



# The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE.

Kabi Kolobe - 29589551 10/11/2010 MBA 2009/10

Contact Details – (+27) 72 141 7243 – m <u>kabi.kolobe@gmail.com</u> – e

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.



#### Abstract

This research study is aimed at finding empirical evidence to support a finding from an initial study that corporate governance disclosure is linked with financial performance for JSE listed companies. The study made use of a scorecard previously designed for the initial study to rate the governance disclosure of the various companies. 74 companies from the eight major sectors of the JSE were selected for the sample and financial data for the review period was extracted from MacGregor BFA. Governance was rated based on annual reports and any other information within the public domain. The financial performance measures used were, CAGR using opening and closing share prices, price to book and price/earnings ratio.

Using mean disclosure scores, two portfolios were created to compare financial performance, the high and low disclosure portfolios. A simple correlation analysis was then conducted to assess the relationship of governance disclosure with the three different financial measures.

The findings indicate a negative correlation between governance disclosure and returns whilst a positive correlation is established between governance and firm valuations.



# Keywords

- Corporate governance;
- Financial returns;
- Firm valuation;
- Disclosure; and
- Listed companies.

UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI YA PRETORIA

Declaration

I declare that this research project is my own work. It is submitted

in partial fulfilment of the requirements for the degree of Master of

Business Administration at the Gordon Institute of Business

Science, University of Pretoria. It has not been submitted before

for any degree or examination in any other University. I further

declare that I have obtained the necessary authorisation and

consent to carry out this research.

Kabi Trevor Azar Kolobe

ίV



# **Acknowledgements**

The journey has indeed been a long and testing one. The successful completion of this journey would have never been achieved without the encouragement, support, sacrifices and understanding of my wife, family, friends, colleagues and my fellow MBA peers.

A special thank you and appreciation goes to;

- My wife, Thakane, who despite being an MBA widow, has been a tower of strength, support and inspiration. You are truly remarkable.
- My parents (both sets), for their wise counsel, encouragement and putting me high on their prayer list
- My brothers and sisters, especially Katlego for the self-confidence sessions
- The 'unofficial' syndicate, Tumi Sefolo, Motheo Matsau and Tumi
   Mojapelo, for the unwavering support throughout the journey
- My studymates over the journey, Stephan Mkhawane and Hopolang Ntoi
- My colleague, Takalani Tshivhase for the support and encouragement throughout the journey
- My supervisor, Dr. Thabo Mosala, for the freedom you afforded me with the project. I sincerely hope that the final work will make you proud.



And last but not least, to the most amazing and selfless individual, Carl
 Thobejane. You are a special one.



# **Table of Contents**

1. Int	roduction to the Research Problem	1
1.1.	Research Title	1
1.2.	Research Problem	1
1.3.	Research aim	3
2. Lit	erature review	5
2.1.	Agency/Principal Theory	6
2.2.	Corporate governance around the world	8
2.3.	Corporate governance in South Africa	10
2.4.	Corporate governance and financial performance	11
2.5.	Replication of studies	13
3. Re	esearch propositions	15
4. Pr	oposed research methodology	16
4.1.	Research design	16
4.2.	Constructing a governance scorecard	17
4.3.	Measuring financial performance	20
4.4.	Population and sampling	21
4.5.	Unit of Analysis	22
4.6.	Risk management	22
5. Re	esearch results	24
5.1 (	General findings	24
5.2 F	Results by governance disclosure categories	26
5.3 (	Sovernance disclosure by JSE Sector	32
5.4 (	Sovernance disclosure and financial performance	33
5.5 (	Sovernance disclosure and firm valuation – price to book	35



	5.6 G	overnance disclosure and firm valuation – price/earnings ratio	37
	5.7 G	overnance disclosure correlation with financial measures	38
	5.8 M	ean G-Score correlations with financial measures	40
	5.9 S	ummary of proposition testing	43
6.	Dis	cussion of results	44
	6.1 R	esults by governance disclosure categories	44
	6.2 G	overnance disclosure by sector	47
	6.3 G	overnance and financial performance	49
	6.4 C	omparison of results with initial study	56
	6.5 G	eneral limitations of the study	57
7.	Cor	nclusion	59
	7.1.	So what?	61
	7.2.	Recommendations for future studies	62
	7.3.	Concluding remarks	63
D,	foror	0000	65



# **List of Tables**

Table 1: G-Score extract – category 2, remuneration of directors	19
Table 2: Governance disclosure categories	26
Table 3: Correlation matrix for governance disclosure categories	31
Table 4: Governance score by JSE sector	32
Table 5: Portfolio returns by sector	33
Table 6: Portfolio returns against sector index returns	35
Table 7: Governance and price to book valuation	35
Table 8: Governance and sector price/earnings valuations	37
Table 9: Correlations of financial measures with governance disclosure	38
Table 10: Summary of propositions	43
List of Figures	
Figure 1: Distribution of governance scores	25
Figure 2: Scatter plot of governance scores and returns	40
Figure 3: Scatter plot of governance scores and price to book valuations	41
Figure 4: Scatter plot of governance scores and price/earnings ratios	42
List of Appendices	
Appendix A: Governance scorecard template	70
Appendix R: JSF sample	71



#### 1. Introduction to the Research Problem

#### 1.1. Research Title

The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE.

#### 1.2. Research Problem

A business corporation is organized and carried on primarily for the profit of the shareholders; and managers are responsible for coordinating the business to achieve this goal (Grant, 2003).

The foundation for the corporation that makes it the preferred form for the large enterprise is its internal dynamic of accountability. It is trust that makes the corporate structure viable. This trust is a bridge that holds managers responsible to shareholders (Grant, 2003).

Recent major corporate failures in the United States, such as Enron and Worldcom in the 90s saw the introduction of Sarbanes-Oxley in 2002 to strengthen corporate governance and control in order to avert similar outcomes as well as to pursue the goal of the enterprise (Grant, 2003). The recent global economic crisis has not been an exception to the rule and has raised fresh concerns about the effectiveness and adequacy of corporate governance standards and practices (Business day, 2008).



In South Africa, major corporate failures such as the Regal Bank and Leisurenet have led to the enhancement of corporate governance standards and practices in the form of King II Code of Corporate Governance (Naidoo, 2002).

The rise of shareholder activism, coupled with the growing concerns about environment as well as globalisation, have also contributed immensly to the evolution of corporate governance (Abdo and Fisher, 2007)

The first edition of corporate governance standards in South Africa, King I, was launched in 1994 and coincided with not only the first democratic elections of South Africa but also the re-entry of South Africa into the greater global community (Naidoo, 2002).

In the case of South Africa like most emerging economies, the principle of good corporate governance is very pertinent because such economies rely heavily on foreign direct investment (Vaughn and Ryan, 2006).

Tighter and stricter governance codes have led to an outcry from some circles within the business community regarding the increased cost of governance and the more rigorous scrutiny particularly in the wake of the collapse of governance. In a study on the cost of governance, Durden and Pech (2006) argue that in some organizations there was a risk that an ever more prescriptive, legal and regulatory approach to corporate



governance has stifled management in terms of an agile and rapid response to external pressures. There were even concerns that such tight measures could lead to mass de-listings from major bourses in a bid by companies to shy away from increased public scrutiny. In the United States, the cost of compliance since inception of the Sarbanes-Oxley in 2002 was estimated to be as much as \$ 246 billion which was more than the combined value of the write-offs of Enron, Worldcom and Tyco (Institute of Directors South Africa, 2009).

The other side of the debate regarding the value-add of corporate governance other than transparency and better control has often overlooked, that of value creation as a result of better decision making, that of value creation as a result of a clear delegation of authority.

A shared sentiment amongst corporate governance scholars has been that good governance generally reduced the risk of failure which has provided comfort to investors about the inherent risk of their investments (Abdo and Fisher, 2007).

#### 1.3. Research aim

The aim of the proposed study is to determine the impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE. The study is a replication of a previous



study (Abdo and Fisher, 2007) which was conducted over a three year period, 2003 to 2005.

The study is intended to verify and confirm the outcomes of the previous study over a longer term, thereby validating the results of the initial study. The case for the proposed study is a compelling case and is based on the following;

- Primary limitation of the study by Abdo and Fischer (2007), that
  the study was conducted over a very short period. Studies
  conducted on financial performance are generally conducted over
  a much longer period in order to limit the impact of short term
  market factors
- The mixed results from studies conducted in different countries
- Limited research on the subject matter within South Africa.



#### 2. Literature review

Corporate governance by definition can be described as a manner of directing and controlling the affairs of a corporate entity (King, 2006). The origins of modern corporate governance can be traced back to a point in time when the role of managing an entity got separated from the ownership and is premised on the Agency –Principal theory (Abdo and Fisher, 2007).

In a similar definition (Naidoo, 2002), corporate governance is defined as a practice by which companies are managed and controlled, which encompasses:

- Creation and ongoing monitoring of a system of checks and balances to ensure a balanced exercise of power within a company;
- Implementation of a system to ensure compliance by the company with its legal and regulatory obligations;
- Implementation of a process whereby risks to the sustainability of the company's business are identified and managed/mitigated within agreed parameters; and
- Development of practices which make and keep the company accountable to the broader society in which it operates.



