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Review

The correlation between perceived internal audit quality and defined corporate governance soundness

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This paper investigated whether a correlation exists between the perceived quality of an internal audit function and the soundness of its company's corporate governance structure. Compliance with ten disclosure requirements of the King II report was used to determine a corporate governance score for each participating company. The perceptions of management and audit committee chairs on their companies' internal audit function quality were used to determine a quality score for each participating internal audit function. These perceptions were based on elements that affect internal audit function quality identified from the literature. The correlation between these scores was then investigated. The sample consisted of thirty large South African companies. Results were based on questionnaires completed by chief audit executives, chief executives and audit committee chairpersons of participating companies. The main finding was that no correlation was found to exist between the defined soundness of the corporate governance structures and the perceived internal audit quality of participating companies. This finding causes doubt about internal audit©s role as a corporate governance mechanism in an organisation, and indicates that extensive research should be encouraged into the relevance of internal audit as a true corporate governance mechanism.

Key words: Audit committees, boards of directors, corporate governance mechanism, corporate governance structures, external auditors, internal audit, internal audit attributes, internal audit quality, internal audit reporting, internal audit value added, king II, king III, quality internal audit function, sound corporate governance.

INTRODUCTION

The past decade has witnessed a proliferation of corporate governance guidelines and codes. Aguilera and Cuervo- Cazurra (2004: 416 and 428) attribute this to two parallel processes, namely globalisation with rapid growth in international markets, and transformation in the ownership structures of firms (due to the growth in institutional investors, privatisation and rising shareholder activism). In addition, valuable lessons have also been learnt from the series of recent corporate collapses that have occurred in different parts of the world, and these have led to various attempts to strengthen regulatory frameworks in order to restore investor confidence and to bring about greater transparency and accountability to corporate affairs (Davies and Schlitzer, 2008:532). It is thus reasonable to conclude that such strengthened regulatory frameworks necessitate more effective monitoring mechanisms of compliance, resulting in the need for improved corporate governance structures. The internal audit function (IAF) is such a compliance mechanism within a corporate governance structure.

South Africa's corporate governance practices were formalised for the first time in 1994, when the King Report on Corporate Governance (King I) was released. King I was internationally regarded as a seminal work on corpo-

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Abbreviations: CAC; Chairperson of the audit committee, **CAE;** Chief audit executive (head of the internal audit function), **CBOK;** Common body of knowledge of the IIA, **CEO;** Chief executive officer, **CFO;** Chief financial officer, **IAF;** Internal audit function, **IIA;** Institute of Internal Auditors, **IOD;** Institute of Directors.

rate governance (IOD, 1994) that, inter alia, described the IAF as an important part of corporate governance, being one of the mechanisms for necessary checks and balances in an organisation. King I advocates that "(t)he internal audit team must be given standing in the company that commands respect and they must be seen as colleagues who aid the senior executives of any business unit to control their businesses" (IOD, 1994).

The increasingly global oriented economic environment, international developments in the area of corporate governance and legislative developments in South Africa necessitated the review of King I. The second King Report (King II) which became effective on 1 March, 2002 deals with internal audit in section four of the Code of Corporate Practices and Conduct (IOD, 2002: 34-35). It added to King I in that it states that King II fully endorses the definition, function and role of internal audit as described by the IIA (IOD, 2002: 34).

Recently a significant corporate governance reform process was concluded in South Africa. The first phase was concluded when the Corporate Laws Amendment Act, 2006 (SA, 2006) was promulgated, which incorporates the recommendations made in King II and thus provides statutory backing for certain corporate governance practices in South Africa. On 16 April, 2009 the Companies Bill was signed into law, marking a new era in corporate governance under the Companies Act, 71 of 2008 (SA, 2009). A tandem process was followed to reform existing corporate governance principles in South Africa in line with changes in international governance trends as well as the local corporate law reform process. This process resulted in the King Report on Governance for South Africa 2009 (King III), which was released on 1 September, 2009. King III states that the key responsibility of internal audit is to aid the board and its committees in discharging its governance responsibilities (IOD, 2009: 93).

The new Companies Act (SA, 2009) incorporates many corporate governance related recommendations from the King II report that were initially included in the Corporate Laws Amendment Act, 2006. Section 94(7)(f)(iii) of the new Companies Act requires that the audit committee should prepare a report, to be included in the annual financial statements of inter alia a listed company, that comments in any way the committee considers appropriate on the financial statements, the accounting practices and the internal financial controls of the company (SA, 2009). It can thus be expected that these reporting requirements will necessitate audit committees to put increased reliance on assessments performed by IAFs. Related to the latter statutory requirement, King III (IOD, 2009:97) states that the head of internal audit should provide the audit committee with a written assessment of the effectiveness of the governance, risk and control environment of the organisation.

From the above it is clear that there is a need and role for an internal audit function to serve as a mechanism in corporate governance structures in South Africa. The literature supports the view that the IAF is a critical corporate governance mechanism that plays an important role in organisational governance by monitoring organisational risks and assessing controls (Sarens, 2009: 2; Archambeault, DeZoort and Holt, 2008: 376; Carcello, Hermanson and Raghunandan, 2005: 71; Paape, Scheffe and Snoep, 2003: 261). The latter consists mainly of international research, because the role of the IAF as a corporate governance mechanism represents an unexplored area in South Africa. Exceptions are the research of Van der Nest (2008) and Van der Nest, Thornhill and De Jager (2008), in which audit committees in the South African public sector were explored. These researchers concluded (2008: 186, 556) respectively that the majority of audit committees in the South African public sector are not seen as effective, and recommended the monitoring of IAFs by audit committees to improve their effectiveness.

Other relevant studies performed in South Africa include that of Ferreira (2007), which explored whether an IAF could make a positive contribution in the selection, induction or development process of audit committee members and the resulting impact on the IAF's independence. A decade earlier Mjoli (1997) researched perceptions of the role of internal audit and its added value within a South African context.

Despite all of the recent attention focused on the IAF as a critical corporate governance mechanism, little is known about the determinants of the quality of such a function. According to Gramling and Hermanson (2009: 36-37) the term "internal audit quality" appears to be undefined. Gramling, Maletta, Scnieder and Church (2004: 194) performed a comprehensive literature study on the role of the IAF in corporate governance and inter alia reported that the majority of the research on IAF quality reflects the perceptions of the external auditor and whether he/she uses the internal auditor's work. Felix, Gramling and Maletta (2005: 41), for example, used external auditors' perceptions of internal audit quality in their study to determine the influence of non-audit service revenues and client pressures on external auditors' decisions to rely on internal audit. Mihret and Yismaw (2007: 472) followed another approach and found internal audit quality to be a function of staff expertise and scope of services, while it is also one of the four factors contributing to internal audit effectiveness.

