Stakeholder perceptions on the role of internal audit in risk management: A mining industry perspective

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ABSTRACT

Organisations are faced with risks that can hinder them from meeting their objectives: these risks are both expected and unexpected and could include ‘black swans’. The internal audit function assists management by providing assurance regarding the effectiveness of its risk management processes. By applying a risk-based audit approach internal auditors could enhance the risk management process. However, the literature indicates that the internal audit function may not be playing the role in risk management that its stakeholders require. Interviews were conducted with four groups of stakeholders in the risk management process in the mining industry to identify the expected role of internal audit. The research found that internal audit was performing in line with expectations, but must in future play a bigger role in determining the organisation’s strategic direction by challenging risk identification and assumptions, thereby promoting sustainability. This requires enhancing their technical skills in understanding operational risks specific to mining.

Key words

Internal audit; risk management assurance; risk-based auditing; risk-based audit plan; mining sector; ‘Black Swan’

1 INTRODUCTION

The ‘black swan’ theory, as described by Taleb (2007), refers to the occurrence of an unexpected (to the observer) event, which has a major impact and consequent effects, which is often inappropriately rationalised with the benefit of hindsight. The theory tries to explain the disproportionately important role of high-profile, hard-to-predict and rare events that are beyond the realm of normal expectations (Aven 2013). A perfect example of a ‘black swan’ event is the recent Marikana tragedy that occurred in the South African platinum mining industry. The company involved had a valid and long-standing labour agreement with one of the unions at the mine, and therefore did not expect the majority of their workforce to take part in illegal and protracted strike action, nor did they anticipate the deaths of 44 people and the prolonged labour unrest across the country’s mining sector (Botiveau 2014; Ledwaba 2013). Had industrial and labour relation risks been properly managed and the procedures more effectively reviewed and monitored, the potential risk impact of an emerging labour union could have been taken into account, and these unfortunate effects could perhaps have been avoided or at least muted. Such actions relate to the concept of risk management, a process of identifying, assessing, managing and controlling situations that may inhibit an organisation’s efforts to meet its objectives (Coetzee 2010:33).

Although the responsibility for risk management lies with the board and senior management of organisations (COSO 2004; IIA 2014b; IoDSA 2009), the internal audit function (IAF) is in an ideal position to assist with this task (Coetzee 2010:233; IIA 2009). This view is supported by the significant changes and improvements to, and adaptions undergone by the internal audit profession since the founding of the Institute of Internal Auditors (IIA) in 1941 (Dawuda 2010:11-15; IIA 2014a; Salehi 2012:82; Swinkels 2012:13-15) and the widespread introduction of corporate governance regulations (ASX 2014; FRC 2012; IoDSA 2009). At the same time, the field of risk management has also grown at a rapid pace, assisting businesses to manage their risks (Arena, Arnaboldi & Azzone 2010:659; Dionne 2013; Hoyt & Liebenberg 2011:798; Wu & Olson 2010:837), through the development of a set of risk management frameworks (COSO 2004; ISO 2009).

The role of the IAF in risk management has enjoyed widespread debate in academic literature (Coetzee & Lubbe 2011:55; De Zwaan, Stewart & Subramaniam 2011; Karagiorgos, Drogalas, Eleftheriadis & Christodoulou 2009; Sarens & De Beelde 2006; Ţurlea & Ştefănescu 2009:213; Vinnari & Skærbæk 2014). Studies have shown that IAFs are becoming more aware of their responsibilities in the risk management field (Coetzee & Lubbe 2011:43-44), but that they have not yet fully embraced these responsibilities (De Zwaan *et al* 2011; Karagiorgos *et al* 2009; Sarens & De Beelde 2006; Ţurlea & Ştefănescu 2009:213; Vinnari & Skærbæk 2014). It appears that they are still only reviewing particular risks (such as financial risks), and not the whole risk management process (Allegrini & D'Onza 2003:191; Allegrini, Giuseppe, Melville, Sarens & Selim 2010: xvi). Furthermore the literature shows that although a risk-based audit approach is supported by internal auditors, and that they have the intention to implement such an approach, in many instances this has not yet occurred (Allegrini & D'Onza 2003:197; Coetzee & Lubbe 2011:50; Coetzee & Lubbe 2013:132-133).

The IIA has indicated that the IAF has a very valuable role to play in both the assessment of risk management and in the use of risk management results for planning purposes (IIA 2013:9). It is therefore surprising to note that in the 2010 Common Body of Knowledge (CBOK) studies conducted by the IIA, an average of only 58.2% of internal auditors rated risk management as an important knowledge area in which an internal auditor should be proficient (Bailey 2010:55). Other studies have also identified shortcomings in the involvement of internal auditing in risk management: for example, Fernández-Laviada (2007:144) found that for those banks participating in the study, their IAFs had not performed a review of the operational risks despite their being required by legislation, and Leech (2013:1) stated that internal audit continues to employ traditional audit approaches and is not truly focusing on implementing a risk-based approach.

Based on the above, there appears to be a gap between what is expected of internal auditors by their profession, the regulations and their own management's requirements in relation to what is being done in practice when it comes to risk management. This identifies a need for further studies exploring the perceptions of audit committee members, management and other stakeholders regarding internal audit's role in risk management (De Zwaan *et al* 2011:600-601). These form the focus of this paper, which contextualises and presents the findings of a study performed to determine the role of internal audit in managing the risks faced by mining companies (mining is the South African economic sector that has recently been most seriously challenged to fundamentally rethink risk management (PwC 2013:2)).

The findings of this study show that all the participants believed that the assurance given regarding the risk management processes, as well as the risk-based approach that the IAFs are following in their organisations, align with their expectations of the roles that their IAFs should play. However, several areas were noted where these roles could be improved; in particular, the fact that a more strategic role with regard to challenging conventional risk identification and risk assumptions should occur within the IAF, as they have the broadest perspective of all the departments and role players within the organisations. This was supported by the requirement that more focus should be placed on the sustainability of the organisation and the risks that this challenge holds. The study indicates the need for internal auditors to obtain relevant technical skills so that they are better equipped to evaluate some of the more technical and operations-based risks unique to the mining industry.

