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Published

2010

Journal Title

Managerial Auditing Journal

DOI

https://doi.org/10.1108/02686901011034162

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Internal Audit Independence and Objectivity:
Emerging Research Opportunities

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Acknowledgements: Earlier versions of this paper were presented at a plenary session of the Sixth European and First Global Academic Conference on Internal Audit and Corporate Governance at Erasmus University, Rotterdam, April 2008 and at the Colloquium in Auditing and Governance Celebrating 25 Years of Managerial Auditing Journal at Deakin University in October 2009. The paper has benefited from the helpful comments of those present at these events. We also thank two anonymous reviewers for their suggestions.

January 2010

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Internal Audit Independence and Objectivity:
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Abstract

Purpose - The objective of this paper is to provide a review of the recent literature on internal audit independence and objectivity and discuss opportunities for future research. The topics we examine are the organizational status of internal audit, the internal auditor's dual role as a provider of assurance and consulting activities, internal audit's involvement in risk management, outsourcing and co-sourcing of internal audit activities and the use of internal audit as a training ground for managers. **Design/methodology/approach** - The approach used in this paper is a review of the literature followed by an identification of further research opportunities.
Findings -The paper summarizes the existing body of knowledge relating to internal audit independence and objectivity and identifies gaps in the literature where further research is needed.
Originality/value - The paper provides researchers with a useful summary of the literature on internal audit independence and objectivity and stimulates them to engage in further research in the area.

Keywords - internal audit; independence; objectivity
Paper type - Literature review

Internal Audit Independence and Objectivity: Emerging Research Opportunities

Introduction

The assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence of mind and independence in appearance. Not surprisingly, a large body of research has examined auditor independence and objectivity, but this has been predominantly in the context of external audit. In more recent years, there has been heightened interest in issues associated with the independence and objectivity of internal audit. The motivation for this growth in research is related to the evolving and expanding role of internal audit as a key corporate governance mechanism as well as an internal consultancy service. In this regard, internal auditors are in a unique situation as providers of both assurance services within the organization and consultancy services to managers. This dual role has generated significant debate as it has the potential to place the internal auditor in a situation of conflict. Furthermore, as employees of the organization, the ability of internal auditors to exercise true objectivity has also been questioned (Paape, 2007).

The objective of this paper is to provide a review of the evolving literature on internal auditors' independence and objectivity in order to highlight gaps in knowledge and make recommendations for future research. As a basis for our review, we draw on the current definition of internal audit promulgated by the Institute of Internal Auditors (IIA), together with the IIA professional standards and guidelines on independence and objectivity. In order to capture the increased scope of internal audit as a key governance mechanism, we focus on the literature in this area since the new definition of internal auditing was released in 1999. Our study contributes to the internal auditing literature by providing an in-depth analysis of key issues that impact independence and objectivity in the current governance environment.

Prior literature reviews of internal audit

To date, there have been a limited number of prior reviews of the internal audit literature. Bailey *et al.* (2003) edited a monograph published by the IIA Research Foundation on research opportunities in internal auditing. There were two key objectives of this monograph. It was intended, first, to inspire academic research on topics of relevance to internal auditing and, second, to bridge the gap between academics and practitioners. As such, it is a blend of theory and practice, designed to familiarize academic researchers with internal audit practice (Editorial Preface, xi – xii). Each chapter of the monograph raises a series of research questions related to a specific topic in internal auditing and we refer to these where relevant.

Two previous reviews have examined the literature and future research opportunities relating to the role of the internal audit function in corporate governance. Gramling *et al.* (2004) focus on the relationship between internal audit and the other cornerstones of governance (i.e. external auditors, the audit committee and management). They also evaluate the literature on internal audit quality (including objectivity and independence), with a particular emphasis on external auditors' evaluations of internal audit and their reliance on internal audit work. Cohen *et al.* (2004) provide an extensive review of research on corporate governance and its impact on financial reporting quality. The authors introduce the notion of a corporate governance mosaic, comprising interactions among the board of directors and the audit committee, management, external audit and internal audit. As such, they summarize the research literature relating to internal auditors' governance role and suggest opportunities for future research. Both of these reviews provide an excellent synthesis of the literature in this area, but largely from a North American perspective. Given the growth in international research on internal audit independence and objectivity, we extend this work to include studies from Europe, Australasia and other parts of the world.[1]

In 2006, the IIA commissioned the global Common Body of Knowledge 2006 (CBOK) study, engaging researchers from around the world "to better understand the expanding scope of internal audit practice" (Cooper *et al.*, 2006). This study has resulted in three related literature reviews. Cooper *et al*. (2006) examined the internal auditing literature in the Asia Pacific region, Hass *et al.* (2006) studied the literature from the Americas, while Allegrini *et al.* (2006) performed a similar review of the European literature. The purpose of these reviews was to document changes in internal audit as a result of shifts in global business practices. Where relevant, we draw on aspects of these reviews that relate to internal audit objectivity. We also refer to the findings of the CBOK study (Burnaby *et al.*, 2007) throughout our discussion of the literature.

Background - professional guidance relating to independence and objectivity

In this section we review the professional guidance pertaining to internal audit independence and objectivity. We commence with the definition of internal audit put forward by the IIA (1999) and the definitions of independence and objectivity provided in the Glossary to the IIA Standards (IIA, 2009a). We then summarize the IIA Code of Ethics (2000) with respect to objectivity. We follow this with an overview of the attribute standards and other guidance that the IIA has issued on independence and objectivity.

The IIA (1999) definition of internal auditing is now familiar and well accepted:

> "Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes."