Sarens (2009: 3) promotes the need for further research on IAF quality and raises the question: "When can we talk about an effective IAF?" and then provides the answer: "When IAF quality has a positive impact on the quality of corporate governance". This study explores Sarens's answer by investigating the IAF's role as a corporate governance mechanism. This was done by determining whether management’s and audit committee chair’s perceptions about aspects that indicate IAF quality is correlated with a sound corporate governance structure as defined by a number of disclosable aspects according to the King II report.

OBJECTIVE, JUSTIFICATION AND LIMITATIONS OF THE STUDY

The objective of this paper is to determine whether or not, for the participating South African companies, a positive correlation exists between perceived IAF quality and a sound corporate governance structure as defined by a number of disclosable aspects according to King II. Thus, an attempt is made to explore an IAF as a corporate governance mechanism.

The study builds on the current body of knowledge of the role of IAFs in corporate governance. The findings are important from a theoretical perspective because an IAF as a corporate governance mechanism in the South African context is a relatively unexplored area about which limited literature exists. The study could benefit the IIA by providing information on the role of IAFs as a corporate governance mechanism, information that the IIA could use in developing its standards and providing guidance to its members. In addition, the study could be useful to companies when comparing the quality of their own IAFs to the findings reported on in this paper. This comparison may provide insights about the quality of their own IAFs and trigger initiatives for improvements where such quality is found to be lacking.

The study has specific limitations since, as set out in the foreword to this journal, it is based on the iKUTU study which was limited to 30 large listed participating South African companies. The small sample size may have influenced the results, and its openness to generalisation may therefore be questionable.

Quality of the IAF, for purposes of this study, is based on perceptions of management and audit committee chairs. It can be argued that management in particular is responsible for appointing the IAF and that they may lack the necessary objectivity to pass judgement on IAF quality, as it effectively reflects on their own capability. No attempt is further made to obtain external auditors' views about IAF quality. The scores calculated for IAF quality should be considered with these limitations in mind.

For purposes of this study the soundness of a corporate governance structure is defined by the compliance with ten disclosable aspects as required by the King II report. It can be argued that mere disclosure does not necessarily reflect actual compliance with the King II report. Corporate governance soundness was further defined using only ten of the numerous disclosure requirements contained in the King II report. The scores calculated for corporate governance soundness should be considered against the background of these limitations.

The remainder of this paper conforms to the following structure: section 3 presents a discussion on the IAF's role as a corporate governance mechanism and the determinants of IAF quality, based on the most recent academic literature. Section 4 outlines the methodology followed in this study, and section 5 reports the results and a discussion thereof. In the final section conclusions are summarised, recommendations are made and suggestions for further research are given.

LITERATURE REVIEW

The overarching rationale of this study is that a quality IAF is likely to have a correlation with an organisation's sound corporate governance structure. The literature review therefore focuses on the two components of the rationale: a sound corporate governance structure and IAF quality.

A sound corporate governance structure

In the broadest sense, corporate governance can be defined as stewardship, and thus the rules defining the responsibility of corporate directors state that this is to provide oversight of the goals and strategies of a company and to foster their implementation (Cornelius, 2005: 12) . Corporate governance is therefore the system by which business corporations are directed and controlled (OECD, 1999, 2004), a set of interlocking rules by which corporations, shareholders and management govern their behaviour (Cornelius, 2005: 12).

Effective corporate governance protects the interests of an organisation's stakeholders, ensures the integrity, quality, transparency and reliability of financial reports, monitors the adequacy and effectiveness of internal controls and ensures the quality of audit functions (Rezaee, 2005: 289). The primary representatives of an organisation's stakeholders are viewed as the four cornerstones of corporate governance, and include its board of directors, audit committee, external auditors and IAF (Goodwin-Stewart and Kent, 2006:85; Gramling et al., 2004: 196). These cornerstones or corporate governance mechanisms demonstrate interactive relationships, in which much interest has been expressed in the literature. Goodwin-Stewart and Kent (2006:95), for example, found the existence of an IAF within an organisation to be positively associated with the presence of an independent board chair, an audit committee and a Big4 auditor. Cohen, Krishnamoorthy and Wright (2002: 573) examined the impact of various corporate governance factors, such as the board of directors and the audit committee, on the external audit process, while Davies (2009: 42) explored the working relationship between audit committees and the IAF within Welsh local government. In the Zain, Subramaniam and Stewart (2006: 13) study it was found that a more competent and interactive audit committee appears to have a positive effect on the internal auditors' assessments of their own contribution to external audit work.

In the following sections these four corporate governance mechanisms, as indicative of a corporate governance structure, are discussed. Interrelationships with the IAF as corporate governance mechanism, where appropriate, are emphasised.

Board of directors

King III regards the board of directors as the focal point for and custodian of corporate governance (IOD, 2009:29), and therefore the board of directors is vested with the full responsibility for the direction and management of the company (Vinten and Lee, 1993:14). The composition of the board of directors is more fully defined in King III than in King II. King III requires the board to consist of a majority of non-executive directors (the majority are required to be independent). King III further requires that every board shall have at least two executive directors: the chief executive officer (CEO) and the director responsible for the company's financial affairs. The board should be headed by an independent non-executive director (IOD, 2009:34, 38, 39).

Research on the relationship between the IAF and the board of directors is limited (Gramling et al, 2004: 233). Sarens (2007) views the IAF as the partner of top management in monitoring the company. Fadzil, Haron and Jantan (2005: 846) expand on the latter notion by stating that senior management (represented by executive directors on the board of directors) normally expects that the IAF perform sufficient audit work and gather other information so as to form a judgement about the adequacy and effectiveness of the control processes. If an IAF is not available, the management needs to apply other monitoring processes in order to assure itself and the board that the system of control is functioning as intended. In their study on the relationship between senior management and the IAF, Sarens and De Beelde (2006: 238) found that senior management expects of an IAF to compensate for the loss of control they experience as a result of increased organisational complexity and to fulfil a supporting role in the monitoring and improvement of risk management and internal control.

Audit committee

King III requires an audit committee to consist of at least three members, all of whom should be independent non-executive directors (IOD, 2009: 57) . King II did not address the minimum number of audit committee members and required that the majority of the members should be independent non-executive directors and financially literate (IOD, 2002:12). King III requires that the audit committee members collectively should have a good understanding of integrated reporting (financial reporting and sustainability issues), internal financial controls, internal and external audit processes, corporate law and risk management and governance processes within the company (IOD, 2009: 58). It requires the audit committee to conclude and report annually to the stakeholders and the board of directors on the effectiveness of internal financial controls (IOD, 2009: 65).