2 OBJECTIVE OF THE STUDY

The IIA's *Standards for the Professional Practice of Internal Auditing* (Standards), together with legislation and regulations, require an IAF to create a risk-based internal audit plan in order to provide assurance over the effectiveness of internal controls, risk management and governance processes (COSO 2004:6; IIA 2013:6; IoDSA 2009:69; ISO 2009:20; RSA 2010:61). Depending on directives from management, the board and the audit committee, internal auditors can play a variety of consulting, assurance and advisory roles in an organisation's risk management process (IIA 2009:3-6). The literature does however provide evidence that practices do occasionally differ from theory (Bailey 2010:55; Fernández-Laviada 2007:144; Leech 2013:1).

The objective of this research is to investigate the role of internal audit in risk management in the mining sector. Both perspectives (the internal auditor's role in managing an organisation's risk and the need for a risk-based internal audit coverage plan), are considered by identifying stakeholders' perceptions. The research is, however, limited to three case studies, consisting of three multinational organisations in the South African mining sector. The reasoning is explained in the Research Methodology section.

This study will benefit all practising internal auditors, risk managers (RMs) and other stakeholders (including the IIA and mining companies), by giving dimension to the gap noted between the required role of internal audit in risk management and the actual role that they are playing, and by highlighting possible reasons for the gap. This study could provide information upon which future guidance from the IIA could be based. Furthermore, IAFs in the mining sector can compare their own risk management activities with the findings presented in this study, thus enabling them to cast light on areas for improvement that are in line with expectations expressed in the literature.

The structure of the paper is as follows. Firstly, to contextualise the research, a literature review is presented, showing that internal audit is well positioned to play various roles in the risk management process and to follow a risk-based audit plan. This is followed by a description and explanation of the research method. The results are then discussed and the final section draws a conclusion and presents suggestions for future research.

3 REVIEW OF CURRENT LITERATURE

3.1 Key role players in risk management

The concept of risk has become central to corporate governance and is therefore linked with internal controls within an organisation (Cohen, Krishnamoorthy

& Wright 2010:751; Radu 2012:128; Spira & Page 2003:64; Vinnari & Skærbæk 2014:492). With the recent failures in the global markets much emphasis has now been placed on corporate governance regulations, including the responsibility of the board to provide assurance that risk management processes have been implemented in the business (Cohen, Krishnamoorthy & Wright 2010:751; Radu 2012:128; Spira & Page 2003:64; Vinnari & Skærbæk 2014: 492). These regulations include *The King Report on Governance for South Africa, 2009* (King III) (IoDSA 2009).

The responsibility for risk management rests solely with the board of directors of the organisation; however, they can delegate the performance of some of these roles to management or to an audit committee to assist them (ASX 2014:28; FRC 2012:18; IoDSA 2009:54-81). Corporate governance regulations provide guidance, identifying the key role players within the risk management field (IoDSA 2009; FRC 2012; ASX 2014). One such key role player is the risk management department (RMD), which can represent management when it reviews, identifies and assesses risks within the organisation (Burnaby & Hass 2009:540; COSO 2004:6; IoDSA 2009:22; ISO 2009:22). The role of the RMD can be further expanded to include discussing the organisation's risk management appetite (creating awareness within the organisation) (Burnaby & Hass 2009:541; COSO 2009:5); understanding risks at a strategic level (Burnaby & Hass 2009:541; COSO 2009:5); reviewing the portfolio of risks (COSO 2009:5); being aware of the most significant risks and their organisation's responses (Burnaby & Hass 2009:541; COSO 2009:5); and monitoring and reporting on the risk management process (Burnaby & Hass 2009:541). The other key role player in the risk management field is the IAF, which can fulfil supporting and independent roles through advising, assuring and monitoring the risk management process, as well as making use of risk management practices within their own fields of expertise (COSO 2004:6; IoDSA 2009:69; ISO 2009:20; RSA 2010:61).

The roles that are therefore played by the RMD (Burnaby & Hass 2009:540; COSO 2004:6; IoDSA 2009:22; ISO 2009:22) and IAF (COSO 2004:6; IoDSA 2009:69; IOS 2009:20; RSA 2010:61) are complementary in nature, while maintaining different perspectives (Manab, Hussin & Kassim 2013:65). The RMD is ultimately responsible for the implementation and operation of the risk management programme, while the IAF is responsible for monitoring and providing assurance on the effectiveness of the risk management process, thus fulfilling a control function (Manab *et al* 2013:64). It can therefore safely be assumed that a well-balanced and effective communication and knowledge-sharing line is a prerequisite between the two functions as they are required to work closely together.

3.2 Role of internal audit in risk management assurance

The IIA has developed guidelines outlining the roles and accountabilities of an IAF in relation to risk management (IIA 2009). These roles and accountabilities have been split between core roles for the IAF, legitimate roles that can be assumed (subject to the institution of appropriate safeguards), and roles that should not be undertaken by the IAF (IIA 2009:4). The latter (roles to avoid) include setting the risk appetite, performing management's functions with respect to risk management, and assuming accountability for risk management (IIA 2009:4). The core activities include giving assurance as to the effectiveness of the risk management process, ensuring risks are correctly evaluated and responses are both appropriately designed and effectively implemented (IIA 2009:4), and supporting the overall process (Allegrini & D'Onza 2003:196). Roles that may be assumed (subject to taking appropriate precautions), include consolidated reporting to the audit committee on the results of the risk management process (Allegrini & D'Onza 2003:196; IIA 2009:4); coordinating risk activities; developing risk strategies (Arena *et al* 2010:782; IIA 2009:4); and contributing to the improvement of an organisation's risk management framework (Coetzee 2010:35).