With the separation of company ownership from their control, corporate governance seeks to ensure that agents (managers and directors), manage companies to serve the interests of the principals (shareholders) (Grant, 2003).

The key challenge for companies has been to strike a balance between performance and conformance with governance principles (Ford, 2009).

# 2.1. Agency/Principal Theory

Agency theory deals with the contractual relationship between principals (shareholders/stakeholders) and agents (managers). The theory in its rudimentary form, the principal grants authority to the agent to further his/her interests such that the welfare of the principal is directly affected by the decisions of the agent (Jensen and Meckling, 1976).

Agency theory is firmly rooted in economic utilitarianism (Ross, 1973). The theory posits that both agent and principal are utility maximisers and presumes that the agent will act in his best interests and not those of his principal (Jensen and Meckling, 1976).

Millson and Ward, 2005, cite a study by Eisenhardt (1989), and outline the underlying assumptions of agency theory as;

(i) Existence of divergent goals between agent and principal;



- (ii) Existence of information asymmetry either before or after contracting the agent; and
- (iii) Difference in risk preferences between the agent and the principal which may lead to different actions being taken (investment actions).

In a study titled the re-examination of agency theory assumptions: extensions and extrapolations (Wright, Mukherji and Kroll, 2001), it was established that agency costs were inevitable to a large enterprise and consequently, to control these costs, there is a requirement for specified formal contract in economic exchange.

Wright et al (2001), further posit that high agency costs have had an adverse effect on the efficiency of the company, leading to sub-optimal results. In contrast, low agency costs have been positively associated with the efficiency of the organization, leading to optimal results.

Innovative measures such as share options have been put in place to align the goals of the agent with that of the principal in order to frame the decision making by the agent towards creation of value. Such methods of remuneration have had a positive effect in that they lower the agency costs of the company and thereby aligned the decisions of the managers with the goals of the shareholders (Vermaelen, 2010). To verify that the conduct of individuals (agents) was compatible with their stipulated contracts, vigilant monitoring was required (Wright et al, 2001).



Corporate governance therefore deals with how the shareholders (principals) incentivise management (agents) to effectively align management goals with shareholder goals, and also to ensure that there was adequate information flow to enable proper monitoring and control of management actions (Millson and Ward, 2005).

#### 2.2. Corporate governance around the world

A plethora of studies have been conducted around the globe focused on the impact of corporate governance on firm performance as well as the causal link between good corporate governance and superior financial performance (Bauer, Frijns, Otten, Tourani-Rad, 2005; Van der Bauwhede, 2009; Wang, 2009; Ehikioya, B. I, 2007; Brown and Caylor, 2008; Larcker, Richardson and Tuna, 2007).

The results of these studies have varied widely, partly due to the inconsistencies in the measures used to assess both corporate governance and the associated financial performance (Larcker et al, 2007).

The disparity between results from studies on corporate governance and financial performance was largely explained by the differing methodologies, performance measurements as well as differences in governance standards throughout the world (Abdo and Fisher, 2007).



Korac-Kakabadse, Kakabadse and Kouzmin (2007), indicated that the most common measures financial measures used in studies on corporate governance and financial returns were;

- Return on equity (ROE);
- Return on assets (ROA);
- Earnings per share (EPS);
- Share price;
- Return on investment (ROI);
- Profit margins;
- Net income; and
- Profit margins on sales, income/sales and income/equity.

In a study conducted by Bauer et al, 2005, it was found that corporate governance positively affected share price and company value, but had a negative effect on company operating performance. In another study conducted by Ehikioya, 2009, it was found that some aspects of corporate governance were positively related to superior performance whilst other aspects showed no link with performance.

Based on a study by Chang (2009), it was found that companies with poor corporate governance had a greater probability to be in financial distress which implied that at a minimum, companies with good corporate governance practices had a greater probability to be financially healthy relative to their counterparts with poor governance.



A study conducted in the US on governance disclosure by Holder-Webb, Cohen, Nath and Wood (2007), confirmed the correlation between governance disclosure and firm size. Disclosure levels were found to be higher for larger firms. An explanation for lower levels of disclosure in smaller firms was that there was less analyst following and the companies were less in the public spotlight.

# 2.3. Corporate governance in South Africa

South Africa is the leading economy in Africa, accounting for nearly 40% of the Sub-Saharan Gross Domestic Product (CIA factbook, 2010). In the last two decades corporate governance has evolved to keep up with developments globally, and most recently has seen the introduction of the 3<sup>rd</sup> edition of the King Code of Governance.

The first code of corporate governance, King I was issued in 1994 which coincided with the re-integration of South Africa with the rest of the world (Naidoo, 2002). A revised edition of the code was issued in 2002, King II, to keep in line with emerging trends elsewhere (Naidoo, 2002).

In 2003, the JSE followed suit and issued comprehensively revised listing rules which required listed companies to comply with the recommendations of King II or otherwise explain reasons for non-compliance (Abdo and Fisher, 2007).



In their study by Abdo and Fisher (2007), it was concluded that there is a link between level of disclosure and company performance. It was further established that corporate governance is a component of equity risk which has a bearing on the financial performance of the company. However the study was conducted over a short term and as such its results were not compelling enough. More research was required over a longer time period (Abdo and Fisher, 2007).

# 2.4. Corporate governance and financial performance

Brown and Caylor (2008) in their study on corporate governance and firm operating performance found three out of four of their governance provisions were significantly and positively correlated to Return on Assets using two out of three econometric models.

The basis for the argument that corporate governance yielded superior financial performance was premised on the notion that better corporate governance led to improved financing decisions and investment decisions (Vermaelen, 2010).

Financing options were primarily limited to debt and equity. The less expensive both sources were, the better the prospects for the company to raise capital. In a study conducted in Pakistan on the impact of corporate governance on cost of equity (Shah and Butt, 2009), it was



concluded that good corporate governance significantly reduced the cost of equity, thereby facilitating better access to capital at a lower cost.

A further argument in favour of good corporate governance was the association between corporate governance and financial distress. In a study on corporate governance characteristics of companies in financial distress, (Chang, 2009), it was concluded that aspects of good corporate governance reduced the probability of financial distress for companies. The study cited two aspects of governance in particular, board composition and board size and concluded that companies with boards consisting of more non-executive directors than executive directors had a smaller probability of financial distress. The study also concluded that a company with an oversized board had a higher probability of being in financial distress.

Fama and French (1992) concluded that size was in fact a significant factor in relation to financial performance. The conclusion from the study was that companies with small market capitalization tended to do better than the rest of the market.

In a study conducted by McKinsey & Co in 2002, an overwhelming majority of institutional investors indicated that they were prepared to pay substantial premiums for companies with good governance disclosure. Premiums for North American companies were stated to be as high as 14% and would be even higher for companies in developing economies



(Holder – Webb et al, 2007). The study further revealed that governance issues were rated as equally important as the financial state of the company in the equity buy decision.

A different dimension on competitiveness and profitability of firms has been advanced by Porter (1998), that industry competitiveness and dynamics determined the level of profitability of individual companies. The design of the study, in particular the sample population has however negated any bias that could have arisen as a result of industry dynamics (Abdo and Fisher, 2006).

Kakabadse et al, (2001), cited conclusions from 159 studies conducted by Dalton and Daily, 1999, with 40 years of data that there were was no clear evidence of a substantive relationship between board composition and financial performance irrespective of the type of performance indicator, size of the firm or the manner in which board composition was measured.

#### 2.5. Replication of studies

By definition, a replication is defined as a duplication of a previously published empirical study that is concerned with assessing whether similar findings can be obtained upon repeating the study. Likewise, a replication with extension is a duplication of a previously published empirical research project that serves to investigate the ability to



generalize earlier research findings (Evanschitzky, Baumgarth, Hubbard and Armstrong, 2006).

In a South African context, Abdo and Fisher (2007) concluded that there was in fact a link between corporate governance disclosure and firm performance. For this conclusion to become widely accepted it would have to withstand the rigour of replication as was the norm with most other sciences (Hyndman, 2009).

In the case of the proposed study, a replication would be useful to test the phenomena of reported corporate governance disclosure in a different context (longer time period) with a view to strengthen the findings and therefore afford both academia and business the confidence of consensus regarding the impact of reported corporate governance on financial performance for listed companies (Easley, Madden and Dunn, 2000).



# 3. Research propositions

The following propositions were considered for the study:

- P<sub>1A</sub> JSE listed companies with high levels of corporate governance disclosure achieved higher than average financial results for shareholders over the medium term.
- P<sub>1B</sub> JSE listed companies with low levels of corporate governance disclosure achieved lower than average financial results for shareholders over medium term.
- P<sub>2</sub> JSE listed companies with high levels of corporate governance disclosure achieved higher firm valuations than companies with low levels of corporate governance.



# 4. Proposed research methodology

The research methodology followed was essentially similar to the one in the initial study by Abdo and Fisher, 2007.

### 4.1. Research design

The study took the form of a descriptive quantitative design. It made use of qualitative secondary data extracted from

- MacGregor BFA Vital financial data such as historical share prices, company and industry performances; and
- Individual company annual reports for the period under review,
   2003 to 2009

Based on the title of the study, only publicly disclosed information was assessed for the study.