The role of the audit committee is to serve as an extension of the function of non-executive directors since, by implication; both possess the quality of independence (Vinten and Lee, 1993: 11). Beasley, Carcello, Hermanson and Neal (2009: 80), as well as Rezaee (2005: 284, 291) perceive an audit committee as part of a company's monitoring mechanism, overseeing the integrity and quality of its financial reporting process and the effectiveness of both internal and external audit functions as the guardians of stakeholders' interests.

The International Standards for the Professional Practice of Internal Auditing (IIA Standards) states that the relationship between the IAF and the audit committee should be such that the CAE functionally reports to the audit committee (representing a level within the organisation that allows the IAF to fulfil its responsibilities) and that the IAF should provide the committee with appropriate information (IIA, 2009: Practice advisory 1110-1). Turley and Zaman (2004:309) believe the latter relationship strengthens the IAF, which according to Gramling et al. (2004: 198) heightens its standing. The relationship between audit committees and IAFs has been well researched. Allegrini, D'Onza, Paape, Melville and Sarens (2006: 849) found that IAFs perceive their relationship with audit committees in a positive light. Evidence is available that the more independent an audit committee is from executive management, the more active is its approach to internal audit (Turley and Zaman, 2004:317). Raghunandan, Read and Rama (2001:116, 117) found a positive association between independence among audit committee members, the review of internal audit results and the frequency of meetings with the CAE. Goodwin (2003: 274) reached a similar conclusion, and reported that the independence of the audit committee and the level of accounting experience among its members have a complementary impact on the audit committee's relation with the IAF. In a recent study Meyers and Ziegenfuss (2006: 51, 61) examined communication between the IAF and audit committee and found that effective audit committees communicate more with CAEs. Sarens, De Beelde and Everaert (2009: 91) investigated the reason why audit committees look for support from the IAF, and found that audit committees seek comfort with respect to the control environment and internal controls, and that the IAF can provide such comfort.

External auditors

According to Rezaee (2005:284) management of a company is primarily responsible for designing and maintaining adequate and effective internal controls, but internal and external auditors should ensure that internal controls are adequate and effective in preventing, detecting and correcting financial statement misstatement and that management does not override control activities. The comprehensive literature study of Gramling et al. (2004: 210) shows that the most extensive area of internal auditing literature on the role of an IAF within corporate governance focuses on the relationship between the external auditor and the IAF. Many studies provide evidence on the various factors/criteria affecting the external auditor's latter reliance decision. These factors include the IAF's independence (reporting responsibilities), competence and work performance of internal auditors, audit materiality levels, client risk factors and prior experiences with the particular IAF (Felix et al., 2005: 31; Al-Twaijry, Brierley and Gwilliam, 2004: 935; Haron, Chambers, Ramsi and Ismail, 2004: 1150, 1151).

The importance of having a Big4 accounting firm as external auditors participating in an organisation's governance has been explored in previous studies. Beasley, Clune and Hermanson (2005: 524) explain that most studies classify the largest international accounting firms, the Big4 firms, as high quality auditors. Rezaee (2005: 285), for example, supports the notion that Big4 accounting firms are more likely to detect financial statement misstatements than non-Big4 accounting firms because they have a greater ability to withstand client pressure, greater concern for their reputation, greater resources (in terms of both competent personnel and advanced technology) and more developed audit strategies and processes. Felix et al. (2005: 309) distinguished between a Big4 accounting firm as external auditors and a non-Big4 accounting firm in their study, because they believe that if a company is shunned by a Big4 accounting firm, this may indicate potential internal control problems. The same approach was followed by Zhang, Zhou and Zhou (2007: 309) in their American study on audit committee quality.

Internal audit function (IAF)

King I, King II and King III acknowledge the role of an effective IAF as a mechanism in a good corporate governance structure. These reports state that the audit committee should be responsible for overseeing the IAF and that the latter should be strategically positioned to achieve its objectives (IOD, 2009, 2002, 1994).

Research supports the principles in King that value should be placed on internal audit as a monitoring function because the IAF contributes to an improved control environment (James, 2003: 323). Rezaee (2005: 294) viewed the IAF as the first-line defence against fraud because of internal audit staff's knowledge and understanding of the organisation's business environment and internal control structure. This view point is supported by Coram, Ferguson and Moroney (2008: 557) who found that organisations with an IAF are more likely to detect and self-report fraud through misappropriation of assets than those that do not. The Carcello et al (2005: 70) study proved that organisations facing higher risk will increase their organisational monitoring through internal audit.

IAF quality

The aim of this paper is to explore an IAF as a corporate governance mechanism by determining whether or not, for the participating South African companies, a correlation exists between IAF quality and a sound corporate governance structure. The four indicators (independence of IAFs, value added by IAFs, attributes of IAFs and recommendations made by IAFs) discussed below influence the quality of an IAF (Gramling and Hermanson, 2009:37; Sarens 2009:3; Sav uk, 2007: 277; James, 2003: 322; Abbott, 2000: 57).

Independence

The independence of an IAF contributes to its quality. The independence of an IAF refers to its organisational position, which in practical terms is reflected by its reporting responsibilities (Sarens, 2009:3). The literature supports the importance of an IAF's functional reporting relationship with the audit committee (Fraser and Henry, 2007: 397 and 398; Kaplan and Schultz, 2007: 114; Moeller, 2004:41; Paape et al., 2003: 254; Nagy and Cenker, 2002:136; Goodwin and Yeo, 2001: 122), as it enhances the quality of an IAF (Abbott, 2000: 57). James (2003: 322) found that the respondents of his study, American bank lending officers, perceive IAFs that report to the audit committee as more able to deter financial statement fraud and more likely to report such fraud than IAFs that report to senior management.

Value added by IAFs

Sav uk (2007: 277) maintains that an IAF, being a constituent part of corporate governance, can add value to an organisation only if it is effective. She (2007: 281-282) used the following attributes for IAF effectiveness: subordination to the audit committee, professional certification, experience, internal audit strategy and operating responsibilities. Coram et al (2008:546) acknowledge that there has been limited research on the effectiveness of IAFs. Arena and Azzone (2009: 44) linked the effectiveness of an IAF to the resources and competencies of the internal audit team, activities and processes performed and its organisational role, attributes which have been well researched (refer to section 3.2.3 below).

