, it is a gift, and the majority shareholders have no power to give away corporate property against the protest of the minority shareholders. This court case effectively established the legal right to examine the executive remuneration of listed companies (Cooley 2009).

Research has indicated that an improvement in corporate governance requirements can increase the link between executive remuneration and company performance. Research conducted by Conyon and Leech (1994) tested UK listed companies between 1983 and 1986. They found that the evidence of the role played by corporate governance was mixed. Conyon (1997) studied 213 large UK companies between 1988 and 1993 and found that there was a relationship between company performance and executive remuneration as a result of corporate governance measures, especially if there is a remuneration committee. Laign and Weir (2000) studied large UK companies between 1994 and 1996 and found mixed results. Rankin (2007) studied 300 Australian companies in 2005 and found a link between company performance and executive remuneration due to the improvement in corporate governance measures.

## Corporate governance and the Alternative Exchange

The Alternative Exchange (AltX) was launched after the implementation of the King II Report on corporate governance. It is expected that a closer link would exist between company performance and directors' remuneration after the implementation of the King Codes of Corporate Governance.

Table 1 shows the corporate governance requirements relating to executive remuneration for directors and senior executives, according to King II and King III. King III also requires specific disclosure of remuneration paid to each director in terms of the Companies Act. Compliance with the King II Report was required for

the companies in the sample of this study. King III will only become a requirement with the implementation of the 2008 Companies Act. The disclosure requirements relating to executive remuneration, as required by the Companies Act (Act No. 71 of 2008) and the Johannesburg Securities Exchange (JSE) listing requirements are shown in Table 2.

**Table 1:** Corporate governance requirements of King II and King III relating to executive remuneration

| King II | King III |
|---|---|
| **Performance-related remuneration** | |
| • Performance-related elements of remuneration should constitute a substantial portion of the total remuneration of executives. | • Short-term and long-term performance-related awards must be fair and achievable. |
| **Remuneration policies** | |
| • There should be a formal and transparent procedure for developing a policy on director and executive remuneration. This should be supported by a statement of remuneration philosophy in the annual report. | • Remuneration policies that create value for the company over the long term should be implemented.<br>• The remuneration committee should assist the board in setting and administrating remuneration policies.<br>• The company's remuneration policy should be tabled to shareholders for a non-binding advisory vote at the annual general meeting. |
| **Annual bonuses** | |
| | • Annual bonuses should be reviewed regularly to ensure that they remain objective.<br>• Annual bonuses should relate to performance against annual objectives consistent with long-term value for shareholders. |
| **Share-based payments** | |
| | • Participation in the share option scheme should be restricted to employees and executive directors.<br>• The chairman and other non-executive directors should not receive share options or other incentive awards geared to share price or corporate performance.<br>• Vesting of rights (in cash or shares) should be based on performance conditions measured over a period appropriate to the strategic objectives of the company. The period of measurement should not be less than three years.<br>• Where performance conditions are not met, these conditions should be retested in subsequent periods before share options are awarded.<br>• Regular annual grants of share-based awards are desirable. |

**Sources:** For King II Report, IoD (2002); PWC (2009)
For King III Report, IoD (2009); PWC (2009)

The requirements were listed as a way of indicating the improved corporate governance requirements created by the King III Report on corporate governance and the disclosure requirements of the Companies Act and the JSE listing requirements.

**Table 2:** Disclosure of executive remuneration in terms of the Companies Act 2008 and the JSE listing requirements

| Companies Act 2008 | JSE listing requirements |
| --- | --- |
| • The following must be disclosed separately:<br>– Remuneration,*<br>– Benefits,*<br>– Pensions,<br>– Payments to pension funds on behalf thereof,<br>– Compensation for loss of office,<br>– Securities issued, and<br>– Service contracts.<br>• Remuneration includes:<br>– Directors' fees for services to or on behalf of the company,<br>– Salary, bonuses and performance-related payments,<br>– Expense allowances for which the director need not account,<br>– Contributions to any pension scheme not otherwise needing separate disclosure,<br>– Options or rights given directly or indirectly,<br>– Financial assistance for the subscription of options or securities or the purchase of securities, and<br>– Any loans and any other financial assistance.<br>• Remuneration and benefits must be shown for:<br>– Services as director of the reporting company, and<br>– All other services while being a director of the reporting company.<br>* To be disclosed for each director | • Disclosure should be made of each individual director's emoluments, including directors who have resigned.<br>• An analysis in aggregate and by director of emoluments paid for the current financial year as well as the preceding financial year, distinguishing between executive and non-executive directors:<br>– Fees for the services as director,<br>– Management, consulting, technical or other fees,<br>– Basic salary,<br>– Bonuses and performance-related payments,<br>– Sums paid by way of expense allowance,<br>– Any other material benefits received,<br>– Contributions to pension fund, and<br>– Commission, gain or profit-sharing arrangements. |