In order to provide a cross-section of companies on the JSE as well as to avoid selection bias, all major sectors were included and all the companies within each sector were assessed for analysis. The approach was best suited to allow for an exploration of the relationship between governance and the different financial measures, using correlation within each sector and thereby eliminating the effect of industry dynamics (Abdo and Fisher, 2007).



An alternative design would have been a quasi-experimental time-series design. However, this would have required a much longer period in order to differentiate between temporary and permanent changes on the dependent variable (Zikmund, 2003). Furthermore, quasi-experimental studies do not allow the researcher full control over variables that can influence the study (Zikmund, 2003).

# 4.2. Constructing a governance scorecard

Although a new code of governance has come into existence in the form of King III, the study focused on governance under the regime of King II. The study made use of the same scorecard that was designed by Abdo and Fisher for their study in 2007. This has provided consistency for the study in order to assess the same elements over an extended period.

Larcker et al, (2007), identified seven key components of the scorecard; namely, characteristics of the board of directors, stock ownership by executives and directors, stock ownership by institutions, stock ownership by activist shareholders, level of debt and preference shares, compensation mix variables, and anti-takeover devices.

Similarly, Abdo and Fisher (2007), in their SA-based study, identified seven key categories of the governance scorecard as well. They are board effectiveness, remuneration, accounting and auditing, internal audit, risk management, sustainability and ethics. These elements were



much in line the core characteristics of good governance as identified by the King II code of governance (Naidoo, 2002) which are:

- Discipline commitment by senior management to adhere to universally recognised behaviour
- Transparency reflection of a true picture and openness about the conduct of the company
- Independence the extent of controls to minimise potential conflicts of interest
- Accountability consequential responsibility for outcome of decisions
- Responsibility towards all stakeholders of the firm
- Fairness towards all stakeholders
- Social responsibility response to social issues

Corporate governance as a field is very difficult to measure and highly subjective; however the use of a scorecard for reported governance makes measurement to be more objective and consistent (Abdo and Fisher, 2007).

The study made use of a G-Score measure which was exclusively designed for the study by Abdo and Fisher (2007). The G-Score is a composite measure of 29 governance disclosure factors, encompassing the seven broad categories identified in the initial study: board effectiveness, remuneration, audit and accounting, internal audit, risk



management, sustainability and ethics, as prescribed by the King II report.

This composite measure consisted of a 3-point scale for each of the subitems under each of the seven headings, wherein, 0 represents nondisclosure of a particular governance provision, 1 represents limited disclosure and 2 represents comprehensive disclosure (Abdo and Fisher, 2007).

A total percentage score was then calculated for each category by taking the companies score divided by the maximum score attainable for each category. The total score for each of the seven categories were then aggregated to obtain the total G-score for each company on an annual basis.

Table 1: G-Score extract – category 2, remuneration of directors.

No	Governance disclosure factor	Score	Max	%
1	Existence of a remuneration committee	2	2	100%
2	Majority of members are non-executive	2	2	100%
3	Remuneration policy codified and disclosed in annual report	1	2	50%
4	Balance between guaranteed salary and performance element (share options)	1	2	50%
5	Full disclosure of individual director including benefits	2	2	100%
	Governance disclosure points	8	10	80%

Table 1 shows an extract from the G-Score template. The disclosure of remuneration of directors was assessed through five independent governance disclosure factors, each with a possible maximum score of 2,



depending on the level of disclosure. In this example, the company has scored 8 out of 10 for the category of remuneration of directors – a score of 80%.

#### 4.3. Measuring financial performance

The study made use of the following three financial measures consistent with the initial study (Abdo and Fisher, 2007);

- Annual average share price returns over the seven year period
- Market to Book Value which serves as an indicator for firm value
- Price/Earnings Ratio

The first financial measure was the annual average share price returns. Using closing share prices obtained from McGregor BFA for the period 30 June 2003 to 30 June 2009 the actual share price for each of the sample companies was derived and translated into Compound Annual Growth Rate (CAGR) for the period under review (Abdo and Fisher, 2007).

The second measure was market-to-book-value (MTBV) also known as price-to-book ratio. It was calculated by using the market capitalisation of the company and divided it by the book value of equity (total assets minus liabilities per balance sheet). A value of less than one implied that the firm had not been successful at creating value for the shareholders,



and conversely, a value greater than one implied that value had been created (Abdo and Fisher, 2007).

The third measure considered was the price/earnings (P/E) ratio. The P/E ratio represented the share price divided by earnings per share and this measured how much investors were willing to pay per Rand of current earnings. Higher P/Es are considered to be a reflection of significantly good future prospects (Abdo and Fisher, 2007).

### 4.4. Population and sampling

The study covered the period 30 June 2003 to 30 June 2009, which was significantly longer than the initial study. It covered all the major sectors of the JSE in order to minimise any bias that could arise as a result of a limited coverage. This was in accordance with the initial study conducted by Abdo and Fisher (2007).

The population of the study comprised all companies listed on the JSE's main board for the period of the study. Companies that delisted during the period and companies listed on the Alternative Exchange (Alt-X) were excluded in the study. Companies with dual listings whose primary listings were not on the JSE were also excluded as their reporting was not tailored to suit King II code of governance.



The companies were grouped into their respective sectors as per JSE categorisation and then ranked according to their G-Score ratings for the period under review (Abdo and Fisher, 2007). The following portfolios of shares were selected for each sector;

- High G-Score portfolios (High) consisting of companies with G-Scores of above 75%
- Low G-Score portfolios (Low) consisting of companies with G-Scores of 50% and less.

The sectors covered in the sample were; mining, banks, life insurance, media, food, construction, retail and IT sectors.

#### 4.5. Unit of Analysis

The unit of analysis for the study was a listed company on the JSE during the period 2003 to 2009.

#### 4.6. Risk management

Since the study was a follow up to an initial study, due care was required to manage risk throughout the process in order not to compromise the quality of the study. All risk exposures from the initial study were taken cognisance of in order to enhance and build on from the initial study.



A significant effort was directed to mitigate both researcher error and sampling error. An example of this was the wide coverage which included all the major sectors of the JSE. Whilst the study covered twice as much time over the initial study, some elements of the limitations from the initial study could not be eliminated and remained as key concerns. One such limitation was that of endogeneity which cannot be eliminated from the study.



#### 5. Research results

#### 5.1 General findings

The research findings reveal wide and varying results for governance disclosure amongst companies listed on the JSE. Over the seven year period of the study, the sample was made up of 74 companies, and of these companies, the highest recorded mean G-Score in one reporting period was 95% and the lowest ranking mean was 13%.

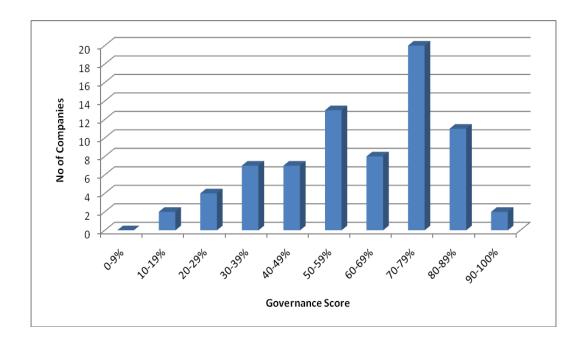
At sector level, the highest recorded mean score over the seven year period was 78% in the life insurance sector and the lowest recorded mean score was 52% in the retail sector. The study covered eight sectors representing the largest sectors of the JSE. The mean G-Score over the period for the entire sample was 62%.

In the sample of 74 companies, 54 companies representing 73% of the sample had a mean G-Score of 50% and above, whilst 20 companies representing 27% scored below 50%. In terms of the extremes/outliers, two companies representing 3% recorded mean G-Scores of above 90% and below 20% respectively, thus widening the range of the mean scores. Figure 1 is a histogram of the recorded G-Scores over the review period.



A relevant and encouraging trend is the fact that the highest frequency falls within the 70-79% scoring range with 20 companies.

Figure 1: Distribution of governance scores





# 5.2 Results by governance disclosure categories

Table 2: Governance disclosure categories

	Governance attribute	2003 - %	2009 - %	% Change
I	Board Effectiveness	63.49	78.77	24%
II	Remuneration	75.44	87.10	15%
Ш	Accounting & Auditing	61.83	74.63	21%
IV	Internal Audit	29.57	43.80	48%
V	Risk Management	38.09	61.43	61%
VI	Sustainability	40.41	65.11	61%
VII	Ethics	63.24	87.31	38%
	Mean	53.15	71.16	38%

Table 2 indicates the mean score for each of the governance disclosure categories. The data indicates the mean scores for both the starting period and the closing period. From the table both the highest and the lowest scores are visible as well as the improvement trend in the level of disclosure over the years.

The most reported governance attribute in 2003 was remuneration with a mean disclosure score of 75.44% whilst the lowest ranking attribute was internal audit at 29.57%.

In 2009, the most reported attribute was the ethics category with a mean score of 87.31% and the least reported attribute remained as internal



audit. The remuneration attribute was marginally lower than the ethics category and scored 87.10%.