A major risk event, or 'black swan', does not result from the materialisation of a single risk, but usually from a series of seemingly minor wrong decisions and risks that were not managed properly (Lam 2009:25). A possible counter-strategy is the establishment of an Enterprise Risk Management (ERM) process, which is still a very fluid term with various interpretations in different organisations (Arena *et al* 2010:659). However, ultimately ERM, in which the IAF could perform a coordinating role, involves the escalation of risk management to a more strategic level that encompasses the whole of the organisation, in order to ensure that reasonable assurance can be given that an organisation will achieve its goals, through the identification, assessment and effective management of risks (Arena *et al* 2010:659; Hoyt & Liebenberg 2011:798; Golshan & Rasid 2012:277; Paape & Speklé 2012:1).

For this reason the Committee for Sponsoring Organisations (COSO) developed a framework for risk management in 2004 (COSO 2004). Several additional documents have subsequently been published, all intended to reinforce the original principles of the 2004 framework. These include *Strengthening enterprise risk management for strategic advantage* (COSO 2009) – which emphasises the fundamentals contained in and use of the 2004 framework (COSO 2009:4–18), and the 2013 *COSO Framework and SOX Compliance* (COSO 2013) – which requires the use of the 2004 framework when performing risk management (COSO 2013:7). The COSO framework consists of eight elements perhaps the most important of which is (from an internal audit perspective), the monitoring element, which requires that the risk management process should be regularly reviewed (COSO 2004:4). The framework itself also sets clear roles and guidelines for the IAF, confirming that they have key responsibilities and roles to play within the risk management field (COSO 2004:6). These roles and responsibilities include considering the breadth of their focus on ERM (COSO 2004:7), providing input to the board where requested (COSO 2004:6-7), and monitoring the effectiveness of the risk management process and suggesting improvements where required (COSO 2004:4). It appears that the COSO framework is being applied in practice, because it was noted that 67% of internal auditors interviewed in Italian companies have adopted the COSO framework for testing and monitoring purposes, albeit for mainly operational audits (Allegrini & D'Onza 2003:191). This trend seems to be supported globally, with 69% of the internal auditors participating in the CBOK study of 2010 indicating that they were using frameworks such as COSO when assessing the effectiveness of control systems (Alkafaji, Hussain, Khallaf & Majdalawieh 2010:24).

Similarly, the International Standards Organisation (ISO) developed a standard known as *ISO 31000 – Risk Management* in 2009 (ISO 2009) that sets out pertinent principles and guidelines. The ISO risk management framework (ISO 2009:10-12) contains several sub-steps that guide the implementation of a risk management system. However, for purposes of understanding the role of the IAF, the most relevant section is on monitoring and review: this includes the review of all aspects of the risk management process, with particular emphasis on ensuring that both the design and effective implementation of internal controls are optimised (ISO 2009:20). This is therefore an area in which the IAF can play a valuable role in the corporate governance environment.

Indications are that the inclusion of internal auditing in risk management is gaining momentum. This is supported by a survey of all its members, performed by the IIA in 2010, which noted that 72% of respondents performed financial risk audits. This placed it as the third most-performed type of audit. In addition, respondents saw the audit focus shifting towards ERM over the next five years as the second most important growth field after corporate governance (Allegrini *et al* 2010:xvi). The respondents also rated risk-based planning as one of the top five audit tools that they use (Allegrini *et al* 2010:9).

The standards discussed above are in line with the guidelines contained in King III, which was published in South Africa during 2009. King III follows the principle of 'apply or explain' because compliance with it is not compelled by legislation (IoDSA 2009: 2-5). Even though compliance with King III is not legally required, all companies registered on the Johannesburg Stock Exchange (JSE) are required to adhere to these principles (IoDSA 2009:4-5). As part of the compilation of the King III report, certain risk management responsibilities were identified and codified as the responsibilities of either the board, the audit committee and/or the internal auditors (IoDSA 2009). The board is required to ensure that risk assessments are performed on a continuous basis, to develop the risk management framework, perform risk management monitoring through management, and to receive assurances on the effectiveness of the risk management process (IoDSA 2009). This is normally established through the development of a RMD, which manages these roles on behalf of senior management (IoDSA 2009:65-69). The audit committee, if assigned the role by the board, is responsible for the oversight of the risk management process, assisting the board in fulfilling its responsibilities for risk management, and approving and reviewing the IAF's risk-based plan (IoDSA 2009:54-81). The IAF should provide independent assurance in relation to risk management, without accepting accountability for its implementation. Furthermore, the IAF should provide an annual written assessment of the effectiveness of the risk management process (IoDSA 2009:69).

Although the South African Companies Act (RSA 2008) does not compel the formation of a risk management function, it does allow for an audit committee to conduct its affairs and to comment on controls as it considers appropriate (RSA 2008: Sec 94(7)). In contrast, Gates (2006:81) notes that the Sarbanes-Oxley Act (SOX) in the United States of America has provided significant incentive for organisations to employ formal risk management techniques. Their Securities Exchange Commission asks boards to implement risk management as part of their assurance processes (Leech 2013:3; Beasley, Clune & Hermanson 2005:522), and in fact, combining ERM with SOX's methods, and adding internal audit risk management assurance is highly recommended (Leech 2013:3).

However, several studies indicate that the IAF is not performing this role as well as it should be (Coetzee & Lubbe 2011:55; De Zwaan *et al* 2011; Karagiorgos *et al* 2009; Sarens & De Beelde 2006; Ţurlea & Ştefănescu 2009:213; Vinnari & Skærbæk 2014). For example, the IAFs are only reviewing financial risks and not the whole spectrum of risk management (Allegrini et al 2010:xvi), i.e., they are not taking into account operational risks (Fernández-Laviada 2007: 144).