This definition highlights the independence and objectivity of internal auditing with respect to both assurance services and consulting. Independence and objectivity are closely related. However, the Glossary to the IIA Standards distinguishes between the two concepts in the following way:

> "Independence – The freedom from conditions that threaten objectivity or the appearance of objectivity. Such threats to objectivity must be managed at the individual auditor, engagement, functional and organizational levels."
>
> "Objectivity – An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to that of others."

Hence, the IIA's distinction between the two terms appears to be that objectivity is a state of mind while independence is the state of affairs that permits an internal auditor to operate with an objective attitude. While the IIA standards (IIA, 2009a) emphasize independence at the organizational level, the definition indicates that it is also important at the individual, engagement and functional levels.

The IIA Code of Ethics (IIA, 2009b) consists of a number of basic principles which internal auditors are expected to uphold, together with rules of conduct which describe the norms of behaviour expected of internal auditors. The principle relating to objectivity requires internal auditors to "exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined." Furthermore, internal auditors are expected to make a balanced assessment of all the relevant circumstances and they should not be unduly influenced by their own or others' interests when forming judgments. The rules of conduct specify that internal auditors:
(i) shall not participate in any activity or relationship that may impair or be presumed to impair their unbiased assessment;
(ii) shall not accept anything that may impair or be presumed to impair their professional judgment; and
(iii) shall disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under review.

The IIA has issued a number of attribute standards (IIA, 2009a) and associated practice advisories (IIA, 2009c) relating to independence and objectivity. Standard 1100 states that "the internal audit activity must be independent, and internal auditors must be objective in performing their work." To achieve the required degree of independence, the chief audit executive (CAE) should have direct and unrestricted access to senior management and the board and this can be achieved by a dual reporting relationship.

Attribute Standard 1110 further discusses organizational independence based on the CAE reporting to a level in the organization that permits the internal audit activity to fulfill its responsibilities. The standard stresses that the CAE must confirm the organizational independence of internal audit to the board at least annually. The related Practice Advisory 1110-1 stresses that the CAE should ideally report functionally to the board and administratively to the chief executive officer (CEO). As a minimum, administrative reporting should be to an executive with "sufficient authority to promote independence and to ensure broad audit coverage, adequate consideration of engagement communications and appropriate action on engagement recommendations".

Attribute Standard 1120 relates to individual objectivity and requires internal auditors to "have an impartial, unbiased attitude and avoid any conflict of interest." The related Practice Advisory 1120-1 stresses the need to avoid potential and actual conflicts of interest and bias at the individual level and suggests that staff assignments should be rotated periodically. Attribute Standard 1130 discusses the need to adequately disclose to appropriate parties any impairment to independence or objectivity. Examples of impairment include internal auditors assessing operations for which they were previously responsible. Other impairments noted in the Glossary to the Standards are personal conflicts of interest, scope and resource limitations, and restrictions on access to records, personnel and property.

Various practice advisories are related to impairment of independence and objectivity. Practice Advisory 1130-1 requires internal auditors to report to the CAE any situations involving actual or potential impairment and highlights the importance of not accepting fees, gifts or entertainment from audit clients. Practice Advisory 1130.A1-1 does not permit staff transferred or temporarily assigned to internal audit to undertake audits of activities that they previously performed until at least one year has elapsed. Practice Advisory 1130.A2-1 stresses that internal auditors should not have responsibility for non-audit functions that are subject to internal audit assessments.

In addition to the standards and advisory statements, the IIA has also published a framework to guide internal auditors with respect to independence and objectivity (Mutchler *et al.*, 2001). In this framework independence is recognized as a state where threats to objectivity are appropriately managed. Hence, internal auditors are required to identify, assess and manage threats to their objectivity, including the need to consider safeguards that can mitigate the effects of the threats. An excellent summary of this framework is provided by Mutchler (2003)[2] in her discussion of research opportunities related to this framework. To avoid duplication, we provide only a brief overview of the framework while, in subsequent sections of the paper, we extend and discuss Mutchler's suggestions for research in the area.

On an individual level, the framework discusses seven threats to an internal auditor's objectivity. These are (i) self-review, where the internal auditor reviews his/her own work; (ii) social pressure, where the internal auditor is exposed to pressure from, say, the auditee, or others on the audit team; (iii) economic interest, resulting, for example, from incentive payments or from auditing the work of someone who has the power to affect the internal auditor's employment or salary; (iv) personal relationship, where the internal auditor is a relative or friend of the auditee; (v) familiarity, resulting from a long term relationship with the auditee including having worked in the unit being audited; (vi) cultural, racial and gender biases arising in multinational organizations when the auditor is biased or lacks an understanding of local culture and customs; and (vii) cognitive biases resulting from preconceived notions or the adoption of a particular psychological perspective when performing the audit. These threats can also occur at the internal audit function level, particularly when the function is involved in both consulting and assurance activities.

The framework also gives examples of mitigating factors that act as safeguards against the threats to objectivity. Examples include organizational position and policy statements which increase the status of internal auditors in the organization, a strong and supportive governance environment, appropriate incentive schemes which reward objectivity, the use of teams, and adequate supervision of staff.

In summary, it is apparent that the IIA takes a strong stance on the need for independence and objectivity within the profession. Burnaby *et al.* (2007) report that 67% of respondents in the CBOK survey believed that they fully comply with IIA Standard 1100, while 88% are of the view that the standard provides adequate guidance with respect to independence and objectivity. However, as Paape (2007) argues, the two concepts are not well defined and are relative in nature given that internal auditors are employees of the entity. Hence, in addition to the empirical research opportunities discussed in the next section, there is also an opportunity for academics to contribute to the conceptual debate on independence and objectivity. This debate should be directed at providing further clarification on the distinction between the two concepts.