#### 5.2.1 Board effectiveness

The mean score for board effectiveness in 2003 was 63.49% and over the period improved by 24% to 78.77% in 2009. The sector with the highest mean score in 2003 for board effectiveness was the life insurance sector with a score of 90% and the lowest score was 48.46% recorded for the mining sector.

For 2009, the highest mean score for board effectiveness was 93% in life insurance and the lowest score was 65.77% for the retail sector. Mining was the most improved sector with a 57% improvement in their board effectiveness disclosure.

#### 5.2.2 Remuneration

The mean score for remuneration in 2003 was 75.44% and over the period improved by 15% to 87.10% in 2009. The sector with the highest mean score in 2003 for remuneration was the life insurance sector with a disclosure of 96% and the lowest disclosure was in mining with a score of 63.85%.



For 2009, the highest mean score for remuneration was 100% recorded for the life insurance sector and the lowest score was 77.5% for the media sector. The most improved sector was by far, the mining sector with an improvement of 39% in disclosure.

#### 5.2.3 Accounting and Auditing

The mean score for accounting and auditing in 2003 was 61.83% and over the period improved by 21% to 74.63% in 2009. The sector with the highest mean score in 2003 for accounting and auditing was the life insurance sector with a disclosure of 80% and the lowest disclosure was in mining with a score 45.38%.

For 2009, the highest mean score recorded was in the life insurance sector with a score of 90% and the lowest score was 67.27% in the food sector. The most improved sector was mining with a 56% improvement in accounting and auditing disclosure.

#### 5.2.4 Internal audit

The mean score for internal audit disclosure in 2003 was 29.57% and over the period improved by 48% to 43.8% in 2009. The sector with the highest mean in 2003 was the banking sector with a 42.86% disclosure and the lowest score was recorded in the media sector of 12.5%.



In 2009, both the banking and the media sectors retained their rankings for the highest and the lowest disclosures with mean scores of 67.86% and 31.25% respectively. The sector with the most improvement was the media sector with a 150% improvement in disclosure but was disadvantaged by having started from a much smaller base.

## 5.2.5 Risk Management

The mean score for the risk management category in 2003 was 38.09% and over the review period improved by a remarkable 61% to 61.43% in 2009. The sector with the highest mean in 2003 was the banking sector with a 62% disclosure and the lowest score was recorded in the mining sector with a mean score of 19.23%.

For 2009, the highest disclosure was in the life insurance sector with a mean score of 86.80% and the lowest disclosure was in the IT sector with a mean score of 50%. The sector with the most improvement was the mining sector with a 167% improvement from 2003 to 2009.

## 5.2.6. Sustainability



The mean score for the sustainability category in 2003 was 40.41% across all sectors and over the period improved by 61% to close at 65.11% in 2009. The sector with the highest mean in 2003 was the life insurance sector with a disclosure level of 73.2% and the lowest disclosure was in the retail sector at 15.38%.

In 2009, the life insurance sector retained its ranking as the leading sector with a disclosure level of 83.20%. The retail sector similarly retained its ranking as the lowest ranked sector for sustainability in 2009 scoring 41%. Despite being the lowest ranking sector, the retail sector was the most improved sector with a 167% improvement in the disclosure of sustainability.



#### 5.2.7 Ethics

The mean score for the ethics attribute in 2003 was 63.24% across all sectors and over the period, it gained by 38% to close at 87.31% in 2009. The life insurance sector posted the highest disclosure for the ethics attribute and recorded 80% and the lowest ranking sector was media with a mean score of 50%.

In 2009, both mining and life insurance sectors took top honours and recorded scores of 100%, whilst media retained its ranking as the lowest ranking sector at 75%. The largest change in disclosure was observed in the mining sector with an improvement of 73%.

#### 5.2.8 Correlation matrix

Table 3: Correlation matrix for governance disclosure categories

	Board_Eff	Remun	Acc_Audit	Int_Audit	Risk_Man	Sustainability	Ethics
Board_Eff	1						
Remun	0.7328	1					
Acc_Audit	0.6267	0.7357	1				
Int_Audit	0.5012	0.5508	0.5435	1			
Risk_Man	0.7785	0.7441	0.5639	0.5872	1		
Sustainability	0.6839	0.7187	0.5355	0.5697	0.565	1	
Ethics	0.6146	0.5234	0.4319	0.4368	0.5917	0.4818	1

Cronbachs Alpha = 0.8936 Standardized Cronbachs Alpha = 0.9117



Table 3 is a summary of pairwise correlations for the different governance disclosure categories. From the table, the seven disclosure categories are generally highly correlated, with correlations ranging from 0.4319 to 0.7785.

In relative terms, the disclosure category for ethics is least correlated with other categories, whilst all other categories are highly correlated to board effectiveness and remuneration disclosures.

### 5.3 Governance disclosure by JSE Sector

Table 4: Governance score by JSE sector

Sector	No of firms		II	III	IV	V	VI	VII	Mean G-Score	Min Score	Max Score
Banking Sector	7	83.06	88.6	72.86	55.61	71.14	67.90	70.41	72%	31%	95%
Food Sector	11	63.96	78.96	63.77	42.86	41.42	56.74	70.13	58%	6%	92%
Retail Sector	13	61.98	80.33	69.45	40.11	50.41	33.66	82.42	52%	1%	94%
IT Sector	11	73.38	79.48	62.99	26.62	44.99	50.79	88.31	60%	13%	93%
Construction Sector	10	70.14	82.57	67.14	30.71	40.76	53.04	75.72	59%	19%	99%
Life Insurance Sector	5	91.86	97.14	85.14	42.86	72.51	79.91	94.29	78%	49%	94%
Media Sector	4	69.82	76.07	63.21	19.64	50.61	41.22	53.57	55%	18%	84%
Mining Sector	13	63.98	75.64	57.69	41.03	37.69	59.85	79.49	59%	4%	87%
Mean	74	72.27	82.35	67.78	37.43	51.19	55.39	76.79	62%	18%	92%

Table 4 provides a summary of disclosure scores by the JSE sector for each of the 7 governance disclosure categories: board effectiveness (I), remuneration (II), accounting & auditing (III), internal audit (IV), risk management (V), sustainability (VI) and ethics (VII). The table also indicates the number of companies and the overall governance score for



each sector. The table also provides minimum, maximum and average governance scores for each sector.

Over the period, the life insurance sector followed by the banking sector are the leading sectors for overall governance disclosure with average disclosures of 78% and 72% respectively. The retail and the media sectors scored the least with disclosures of 52% and 55% respectively over the review period.

The overall mean score for all companies is 62% over the seven years and the range is 74.

## 5.4 Governance disclosure and financial performance

**Table 5: Portfolio returns by sector** 

		Sector Index	High Portfolio	High Portfolio	Low Portfolio	Low Portfolio
Sector		returns	· ·			Return
Banking Sector	7	19.19%	4	16.07%	1	12.83%
Food Sector	11	16.60%	1	27.64%	3	20.79%
Retail Sector	13	14.63%	4	18.75%	5	-27.32%
IT Sector	11	13.72%	4	9.71%	3	35.00%
Construction Sector	10	21.09%	1	-18.95%	3	8.71%
Life Insurance Sector	5	9.09%	3	5.37%	0	n/a
Media Sector	4	23.91%	2	30.20%	2	11.31%
Mining Sector	13	12.70%	3	4.55%	4	17.59%
	74	16.37%	22	11.67%	21	11.27%

Table 5 is a summary of returns (CAGR) by sector. The table compares returns by sector of high and low G-Score means. In a sample of 74 companies, 22 companies obtained a G-Score mean of 75% and above,



and 21 companies obtained a G-Score mean of 50% and below. 31 companies obtained a mean G-Score of between 51% and 74%.

All sectors with the exception of the life insurance sector, had companies in both categories. The life insurance sector with five companies overall, had three companies with high mean G-Scores and none with low mean G-Scores (n/a).

The high mean G-Score portfolio outperformed both the sector average return and the low mean G-Score in three sectors, namely the food, retail and media sectors. In the banking sector, the high mean G-Score portfolio only outperformed the low mean G-Score portfolio but was short of the sector average by 3.12%.

In the other three sectors, IT, construction and mining, the low mean G-Score portfolio outperformed the high mean G-Score portfolio. In both IT and mining, the low mean G-Score portfolio not only outperformed the high G-Score portfolio, but was also superior to the sector average financial returns.



Table 6: Portfolio returns against sector index returns

		Sector Index	High Portfolio	High Portfolio	Low Portfolio	Low Portfolio
Sector		returns	· ·	· ·		Return
Banking Sector	7	19.19%	4	-3.13%	1	-6.37%
Food Sector	11	16.60%	1	11.04%	3	4.19%
Retail Sector	13	14.63%	4	4.12%	5	-41.95%
IT Sector	11	13.72%	4	-4.01%	3	21.28%
Construction Sector	10	21.09%	1	-40.04%	3	-12.38%
Life Insurance Sector	5	9.09%	3	-3.72%	0	n/a
Media Sector	4	23.91%	2	6.30%	2	-12.59%
Mining Sector	13	12.70%	3	-8.15%	4	4.90%
	74	16.37%	22	-4.70%	21	-6.13%

Table 6 is a summary of average portfolio returns for both the high and low disclosure portfolios measured against the average sector returns.