Attributes of IAFs

The recent CBOK study (Hass, Abdolmohammadi and Burnaby, 2006: 841-842), a worldwide study performed by the IIA to reassess its competency framework, has shown that IAFs have difficulty in attracting and retaining internal auditors with the appropriate profile consisting of education, experience, professional certification, training and development, behavioural skills, technical skills and competencies. According to Gramling and Hermanson (2009:37) skilled and qualified internal audit staff are indicative of internal audit quality, a notion that is well supported (Sarens, 2009:4; Mihret and Yismaw, 2007: 475-476). Fadzil et al. (2005: 861) supported the latter notion when they reported that inter alia knowledge, professional certification and training lead to a lower need for monitoring of the internal control system by an IAF, since they are perceived as able to perform audits effectively.

Zain et al. (2006: 3) identified the level of experience among internal audit staff as being indicative of the quality of their IAF. In their assessment, shortly after the definition of internal audit was changed, (Nagy and Cenker, 2002: 130) regard CAEs with more than ten years experience in the field of internal auditing as leading professionals in their field.

Definitions presented in the internal auditing literature underline the value of an internal auditor's technical competence, and link it to knowledge and individual know-how, rather than personal aspects (Richard 2006: 156). In her attempt to conceptualise the role of internal auditors in New Zealand, Van Peursem (2005: 498; 509) found that the professional status of internal auditors is not enhanced through membership of the IIA, but rather through membership of professional accounting associations, in particular the Institute of Chartered Accountants of New Zealand (ICANZ).

Rate of implementation of recommendations made by IAFs

Mihret and Yismaw (2007: 472) believe that internal audit findings and recommendations will not serve much purpose unless management is committed to implement them. Gramling and Hermanson (2009: 37) identify the reliability and usefulness of the work products or deliverables of an IAF as indicators of internal audit quality. According to Rupšys and Boguslauskas (2007: 13) the status of an IAF as viewed by senior management significantly correlates with the percentage of their recommendations which are implemented. Sarens (2009: 4) agrees, but maintains that the frequency of consideration of the recommendations made by the IAF also serves as an indicator of IAF quality.

METHODOLOGY

This paper aims to determine whether or not a correlation exists between perceived IAF quality and defined corporate governance soundness of large listed South African companies, and thus to explore an IAF's role as an corporate governance mechanism.

To evaluate IAF quality the research methodology used during the iKUTU study, included in the foreword to this journal, was used. In particular, the perceptions on participating companies IAFs' reporting lines, attributes, value added and the implementation of their recommendations were determined, and the academic and professional qualifications, fields of specialisation and years of experience of those IAFs' chief audit executives (CAEs) were considered. The views of all the major stakeholders in internal auditing, including CAEs, chairpersons of the audit committees (CACs) and senior management represented by either the chief executive officers (CEOs), the chief operating officers (COOs) or the chief financial officers (CFOs) of participating companies, were used when IAF quality was assessed.

To assess the soundness of the corporate governance structures of participating companies, ten specific corporate governance disclosures in their 2008 annual reports were analysed which include the characteristics of a participating company's board of directors, its audit committee and its external auditor.

Model

Two models were developed, taking the soundness of a company's corporate governance structure as an independent variable and the quality of its IAF as the dependent variable. In the first model the quality of a company's IAF was based on the perceptions of CEOs/CFOs/COOs and information provided by CAEs, while for the second model the perceptions of CACs, rather than those of CEOs/CFOs/COOs, were used.

Assessment of the soundness of a company©s corporate governance structure

To assess the soundness of a participating company's corporate governance structure, a Corporate Governance Score (CGS) was calculated that reflected specific disclosures about ten aspects of a participating company's corporate governance structure. Information used in calculating the CGSs was obtained from an analysis of the 2008 annual reports of participating companies. The same CGSs were used as predictor in both the models.

The CGS was based on the King II principles for good corporate governance and calculated by the summation of the following elements:

B-CHAIR = 1 if the board had an independent non-executive chairperson, else 0
B-INDEP = 1 if the majority of directors was independent directors, else 0
B-NON-EXC = 1 if the majority of directors was non-executive directors, else 0
NR = 1 if four or more board meetings were held per annum, else 0
AC-M = 1 if the audit committee consisted of two or more members, else 0
FINLIT = 1 if at least one of the audit committee members was financially literate, else 0
AC-INDEP = 1 if the majority of the members of the audit committee was independent directors, else 0
AC-NON-EXC = 1 if the majority of the members of the audit committee was non-executive directors, else 0
AC-CHAIR = 1 if the audit committee had an independent non-executive chair person, else 0
BIG4 = 1 if one of the Big4 accounting firms was the external auditor(s), else 0
The CGS consists of ten elements with a maximum possible score of 10.

Assessment of the perceived quality of a company's IAF

To assess the perceived quality of a participating company's IAF a Quality Score (QS) was calculated. The elements used to calculate the QS arise from the literature as discussed in section

3.2 and are based on the perceptions of CEOs/CFOs/COOs and CACs and information provided by CAEs.

QS1: The QS used in the first model, QS1, was based on the perceptions of the CEOs/CFOs/COOs and information provided by CAEs. It was calculated by the summation of the following elements.

FRL: Functionality reporting lines of the IAF, 1 if it is to the chairperson of the audit committee, else 0.

ATTR: Perceived satisfaction on specified attributes (competence, commitment, effectiveness, flexibility, value added and meet expectations) of the IAF, ranging from 1 if extreme dissatisfaction was expressed to 5 where extreme satisfaction was expressed.

VALUE: Perceived value added to corporate governance activities performed by the IAF, ranging from 1 if no value was added to 4 where significant value was added.

FREQ: Frequency of considering/implementing the IAF's recommendations, 1 if these are always considered/implemented, else 0.

SATIS: Perceived satisfaction with the IAF's contribution to corporate Governance, ranging from 1 if extreme dissatisfaction was expressed to 5 where extreme satisfaction was expressed.

A-QUAL: If the highest academic qualification of the CAE is a postgraduate degree or higher 1, else 0.

P-QUAL: If the CAE is a CIA and/or CA(SA) 1, else 0.

FIELD: If the field of specialisation of the CAE is external or internal auditing 1, else 0.

EXP: If a CAE has 10 years or more experience 1 in the field of internal auditing, or else 0.