The extant literature and research opportunities

To avoid replication of previous literature reviews, we do not cover the whole spectrum of internal audit research. Rather, we focus on specific areas of significance to internal audit objectivity where we perceive a need for further research. As previously noted, our emphasis is on work that has engaged internal auditors rather than on work that examines the perceptions of external auditors.[3] In order to address issues of current relevance, we restrict our discussion of prior studies to those that have been conducted since the revised definition of internal audit in 1999.

The topics that we discuss are: (i) organizational status; (ii) assurance versus consulting; (iii) internal audit's role in risk management; (iv) outsourcing and co-sourcing internal audit activities; and (v) internal audit as a management training ground. For each topic, we summarize the key studies, highlight the gaps in knowledge and discuss opportunities for future research. We conclude our review with a brief discussion of emerging areas that could provide further research opportunities.

Organizational status

As we discussed earlier, the IIA stresses that the internal audit function should be given the appropriate status in the organization to enable the function to exercise organizational independence and individual internal auditors to act objectively. This is necessary because internal auditors are in a unique position as employees of an organization with responsibility to assess and monitor decisions made by management and also to advise management on the adequacy and effectiveness of internal controls (Sarens and de Beelde, 2006a). It is thus no surprise that internal auditors can face considerable familiarity and social pressure threats stemming from their relationship with management. In more recent years, audit committees have undertaken an important governance role in coordinating and overseeing the communications between management, internal auditors, and external auditors. Gramling *et al*. (2004, p.148) highlight that "a quality relationship between the IAF (internal audit function) and the audit committee also works towards providing the IAF with an appropriate environment and support system for carrying out its own governance related activities (e.g. risk assessment, control assurance and compliance work)". In addition, corporate governance guidelines and listing rules explicitly recognize the governance role played by audit committees in enhancing the relationships between management, external auditors and internal auditors (Blue Ribbon Committee, 1999; Smith Committee, 2003). As such, audit committees can be viewed as a key safeguard mechanism for internal auditors in managing their professional objectivity.

The majority of prior studies relating to the organizational status of internal audit have focused on internal audit's relation with the audit committee. Most of these studies involve surveys or interviews of internal auditors. An exception is the study by Carcello *et al*. (2002) which examined audit committee charters and reports of 150 US companies. Part of this study looks at disclosures relating to auditor oversight. The authors found that disclosures relating to external audit were much more prevalent than those relating to internal audit, with less than 50% of companies in their sample reporting that the audit committee held private meetings with internal audit.

Leung *et al.* (2004) explored the role of internal audit in corporate governance and management in Australia using both an on-line survey and in-depth interviews of CAEs. They report that, while a majority of CAEs had reporting responsibilities to the audit committee or board level, more than 22% of participants reported only to management (either to the CEO or the chief financial officer). Globally, the CBOK study (Burnaby *et al.*, 2007) found that only 47% of CAE respondents reported to the audit committee level. However, where an audit/oversight committee was present (in 73% of organizations), 91% of respondents believed that they had appropriate access to the committee.

Christopher *et al.* (2009) examined the independence of the internal audit function in a sample of 34 Australian companies through the function's relationship with both management and the audit committee. An e-mail based survey of CAEs identified a number of threats to independence stemming from internal audit's relationship with the audit committee. These threats include CAEs not reporting functionally to the committee, the audit committee not having sole responsibility for appointing, dismissing and evaluating the CAE and audit committee members lacking expertise in accounting.

Other surveys have examined whether the composition of the audit committee is associated with the strength of the relationship between the internal audit function and the audit committee. Raghunandan *et al.* (2001), in a survey of US chief internal auditors[4], assessed the joint effect of audit committee independence and expertise on the committee's interaction with internal audit. They found that independent committees with at least one member with accounting or finance expertise had longer meetings and more private meetings with the chief internal auditor. Goodwin and Yeo (2001) surveyed chief internal auditors in Singapore and found that audit committees comprised solely of independent directors had more frequent meetings and more private meetings with the chief internal auditor. Goodwin (2003) obtained similar results in a survey of chief internal auditors from Australia and New Zealand. In contrast, however, O'Leary and Stewart (2007), in a study of Australian internal auditors' ethical decision making, found that the existence of an effective audit committee had little impact on internal auditors' perceptions of their willingness to act objectively.

The involvement of the audit committee in decisions to dismiss the chief internal auditor is another indicator of internal audit independence. Prior studies have obtained mixed results in this regard. For example, Goodwin and Yeo (2001) report that 72% of audit committees in their Singapore study were involved in dismissal decisions while Goodwin (2003) found only 52% of Australian and New Zealand audit committees were similarly involved. Only Goodwin (2003) found a relationship between dismissal decisions and the independence of the audit committee.

Studies based on in-depth interviews of internal auditors and audit committee members suggest that audit committees may strengthen internal auditors' status and in turn their ability to remain objective and independent. Turley and Zaman (2007) conducted interviews with a variety of personnel from a large UK financial services company (of which one interviewee was the head of group internal audit and another, the audit committee chair). Based on these interviews, the authors argue that an audit committee is able to set a 'tone' that allows internal audit to have a certain degree of influence in the organization. As such, an effective audit committee is seen to play a critical role in supporting the internal auditor's position and strengthening internal audit independence.