5.5 Governance disclosure and firm valuation – price to book

Table 7: Governance and price to book valuation

		Sector Price to	High Portfolio	High Portfolio	Low Portfolio	Low Portfolio
Sector	Firms	Book	Firms	Price to Book	Firms	Price to Book
Banking Sector	7	1.47	4	1.60	1	1.30
Food Sector	11	1.97	1	2.89	3	1.09
Retail Sector	13	2.39	4	3.60	5	1.35
IT Sector	11	1.18	4	0.99	3	1.56
Construction Sector	10	2.01	1	17.68	3	1.30
Life Insurance Sector	5	2.28	3	1.21	0	n/a
Media Sector	4	1.96	2	2.65	2	1.69
Mining Sector	13	1.73	3	1.47	4	1.65
	74	1.88	22	4.01	21	1.42



Table 7 is a summary of firm valuations using the price to book ratio by sector. The table compares average sector valuations between the high and low mean G-Score portfolios.

In five sectors (banking, food, retail, construction and media), the high portfolio had superior price to books compared to both the low portfolio and sector averages. The low portfolio exhibited higher price to book ratios in two sectors and only in one sector was the price to book higher than both the sector and the high portfolio.

The life insurance sector, as stated earlier, only has a high portfolio and therefore its price to book was only comparable to the sector, and in this case the sector average was much higher than the high portfolio.

The construction sector was probably the only sector with an outlier with a price to book of 17.68, which was nearly five times higher than the second highest. The average price to book for the high mean G-Score portfolio, with the exclusion of the outlier is 2.06 compared to 1.42 for the low G-Score portfolio and a sample average of 1.88.



## 5.6 Governance disclosure and firm valuation – price/earnings ratio

Table 8: Governance and sector price/earnings valuations

		Sector	•			Low Portfolio
Sector	Firms	Price/Earnings	Firms	Price/Earnings	Firms	Price/Earnings
Banking Sector	7	10.01	4	11.60	1	10.14
Food Sector	11	10.07	1	11.50	3	12.62
Retail Sector	13	15.79	4	33.88	5	13.75
IT Sector	11	8.52	4	6.24	3	10.17
Construction Sector	10	7.22	1	19.91	3	4.18
Life Insurance Sector	5	13.68	3	148.22	0	n/a
Media Sector	4	10.88	2	14.63	2	9.31
Mining Sector	13	3.52	3	25.06	4	-0.84
	74	9.96	22	33.88	21	8.48

Table 8 is a summary of firm valuations using the price/earnings ratio.

The table compares average sector valuations between the high and the low mean G-Score portfolios using the price/earnings ratio.

In five sectors (banking, retail, construction, media and mining), the high mean G-Score portfolio had superior price/earnings ratios compared to both the sector averages and the low mean G-Score portfolios. In contrast, two sectors, food and IT, had much higher price/earnings ratios in their low mean G-Score portfolios, which exceed both the sector averages and the high G-Score portfolios.



The life insurance sector only had the high mean G-Score portfolio and no companies in the low mean G-Score portfolio (n/a). The life insurance sector was also an outlier with a price/earnings ratio of 148.22 which is over four times the second ranked price earnings ratio.

The overall mean price/earnings for the high G-Score portfolio without the outlier is 17.55, compared to 9.96 and 8.48 for the sample and the low G-Score portfolio respectively.

#### 5.7 Governance disclosure correlation with financial measures

Table 9: Correlations of financial measures with governance disclosure

					Correlation	Correlation with	Correlation with
	Governance attribute	Mean	Min	Max	with Return	Price to Book	P/E Ratio
I	Board Effectiveness	71.13	5	100	-0.0998	0.1463	0.2998
II	Remuneration	81.27	0	100	-0.3405	0.1888	0.3944
Ш	Accounting & Auditing	68.23	0	100	-0.1885	0.2370	0.4238
IV	Internal Audit	36.68	0	100	-0.1512	0.2926	0.2619
٧	Risk Management	49.76	0	100	-0.2036	0.2522	0.3485
VI	Sustainability	52.76	0	100	-0.2159	0.2000	0.2678
VII	Ethics	75.27	0	100	-0.3007	0.1176	0.3025
	G-Score	62.16	0.71	100.00	-0.2143	0.2049	0.3284

Table 9 indicates the minimum, maximum and the mean disclosure for the period per governance attribute. The table also indicates the correlation between each board attribute and the three financial



measures used for the study, return (CAGR), price to book ratio and the price/earnings ratio.

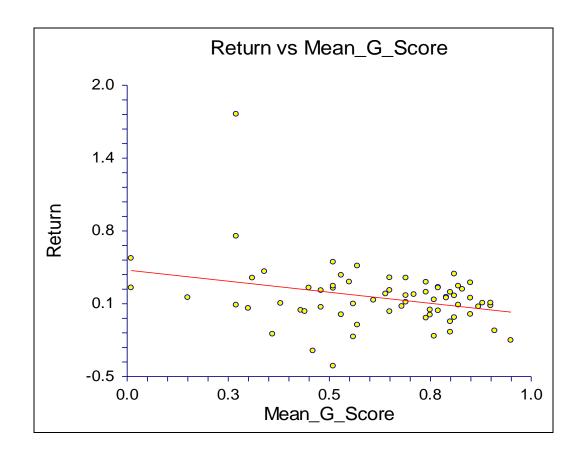
All correlations with return (CAGR) are negative and range from -0.0998 to -0.3405 over the period, and the average correlation with return is -0.2143. Correlations with price to book are all positive and range between 0.1176 and 0.2926 whilst the average correlation with price to book is 0.2049. The average correlation with price earnings ratio is relatively stronger at 0.3284, and the range is between 0.2619 and 0.4238.

The strongest correlation with return is with remuneration at -0.3405, whilst the weakest is with board effectiveness. For price to book, the strongest correlation is with internal audit at 0.2926 and the weakest is with ethics at 0.1176. The strongest correlation with price earnings ratio is with the accounting and audit category at 0.4238 and the weakest is with the internal audit category at 0.2619.



## 5.8 Mean G-Score correlations with financial measures

Figure 2: Scatter plot of governance scores and returns



R-Squared 0.0947

Correlation -0.3078

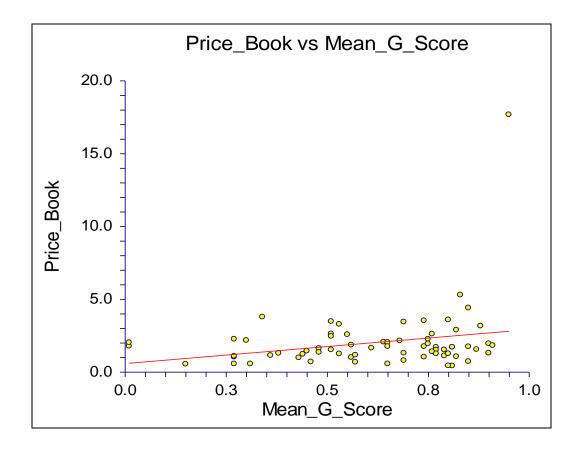
A significance test that the slope is zero resulted in a t-value of -2.6280.

The significance

level of this t-test is 0.0107. Since 0.0107 < 0.0500, the hypothesis that the slope is zero is rejected.



Figure 3: Scatter plot of governance scores and price to book valuations



R-Squared 0.0579

Correlation 0.2405

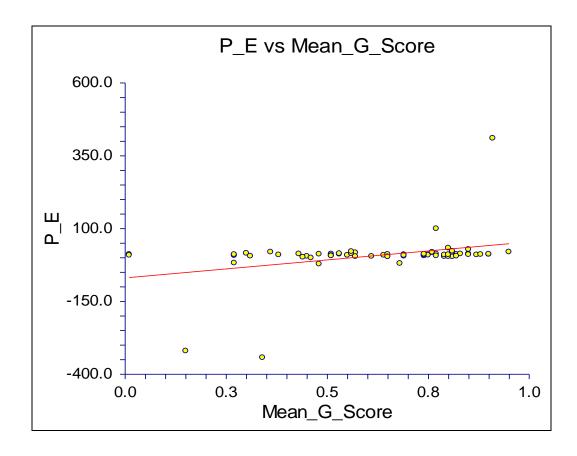
A significance test that the slope is zero resulted in a t-value of 2.0133.

The significance

level of this t-test is 0.0482. Since 0.0482 < 0.0500, the hypothesis that the slope is zero is rejected.



Figure 4: Scatter plot of governance scores and price/earnings ratios



R-Squared 0.1252

Correlation 0.3539

A significance test that the slope is zero resulted in a t-value of 3.0737. The significance

level of this t-test is 0.0031. Since 0.0031 < 0.0500, the hypothesis that the slope is zero is rejected.