**Sources:** Companies Act (Act No. 71 of 2008) and JSE Listing requirements (JSE 2010)

## *Research methodology*

This part of the article is devoted to the analysis of annual reports of companies listed on the AltX, which forms part of the JSE Securities Exchange (JSE). The

AltX was launched in 2003, following the need for a market for fast-growing small and medium-sized companies. The AltX listing requirements and governance procedures (which comply with those of the JSE, given one or two exceptions) are geared towards attracting new and growing businesses wanting to raise funds, make acquisitions and mature in such a way as to facilitate transfer to the JSE main board.

These companies were selected to investigate whether a link exists between the short-term remuneration of executives of small to medium-sized companies, and company performance.

## *Sample and data*

The sample period includes reporting periods from 2003 to 2010. There were 64 South African companies listed on the AltX at the end of March 2011 (JSE 2011). The sample selection started off with these 64 companies. Of these companies, six were excluded that had been listed for less than three years. The final sample consisted of 58 companies, but only data available on McGregor BFA for the companies in the sample were used in the regression analysis. Data for the 2010 reporting period were not available for seven of the companies included in the sample. Figure 1 shows the number of companies that were included in the regression analysis for each of the years in the sample period.

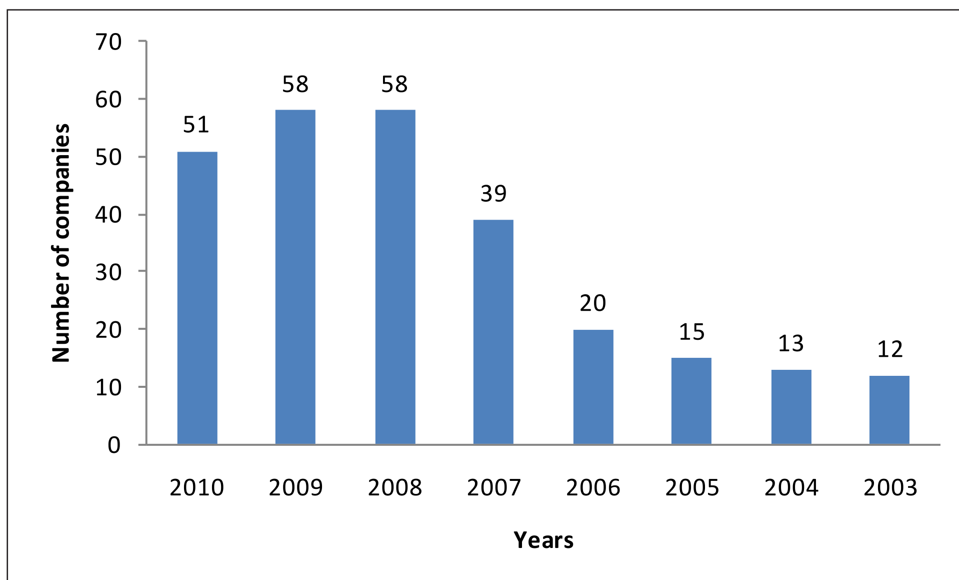


**Figure 1:** Number of companies included in the regression analysis per year

In order to make meaningful comparisons between the results of different companies, it was necessary to devise a standardised system of analysis. The standardised information was extracted from McGregor's Bureau of Financial Analysis data stream (McGregor BFA). The Blink sub-section was used to extract the company performance line items from the companies' standardised financial statements. Information of executive remuneration was obtained from the companies' published financial statements.

### *Research method*

The Durbin-Watson test was performed to test for serial/auto correlation of residuals. A significant positive correlation of 1.2 was found, thus indicating that there was auto-correlation of residuals. Taking into account the nature of the data, which included systematic patterns and the auto correlation of the residuals, a time-series cross-sectional regression analysis was performed. Executive remuneration was regressed on various company performance indicators. The analysis was at a company level (with each reporting period of the company representing a single observation).