From the above it is clear that QS1 consists of nine elements. Where a company used an in-house function as well as an outsourced IAF (effectively co-sourcing its internal audit), the elements of both the in- house and the outsourced IAF were taken into account through the use of an average. This approach ensured comparability with companies that used either an in-house IAF or an outsourced IAF. The total score was calculated as follows:

- For six elements (FRL, FREQ, A-QUAL, P-QUAL, FIELD, EXP) a value of 1 was given for compliance, or else 0.
- For the element ATTR (perceived satisfaction on specified attributes) six attributes of an IAF or its staff were used, namely competence, commitment, effectiveness, flexibility, value added and meet expectations, with the maximum satisfaction score of 30 (5 x 6) and the minimum of 6 (1 x 6).
- For the element VALUE (perceived value added to corporate governance activities) the maximum score of 4 corresponds with significant value added, while the minimum score of 1 reflects no value added.
- For the element SATIS (perceived satisfaction with the IAF's contribution to corporate governance) the highest level of satisfaction (extreme satisfaction) corresponds to the maximum score of 5, while the minimum score of 1 reflects extreme dissatisfaction.
- The maximum score that could be achieved from these nine elements thus amounts to 45 (6 + 30 + 4 + 5).

QS2: The QS used in the second model, QS2, was based on the perceptions of the CACs and information provided by CAEs. The same elements and related attributed values were used as for the calculation of QS1, however the following additional element and its related value was included in the calculation of QS2:

NUM = The number of times per annum that a CAE reports to the CAC; 1 for three or more times, else 0

The maximum score that could be achieved amounts to 46, (made up of the 45 for QS1 above + 1).

RESULTS AND DISCUSSION

Descriptive statistics

Table 1 provides the descriptive statistics for the variables (CGS, QS1, QS2) used in both models.

As explained in the foreword to this journal, questionnaires were completed by the CEOs/CFOs/ COOs, CACs and CAEs of thirty large listed companies in South Africa. A questionnaire from a CAC of one company, a questionnaire from a CEO of another company and a questionnaire from a CAE of yet another company had not been fully completed and were thus disregarded. The effect of the missing data was that 28 responses each were available for the calculation of both QS1 (CEO + CAE) and QS2 (CAC + CAE).

From Table 1 the mean of CGS is 8.70 (87%), indicating high compliance with King II disclosure requirements by the participating companies. Six (60%) was the lowest and ten (100%) was the highest CGS obtained by a participating company.

The means of QS1 and QS2 are 35.66 (79%) and 36.36 (79%) respectively, indicating that the quality of IAFs were perceived by respondents, to be relatively high. For QS1 the lowest score was 25 (56%) in contrast with a highest score of 44 (98%), while for QS2 these scores were 29 (63%) and 42 (91%) respectively. From table 1 the widespread distributions between the lowest and highest scores obtained for all the variables are apparent.

Corporate governance scores (CGSs)

In Table 2 the CGSs of the participating companies are presented. As explained in section 4.1.1, the maximum possible corporate governance score was ten. Eight companies (27%) obtained the maximum score. All but one of the participating companies obtained a CGS of seven or above, while 87% (26 companies) obtained a score of at least eight. These high scores could be ascribed to the fact that the thirty participating companies are all prominent listed South African companies, who in terms of the JSE listing requirements were obliged (for the 2008 year) to adhere to the principles in King II. These scores represent the independent variables used for both the models.

Table 1. Descriptive statistics.

	CGS	QS1 (CEO/CFO/COO + CAE)	QS2 (CAC + CAE)
N	30	28	28
Minimum	6	25	29
Maximum	10	44	42
Mean	8.70	35.66	36.36
Std deviation	1.09	5.10	3.03
Skewness: Statistic	-.555	.203	-.047
Std error	.427	.441	.441
Kurtosis: Statistic	-.212	-.720	.277
Std error	.833	.858	.858

Table 2. Frequencies of CGSs.

CGSs obtained	Number of companies = Frequency	Valid percentage	Cumulative percentage
6	1	3.3	3.3
7	3	10.0	13.3
8	8	26.7	40.0
9	10	33.3	73.3
10	8	26.7	100
Total	30	100	

Table 3. QS1 and QS2 of participating companies in relation to their CGS.

Frequency	CGS		QS1		QS2	
	Score	%	Mean score	%	Mean score	%
1	6	60	35.00	78	33.50	73
3	7	70	38.16	85	36.00	78
7	8	80	35.57	79	36.50	79
8	9	90	34.39	76	37.56	82
8	10	100	36.31	81	35.50	77
Total	10	100	35.66	79	36.36	79

Quality scores (QS)

In Table 3 QS1 and QS2 of the participating companies are presented in relation to their CGSs. The QS1 and QS2 represent the dependent scores in both models. From Table 3 it is clear that QS1 and QS2 of participating companies did not increase with an increase in their CGSs. The eight participating companies that obtained the maximum CGS obtained an average of 81% and an average of 77% respectively for QS1 and QS2. The three participating companies that obtained CGSs of 7 (70%) obtained the highest average QS1 (85%) and the third highest average QS2 (79%). The eight companies that obtained a CGS of 90% had the lowest average QS1 (76%) but the highest average QS2 (82%). The variance between participating companies' QS1 and QS2 in relation to their CGSs is obvious.

Figures 1 and 2 provide error bars, illustrating the frequencies and distributions of QS1 and QS2.

Table 3 in conjunction with Figures 1 and 2 illustrates that a correlation or positive relationship between CGS as predictor and the variables of QS1 and QS2 could not be established. The fluctuations in the means are clearly illustrated by Figures 1 and 2. In both figures the means (indicated by) are not in a straight line, nor do they follow an upward trend where CGS increased.

Only the eight participating companies who obtained CGS of 8 (80%) obtained the same average for QS1 and QS2, namely 79%. Participating companies that obtained the highest average QS1 (85%), also obtained a much

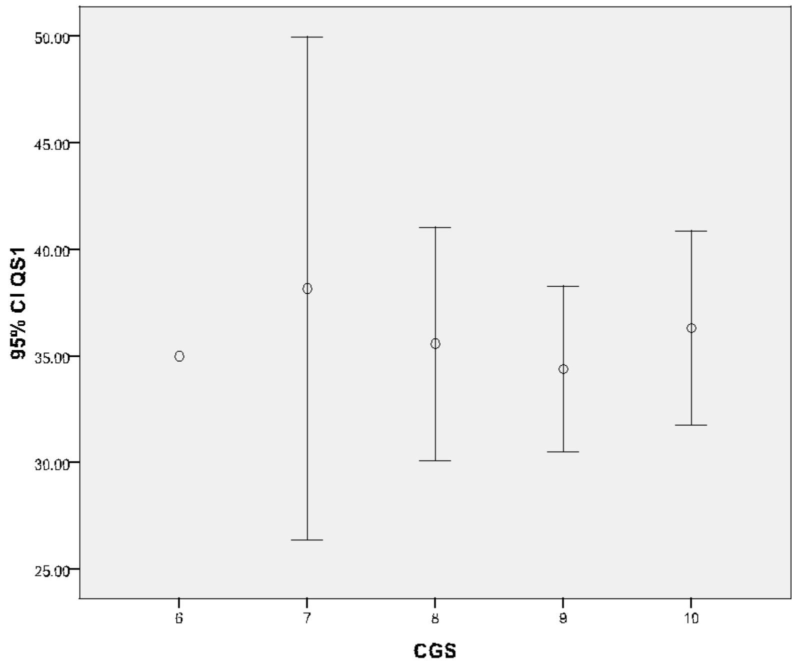

Figure 1. Frequencies and distributions of QS1.