## 5.9 Summary of proposition testing

**Table 10: Summary of propositions** 

Proposition	Correlation	R <sup>2</sup>	T-test	Result
P <sub>1A</sub>	-0.3078	0.0947	0.0107< 0.05	Not rejected
P <sub>1B</sub>	-0.3078	0.0947	0.0107< 0.05	Not rejected
P <sub>2</sub>	0.03539	0.1252	0.0031< 0.05	Not rejected

Propositions P1A and P1B are rejected as a result of the negative correlation with mean returns.

Proposition P2 is not rejected as the correlation with price to book is positive and is statistically significant.



#### 6. Discussion of results

As noted earlier in the study, there is a growing interest in the topic of corporate governance and in particular, the relationship between good corporate governance and financial performance. Literature on the subject is generated annually and most of the studies are conducted in developed markets while those in emerging markets are trailing behind. The growing volumes of such literature have also revealed a growing divergence of results which have largely been attributed to the use of varied methodologies and governance reporting standards (Abdo and Fisher, 2007).

#### 6.1 Results by governance disclosure categories

The comparative results of governance disclosure between the years 2003 and 2009, indicate an encouraging and positive trend of general improvement with a 38% overall improvement in disclosure. In two of the seven disclosure categories, an improvement of 61% was recorded over the seven year period which is significant and demonstrates an intention on the part of listed entities to become transparent and comply.

Over the period of the study, some important aspects of the governance landscape evolved, namely the listing requirements as pronounced by



the JSE as well as the introduction of refinements to the Black Economic Empowerment (BEE) legislation. The two developments compel companies to provide additional reporting in matters relating to statutory requirements, human resource practices as well as procurement practices.

One of the objectives of the King II report was to encourage more active shareholder participation in the affairs of the companies (Naidoo, 2002), and this has given rise to shareholder activism which amongst many issues, propagates for more transparency from directors.

Whilst the overall disclosure has significantly improved over the years, there are some critical disclosure categories which are still lagging behind, in particular, the accounting and audit, the internal audit, and to a lesser extent the risk management disclosure categories. In most instances, the cause of revisions to governance provisions globally have been a result of a failure of internal controls within companies, and the natural expectation has been for emphasis in the disclosure of these categories.

The overall mean score for accounting and auditing and the internal audit disclosures were 74.63% and 43.80% respectively in 2009. Equally concerning is the mean score for risk management disclosure which was at 61.43% in 2009.



In the case of internal audit disclosure, most companies cite the size of their operations as not large enough to warrant the establishment of an internal audit function. This reasoning raises the question of intent, whether indeed companies are committed to practices of good governance or whether the issue of resources plays a part in non-compliance.

As mentioned earlier in the study, some within business community have raised concerns about the cost burden of governance compliance on companies, which in fact explains why there is more disclosure for larger firms (Holder-Webb, et al, 2007). In a recent interview with officials at the London Stock Exchange, governance requirements were cited as one of the reasons for de-listings or downgrading to AIM (alternative exchange) whose disclosure requirements are not as rigorous as the main board.

One other constraint that becomes evident is the availability of suitably qualified individuals. This constraint is illustrated by the observation of a few prime individuals serving in at least more than three boards across various sectors. It is also evidenced by the length of time it takes to effect board appointments. In some cases, board appointments can take up to two years from the time when the board expressed a desire to make appointments. This in turn can negatively affect board effectiveness.



As mentioned earlier in the study, the US introduced the Sarbanes-Oxley after the collapse of Enron and Worldcom, both of which were a result of failure of internal controls including failure or complicity by external auditors in the process. In South Africa, the revision of the King code followed corporate irregularities at Leisurenet and Regal Bank, where there were cases of compromised ethics or lack thereof, undisclosed conflicts of interest and a general collapse of checks and balances.

The highest disclosures over the study period are in the ethics and remuneration disclosure categories with mean scores of 87.31% and 87.10% respectively. High disclosure in the remuneration category can possibly be best explained by the fact that it is a legal requirement for public companies to disclose the remuneration of its directors. Development of a code of ethics and disclosure thereof, is in contrast less onerous than most of the disclosure requirements and therefore becomes an easier category to disclose. Most of the codes assessed in the study were generic in nature with very little customisation to company.

#### 6.2 Governance disclosure by sector

The leading sectors in governance disclosure are the life insurance and banking sectors with average disclosures for the period of 78% and 72% respectively. This is hardly surprising given the rigorous disclosure



requirements by the regulators, over and above the standard listing requirements and the provisions of King II.

As was noted by Abdo and Fisher, 2007, banks and the life insurance sectors are obliged to comply with independent regulators such as the South African Reserve Bank and the Financial Services Board. The additional disclosure requirements for the two sectors are best demonstrated by the unparalleled high disclosure in the risk management category which is an important aspect of the SARB regulation for the banks. The average disclosure for the two sectors in risk management is 72.51% and 71.14%.

Whilst a general trend of improvement was observed overall, the mining sector was by far the most improved sector over the reporting period with a 58% improvement in disclosure and was followed closely by the construction and retail sectors with 40% improvement each. This was possibly driven by the amendments to mining legislation which was introduced in 2005, which effectively compelled companies to use their mining concession or lose their bids. Specifically, the mining sector saw a significant improvement in the disclosure of risk management and sustainability.

In the case of the construction sector, a possible driver for improvement of governance disclosure, was the requirement by government to procure



from companies with suitable empowerment credentials. The construction sector is largely driven by government spending on infrastructure projects.

The retail sector on the other hand was on average the sector with the least disclosure over the review period. This is possibly explained by the fact that the sector has the least regulatory requirement. The least reported disclosure category for the retail sector is the sustainability category which in 2009 had an average of 41%.

Unlike other sectors such as mining and construction where disclosure was driven by regulators and large customers, the retail sector is predominantly a business to consumer environment, with fewer businesses and multitudes of consumers, bargaining power largely rests with companies and therefore customers are not in a position to drive change towards more disclosure.

#### 6.3 Governance and financial performance

The propositions that were considered for the study were as follows;

 P<sub>1A</sub> – JSE listed companies with high levels of corporate governance disclosure achieved higher than average financial results for shareholders over the medium term



- P<sub>1B</sub> JSE listed companies with low levels of corporate governance disclosure achieved lower than average financial results for shareholders over medium term
- P<sub>2</sub> JSE listed companies with high levels of corporate governance disclosure achieved higher firm valuations than companies with low levels of corporate governance.

From the results obtained in Figure 2, both propositions P1A and P1B were rejected. The results for the mean G-Score against returns instead exhibit a negative correlation between returns and mean G-Scores, i.e. high governance disclosure leads to lower returns. The results obtained contradict the results obtained in the initial study by Abdo and Fisher, 2007.

The results obtained in Figures 3 and 4 for firm valuations and governance disclosure support proposition P2 as the proposition was not rejected, i.e. companies with high governance disclosure achieved higher firm valuations than companies with low governance disclosure. The results were consistent with the results obtained from the initial study by Abdo and Fisher, 2007.

#### 6.3.1. Governance disclosure and financial returns

At face value, the results of the summary in Table 5 reveal an interesting but mixed picture. Overall, the high portfolio composed of high 50



governance disclosure companies marginally outperformed the low portfolio made up of low governance disclosure firms in terms of returns. However, a sector analysis reveals a slightly distorted picture which is confirmed by the overall statistical analysis of returns against mean G-Score disclosures.

For the top five sectors in mean disclosures, all the high portfolios yield returns below the sector averages, and only one sector, banking, has a high portfolio that outperforms its low portfolio counterpart. In three of the five sectors, the high portfolio yield returns below both the low portfolio and the sector averages. The life insurance sector, which is the top ranked sector, only has a high portfolio and the returns of this portfolio are well the sector average return.

It is only in the bottom ranked sectors where the high portfolios outperform the sector performance and the low portfolios, and these are the food, media and retail sectors.

The statistical results in Figure 2 for the returns against the mean G-Score disclosure, reveal a negative correlation of -0.3078 and an r2 of 0.0947. Whilst the correlation is low, it is statistically significant which leads to a conclusion that high disclosure leads to lower returns.



There is a variety of possibilities for the negative correlation and lower returns which may explain the results and perhaps contextualize the outcome. The list of possibilities includes the following:

- Global financial (liquidity) crisis and subsequent economic recession;
- Firm size in relation to disclosure;
- Firm betas and share liquidity in relation to size; and
- Exclusion of dividends from the measure of returns.

In 2008, the world experienced the worst financial crisis since the Great Depression of the 30s. The meltdown commenced with the collapse of some of the largest financial institutions in the United States and eventually swept across the entire global financial system adversely impacting on all major bourses. The major consequence of the crisis was that large pension funds which held significant equity holdings in most public companies were compelled to shed some of their holdings in order to maintain their liquidity obligations and this resulted in an oversupply of shares for sale, which led to a crash in shares across the globe. The JSE was no exception and did not escape unscathed as evidenced by the returns on its All-Share Index which was down -25.70% in 2008 as a result of \$ 6.1 billion outflows (Macias and Massa, 2009).

As a result of the financial crisis, most companies experienced a sharp fall in their share prices and have only just shown signs of recovery. The



impact of the financial crisis supports the argument raised by Porter (1998) that profitability is a function of industry dynamics and the context within which the firm operates in.