3.3 The need for internal auditors to use risk-based audit planning

The second aspect of the IAF's role in risk management relates to risk-based auditing, the process of identifying, auditing and reporting on the most crucial risks facing an organisation by reviewing the controls associated with addressing those risks (Hematfar & Hemmati 2013:2088). Risk-based auditing goes a step further than the traditional audit techniques; it looks at more than just audit risks and focuses on business risks as well (Hematfar & Hemmati 2013:2090). Although it is a fairly new concept, with the proper implementation it could result in more effective and efficient audits (Coetzee & Lubbe 2013:113).

Nearly a decade ago Sarens and De Beelde (2006:13) noted that the core activity for IAFs was still assessing the effectiveness of internal controls, and that, at that time, internal audit had not yet begun focussing on assessing the effectiveness of risk management or the implementation of risk-based auditing. In a later study, Soh and Martinov-Bennie (2011:612) found that IAFs had now moved to more risk-based auditing (particularly around operational risks), and that there was now less emphasis on 'tick and flick' audits.

Nevertheless, the assessment of the internal controls is still very important and has been identified as one of the key areas in which audit committees seek comfort from the internal auditors (Sarens, De Beelde & Everaert 2009:91). However, if a risk-based audit approach is adopted (through risk-based planning), as is required by the IIA (IIA 2013:7), the most important internal controls of material risks will be reviewed. This is supported by the IIA's Standards, King III's principles and the *Public Sector Risk Management Framework*, which all state that the IAF should develop a risk-based plan at the beginning of the year (IIA 2013:9; IoDSA 2009:78; RSA 2010:61). This is followed up by applying a risk-based audit approach, thus focusing on the more critical controls that are essential to achieving the objectives of the organisation (IIA 2013:9; IoDSA 2009:78; RSA 2010: 61).

4 RESEARCH METHODOLOGY

To achieve the research objective, a literature review was performed which shows that internal audit is well positioned to play various roles in the risk management process, and to follow a risk-based audit coverage plan. This was followed by an empirical research component, which, being of a qualitative nature ensured that a sound, elaborative and in-depth approach was followed (Yin 2014). A case study method was selected as it allows for in-depth understanding (Creswell 2009:13). It is regarded as the most effective approach, as case studies are by nature more focused on explanatory questions (how and why), which best relate to the objective of this research: to investigate the role of internal auditing in risk management in the mining sector (Yin 2014).

One of the limitations of a case study is that the findings do not automatically have universal applicability; however the relevant themes occurring throughout the interviews could still be used in the same environment (Yin 2014). In order to ensure that triangulation of data and sources occurs, and thereby strengthens the integrity of the data, multiple case studies were selected instead of only one (Yin 2014). This also assisted in managing the limitations, as it made it possible to replicate and evaluate the results of the case studies on an individual as well as a combined basis (Yin 2014).

The mining sector was specifically selected for this research due to its importance to the economies of many particularly developing countries. In emerging markets in particular mining is essential to their development, as it is a source of cash inflows, and because it increases export capacity and job creation (Broadberry & Irwin 2007:262; Fedderke & Pirouz 2000:2; Jenkins 2004:23; Jerven 2010:81). The juxtaposition of the strategic importance of the mining industry to South Africa's economy with the Marikana tragedy, and recognising how quickly the prolonged strike action escalated into deadly violence (claiming the lives of 44 people), (Botiveau 2014; Ledwaba 2013), it has become clear that risk management in this sector is very relevant, topical and strategically important. That this was followed by another prolonged period of labour unrest across the country's mining sector, with additional negative impact on the country's economy, reinforces the need to assess attitudes and approaches to risk management in this sector. These events placed risk management in this sector under intense public scrutiny. With internal auditing being well positioned to play an important role in risk assessment, it is hoped that they will be encouraged/allowed to contribute their expertise to the risk management arena, and help avoid similar events in future.

In order to increase the general applicability of these findings, three multinational mining companies with operations in South Africa were selected as case studies. All three of the organisations have implemented risk management processes and have IAFs working alongside combined risk and audit committees. This allowed for a review of organisations that are similar in the maturity of their control and risk environments, which would further strengthen the integrity of the data.

In selecting the individual participants for the research, stakeholders, as identified in the literature as important role players in risk management, were considered. Four categories of participant were identified, namely: the audit committee; executive management; the RMD, and the IAF. The audit committee is regarded as an integral component of the risk management process (De Zwaan *et al* 2011; IoDSA 2009; Sarens, De Beelde & Everaert 2009:91), and for this reason audit committee members were selected as participants in the research. The Chief Financial Officers (CFOs) of the targeted organisations were selected because of their close working relationships with the IAFs and RMDs, as well as with the members of their organisations' audit committees (Eulerich, Theis, Velte & Stiglbauer 2013:59; Sarens & De Beelde 2006). The CFOs represent executive management, and are ultimately responsible for their organisations' risk management processes (Sarens & De Beelde 2006:15; Starr, Newfrock & Delurey 2003:79). With regard to the IAFs, due to the direct involvement of internal audit in the risk management process (De Zwaan *et al* 2011; Karagiorgos *et al* 2009; Sarens & De Beelde 2006; Ţurlea & Ştefănescu 2009:213; Vinnari & Skærbæk 2014), the Chief Audit Executives (CAEs) were selected as participants. Similarly, the direct involvement of the RMD in managing the process resulted in their inclusion as participants (Burnaby & Hass 2009:540; COSO 2004:6; IoDSA 2009:22; ISO 2009:22). By obtaining the views of four participants, representing four different functions, in each of three multinational mining companies, robust triangulation opportunities were created (Yin 2014).