Company performance was referenced to various financial indicators that were perceived by shareholders as the value of the company (PWC 2009). Turnover, EBITDA, total assets and share price were used as company performance indicators in this study.

The variables used in the regression analysis, as defined by McGregor BFA, were as follows:

- *Executive remuneration*: Total cash remuneration of executive directors of the company as disclosed in published annual reports. Cash remuneration includes base salary, benefits and annual bonus.
- *Turnover*: Sales as disclosed in the statement of comprehensive income.
- *EBITDA:* Earnings before interest, tax, depreciation and amortisation as disclosed in the statement of comprehensive income.
- *Total assets*: Non-current assets plus current assets as disclosed in the statement of financial position.
- *Share price*: Volume weighted average price of the share for the financial year (total monetary value of the shares traded during the year divided by the number of shares traded during the year).

Descriptive statistics indicated that the means for the dependent variable (namely, executive remuneration) range from R1 481 875 in 2003 to R5 434 055 in 2010.

The range in the means for the independent variables (performance indicators) were as follows:

- Total assets: R20 243 636 in 2003 to R298 489 303 in 2010
- Turnover: R25 449 545 in 2003 to R341 441 396 in 2010
- EBITDA: R2 974 636 in 2003 to R36 623 642 in 2010
- Share price: R0.13 in 2003 to R0.69 in 2010.

The mean of each variable was calculated per year and standardised in order to make a comparison between performance indicators and executive remuneration. This comparison is illustrated in Figure 2.

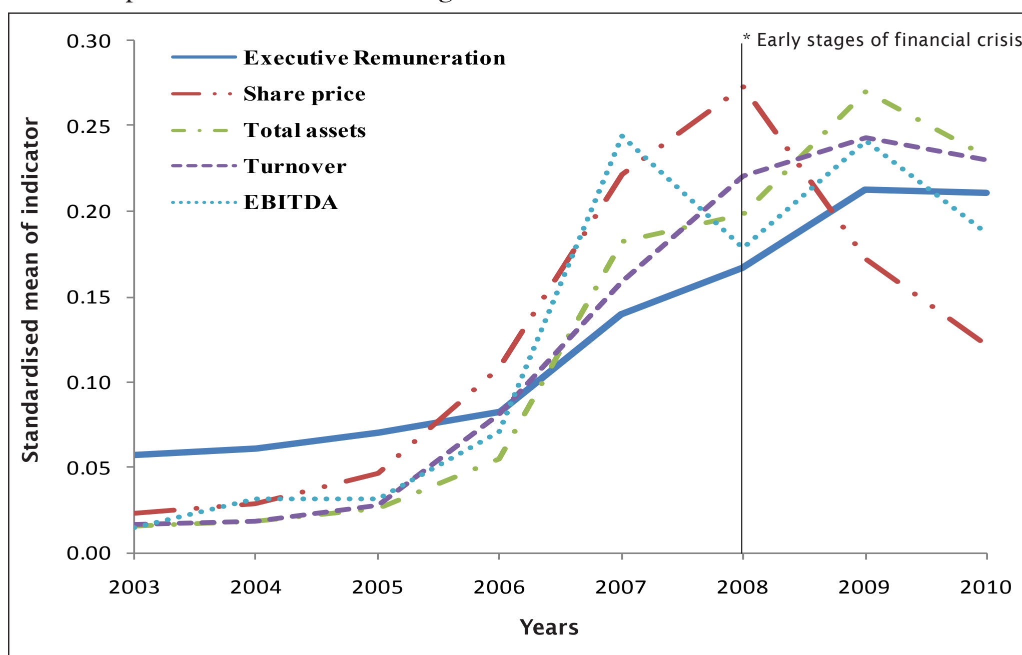


**Figure 2:** Comparison of standardised performance indicators with executive remuneration

## Research results and discussion

Table 3 reports the results of the regression analysis performed in the study. All the variables have positive regression coefficients, except for EBITDA. Total assets and turnover were significant at the 0.01 level and share price at the 0.05 level. Although EBITDA has a negative regression coefficient, it was only significant at the 0.10 level.

The R-square indicated that 34% of the variation in executive remuneration was explained by the set of company performance indicators.