In a similar vein, Mat Zain and Subramaniam's (2007) study of heads of internal audit from eleven organizations in Malaysia reflects the importance of the powerful position of audit committees in enhancing internal audit objectivity. The study reveals that internal auditors place significant trust in audit committees to take up the key questioning role in more formal settings. This finding raises the possibility of a cultural effect stemming from the fact that Malaysia is a high power distance nation (Hofstede, 1981), where the cultural norm emphasizes class distinctions based on the level of authority.

Finally, the role of audit committees serving as a potential support of internal audit is also evident in James' (2003) study. He examined the perceptions of bank lending officers with respect to the impact of reporting structure on internal audit's ability to prevent financial statement fraud. The study found that internal audit functions that report to senior management are perceived as being less able to prevent fraudulent reporting compared to those departments that report solely to the audit committee.

Another avenue of research pertaining to organisational status involves the relationship between internal audit and senior management. Investigations into the impact of this relationship on internal audit objectivity are very limited. Sarens and De Beelde (2006a) used a case study approach of five Belgian companies to explore the expectations and perceptions of both senior management and internal auditors with respect to the relationship between the two parties. They found that, when internal audit operates primarily in a management support role, there is a lack of perceived objectivity and the relationship with the audit committee is weak. They also found that senior management's expectations significantly influence internal audit and that the support of senior management is critical to the acceptance and appreciation of the internal audit function within the organization. Christopher *et al*. (2009) found that independence threats associated with internal audit's relation with management stem from the involvement of the CEO or chief financial officer (CFO) in the internal audit function's plan and budget, management regarding the internal auditor as a partner and using the internal audit function as a stepping stone to other positions.[5] Van Peursem (2005), in a multiple case study of six senior internal auditors in New Zealand, found that internal auditors' close relationship with management can place their independence from management at risk. For example, interviewees recognised a need to balance the conflicting interests of their managers with the interests of their profession and were conscious that they have a responsibility to report over their employer's head if necessary.

Table I provides a summary of the above studies.

Insert Table I about here

While prior research has provided some insights into the impact of organizational status on internal audit objectivity, there are a number of avenues for further research. For instance, although corporate governance guidelines and listing rules recognize the governance role played by audit committees, we do not know whether audit committees do in fact play a key role in internal audit independence. Further, very little is known about management's attitudes towards internal audit objectivity and whether their ability to act in an unbiased manner is strengthened when they report to the audit committee. Further, the relationship between internal audit functional independence (the state of affairs that permits an objective attitude) and objectivity (the individual internal auditor's state of mind) is relatively unexplored. In addition, while it is recognized that reporting to the CFO is likely to compromise internal audit independence and objectivity, there has been little research that has examined the impact of reporting to more senior management such as the CEO.

We also do not know whether the results of prior studies are generalizable to other jurisdictions and cultures. Of note, cultural dimensions such as power distance could be driving the results of studies in Eastern cultures such as Malaysia and Singapore and this warrants further exploration. Finally, alternative research designs could add insight to our understanding of the relation between organizational status and internal audit objectivity. For example, experimental designs could be undertaken in order to identify causal relationships more easily. Numerous experimental studies have examined various aspects of external auditor independence and these could be used as a base to provide insight into further exploration of internal audit objectivity.

Assurance versus consulting

The IIA definition of internal audit highlights the value-adding role of internal audit as an assurance and consulting activity.[6] Consulting services as defined by the IIA refer to "advisory and related client service activities, the nature and scope of which are agreed with the client, are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility" (IIA, 2009). Chapman (2001) argues that involvement in consulting activities has elevated internal audit to a more strategic role in the organization. She further suggests that consulting activities are generally of a problem-solving nature, with internal audit working closely with management to assist management to achieve its objectives. Further, consulting involves a more pro-active approach whereby internal audit becomes a partner with management (Bou-Raad, 2000; Christopher *et al*., 2009).

A number of studies around the world have examined the extent to which internal audit engages in consulting activities. A study by Nagy and Cenker (2002) examined whether the new definition actually reflected the activities of internal auditors. The researchers interviewed 11 US directors of internal audit, addressing issues and highlighting changes associated with audit scope, organizational structure, risk management and audit committee expectations. The study found that the change in definition simply reflected existing practice, with internal auditors having performed consulting services and other value-added activities for many years.

Hass *et al*. (2006) report that during the 1990s internal auditors in the US tended to became consultative partners with management. However, in the early 2000s the increasing emphasis on compliance surrounding internal control systems in the immediate post-Sarbanes-Oxley (SOX) era led to a move back towards assurance work for internal auditors. This signals that the extent of internal audit involvement in consulting activities is influenced by the economic and regulatory environment and is therefore likely to vary across time.

Several European studies provide evidence of the extent of internal audit engagement in consulting activities in Europe. For example, Arena *et al.* (2006) undertook a multiple case study of internal audit functions in six Italian companies and found that only in one of the firms, the internal audit function had engaged significantly in consulting activities. Allegrini *et al*. (2006), in their literature review of European internal auditing, report that consulting generally forms a relatively small part of internal audit activities in Europe (e.g. in France, assurance services represent 73% of work (Institut Francais de l'Audit et du Contộle Internes, 2005), in Belgium, consulting averages 12 per cent of annual working time (IIA Belgium, 2006), while in Italy, only a few large companies (8% of the top 100 firms) use internal audit for consulting activities (Allegrini and D'Onza, 2003)). However, consulting activities appear to be increasing – for example, Allegrini and Bandettini (2006) indicate an increase from 7 to 26 per cent of time allocated to consulting activities in Italian companies. Paape *et al.* (2003) found that 64% of respondents to their survey of chief internal auditors across fifteen European nations reported that their function engaged in consultancy and management support activities. Furthermore, 61% of respondents disagreed with the suggestion that it is better for internal audit not to accept consultancy assignments in order to protect and maintain independence.