Another factor which could be in play is that of company size both in relation to governance disclosure and to firm returns. Though not part of the study, company size could be a factor in relation to governance disclosure, and from the literature, it is evident that size does matter in relation to returns. Therefore, in designing control portfolios, size should have possibly been a criteria in order to distinguish between large and small firms (Fama and French, 1992).

In light of the possible impact of the financial crisis on the results, a significant factor for consideration is the beta, a risk indicator which measures the sensitivity of individual share prices in relation to the entire market. A comparison of the individual portfolios measured against returns reveals a much more pronounced negative correlation for both the high and the low portfolios, and a zero correlation for the medium portfolio. This finding is significant and suggests that perhaps more control criteria ought to have been considered for the portfolios in order to obtain much more concrete findings. However, the study by design was a replication with an intention to test findings of the initial study over a longer time period.



The measure of financial returns used, CAGR, though a true measure of wealth created, is not adequately robust to be applied as a single measure for financial returns. For one, the measure does not consider dividends paid over the time period currently applied, which contribute significantly to the wealth creation of shareholders. Secondly, no consideration is made for corporate actions such as share splits, share issues and share buy-backs, which can all significantly alter the share price.

#### 6.3.2 Governance disclosure and firm valuation

Two measures for firm valuation were used for assessment, namely the price to book and price/earnings ratio. Both results reveal a positive correlation which leads to a conclusion that high governance disclosure leads to higher firm valuations. These results support the literature and the findings of the initial study by Abdo and Fisher, 2007.

Results from Table 7, which is a summary of mean disclosures and average price to book values for the sector and the high and low governance disclosure portfolios reveal a much more compelling picture with overall price to book values for the high portfolio being more than twice as high as the low portfolio. At sector level, three out of eight sectors have price to book values lower than the sector averages, and in these, both mining and IT sectors have price to book values lower than both the sector average and the low portfolio.



The statistical results in Figure 3 for the mean G-Score disclosures measured against price to book values result in a correlation of 0.2405 and an r2 of 0.0579. Whilst both are low, they are statistically significant to lead to a conclusion that high governance disclosure leads to higher firm valuations.

Results from Table 8, which is a summary of mean G-Scores and price earnings ratios for the sector and the high and low disclosure portfolios, exhibit an even more compelling picture with seven out of eight sectors achieving higher price earnings ratios than both sector averages and the low portfolio.

Only the IT sector's high portfolio achieved lower price earnings ratios than the sector average and the low portfolio.

The statistical results in figure 4 for the mean G-Score measured against the price earnings ratio reveal a positive correlation of 0.3539 and an r2 of 0.1252. Of the three measures, this is the highest correlation which signifies a positive relationship between governance disclosure and price earnings.

The findings for the two financial measures, price-to-book and price earnings, are consistent with the literature which states that good governance results in a premium for firm valuation. The McKinsey & Co



study revealed that a premium of as much as 14% is placed on companies with good governance in North America and could be even higher in developing economies (Holder-Webb, et al, 2007).

## 6.4 Comparison of results with initial study

The study by design was a replication of an initial study and adopted the same methodology as the initial study. Since the study was over a much longer period the make-up of the sample population differed slightly with some companies either delisting or relocating their listings elsewhere. As a result, the sample was relatively smaller with only 74 companies compared to 97 companies in the initial study.

As a result of the smaller sample, the general mining and the gold mining sectors were amalgamated into one sector for the current study. Both changes however, are not material to having any adverse result in the overall study.

The same G-Score template as designed for the initial study was used for the study without alteration, as well as the financial measures of return and valuation. In the same vein, the statistical tests applied in the study were also consistent with the ones used in the initial study.



Whilst the results of the two studies cannot be directly compared due to different review periods, a general observation was made about the variance of governance disclosure scores over the same period 2003 to 2005 which highlights a shortcoming of the study, that of subjectivity. Some aspects of the G-Score template are indeed factual and quantitative in nature, and are therefore least likely to differ. However some aspects, particularly the difference in rating between 1 and 2 on the scale are extremely subjective. There may have been a consistency in the subjectivity in each of the studies, but this compromises prospects for replication of the studies.

A particular observation made between the two studies over 2003 and 2005, is that generally the current study had a much wider range in mean scores compared to the initial study both across the different attributes and overall. The general trends however remain the same as evidenced by the consistency of rankings of the remuneration and the internal audit disclosure categories.

#### 6.5 General limitations of the study

One of the main limitations of the study is that of subjectivity as noted in an earlier section of the study. Secondly and most importantly, what companies disclose may not necessarily be an adequate reflection of the actual governance practices (Abdo and Fisher, 2007). This in fact is best



illustrated by the disclosure of attendance registers in which some companies simply do not disclose the attendance register, and some either just disclose the number of meetings, and some fully disclose meeting dates, venues and full attendance lists. Such a discrepancy creates a distorted picture and at best demonstrates that disclosure is not always a fair reflection of actual governance practices.

A third limitation is that of endogeneity which is difficult to eliminate from the study and as well casts a limitation to the conclusion that is drawn from the study (Abdo and Fisher, 2007).

The final limitation relates to the financial measures used. Whilst the measures for valuation may be adequate, only a single measure was used for firm returns, which as proven by the effects of the financial crisis may not be the most adequate measure.



#### 7. Conclusion

There is an old adage that says; "what gets measured is what gets done".

This is a fitting description of the patterns and trends in governance disclosure that have emerged from the study.

High governance disclosure for the top five sectors is either attributed to regulatory requirements or procurement requirement by government as a large customer. In the banking sector and life insurance sector, the high governance disclosure particularly for risk management is attributed to the requirements of the Reserve Bank and the BASEL II accord. Similalrly, both IT and construction sectors had a significant improvement in the disclosure of sustainability which is attributed to the procurement requirements of a large customer, government.

Two main conclusions can be drawn from the results of the study and these are;

- High governance disclosure does not lead to superior financial returns, at least when measured using share price appreciation
- High governance disclosure does however lead to higher firm valuations on average compared to average sector benchmark



In fact, for the first conclusion, the results revealed a negative correlation suggesting that high disclosure results in lower financial returns, which is perhaps surprising.

There is a pertinent question to be asked before delving into the conclusions in order to contextualise the results: what is the aim of corporate governance? Naidoo (2002) aptly describes corporate governance as a mechanism to instil responsible leadership in companies, and such leadership is transparent, answerable and accountable towards its stakeholders.

A subsequent question could then be: what are the benefits of good corporate governance? One benefit which is confirmed by the findings of this study is that companies with high governance disclosure achieve above average firm valuations. By extension, this means firms with high governance disclosure are perceived to be less risky than those with poor governance disclosure.

In this context, the first conclusion that high governance disclosure does not lead to superior financial returns is not to be construed to mean that good corporate governance is not useful.

The reading into this conclusion is simply that there is at least no positive relationship between returns and high disclosure. Whilst this finding contradicts the finding from the initial study, it is not very surprising. If indeed



there was a positive linear relationship between disclosure and returns (not causal), given the upward trend in disclosure, there would have had to be a commensurate increase in returns or at least a narrowing gap in returns within sectors.

The second conclusion does confirm that investors place a premium on companies with good corporate governance as purported by McKinsey & Co (Holder-Webb, 2007). The prospects therefore are in favour of companies with high governance disclosure in capital raising initiatives. From this conclusion, it can be inferred that companies with good governance are more attractive to investors than poorly governed companies.

From a macro-level perspective, growth for developing economies is heavily dependent on the inflow of foreign direct investment and given the weighting of good governance as evidenced by the McKinsey & Co study in 2002 (Holder-Webb, 2007), it becomes crucial for such developing economies to develop and abide by sound corporate governance frameworks. As such, the link between corporate governance and economic development as well as growth is inextricable.

#### 7.1. So what?

The aim of the study was to determine the impact of reported governance disclosure on financial performance, as well as to validate the findings of the initial study over a longer period. Financial performance for the study was



measured in returns and firm valuations. Both aims of the study have been fulfilled and the results which are statistically significant tell a two different tales.

Whilst the results do not confirm any positive correlation between firm returns and governance disclosure, the finding does not negate the relevance and importance of good corporate governance. The other finding of the study points to a significant direct benefit arising from good governance.

#### 7.2. Recommendations for future studies

One of the prime objectives of this study was to replicate an initial study in order to validate findings from an initial study. The methodology was kept consistent with the initial study and in comparison to other studies on the same subject, the tests are at best rudimentary.

The King II code of governance has just undergone significant revisions and a new code, King III has come into effect in 2010. As was the case with King II, it is likely that companies will take some time before the new code is implemented in full.



Against this background, future studies are recommended on the subject to further explore and test whether indeed a significant relationship can be ascribed between corporate governance and financial performance. The following are recommended for future studies:

- Use of much more robust statistical methods such as Chi-square tests to measure association
- Use of more control portfolios such as size, as well as the Fama and French factors
- Use of relatively longer review periods in order to cover various economic cycles
- Use of more robust financial measures to cover all facets of finance sphere

## 7.3. Concluding remarks

In a recent South African publication, a list of top 100 companies based on returns over five years from 2005 to 2010 was published. Whilst its review period is slightly different to the one in the study, its results were consistent with the findings of this research paper. Out of the 100 companies, 26 companies were from the low and medium governance portfolios (74% and below) and only 13 were from the high governance portfolio. Even more revealing was the fact that in the top ten, five companies were from the medium portfolio (51% - 74%) and none were from the high portfolio.