During August and September 2014 the researcher performed semi-structured interviews with 11 participants and received a documented response from the 12th participant. The written response was based on the interview questions, all of which were intended to elicit their views (Creswell 2009:181). The interview questions were informed by the literature review and are set out in Annexure A. One of the weaknesses of interviews is that deficiencies in (interviewer) recall and reference biases may occur (Yin 2014). In order to address this, the interviews were recorded and independently transcribed, and the transcripts of the interviews were sent to the participants for final review. The data was then analysed according to themes and perspectives by using Atlas.ti. This involved, as was suggested by Creswell (2009:184-187), generating categories of information by using a combination of predetermined and emerging codes, and connecting these categories to position them within the context informed by the literature review. Ethical clearance was obtained for the research during July 2014. A list of interview questions was e-mailed to the participants before the interviews and they were requested to sign letters of consent before participating in the research. CAE participants were further requested to provide background information on their companies. This questionnaire sought information on the number of employees in the company; number of employees in the IAF; number of the employees in the RMD; structure and reporting lines of the IAF; and the structure and reporting lines of the RMD.

5 RESULTS AND DISCUSSION

Using the questions in Annexure A as a reference point for this section, the following results were noted and have been structured into five separate and distinct themes. The different viewpoints of the stakeholders involved were grouped by function, as far as possible, to provide a unified expression of stakeholder expectations and viewpoints.

5.1 Organisational structure

All three of the organisations participating in this study are multinational entities that are listed on several stock exchanges, including the JSE. The organisations' employee bases range from tens of thousands to hundreds of thousands of employees, who are also supported by several thousand contractors. Similarly, the sizes of the IAFs range from a total of 22 (in South Africa only) to between 41 and 56 employees deployed globally. The RMDs have an average of four employees (stationed in the central RMD, with responsibility for policy and procedure creation), and they are supported by line RMs. In two of the organisations the IAFs and RMDs are separate departments, while in the third the functions have been combined, and have the task of creating policy and procedures for risk management as well as assurance over the risk management process. They report directly to the CAE.

All the CAEs report functionally to a combined risk and audit committee; two report administratively to the CFO, while the third reports administratively to the Chief Executive Officer of the organisation. The above structures are acceptable in terms of the IIA Standards as they allow the IAFs the required independence to perform their roles (IIA 2013:4).

5.2 Current and expected roles for the IAF and RMD

All of the participants had very similar viewpoints on the current and expected roles of their IAFs and RMDs.

With regard to the IAF, all participants concurred with the view of a CFO participant that

"… the role is an important one, to give objective feedback to management, the line and also to more senior management, and ultimately the governance layer, whether it's the board or other governance areas, that the processes are in place, they're working effectively, and that the risks are being properly identified and managed."

A CAE participant added: *"It [the IAF] is there as assurance for the board and to the extent there needs to be a critical control over this process and verification undertaken that has to be pushed back to management."*

Because of the importance of the IAF's involvement in the risk management process, there are three essential areas in which participants require the IAF to play a role: these are a risk management assurance view of the process; a risk-based audit approach, and an assurance that the controls are working effectively.

A CFO participant explained the IAF's contribution to the risk management point of view:

"What's the methodology or the process which the organisation which it's looking at has in place to manage risk, to make sure that is robust in its … design."

The participant then referred to the effectiveness and consistency with which management deploys the risk management process across their organisation, including reviewing the material risks facing the organisation, as the product of a risk-based audit approach.

In addressing the third essential area, the IAF is then required to review and assess the adequacy and effectiveness of the controls that have been implemented to manage the risks identified.

The three key areas identified by the participants are therefore mirrored in the key findings from the literature review in that a risk-based audit approach alongside assurance over the risk management process of the organisation is exactly what the stakeholders require. Furthermore, even though the stakeholders wish to have a risk-based approach, they also have a very strong requirement that the IAF provides an opinion on the effectiveness and design of the controls over the risks themselves.

With regard to the role of the RMD in the process, all the participants agreed on what they expected from their RMDs - that risk management is not solely the responsibility of the RMD. As one of the RM participants stated: "*risk management [is] every line manager's role*."

The main responsibility of the RMD is to support the line managers in their efforts to know and own their risks and the controls to mitigate and control those risks. The RMD should "*leave the accountability for the risks with the line who are in best position to* *assess and understand those risks"*, as a CFO participant stated. The RMD should provide robust methodologies that assist line management in effectively assessing risks in a standardised manner across the organisation. All of the participants also agreed that this is not a role that should be played by the IAF, which should maintain its independence throughout this process.

A number of specific areas were identified where sharper focus and improvements within the IAF in the future would ensure that they remain relevant and add value to their organisations. The four areas respondents identified are: to increase the strategic role of internal audit, including increasing technical expertise; to provide a holistic review of the risk management process; to ensure that a robust and consistent approach to risk management is implemented by management; and to ensure that the risks to sustainability faced by the organisation are taken into account.

Addressing these four areas in more detail, a few of the participants identified that the IAF should play a more strategic role in future and should focus on the strategic risks within an organisation. As a CAE participant explained:

"I think we are sitting at the right tables; we are sitting at Exco, Manco, audit committees and so forth. If you're looking at the integrated reporting framework and what King is saying is that we should look at the process much more strategically."

This requirement is closely aligned with the literature review, which also indicated that the IAFs need to become more strategically involved.

Support for the strategic role requires an increase in technical expertise – a need that the participants also identified. As a CFO participant noted:

"… the internal audit function should have in-depth knowledge of the top risks of the company (financial, operational, and strategic) and be able to effectively review and suggest improvements."

Secondly, all participants shared an expectation that a full, holistic review of the risk profile of the organisation should be performed to ensure that all risks have been taken into account, and especially in the organisation's key focus areas. A CAE participant believed that internal audit should be a role player *'in ensuring the risk profile, or risk register for an organisation, is holistic - and by holistic I mean is recognising emerging risks that are facing the company'*. The participant made the further point that internal audit should also consider the possibility that management had perhaps incorrectly described the risks, or had not fully understood the impact the risks might have.