Selim *et al.* (2009) in a comparative study of internal auditing and consulting practice between the UK/Ireland and Italy, found that in both countries there has been a significant increase in the level of consulting since 1999. In the UK/Ireland, the most common consulting assignments are risk management[7], project management, governance, and contingency planning and disaster recovery. In Italy, the most common assignments relate to legislative compliance, governance and risk management. The study provides mixed support for concern about whether the dual role of consulting and assurance compromises internal audit objectivity. Some 36% of Italian respondents reported that involvement in consultancy increases the ability to be independent and objective while 38% of UK/Ireland respondents reported that such involvement decreased independence and objectivity. Further, 64% of UK/Ireland respondents reported an increase in the risk of conflict of interest for internal auditors arising from involvement in both consulting and assurance while 51% of Italian respondents reported 'no effect' (Selim *et al*., 2009, p.18). The authors suggest that possible reasons for these different results include (i) the different nature of consulting activities in the two countries, with more non-traditional types of consulting assignments being undertaken in the UK/Ireland; (ii) differences in the structure of shareholding, with more family-owned businesses in Italy lowering the perceived importance of independence; (iii) traditionally less concern for independence as a governance characteristic in Italy.

Selim *et al.* (2003) examined the role of internal audit in mergers, acquisitions and divestitures (M, A & D). The research involved interviewing internal auditors and senior managers in 22 companies in the US and Europe. They found that internal audit played a relatively small role in M, A & D activities but that interviewees believed that opportunities exist for a more pro-active role, notably in the areas of advising management and providing consulting services. Melville (2003) conducted a global survey of internal auditors' contribution to strategic management within their organization. The study found that internal auditors make a positive contribution to strategic management and are active in the development of strategic objectives.

Van Peursem (2004) conducted a survey of New Zealand internal auditors to identify functions that internal auditors perceive to be essential to their role. The survey also sought to understand the nature of the internal auditor's "role dilemma" (p. 379) which arises from the expectation that internal auditors will both assist management and independently evaluate management. Comments received from respondents indicated that internal audit's role has changed in recent years to one of consultant rather than of "policeman". Most of those who commented on this change did not perceive it as a problem. Van Peursem's (2005) study, discussed in the previous section, is also relevant to this issue. The study attempted to explain how internal auditors deal with the conflict between their audit oversight responsibilities and the provision of support to management. Van Peursem found that the tension involved in maintaining this dual role leads to role ambiguity but that this ambiguity is not necessarily undesirable. Three concepts emerged from the interviews which impact on internal auditors' ability to maintain their independence: how they create and establish their own role and duties; the role of professional status; and the nature of the communications in which they engage.

A recent study by Ahmad and Taylor (2009) provides evidence of the effect of a number of dimensions of role ambiguity and role conflict on internal auditors' commitment to independence. In a survey of 101 Malaysian internal auditors, they do not find a significant relation between commitment to independence and role conflict arising from performing both an advisory role and an oversight role. Further, this dimension of role conflict was found to be relatively low, suggesting that Malaysian internal auditors do not perceive a conflict between their consulting and assurance roles.

Schneider (2003) suggests that a direct result of internal auditors' involvement in business consultancy is their participation in incentive-based compensation schemes such as bonuses and/or stock ownership. Two studies have confirmed that this practice is prevalent amongst US internal auditors (DeZoort *et al.*, 2000; Dickins and O'Reilly, 2009). DeZoort et al. (2000) found that almost half of the 179 respondents to their survey indicated that incentive-based compensation was available to internal auditors in their organization. The most common incentive-based schemes involved bonuses based on overall company performance, internal audit function performance and individual performance. Almost one third of respondents perceived that such schemes could impair internal audit objectivity and independence. More recently, Dickens and O'Reilly (2009) likewise found that 89% of the 99 CAEs responding to their survey of US mid-sized listed companies were eligible to participate in stock-based awards and/or bonuses based on operating results, indicating a substantial participation of internal auditors in incentive-based compensation.

Schneider (2003) used an experimental design to explore the impact on internal audit objectivity of participation in incentive-based reward schemes. His study examined whether the type of compensation would influence US internal auditors' willingness to report the failure to recognize an inventory loss (a GAAP violation). He found that, when compensation was tied to stock price, a significantly higher percentage of internal auditors would not report the GAAP violation compared to when the compensation was tied to earnings or was fixed. However, it is unclear why an incentive payment linked to stock price had an impact while one linked to earnings did not. Further, there was no evidence that stock ownership influenced internal auditors' willingness to report the GAAP violation.

Two other experimental studies conducted in the US have addressed the concern that the dual role of assurance provider and consultant can create bias and hence cause problems for internal audit objectivity. Both Brody and Lowe (2000) and Ahlawat and Lowe (2004) examined whether internal auditors can remain objective when consulting to management in a corporate acquisition setting. The two studies involved internal auditors acting for the buyer or seller in an acquisition. The role that the company was taking in the negotiation process was found to influence participants' judgments, with internal auditors allocated to the buyer condition providing significantly higher likelihood judgments about inventory obsolescence compared to those allocated to the seller condition. The researchers conclude that this suggests that internal auditors who act as consultants may not be able to maintain their objectivity.