**Table 3:** Time series cross-sectional regression of executive remuneration on company performance indicators: 2003 to 2010 (R-square = 0.3366)

| Variable | Beta coefficient | Std error | t-statistic | p-value |
|---|---|---|---|---|
| Intercept | 1 938 763 | 442 215 | 4.38 | 0.0001 |
| **Company performance indicators** | | | | |
| Share price | 545 483.9 | 147 969 | 3.69 | 0.0003 |
| Total assets | 0.00367 | 0.00053 | 6.90 | 0.0001 |
| Turnover | 0.00248 | 0.00044 | 5.70 | 0.0001 |
| EBITDA | -0.00174 | 0.00104 | -1.68 | 0.0952 |

In addition, a sensitivity test was performed, where outliers were downscaled to three standard deviations from the mean. It was found that the outliers did not affect the results, and therefore only the results from original data are reported.

## Additional testing

The results from the empirical test provide evidence that there is a strong relationship between executive remuneration and company performance indicators. In this section, additional testing was performed to determine whether the link between short-term executive remuneration and company performance still hold during a financial crisis. A report issued by *Business Day* in 2010 indicated that investor activity had been low for the AltX companies, and that the market capitalisation of the AltX companies had decreased considerably since the financial crisis (Greenhill 2010).

Figure 2 shows that there was a significant decrease in share prices from 2008, the early stages of the financial crisis. The review of financial markets at the end of 2008 revealed that the most outstanding feature of the year was the meltdown of financial markets, which also affected the AltX (JSE 2008). A close analysis of the performance of the three junior boards: the AltX in South Africa, the Alternative Investment Market (AIM) in the UK and the Toronto Stock Exchange's Venture Exchange (TSX-V) in Canada, indicates that the AltX woes are not unique to the South African market and that the AltX has been much more successful than the other junior boards (Prinsloo 2009). The 2008 annual report issued by the World Federation of Exchanges indicated that the market capitalisation of the AIM and

TSX-V had declined by 71.8% and 76.1% respectively over this period. However, the market capitalisation of the AltX decreased by only 59.7% over this period, but continued on its downward trend in 2009, while the AIM and TSX-V showed increases in trading volumes and average prices in 2009 (Prinsloo 2009). An analysis of the performance of AltX companies for the period May 2009 to September 2009 reflects a significant decrease in share prices. A basic correlation test between share price performance and the change in variables such as revenue, operating profit and headline earnings revealed that during this period, there was not a strong correlation between share price movement and other variables (JSE 2009).

To perform the additional testing, the sample period was adjusted to correspond with the period of the financial crisis, namely 2008 to 2010. The sample size was reduced to include companies that were listed for the period 2008 to 2010, with available data, thus the 51 companies that were included in the original test for the 2010 period. The results of the additional testing are reported in Table 4.

**Table 4:** Time series cross-sectional regression of executive remuneration on company performance indicators: 2008 to 2010 (R-square = 0.2683)

| Variable | Beta coefficient | Std error | t-statistic | p-value |
|---|---|---|---|---|
| Intercept | 2 711 397 | 555 089 | 4.88 | 0.0001 |
| **Company performance indicators** | | | | |
| Share price | 288 476.8 | 196 979 | 1.46 | 0.1452 |
| Total assets | 0.00344 | 0.00072 | 4.80 | 0.0001 |
| Turnover | 0.00329 | 0.00073 | 4.52 | 0.0001 |
| EBITDA | -0.00221 | 0.00123 | -1.79 | 0.0753 |

The R-square decreased from 34% to 27%, thus indicating that company performance variables explain less of the variation in executive remuneration during a financial crisis. Total assets and turnover remained significant at the 0.01 level. EBITDA still had a negative regression coefficient, but this was only significant at the 0.10 level. Share price was insignificant in this period.

## Conclusion and areas for further research

Evidence was found of a strong relationship between executive remuneration and some company performance indicators, such as total assets, turnover and share price for companies listed on the AltX. It was also found that the link still holds during a

period of financial crisis, with the exception of share price, which was an insignificant performance indicator in this period. These findings might be attributable to high standards of corporate governance, especially with the introduction of King II in 2002, which recommended that a remuneration committee should make recommendations to the board regarding remuneration policies. The pay–performance link might even have become stronger after the introduction in 2009 of King III, which requires that companies must adopt remuneration policies over the long term. These remuneration policies should be tabled and be approved by shareholders (IoD 2009). It is concluded that an increase in stakeholder value over the long term is possible if remuneration policies for executives are linked to performance.