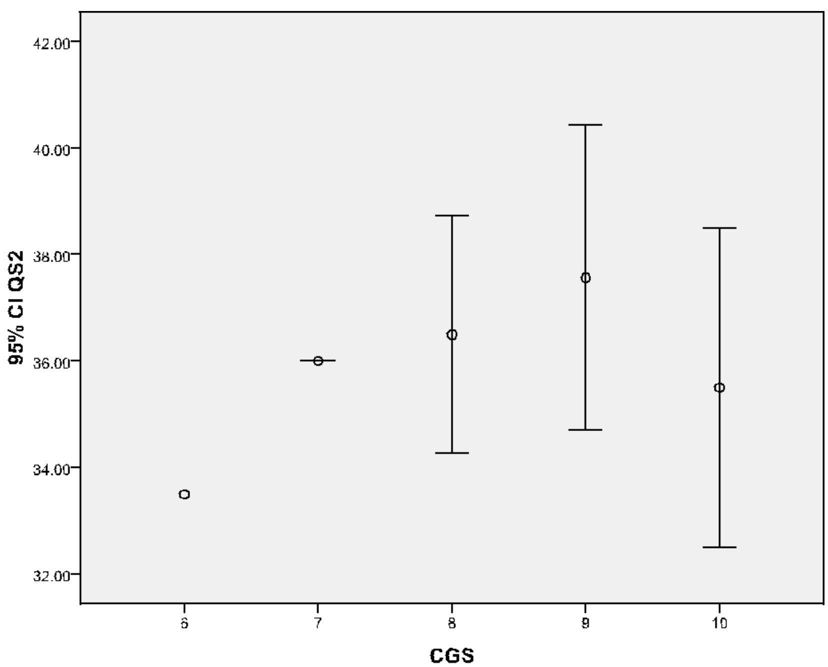

Figure 2. Frequencies and distributions of QS2.

lower average QS2 (78%). The same tendency existed for the participating companies that obtained the highest average QS2 (82%), since they obtained the lowest QS1 (76%). The absence of a positive relationship between the independent (CGS) and dependent variables (QS1 and QS2) of both models is further illustrated by Figure 3, presenting an overlay scatter plot incorporating QS1 and QS2 of participating companies in relation to their CGS. Figure 3 clearly shows that for each CGS diverse QS1 and QS2 were achieved.

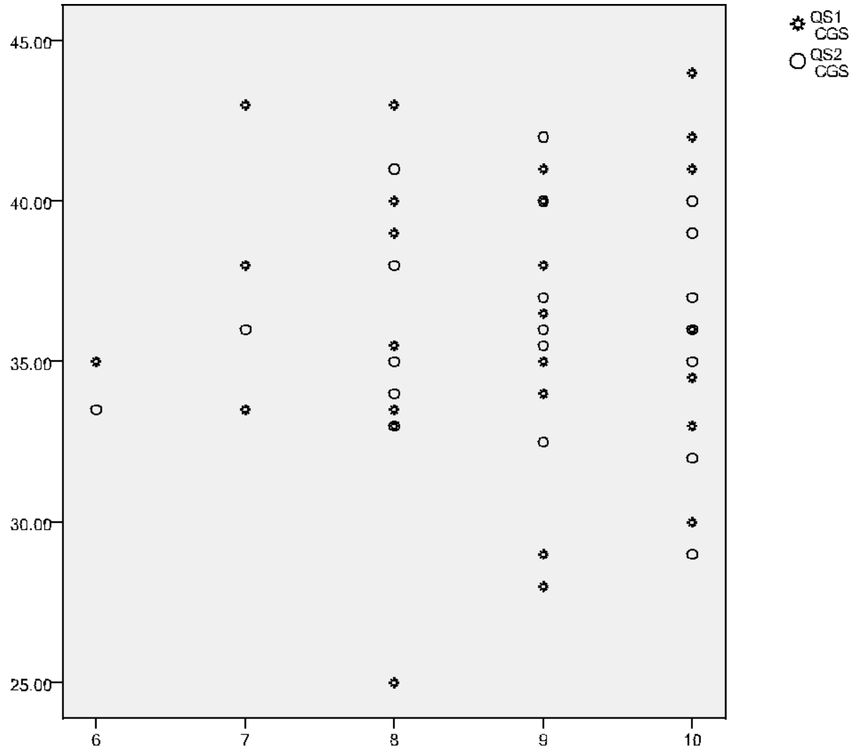

Figure 3. Scatter plots of variables.

Table 4. Pearson correlation coefficients for the variables CGS, QS1 and QS2.

	CGS	**QS1 (CEO/CFO/COO + CAE)**	**QS2 (CAC + CAE)**
QS1			
Pearson coefficient	1	.177	-.047
Sig. (2-tailed)		.376	.813
N	28	27	28
QS2			
Pearson coefficient	.177	1	.029
Sig. (2-tailed)	.376		.882
N	27	28	28

Correlation

From the above it is clear that the participating companies obtained high CGS scores, and relatively high QS1 and QS2 scores, correlations between the independent variable (CGS) and the dependent variables (QS1 and QS2) of the two models appear poor. The Pearson correlation coefficients, as contained in Table 4, were calculated to prove such poor correlation. The low correlation coefficients for the depending variables QS1 (-.047) as well as QS2 (.029) in relation to the independent variable CGS indicate a poor correlation between the existence of a sound corporate governance structure in a participating company and the quality of its IAF as perceived by either CEO/CFO/COO and CAE or CAC and CAE respondents.

The main finding of the study is that no correlation between the defined soundness of the corporate governance structures of participating companies and the perceived quality of their IAFs was found to exist. This finding appears to contradict the literature (refer to section 2) which supports the notion that the IAF is regarded as an important corporate governance mechanism and, provided that the IAF is of acceptable quality, that it could contribute to a sound corporate governance structure. The results reflect that although IAFs scored relatively high on quality, no correlation existed between such perceived IAF quality and the defined soundness of the corporate governance structures of the participating companies.