Insert Table II about here

The above synthesis (summarized in Table II) indicates that internal auditors are engaging in a greater amount of consulting activities. It appears that they support this move as one which adds value to the organization. However, there are role conflict issues which can create objectivity problems. It is possible that engaging in both assurance and consulting activities gives rise to a self-review threat and/or a social pressure threat. Further, if involvement in consultancy leads to participation in incentive schemes, there is also an economic interest threat.

There are clearly gaps in the literature which indicate opportunities for further research. We know that internal auditors are generally engaging in more consulting activities and that they perceive that this is an opportunity to add value to their organization. However, Selim *et al*. (2009) is one of the few studies to identify the types of assignment carried out by internal audit departments, both before and after 1999. Further examination of varying trends in both the level of consulting and the nature of consulting activities across different jurisdictions is clearly warranted.

We also know little about the frequency and nature of incentive-based compensation schemes for internal auditors, particularly outside of the US. We need to determine the prevalence of incentive-based remuneration in other jurisdictions and whether such remuneration schemes are based on company performance, performance of the internal audit function or on individual performance. The impact of these different types of schemes on internal audit objectivity is clearly an important avenue for further research.

From the small number of experimental studies that have been conducted, it appears that internal auditors do not act without bias when performing consulting activities. However, these studies need to be replicated and extended to different situations and different groups of internal auditors to determine the generalizability of the findings. For instance, the nature of consulting activities may be important, e.g. involvement in systems design and implementation may have a different impact on objectivity than involvement in business valuation, feasibility studies or project management. There could also be industry differences, with internal auditors in industries that emphasize compliance, such as the finance sector, being at greater risk of compromising independence compared to less regulated industries.

We also need to identify and test factors that might mitigate any potential biases, for example organizational status, supervision and whistle-blowing protection. In addition, we do not know how the performance of consulting activities impacts assurance services and whether internal auditors are able to maintain their objectivity when they provide both types of services to a client. While Van Peursem (2005) provides valuable insights to our understanding of how internal auditors balance their assurance and consulting roles, her evidence is drawn from interviews with six New Zealand internal auditors, only one of whom was employed in a major corporation. Four participants came from public sector or quasi-public sector organizations while the fifth participant was an internal audit outsource provider. Hence, further research is needed in other contexts and jurisdictions to elaborate and extend this work.

Internal audit's role in risk management

Recent corporate governance developments have raised the profile of risk management within organizations.[8] While the prime responsibility for risk management lies with the directors and senior management, internal auditors are also seen as key contributors as consultants and assurance providers on risk management processes and systems. The CBOK study (Burnaby *et al.*, 2007) found that 67% of respondents currently had a role in risk management while 25% expected to have a role within the next three years. Further, almost 80% of respondents believed that risk management audits would increase within the next three years.

The internal auditing profession has become a key driver of the concept of enterprise risk management (ERM), defined by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004, p.2) as:

> " A process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives…"

In 2004, the IIA, in conjunction with COSO, issued a position statement on the role of internal audit in ERM, suggesting ways for internal auditors to maintain their objectivity and independence. This position paper, which was updated in 2009 (IIA, 2009d), outlines the recommended roles of internal audit in ERM, roles that are legitimate with safeguards, and roles that should not be undertaken. These roles are listed in Table III. Both COSO and the IIA emphasize that management has the ultimate responsibility for ERM.

Insert Table III about here

In 2005, the IIA conducted a global online survey of internal auditors regarding their involvement in ERM (Gramling and Myers, 2006). Responses were received from 361 IIA members. The survey found that internal audit was primarily responsible for ERM in 36 percent of the respondents' organizations. Further, the study also found that some internal auditors were engaged in roles that the IIA has determined internal auditors should not undertake.

Ernst & Young's (2006) third Australasian benchmarking survey indicates that 62% of respondents' internal audit functions are involved in providing assurance over risk management practices, while 47% report that internal audit develops and assists in the oversight of the risk management framework.[9] The report also raised concerns over whether it is best practice for internal audit to be involved in both developing and assuring risk management frameworks and processes.

Sarens and De Beelde (2006b) interviewed CAEs in four US companies and six Belgian companies in order to compare how they perceive their current role in risk management. The study found that, in both countries, internal auditors have a crucial role to play in enhancing risk assessment and internal control practices. However, differences across the two jurisdictions were found, with US companies being strongly influenced by the internal control review requirements of SOX while Belgian internal auditors play a greater pioneering role in creating a higher level of control awareness and a more formalized and transparent risk management system. Allegrini and D'Onza (2003), in a survey of internal auditors in large Italian companies, provide evidence of the contribution that internal auditors make to the risk assessment process in these companies. They found that 30% of respondents co-operate with external consultants in the risk management process while 37% support the risk management process directly in co-operation with line management by providing methodologies or engaging in consultancy services in risk management activities.

Fraser and Henry (2007) undertook a series of interviews with the finance director, the audit committee chair, and, where applicable, the head of internal audit and the director of risk management in five large UK organizations, as well as an audit partner from each of the Big Four audit firms. They found that internal audit tends to play a major role in ERM, particularly in the embedding of risk. More interestingly, they also found evidence of internal auditors having responsibility for ERM practices, despite the COSO and IIA position paper stating that responsibility must rest with management. For example, in one organization the internal auditor had been responsible for setting up the system, while in another there were concerns that an internal audit function that was composed predominantly of accountants and at the same time heavily involved in risk management may not identify certain risks.