Future research could explore the link between company performance and executive remuneration, which adds incentive components such as share options and long-term incentives. A follow-up study can be done to explore and find empirical evidence to show whether the link has become stronger after the introduction of King III.

## References

Anderson, R. 2008. 'Grappling with director remuneration', *Financial Mail*, 13 June.

Barber, N., Ghiselli, R. & Deale, C. 2006. 'Assessing the relationship of CEO compensation and company financial performance in the restaurant segment of the hospitality industry', *Journal of Foodservice Business Research,* 9(4): 65–82.

BDO. 2010. 'Examined link between executive pay and company performance in 10 top American cities. BDO compensation study by city', *Career Journal*, 28 August.

Benito, A. & Conyon, M.J. 1999. 'The governance of director's pay: Evidence from UK companies', *Journal of Management and Governance*, 3: 117–136.

Brand-Jonker, N. 2009. 'Top-salarisse is nie sondaar, sê kenner', *Die Burger,* 5 August.

Carlos, A.M., Nicolas, S. 1996. 'Theory and history: Seventeenth century joint-stock trading companies', *Journal of Economic History*, 56(4): 916–924. [Online] Available at www.jstor.org/stable/2123515. Accessed: 22 April 2011.

Claasen, L. & Planting, S. 2008. 'Money for jam', *Financial Mail*, 18 July.

Cooley, T. 2009. 'The spirit of capitalism: The role of executive compensation in the financial crisis', *Max Weber Lecture Series,* [Online] Available at http: //cadmus.eui.eu/bitstream/handle/1814/12933/MWP_LS_2009_5.pdf?sequence=1. Accessed: 25 May 2011.

Conyon, M.J. 1997. 'Corporate governance and executive compensation', *International Journal of Industrial Organization,* 15(4): 493–509.

Conyon, M.J. & Leech, D. 1994. 'Top pay, company performance and corporate governance', *Oxford Bulletin of Economics and Statistics,* 56: 229–247.

Crotty, A. 2008. 'MPs take a look into executives' huge purse, investors must have a say in pay', *Star,* 12 August.

Deegan, C. 2009. *Financial Accounting Theory,* 3rd edition. Australia: McGraw Hill.

*Economist*, 2004. 'CEOs and their Indian rope trick', 9 December. [Online] Available at: http: //www.economist.com. Accessed: 21 October 2010.

Eichholtz, P.M., Kok, N. & Otten, R. 2008. 'Executive compensation in UK property companies', *Journal of Real Estate Finance and Economic,* 36(4): 405–426.

Girma, P., Thomson, S. & Wright, P.W. 2007. 'Corporate governance reforms and executive compensation', *The Manchester School,* 75(1): 405–426.

Greenhill, N. 2010 'JSE/AltX', *Business Day,* 1 July. [Online] Available at: www.businessday.co.za/Articles/Content.aspx?id=113458. Accessed: 11 March 2011.

Gregg, P., Jewell, S. & Tonks, I. 2005. 'Executive pay and performance in the UK 1994–2002', *CMPO Working Paper Series,* 05(122). [Online] Available at: http: //people.exeter.ac.uk /ipt 201 /research/Executive%20Pay_Performanceupdate6.pdf 05(122). Accessed: 20 October 2010.

IoD (Institute of Directors Southern Africa). 2002. *King Report on Corporate Governance for South Africa.* Parktown: IoD.

IoD (Institute of Directors Southern Africa). 2009. *King III Report on Corporate Governance for South Africa*. Pietermaritzburg: Lexis Nexis.

Izan, H.Y., Sidhu, B. & Taylor, S. 1998. 'Does CEO pay reflect performance? Some Australian evidence', *Corporate Governance: An International Review,* 39–47.

Jensen, M.C. & Meckling, W.H. 1976. 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of Financial Economics,* 3(4): 305–360. [Online] Available at: http: //www.sfu.ca/~wainwrig/Econ400/jensen-meckling.pdf. Accessed: 20 September 2010.

Jensen, M.C. & Murphy, K. 1990. 'Performance pay and top management incentives', *Journal of Political Economy*, 2: 225–265.

JSE (JSE Securities Exchange South Africa). 2008. The Alternative. [Online] Available at: www.jsenews.co.za/alternative1208_highlights/index.htm. Accessed: 1 June 2011.