The findings of the Goodwin-Stewart and Kent (2006) study could support the main finding of this study. Those researchers explored the use of internal audit as a corporate governance mechanism and found a significant positive association between the existence of an IAF and both an independent board chair and the existence of an audit committee. However, their findings did not support an association between the number of non-executive directors on the boards and the existence of an IAF, nor was any association found between the existence of an IAF and the independence of the audit committee or the frequency of audit committee meetings. A marginally significant association was found between audit committee expertise and the existence of an IAF. They concluded with caution that accounting and finance expertise on the audit committee could be used as a substitute for reliance on internal audit (Goodwin-Stewart and Kent, 2006: 95-96).

Another factor, based on previous studies, which should be taken into account when interpreting the main finding of the current study, is that the role of the IAF may be unclear. In their literature review on internal auditing in the Asia Pacific region, Cooper, Leung and Wong (2006:832) reported that although internal audit is strongly supported by CEOs, conclusive consensus on the role of the IAF has not yet emerged. They elaborated (2006:832) by indicating that much confusion exists regarding the independence of internal auditors. In her study on the role of the New Zealand internal auditor, Van Peursem (2004:378) expressed reservations about the effectiveness of the internal auditor's role, since she held the opinion that the IAF would assume whatever position was in the best interests of its employer and would be reluctant to counter management, irrespective of the consequences.

Summary, Conclusion and Recommendations

The study investigated an IAF's role as a corporate governance mechanism in South African listed companies. Limited literature exists on this unexplored area. The overarching rationale of this study is that a perceived quality IAF is likely to correlate with the soundness of its organisation's corporate governance structure. The study found that there is no correlation between the perceptions of management and audit committee chairs regarding the quality of its IAF and the soundness of corporate governance structures, as defined by ten disclosable aspects according to the King II Report.

The study found that nearly all the participating companies complied with the ten King II disclosure requirements used in the study as a measurement of corporate governance soundness. This finding was to be expected because all 30 participating companies are prominent JSE listed companies which, in terms of King II and the JSE listing requirements, have to comply with King II disclosure requirements. The study also revealed that the perceived quality of these companies' internal audit appeared to be relatively high.

By exploring the correlation between perceived IAF quality and participants' compliance with corporate governance disclosures, it was found, against expectations that such a correlation does not exist. This finding could indicate that an IAF as a corporate governance mechanism within corporate governance structures in the South African context is questionable. It opens various future research possibilities.

Explorations of the complex interactions between the various corporate governance mechanisms, the board of directors, audit committees, IAFs and external auditors as part of corporate governance structures are needed to determine how sound corporate governance can be optimised. In particular, the interrelationships between these mechanisms need to be explored, including how the IAF affects and is affected by them. Such an investigation is especially relevant in South Africa in the light of the recent release of King III.

A more in- depth investigation of the robustness of both independent and dependent variables of the models used in this study would be useful. In the light of corporate governance reforms, a more comprehensive evaluation, not limited to corporate governance disclosures, should be conducted to determine the soundness of organisations' corporate governance structures.

The impact of the role that the IAF plays in risk management represents a fruitful avenue for future research to determine whether it contributes to the IAF being a corporate governance mechanism. In the light of King III requirements on risk management, such an investigation should consider that the role of the IAF could be complicated by the possibility that the company may establish alternative mechanisms that either complement or substitute the IAF's role in risk management.

The quality of an IAF requires further attention. Future research should particularly focus on IAF quality as a corporate governance mechanism. Value added in this respect could be explored by a more in-depth investigation of the expectations that other corporate governance mechanisms, particularly external auditors as the most independent party, have of internal audit and the value that internal audit adds. Apparent confusion that exists on the role and independence of an IAF should be considered.

Although the findings of the study contradicted the expectation on which it was based, it still holds benefits. The IIA could use these findings to enhance the role of internal audit in organisations. Regulators of corporate governance could consider these findings to drive future reform of internal audit's role in corporate governance. Companies could assess their own IAF's quality and their corporate governance structures. Individual internal auditors of an IAF could compare their own contributions to the quality of their IAF to the study. Members of other corporate governance mechanisms (boards of directors, audit committees and external auditors) should take these findings into account in their interactions to better equip IAFs for their role as a corporate governance mechanism.

REFERENCES

Abbott LJ (2000). The effects of audit committee activity and independence on corporate fraud. Managerial Finan. 26(11): 55–67.

Aguilera RV, Cuervo-Cazurra A (2004). Codes of good governance worldwide: What is the trigger? Organization Studies 25(3): 415–443.

Allegrini M, D'Onza G, Paape L, Melville R, Sarens G (2006). The European literature review on internal auditing. Manage. Auditing J. 21(8): 845–853.

Al-Twaijry AAM, Brierley JA, Gwilliam DR (2004). An examination of the relationship between internal and external audit in the Saudi Arabian corporate sector. Manage. Auditing J. 19(7): 929–944.

Archambeault AS, DeZoort FT, Holt TP (2008). The need for an internal auditor report to external stakeholders to improve governance transparency. Account. Horiz. 22(4): 375–388.

Arena M, Azzone G (2009). Identifying organizational drivers of internal audit effectiveness. Int. J. Auditing 13: 43–60.

Beasley MS, Carcello JV, Hermanson DR, Neal TL (2009). The audit committee oversight process. Contemp. Account. Res. 26(1): 65–122.

Beasley MS, Clune R, Hermanson DR (2005). Enterprise risk management: an empirical analysis of factors associated with the extent of implementation. J. Account. Pub. Pol. 24: 521–531.

Carcello JV, Hermanson DR, Raghunandan (2005). Factors associated with US public companies' investment in internal auditing. Account. Horiz. 19(2): 69–84.

Cohen J, Krisnamoorthy G, Wright AM (2002). Corporate governance and the audit process. Contemporary Account. Res. 19(4): 573–594.

Cooper BJ, Leung P, Wong G (2006). The Asia Pacific literature review on internal auditing. Manage. Auditing J. 21(8): 822–834.

Coram P, Ferguson C, Moroney R (2008). Internal audit, alternative internal audit structures and level of misappropriation of assets fraud. Account. Finan. 48: 543–559.

Cornelius P (2005). Good corporate practices in poor corporate governance systems: some evidence from the Global Competitiveness Report. Corporate Govern. 5(3): 12–23.

Davies M (2009). Effective working relationships between audit committees and internal audit – the cornerstone of corporate governance in local authorities. A Welsh perspective. J. Manage. Govern. 13: 41–73.