De Zwaan *et al.* (2009) examined whether the extent of (1) internal auditors' involvement in ERM and (2) their interactions with the audit committee affected the perceptions of internal auditors' professional objectivity. Data analysis was based on an experimental questionnaire survey of 117 certified internal auditors in Australia. The results indicate that internal auditors' involvement in ERM is likely to have a significant and negative effect on their objectivity in terms of their willingness to report on breakdown of risk procedures to the audit committee. However, the level of internal auditors' interactions with their audit committees (i.e. *high vs. low*) was found to have only a marginal effect. There was also no significant interaction found between the two independent variables affecting respondents' perceptions of internal auditor objectivity.

Insert Table IV about here

The role of internal audit in risk management and its implications for internal auditors' objectivity is an emerging area on which there is limited empirical evidence. Table IV summarizes the academic research in this area. With the exception of de Zwaan *et al*. (2009), the existing research in the area is generally descriptive. There are numerous opportunities for future research on the implications of internal auditors' involvement in risk management on their professional objectivity. In particular, further study is needed on how different types of safeguards may mitigate threats to objectivity. Examples of safeguards include the roles played by audit committees, by separate risk management committees and by the external auditors. We encourage further research identifying how these safeguards are able to assist internal audit to play an optimum role in the establishment of ERM frameworks while being in a position to monitor and provide assurance on the frameworks once they are operating. There is also scope for more in-depth examination of differences in the role played by internal auditors in ERM and its implications for their objectivity across different sectors, industries and business structures. Of note, ERM is becoming widely used in public sector entities and early evidence suggests that internal auditors are playing an important role in this development (de Zwaan *et al*., 2009). Further research focused on the public sector is needed to fully understand this role.

Outsourcing and co-sourcing internal audit activities

Outsourcing and co-sourcing of internal audit services have become widespread in recent years (Ernst & Young 2006; Caplan and Kirschenheiter 2000). While it is no longer acceptable for external auditors to provide internal audit services to their audit clients (Sarbanes-Oxley, 2002), such services are provided by both public accounting and specialist firms to non-audit clients (Ernst & Young 2006). Globally, the CBOK study (Burnaby *et al.*, 2007) found that, while less than 10% of internal audit work was currently outsourced, a third of CAEs expected this percentage to increase during the next three years. Dickins and O'Reilly (2009) report that 77% of respondents to their survey of US middle-market companies outsourced some portion of their internal audit work, with 15% outsourcing more than half of this work. A study of Australian publicly listed firms by Carey *et al.* (2006) found that 45% of the 99 respondent firms using internal audit had outsourced some or all of their internal audit activities. The type of services outsourced included both traditional financial statement audit-related services such as review of internal controls and testing of account balances, and also compliance and performance audit services including risk management and regulatory compliance evaluations. Further, Sharma and Subramaniam (2005), in their study of 87 Australian publicly listed firms, indicated that only 50 (62.5%) of the respondent firms utilised internal audit, with 30 (60%) of these either fully outsourcing or co-sourcing their internal audit activities.

It has been argued that an outsourced provider may be more independent than an in-house internal audit function as it is difficult for an employee to be truly independent of management (James, 2003). Research in this area is limited to a few studies and results are mixed. James (2003) examined lending officers' perceptions of the impact of outsourcing on internal audit quality and found that 85% of participants perceived an in-house internal audit function to be less objective than a Big-5 accounting firm and the remaining 11% perceived them to be equally objective. In contrast, Dickins and O'Reilly (2009) found a positive association between the frequency of material weaknesses in internal control and the percentage of outsourced internal audit work. They also found that the likelihood of the internal auditor reporting to the audit committee decreases with a greater level of outsourcing. These findings suggest that the independence and the quality of the internal audit function may be compromised by outsourcing.

Selim and Yiannakas (2000) explored the extent of internal audit outsourcing in the United Kingdom. Respondents from the forty organizations that did engage in either outsourcing or co-sourcing were asked whether the judgment of an outside contractor is more likely to be impartial. The mean response to this question was 2.3, below the mid-point on their scale of one to five. This indicates that the majority of respondents did not perceive an outside provider to be more objective than in-house internal auditors.

Ahlawat and Lowe (2004) explored the outsourcing issue in an experimental study where both in-house and outside internal audit providers assumed the role of internal auditor for the buyer or the seller in an acquisition target. They found that advocacy existed in both groups but that it was more extreme amongst the in-house internal auditors compared to the outside providers. Finally, Gramling and Vandervelde (2006) conducted an experimental study with both internal and external auditors. They found that, while the external auditor respondents assessed internal audit objectivity as higher when the provider was another accounting firm, the internal auditor respondents assessed objectivity to be higher when internal audit was provided in-house.

A summary of these studies is provided in Table V.

Insert Table V about here

There are a number of opportunities for further research relating to outsourcing and co-sourcing. We need to reconcile the differences in the findings of prior studies relating to both perceptions of objectivity and actual objectivity between in-house internal audit functions and outside providers. Further, we do not know whether differences in objectivity are affected by the nature of the activity being undertaken by internal audit. Ahlawat and Lowe (2004), for example, tested a consultancy situation and found that outside providers appeared to be more objective than in-house internal auditors. However, no prior studies have examined objectivity differences in the context of assurance services.

There are also factors that could affect the objectivity of outsourced providers in the same way that external auditor independence can be compromised. For example, the fear of losing a major client, involvement in both consulting and assurance work, and social and other relationships with the client may all lead to a compromise of objectivity. However, none of these issues have been explored empirically. Prior research has also not addressed the issue of co-sourcing, where outside providers are brought in at peak times or to perform specific tasks. Are these providers more or less objective than in-house internal auditors?