Arising from the promotion of a holistic review of the organisation's risk profile, the third area for improvement all participants agreed on was the expectation that the IAF work closely with the organisation to ensure that the approach to risk management is consistent, systematic and enforced. According to a RM participant, the involvement of the IAF is valuable because

"… there is also a benefit to be derived from taking all of the learnings that the internal audit function gleaned from all of their work across different locations and sharing that information. It's a very useful information-sharing tool."

This point was supported by the view of a CAE participant who said:

"I think our internal audit function can bring some of that to bear in terms of what we see in the field and trying to get that level of consistency across the development of the risks within the organisation."

The fourth and final focus area for the IAF with regard to providing risk management assurance may very well be specific to the mining industry. This includes the identification and review of sustainability risks (and their associated controls) that the organisations may face. A CFO participant made the following observation:

"Sustainability is an area of increasing importance, with the triple bottom line, expectations, … and that's growing … and I know boards are expecting internal audit to play more in that area. They look to internal audit to give them assurance on health, safety, environmental, [and] community type areas."

This requirement in itself may therefore have a direct impact on the technical skills that an internal auditor requires in order to provide assurance over such processes in future.

Combined with the above sustainability risks, the ability of the organisation to continue to perform its business functions if a risk should materialise was also of importance to the participants. This was especially true for the RM participants in the study, who believed that it was important to have practical controls in place to protect business continuity. A RM participant stated:

"I've worked through plenty of contingency plans … and a lot of these are these thick documents that the guys draft for business continuity plan but … when disaster strikes, they cannot use it because it's just a lot of theory and it's sitting there somewhere in a drawer."

Another RM participant concurred with this view and suggested that *"… business resilience is the answer to that one, or business continuity; but I don't think many companies have fully tackled it."* These views indicate a clear need to have some sort of assurance over business continuity in future, which could fall within the mandate of the IAF.

5.3 Risk-based auditing

As noted in the literature review, the use of a risk-based approach in the performance of audits has become critical for IAFs as they increasingly focus on the critical risks facing the organisation. This idea was supported by all 12 participants interviewed, who believe that IAFs must follow a risk-based approach in order to add value and to maintain their relevance. One of the audit committee (AC) participants even went so far as to state that *"you absolutely have to have a risk-based approach because otherwise I think you gonna [sic] be dead in the water."* This was supported by another CFO participant who felt that: *"if the IAF is a box-ticking exercise they're less helpful."*

Similarly, all the participants believed their IAFs had implemented a risk-based approach to the performance of their audit activities and that this has assisted them in maximising the resources available; hence the comment: *"a risk-based approach under-pins our ability to be able to divert resources [previously allocated] to less risky areas into high-risk areas."* However, a few CAE participants did acknowledge the possibility that not all of their processes were covered by a risk-based audit approach at this stage.

An area of concern that was raised with regard to the risk-based audit approach. The point was made that this approach should not be a rigid one. In other words, it should not be assumed that the risks identified at the beginning of the year will have retained their relative critical importance to the organisation when their specific section/audit comes up later in the year. As a CAE participant explained: *"if you get to August of 2015, [and] we [are] still doing risk-based audit on your risks of July 2014 … [this] is absolutely crazy and that's absolutely not risk-based."* Another CFO participant suggested that if the risk management register was adequate and if an effective risk management process was in place, then the IAF could be *"quite sure that the top risks are the right risks"* to focus on. The IAF would therefore need to ensure that a thorough review of the risk management process is performed, as well as ensuring the completeness and accuracy of the risk profile (as suggested above), in order to ensure that the data used for the risk-based audit approach remained reliable.

5.4 Issues affecting the effectiveness of internal audit in risk management

The participants were asked if there were any specific regulations or components of legislation that might hamper the effectiveness of the IAF with regard to risk management. One AC participant indicated that he was not aware of the fullest extent of the regulations and legislation that guide the IAF, while eight respondents indicated that they did not think the audit function was being limited by rules and regulations. The remaining three participants (two CAEs and a CFO) were concerned that adhering to the strict requirements of the IIA Standards could compromise the independence of the internal auditors. These concerns were consistent with the views on the impact of resource constraints, as well as the conflict that may sometimes arise between the organisation and the IAF when a review of the risk management process occurs.

The requirements of the IIA and other regulatory bodies, and the effect these have on the available resources of the organisations, were noted as one of the areas that hamper the effectiveness of the IAF. A CAE participant believed that ways should be explored in order

> *"… to free up those resources to execute this work. Because clearly, our stakeholders [are] saying they want more assurance work in risk management, but I can't do more assurance work and to a higher standard [with these resources], so there is a real tension there at the moment. And I think that ultimately, we'll probably need to start to look to some reform, potentially in a regulatory space, either from the relevant stock exchanges or in fact the IIA that controls the [Standards], to relax some of those."*

The next most important issue identified was maintaining independence from management when performing the risk management assurance work. One CAE participant stated: *"I think independence remains the biggest issue … so you have to watch your step the whole time in terms of, are you still independent or not when you're doing it."*

This view was supported by two other participants (a CAE and a CFO), who felt however, that the IAF might be trying to hide behind independence in order not to make difficult decisions. A CAE participant believed that *"internal auditors have been hiding behind independence for a very long time, and many of … us are actually hesitant to come too close to the independence line."* A CFO participant made the point that if the independence of internal audit is over-emphasised, the IAF may be

> *"… losing some of its potential impact. Now clearly there are some areas where you maybe don't want to play, where it would impact objectivity, and objectivity is the word I would use more so than independence for an internal audit function."*

The last area of concern identified by respondents, that might hamper the effectiveness of the IAF in the risk management process, was described as a natural tension between the IAF and the organisation. One RM participant observed that, even though a positive relationship exists between the IAF and management,

> *"naturally, there's always that sense of a little bit of tension, healthy tension I think, to go through that discussion, [to] challenge each other on really what's important… At times that relationship can be tested."*

While a healthy tension is required and is usually beneficial, as noted above, if that tension is not healthy, then the IAF may find itself in a difficult position. According to a CAE participant, *"there's a bit of a push back against audit lately because they see us as a stick; they don't see us necessarily as a business partner."*

5.5 Methods and techniques to improve the value added by internal audit in risk management

The participants had a variety of viewpoints with regard to the value being added by the IAF. There was a similar diversity of views on the methods and techniques that can be used by the IAF to improve its assurance work over risk management (including the relationship between the IAF and the RMD); the value it adds to the risk management process, and the risk-based approach that they follow. There were also some very obvious common themes in the views expressed by participants, and many of these may have been influenced by the specialised nature of the mining industry in which the participants work.