Davies M, Schlitzer B (2008). The impracticality of an international "one size fits all" corporate governance code of best practice. Manage. Auditing J. 23(6): 532–544.

Fadzil FH, Haron H, Jantan M (2005). Internal audit practices and the internal control system. Manage. Auditing J. 20(8): 844–866.

Felix W, Gramling AA, Maletta MJ (2005). The influence of non-audit service revenues and client pressure on external auditors' decisions to rely on internal audit. Contemp. Account. Res. 22(1):31–53.

Ferreira I (2007). The role of internal auditors in the professional development of audit committee members. Unpublished research report in fulfilment of the requirements for the degree of MCom. Unisa, Pretoria.

Fraser I, Henry W (2007). Embedding risk management: structures and approaches. Manage. Auditing J. 22(4): 392–409.

Goodwin J (2003). The relationship between the audit committee and the internal audit function: evidence from Australia and New Zealand. Int. J. Auditing 7: 263–278.

Goodwin J, Yeo TY (2001). Two factors affecting internal audit independence and objectivity: evidence from Singapore. Int. J. Auditing 5: 107–125.

Goodwin-Stewart J, Kent P (2006). The use of internal audit by Australian companies. Manage. Auditing J. 21(1):81–101.

Gramling AA, Hermanson DR (2009). Internal audit quality: would we know it if we saw it? Internal Auditing Jan/Feb. 24(1): 36–39.

Gramling AA, Maletta MJ, Scneider A, Church BK (2004). The role of the internal audit function in corporate governance: a synthesis of the extant internal auditing literature and directions for future research. J. Account. Lit. 23: 194–244.

Haron H, Chambers A, Ramsi R, Ismail I (2004). The reliance of external auditors on internal auditors. Manage. Auditing J. 19(9): 1148–1159.

Hass S, Abdolmohammadi MJ, Burnaby P (2006). The Americas literature review on internal auditing. Manage. Auditing J. 21(8): 835–844.

Institute of Directors (IOD) (1994). The King report on corporate governance for South Africa. November 1994. Johannesburg: IOD.

Institute of Directors (IOD) (2002). King report on corporate governance for South Africa. March 2002. Johannesburg: IOD.

Institute of Directors (IOD) (2009). King report on governance for South Africa. September. Johannesburg: IOD.

Institute of Internal Auditors (IIA) (2009). Practice Advisory 1110-1: organisational independence. Altamonte Springs, Florida: IIA.

James KL (2003). The effects of internal audit structure on perceived financial statement fraud prevention. Account. Horiz. 17(4): 315–327.

Kaplan SE, Schultz JJ (2007). Intentions to report questionable acts: an examination of the influence of anonymous reporting channel, internal audit quality and setting. J. Bus. Ethics 71: 109–124.

Mihret DG, Yismaw AW (2007). Internal audit effectiveness: an Ethiopian public sector case study. Manage. Auditing J. 22(5): 470–484.

Mjoli PV (1997). Perceptions of the role of internal audit and its value added. Unpublished research report in partial fulfilment of the requirements for the degree of Masters in Business Administration. University of the Witwatersrand, Johannesburg.

Moeller R (2004). Managing internal auditing in a post-SOA world. J. Corporate Account. Finan. May/June: pp.41–45.

Myers PM, Ziegenfuss SE (2006). Audit committee pre-Enron efforts to increase the effectiveness of corporate governance. Corporate Govern. 6(1): 49–63.

Nagy AL, Cenker WJ (2002). An assessment of the newly defined internal audit function. Manage. Auditing J. 17(3): 130–137.

Organisation of Economic Cooperation and Development (OECD) (1999). Principles of corporate governance. Paris: OECD.

Organisation of Economic Cooperation and Development (OECD) (2004). Principles of corporate governance. Paris: OECD.

Paape l, Scheffe J, Snoep P (2003). The relationship between the internal audit function and corporate governance in the EU: a survey. Int. J. Auditing 7: 247–262.

Raghunandan K, Read WJ, Rama DV (2001). Audit committee composition, "gray directors" and interaction with internal auditing. Account. Horiz. 15(2): 105–118.

Rezaee Z (2005). Causes, consequences and deterrence of financial statement fraud. Critical Perspectives on Accounting 16: 277–298.

Richard C (2006). Why an auditor can't be competent and independent: a French case study. Eur. Account. Rev. 15(2):153–179.

Rupšys R, Boguslauskas V (2007). Measuring the performance of internal auditing: empirical evidence. Eng. Econ. 5(55): 9–15.

Sarens G (2009). Internal auditing research: where are we going? Editorial. Int. J. Auditing 13: 1–7.

Sarens G, De Beelde I, Everaert P (2009). Internal audit: a comfort provider to the audit committee. Br. Account. Rev. 41: 90–106.

Sarens G, De Beelde I (2006). The relationship between internal audit and senior management: a qualitative analysis of expectations and perceptions. Int. J. Auditing 10: 219–241.

Sarens G (2007). The agency model as a predictor of the size of the internal audit function in Belgian companies. Presentation at the 30th Annual Conference of the European Accounting Association, Lisbon, 25–27 April.

Sav uk O (2007). Internal audit efficiency evaluation principles. J. Bus. Econ. Manage. VIII(4): 275–284.

South Africa (SA) (2006). Corporate Laws Amendment Act 24 of 2006.

Cape Town: Government Printer.
South Africa (SA) (2009). Companies Act 71 of 2008. Cape Town: Government Printer.
Turley S, Zaman M (2004). The corporate governance effects of audit committees. J. Manage. Govern. 8: 305–332.
Van der Nest DP (2008). The perceived effectiveness of audit committees in the South African public service. Meditari Accountancy Res. 16(2): 175–188.
Van der Nest DP, Thornhill C, De Jager J (2008). Audit committees and accountability in the South African public sector. J. Public Admin. 43(4): 545–558.
Van Peursem KA (2005). Conversations with internal auditors: the power of ambiguity. Manage. Auditing J. 20(5):489–512.
Van Peursem KA (2004). Internal auditors' role and authority. Manage. Auditing J. 19(3): 378–393.
Vinten G, Lee C (1993). Audit committees and corporate control. Manage. Audit. J. 8(3): 11–24.
Zhang Y, Zhou J, Zhou N (2007). Audit committee quality, auditor independence and internal control weaknesses. J. Account. Public Policy 26: 300–327.
Zain MM, Subramaniam N, Stewart J (2006). Internal auditors' assessment of their contribution to financial statement audits: the relation with audit committee and internal audit function characteristics. Int. J. Auditing 10: 1–18.