Significantly, the measure of returns used in the ranking was that of CAGR



(using closing share price and opening share price) but with dividends included (Sunday Times, 2010).



#### References

Abdo, A. And Fisher, G. (2007). The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE. *Investment Analyst Journal.* No. 66, pp 43 - 56

Bauer, Frijns, Otten, Tourani-Rad. (2005).' The Impact of Corporate

Governance on Corporate Performance: Evidence from Japan'. Maastricht

University/Auckland University of Technology

Brown, L. D. and Caylor, M. L. (2008). Corporate governance and firm operating performance. *Rev Quant Fin Acc.* No 32, Pp 130 – 144

Business Day (2008). Bank directors are older, if not wiser. Companies and Markets p 12. Available at <a href="http://www.iodsa.co.za">http://www.iodsa.co.za</a> (accessed on 2 May 2010)

Business Times (2010). Top 100 survey. Top 100 Companies, p2

CIA world factbook (2010). Available at <a href="http://www.cia.gov">http://www.cia.gov</a> (accessed on 2 May 2010)

Chang, C. (2009). The Corporate governance characteristics of financially distressed firms: Evidence from Taiwan. *The Journal of American Academy of Business, Cambridge \* Vol. 15 \* Num. 1.* Pp 125 – 132



Durden, C. and Pech, R. (2006). The increasing cost of corporate governance:

Decision speed bumps for managers. *Journal of Corporate Governance*. Vol 6

No. 1, pp 84-95

Easley, R.W., Madden, C.S. and Dunn, M.G. (2000). Conducting Marketing Science: The role of replication in the research process. *Journal of Business Research*. No 48, pp 83-92

Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: evidence from Nigeria. *Journal of Corporate Governance*. VOL. 9 NO. 3 2009, pp. 231-243

Evanschitzky, H., Baumgarth, C., Hubbard, R. and Armstrong, J.S. (2007).

Replication research's disturbing trend. *Journal of Business Research*. No. 60, pp 411-415

Fama, E.F. and French, K.R. (1992). The cross-section of expected stock returns. *Journal of Finance*. Vol. 47 No 2 1992, pp 427 - 465

Ford, J (2009). Lecture notes for Management Accounting. *Gordon Institute of Business Science*. Management Accounting



Grant, G.H. (2003). The evolution of corporate governance and its impact on modern corporate America. *Management Decision Journal*. Vol. 41, No. 9, pp 923 - 934

Holder-Webb, L., Cohen, J., Nath, L, and Wood, D (2007). A survey of governance disclosures among US firms. *Journal of Business Ethics*. Vol. 83, pp 543-563

Hyndman, R.J. (2009). Encouraging replication and reproducible research. International Journal of Forecasting. Vol. 26, Issue 1

Institute of Directors, SA (2009). Draft code of governance, principles for South Africa, King III. IODSA

Jensen, M. and Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and capital structure. *Journal of Financial Economics 3,* pp 305 - 360

King M. 2006. *The Corporate Citizen: Governance for all entities*. Penguin Books

Korac-Kakabadse, N., Kakabadse, A.K. and Kouzmin, A. (2001). Board governance and company performance: any correlations? *Corporate Governance*. Vol. 1, No. 1, pp 24 - 30



Larcker, D.F., Richardson, S.A. and Tuna, I. (2007). Corporate governance,
Accounting outcomes and organizational performance. *The Accounting Review;*July 2007; 82. 4, pp 963 – 1008

Macias, J.B. and Massa, I. (2009). The global financial crisis and sub-Saharan Africa. *Working Paper 304.* Overseas Development Institute

Naidoo, R (2002). *Corporate Governance*. 1<sup>st</sup> Edition. Double Storey Books, Cape Town, South Africa

Porter, M.E. (1998). On Competition. Harvard Business Review

Ross, S. (1973). The economic theory of agency: The principal's problem. *American Economic Review* 63, pp 134 – 139

Shah, S.Z.A. and Butt, S.A. (2009). The impact of corporate governance on the cost of equity: empirical evidence from Pakistani listed companies. *The Lahore Journal of Economics* 14:1, pp 139 - 171

Vander Bauwhede, H (2009). On the relation between corporate governance compliance and operating performance. *Accounting and Business Research, Vol.* 39. *No.* 5, pp. 497–513



Vermaelen, T. (2010). Lecture notes for Advanced Valuation Techniques. *Gordon Institute of Business Science*. Advanced Valuation Techniques

Ward, M. and Millson, R. (2005). Corporate governance criteria as applied in private equity investments. *South African Journal of Business Management*, Vol. 36 No. 1, pp73 -83

Wang, L. (2009). Corporate Governance, Industry Clustering and Corporate

Performance. *The Business Review, Cambridge \* Vol. 12 \* Num. 1 \* Summer \**2009

Wright, P., Mukherji, A. and Kroll, M. J. (2001). A re-examination of the agency theory assumptions: extensions and extrapolations. *Journal of socio-economics* 30. Pp 413 – 429.

Zikmund, W.G. (2003). *Business Research Methods*. 7<sup>th</sup> edition. United States: Thomson South Western.



# Appendix A : G-Score template

No	Category	Score	Max	%
1	Board Effectiveness	0	20	0%
1.1	Board has codified and published formal mandate of roles, responsibilities &	0	2	
	powers			
1.2	Board has codified and published code of conduct that addresses conflicts of	0	2	
	interest			
1.3	Board identifies key risk areas and key performance indicators in the annual	0	2	
1.4	report  Capacity and description of directors is disclosed in the annual report	0	2	
	Board is comprised of a majority of non-executive directors	0	2	
1.6	Different company CEO and Chairman of board and duties/roles are segregated	0	2	
1.7	Formal orientation programme for incoming directors and evidence of ongoing knowledge and skills development	0	2	
1.8	Composition of board committees and sub-committees disclosed in annual	0	2	
1.0	report Regular board meetings and attendance disclosed in annual report	0	<u> </u>	
	-			
1.10	Disclosure of company secretary in annual report with description of duties/roles	0	2	
2	Remuneration	0	10	0%
	Existence of remuneration committee (Remco)	0		<b>3</b> 70
	Majority members are non-executive	0	_	
		_	_	
	Remuneration philosophy codified and disclosed in annual report  Balance between guaranteed salary and performance element (share options)	0		
2.4	Balance between guaranteed salary and performance element (share options)	U	2	
2.5	Full disclosure of individual director remuneration including all benefits	0	2	
3	Accounting and Auditing	0	10	0%
3.1	Audit committee has 2 or more non executive directors	0	2	
3.2	Audit committee chairman is non – executive and not chairman of the board	0	2	
3.3	Mandate of the audit committee disclosed in the annual report	0	2	
3.4	Do external auditors perform any non-audit related services	0	2	
3.5	Evidence of consultation between external and internal auditors in the annual report	0	2	
4	Internal Audit	0	4	0%
4.1	Internal audit function reporting directly to the Board	0	2	
	Description of work performed results of reports and general mandate	0		
1.2	disclosed in the annual report	Ĭ	_	
5	Risk Management	0	6	0%
5.1	Existence of a risk management strategy and framework disclosed in the annual report	0	2	
5.2	Key company specific risks identified and mitigated in the annual report	0	2	
5.3	Business continuity and disaster recovery plan documented and disclosed in the	0	2	
	annual report			
	Sustainability Attributes	0	6	0%
6.1	Commitment to social, environmental and safety responsibilities documented	0	2	
6.3	and disclosed in the annual report	^	1 2	
	Company measure and discloses investment in human capital	0		
6.3	Company discloses procurement practices relating to Black Economic Empowerment	0	2	
7	Code of Ethics	0	2	0%
7.1	Is there a formalised Code of Ethics disclosed in the annual report	0	2	

		H
Average	0%	6



# Appendix B : JSE sample

IT	Food	Retail	Life Insurance	Media	Construction	Banks	Mining
Computer Clearing	Afgri	Advtech	Discovery	AME	AGI	ABSA	ARM
Converge Holdings	Astral	AF & OVR	Liberty	Caxton	Aveng	Capitec	Assore
Datacentrix	AVI	Cashbuild	Metropolitan	Kagiso	Basil Read	Firstrand	DRD
Datatec	Crookes	СМН	Old Mutual	Naspers	Buildmax	Mercantile	Goldfields
Didata	Illovo	Foschini	Sanlam		Ceramic	Nedbank	Goldone
EOH	Intertrading	Italtile			Group 5	RMB	Harmony
Gijima	Oceana	JD Group			M&R	Standard Bank	Implats
Paracon	Rainbow	Massmart			Masonite		Lonmin
Secdata	Sovereign	Mr Price			PPC		Merafe
Spescom	Tiger	Nictus			WBHO		Metorex
UCS	Tongaat	Tradehold					Miranda
		Truworths					Mvelaphanda
		Woolworths					Northam