Nevertheless, this section should be read in conjunction with the current and expected roles of an IAF as explained above, as many of the new approaches suggested by the participants will certainly add value to the risk management assurance role performed by the IAF.

The majority of the participants were in agreement that their IAFs are adding value to the risk management process. However, the reasons offered for such beliefs varied, particularly between different participant categories. The CFO participants mainly perceived that value was added because the IAF reviewed the risk management process from end to end, and therefore ensured that the controls in place to mitigate the risks were in fact effective and efficient. As a CFO participant stated: *"Our internal audit [function] is a significant role player in identifying lacking or ineffective controls over various risks in the organisation and suggesting improvement on these controls, as well as actively monitoring implementation of improvements."*

Two of the AC participants believed that their IAFs are adding value through the interaction between the IAF with the RMD, in that they can ensure that they are focusing on key and material risks when they review the risk-management process. However, in striking contrast to the general consensus, one of the AC participants did not think that the IAF was doing enough to add value to the risk-management process, noting that, due to rigidly held and conflicting views between the risk owners and the IAF, a stalemate situation obtained, in that *"at the end of the day, you landed up almost agreeing to disagree."*

Similarly, one of the RM participants believed that *"right now we're probably not getting enough value and I think that's partly a reflection on where we are in our broader organisational journey."* The other RM participants, however, believed that value was being added to the risk management process, principally through the independent review being performed by the IAF and the value the review has in assisting the RMDs to perform their roles. At the same time their IAFs managed to ensure that they did not overstep its boundaries, noting that: *"the independence is still there: if they found something that could improve they will tell us, and we appreciate that."*

All of the CAE participants agreed that their IAFs were adding value through performing assurance work on the risk management processes, and that the holistic, end-to-end view that they provide was the best evidence of this. One CAE explained that this approach *"has allowed us to … understand the issue, put in place a remediation plan and move forward to ensure that gap doesn't persist going forward … without compromising our assurance work which is first and foremost for the purpose of the audit committee."*

As previously noted, most of the participants agreed that they were receiving value from the IAF through the review of their risk management processes. However, they had further suggestions on how to increase the IAF's value. Many ideas were presented, but the one that was consistently identified concerned the technical expertise that is required by the IAF in order to be able to perform their work in a mining/resource extraction environment. Due to the nature of the mining industry, the significant majority of risks faced are not related to "normal business", but are much more technical in nature, e.g., fall of ground; isolation of energy sources before working, and water purity management amongst others. As a CFO participant observed: *"It's not just finance areas and controls. It's not just even supply or HR etcetera, or IT areas. It does bring you into areas of technical operational risks, asset integrity, resources, mine planning, etc."* He believed that *"the audit skill sets and the knowledge that needs to be brought to bear to properly assess and evaluate"* these industry-specific risks require internal auditors to consider *"the right designs for those controls to mitigate the risk, or prevent the risk, and that they're working effectively,"* and this expectation *"brings new challenges in terms of what skill sets do you have within the internal audit function."* In order to successfully address these issues requires skills that are not ordinarily available to an internal auditor who typically only has an accountancy-based audit background. A RM participant suggested adopting a multidisciplinary approach to mitigate this because

"… internal audit needs access to the right resources, internal or external, and … it can't just be a bunch of auditors going around because they cannot … have all of the required skill levels for all of the different disciplines [at play on a mine]."

Two CAE participants mentioned that their organisations have already implemented processes to address the technical skills issue, in that combined assurance reviews now make use of the specialised skills of technical employees to review these risks. A third CAE participant reported that her organisation was in the process of implementing such an approach. This in itself raises a pertinent question about the way forward for the IAF. One approach is for the IAF to upskill its employees to master all of these technical skills, while an alternative approach is for the IAF to acquire staff members with technical skills but no audit experience, and to train them on the requirements of an audit engagement. A third alternative could be to train the audit staff to be better at providing assurance over the whole risk-management process (big picture), while simultaneously guiding the technical people to apply their expertise to analyse specific risks, and then integrating the two sets of data.

With regard to the interaction between the RMD and the IAF, all but one of the participants (an AC member) believed that there was effective interaction between the two departments. The dissenting participant however, did not believe that there was any co-operation between the departments at all. Even though all the other participants believed that there was a 'good' relationship between the two functions, they also believed that this could be improved, even if only slightly. More inclusive and more continuous communication between the two functions was the main area needing improvement, as was identified by the two CFOs, one RM and one CAE participant. As the CAE participant explained: *"I think it's always a case of making sure people keep the lines of communication open, to share knowledge, and not just to wait until it's that formal time of the year."* This view was supported by a RM participant, who stated: *"…yes, we have to communicate much more, and see each other much more, challenge each other much more."*

The most challenging and therefore most interesting question asked of all participants was whether the IAF and the RMD could assist the company to avoid a 'black swan' event. Three of the participants (an AC, a CAE and a CFO) indicated that they didn't believe that there was anything that the IAF could do to prevent 'black swan' events, least of all a Marikana-type tragedy. The remaining nine participants believed that the IAF might well be able to assist in predicting a 'black swan' event, even another Marikana. However they were unsure of the level of assistance that could be provided. The concerns expressed by these participants were around challenging the completeness of the risk profile and ensuring that adequate resources had been used when the risks were being reviewed.