JSE (JSE Securities Exchange South Africa). 2009. The Alternative. [Online] Available at: www.jsenews.co.za/alternative1109/index.htm. Accessed: 1 June 2011.

JSE (JSE Securities Exchange South Africa). 2010. JSE listing requirements. JSE Ltd. [Online] Available at: www.jse.co.za. Accessed: 25 March 2011.

JSE (JSE Securities Exchange) 2011. 2011 last update, AltX listed companies. [Online] Available at: http: //www.jse.co.za/How-To-List-A-Company/AltX/AltX_Listed_Companies .aspx. Accessed: 10 April 2011.

Laign, D. & Weir, C. 2000. 'The performance-governance relationship: The effects of Cadbury compliance on UK quoted companies', *Journal of Management and Governance,* 4(4): 265–281. [Online] Available at: http: //www.springerlink.com. Accessed: 19 March 2011.

Main, B.G.M., Bruce, A. & Buck, T. 1996. 'Total Board remuneration and company performance', *Economic Journal,* 106(439): 1627–1644.

Matsumura, E.S., J. 2005. 'Corporate governance reform and CEO compensation: Intended and unintended consequences', *Journal of Business Ethics,* 62: 101–113.
McConvill, J. 2005. 'Positive corporate governance and its implications for executive compensation', *German Law Journal*, (6): 1777–1804. [Online] Available at: http: //www.germanlawjournal.com/index.php?pageID=11&artID=677. Accessed: 22 March 2011.
Merhebi, R., Pattenden, K., Swan, P.L. & Zhou, X. 2006. 'Australian chief executive officer remuneration: Pay and performance', *Accounting and Finance,* 46: 481–497.
Murphy, K. 1986. 'Incentives, learning and compensation: A theoretical and empirical investigation of managerial labour contracts', *Bell Journal of Economics,* 17: 59–76.
O'Neil, G.L. & Iob, M. 1999. 'Determinants of executive remuneration in Australian organisations an exploratory study', *Asian Pacific Journal of Human Resources,* 37: 65–75.
Prinsloo, L. 2009. 'Performance of South Africa's AltX in line with that of its Canadian, UK counterparts', *Mining Weekly*. [Online] Available at www.miningweekly.com/article/an-analysis-of-the-three-junior-boards-performance-during-economic-slowdown-2009-10-02. Accessed: 1 June 2011.
PWC 2009. King III – Chapter 14: Remuneration of directors. [Online] Available at: http://www.pwc.com/za/en/king3/remuneration-of-directors-and-senior-executives. Accessed: 25 March 2011.
Rankin, M. 2007. *Determinants of Executive Remuneration: Australian Evidence.* Melbourne: Monash University. [Online] Available at: http: //adt.lib.rmit.edu.au/adt/uploads/approved /adt-VIT20080812.140803/public/01front.pdf. Accessed: 25 February 2011.
Rose, R. 2009. 'Directors' pay hikes vetoed', *Financial Mail,* 8 May.
Sharma, B. & Smith, A.E. 2001. 'Firm performance and executive compensation in Australia and Canada', *Journal of Comparative International Management,* 4(2).
Stathopoulus, K., Espenlaub, S. & Walker, M. 2005. 'The compensation of the UK executive: Lots of carrots but are there any sticks', *Competition and Change,* 9(1): 89–105.
Temkin, S. 2007. 'Report leadership to cast new light on executive pay', *Business Day,* 28 December.
Temkin, S. 2009a. 'Boards compelled to review remuneration strategies', *Business Day*, 19 January.
Temkin, S. 2009b. 'King 3 report opposes executive pay for executives', *Business Day*, 26 February.
Temkin, S. 2010. 'Executive pay to take centre stage', *Business Day*, 20 January.
Van Zyl, J. 2008. 'Uitvoerende bestuur, groot omset', *Finweek,* 25 September.
Woodburn, T. 2008. 'Executive remuneration must be linked to performance', Executive Remuneration and Performance Management Publications. [Online] Available at: www.woodburnmann.co.za/Publications/ExecutiveRemunerationandPerformance. Accessed: 15 November.
Wray, Q. 2008. 'Deputy President warns on widening wealth gap', *Business Report,* 25 April. [Online] Available at: www.busrep.co.za. Accessed: 13 March 2011.