A CAE participant encouraged internal auditors to change their mind-sets, to demonstrate a broader view: *"I think from a risk management perspective, continually challenging and encouraging management to ensure there is sufficient diversity of thinking in terms of potential causes and the potential impacts of a particular incident, remain ever important."* Without meeting that challenge one may end up with a very narrowly framed risk, and associated controls that are very weak.

This CAE participant did also point out that while challenging management, the IAF should nevertheless be sure to maintain its independence.

"On the flip side of that though, in our internal audit function I think the challenge there is that, whilst I encourage my internal audit team to challenge management on their diversity of thinking, their role is not necessarily to say [that] management … has described the risk incorrectly."

6 CONCLUSION

This research was undertaken to investigate the role of an IAF in risk management in the mining sector. This was done by obtaining the perceptions of four of the stakeholders most closely associated with each of the IAFs. Thus the CFOs, RMs, CAEs and an AC member of each of the three selected South African mining companies were interviewed, guided by questions that were formulated after a thorough review of available literature.

The findings confirmed that overall, the IAFs are successfully performing and are expected to continue to perform the main functions of assurance over the risk-management process, while maintaining a risk-based audit approach at all times. Similarly, the participants were also in agreement that the RMD should perform an oversight role regarding policies and consistent implementation of risk management efforts, while the line management should take operational accountability for the day-to-day risk management activities.

With regard to the effectiveness of the relationship between the IAF and the RMD, all participants noted that it is critical that these functions work together closely, to obtain as much information as possible from each other, to ensure that the overall risk profile of the organisation is as near complete and accurate as is possible. Challenging the completeness of the risk profile and the robustness of the review of these risks may, in the opinion of the participants, actually assist management in identifying a possible 'black swan' event in their own organisations. Once identified, management can then allocate the appropriate resources and skills to evaluate and assess this potential event. This close working relationship could also assist in managing one of the issues that may otherwise hamper the effectiveness of the IAF's participation in risk management, namely the tension between the IAF and the organisation whereby management may be reluctant to share all the required information in order to avoid being 'hit with the stick' if things do go wrong.

All the participants indicated that the roles that their IAFs are playing are the roles that they wish them to play. However, in future these IAFs will need to focus their attention on specific mining-related areas and methods in order to provide more value to their stakeholders. Four areas were identified, namely: to fulfil a more strategic role; to follow a holistic approach ensuring all risks are considered; to follow a robust process and consistent approach; and to consider sustainability risks.

Perhaps the single most important one of these areas is the need to increase the capabilities of the internal auditors themselves when it comes to the technical and operational risks that the mining industry faces daily. Strongly supporting the call to increase the technical skills of the IAF is the requirement that it starts achieving a more strategic focus. This will require the IAF to identify not only the business and operational risks, but also the strategic risks that the organisation is exposing itself to – and this will most likely need to be performed with fewer resources than are currently available to the IAF.

All participants supported the implementation of a risk-based internal audit approach, but a few CAE participants acknowledged that not all processes within their organisations are covered by such an approach. Although CAE participants in general did not perceive the internal audit profession's rules and regulations to negatively impact the effectiveness of the IAF in relation to risk management, their independence remains an area of concern. Most of the participants agreed that internal auditors add value in risk management. The reasons cited varied between participant categories: however, there was general consensus that the value added by IAF could increase if their technical expertise in relation to the mining industry improved. This would require an expanded skillset for internal auditors.

In order to provide the correct assurance over the risks and the effectiveness of the design and application of controls to mitigate these risks, the internal auditors will need to understand these risks intimately. Future mining-based IAFs will therefore be faced with two options: either work very closely with technical experts within the organisation in a combined-assurance type of approach while simultaneously increasing their own technical skills, focusing on ensuring the completeness of the risk management profile and the consistent application of the organisation's risk management policies, or by obtaining the required technical skills through in-house appointments or training.

One of the limitations of this case study is that the findings cannot be generalised much beyond the mining industry in South Africa. However, the recurring themes identified by the respondents could be used in the same environment. Despite these limitations, the study has made a valuable contribution to understanding the gap previously noted between the required role of internal audit in risk management and the role that they are currently playing. This has been achieved by identifying the respondents' requirements for improvement within the IAF that would maintain the IAF's relevance to the mining sector into the future.

Because of the unique aspects of the IAF in the mining sector, future academic research needs to be performed on the role of internal audit in risk management in other sectors of the economy, in order to determine if there are any similarities in the future roles of the IAF. Similarly, research is needed to determine the best approach for the IAF to obtain new, industry-specific technical skills (regardless of industry), and what impact these skills are likely to have (or have already begun to have) on the effectiveness of the IAF in the risk-management process. Research could also include the impact this may have on the composition of the IAF as far as its needs for general audit skills versus technical audit skills are concerned. Lastly, research could also be performed to identify exactly what role IAFs should play with regard to identifying strategic risks, and what impact this role might have on their independence.

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APPENDIX A

Interview questions the participants were asked

Interviews were performed with the CAE, CFO, RM and an appropriate AC member, and included the following questions:

1 In the ideal world, which role do you expect internal audit should play to manage an organisation's risks?

2 How do you perceive the role of your organisation's IAF in relation to risk management?

3 How can your organisation's IAF close the gap between your expectations and the actual role they are playing in risk management?

4 What current rules and regulations of internal audit hamper the effectiveness of your risk-management assurance processes?

5 What are your views on a risk-based audit approach for your organisation's internal auditors?

6 What are your views on the value added by your organisation's IAF to its risk-management process?

7 What do you perceive to be the role of your organisation's RMD?

8 What are your views of the relationship and interaction between your RMD and its IAF?

9 How can this relationship and interaction be improved?

10 What do you believe internal audit and the RMD could have done to prevent a 'black swan' event like Marikana?

11 Do you have any other comments on your organisation's risk-management processes in relation to its IAF?