A further issue identified by Subramaniam *et al.* (2004), based on their survey of 41 Australian public sector entities, is that audit committee involvement in the decision to outsource internal audit activities appears to be stronger in entities that adopt full outsourcing of the internal audit function. However, in situations of co-sourcing, the head of the in-house internal audit function and other management appear to play a more active role. Interestingly, when contractual problems arise with external providers, the audit committee’s involvement in the follow-up and evaluation processes appears to be minimal. Hence, further enquiry into the role of audit committees as a safeguard measure in situations when there is risk of loss of internal audit objectivity appears warranted.

A related issue that warrants further investigation is whether reporting relationships that strengthen internal audit can be maintained when the activities are outsourced. For example, internal audit's interactions with the audit committee can strengthen the function's objectivity when internal audit is provided in-house. However, we have little understanding of the relationships that exist between audit committees and outsourced internal audit providers and whether the same level of interaction can exist between the two parties. Dickins and O'Reilly (2009) found that internal auditors in middle-market US companies were more likely to report to the audit committee when the level of outsourcing of internal audit work was low. Hence, whether or not an outside internal audit provider has or needs the same protection from the audit committee as an in-house function and whether this impacts on internal audit objectivity remain avenues for future research. Furthermore, given that audit committee structure and role may differ between public and private sectors, the mechanisms through which internal audit functions may gain strength or independence is an added interesting issue for further investigation. For example, audit committees in public sector organizations tend to entail more executive members (Subramaniam *et al*., 2004), and as such may restrict communications between the internal audit function and the audit committee.

Internal audit as a management training ground

The use of internal audit as a training ground for future management personnel is commonplace. There are two approaches to this practice. First, new graduates can be hired as internal auditors, with the intent of transferring them to line management positions after a few years in internal audit. Second, existing employees can be seconded to the internal audit function for a period of time. At the end of the period, they are transferred back to line functions, often in a higher operational position (Goodwin and Yeo, 2001).

This practice has many advantages for the organization but it can pose a threat to internal audit independence and objectivity (Christopher *et al.*, 2009). Internal auditors may be reluctant to take strong positions on issues that arise if they know they are likely to be transferred back to the department they are currently auditing. The problem is enhanced when the person in charge of the department may become the internal auditor's immediate superior once he or she is transferred back to the line position. The IIA has partially recognized this threat by not permitting staff transferred to internal audit to audit activities they previously performed until at least one year has elapsed. However, there is no guidance on the situation where staff may be transferred to the activity they are currently auditing.

Table VI provides a synthesis of the research to date. Some studies have provided ad hoc evidence of the prevalence of using internal audit as a training ground in European organizations. Arena *et al*. (2006) found that internal audit was seen as a training function in two of the six companies in their case study. Sarens and de Beelde (2006a) report that, in one of their cases, the CFO expected internal audit to be a training ground for future potential managers. The internal audit manager described the function as a fishing pond full of high potential, suggesting that, as a result, the function lacked people with both audit experience and company experience. Selim *et al.* (2003) found that some companies in their study of both US and European acquisitions and mergers established rotation programs whereby new employees were offered a rotation through internal audit as part of their training program. Christopher *et al.* (2009) report that 56% of respondents in their Australian study stated that internal audit staff are transferred to other management positions in their organization. In 60% of companies, employees remain in internal audit for less than four years. The authors conclude that their results "confirm that the internal audit function often is used as a training ground or a stepping stone for future managers to further their careers" (Christopher *et al.*, 2009, pp. 206).

Goodwin and Yeo (2001) is the only study that has investigated the impact on objectivity of using internal audit as a training ground. They surveyed 65 chief internal auditors in Singapore to explore the extent of the practice and perceptions of whether it could impair objectivity. The study found that internal auditing was viewed as a stepping stone to a managerial position in 43% of companies, that internal auditors would in the future be transferred to line positions in 48% of companies and that an auditee could be the future boss of an internal auditor in 49% of companies. Some 32% of respondents believed that using the internal audit function as a management training ground could impair the work of internal auditors.

Insert Table VI about here

This is clearly an area where more research is needed. We do not know exactly how prevalent the practice is on a global basis and we do not know whether the practice does in fact impair internal audit objectivity. There would appear to be social pressure and economic interest threats to objectivity under both of the approaches to using internal audit as a management training ground. Further, the second approach of transferring existing employees to work in internal audit can give rise to familiarity and self-review threats. These threats could be compounded by a lack of commitment to the internal audit profession, including an awareness and understanding of the IIA code of ethics. None of these issues have been explored in depth. Undoubtedly, there are benefits for the organization from using internal audit as a training ground but no study has weighed up the costs and benefits of the practice from the perspective of internal audit.

Emerging areas

The above discussion has focused on five topics of significance to internal audit independence and objectivity where there are clear gaps in knowledge. We now briefly discuss some emerging areas which could provide avenues for research in the future. The CBOK study (Burnaby *et al.*, 2007) highlighted a number of activities where internal audit involvement is expected to increase in the next few years. These key growth areas include involvement in knowledge management systems development review, the development of strategic frameworks, the alignment of strategy and performance measures such as the use of the Balanced Scorecard, benchmarking activities and corporate social responsibility. In each of these cases, less than 30% of respondents currently had any role in these activities but more than 30% expected to have a role within the next three years. Most of these activities involve a blend of consulting and assurance work and hence may pose some threats to internal audit objectivity. Of note, 44% of respondents indicated that their organization would be implementing a knowledge management system within the next three years and hence it will be interesting to monitor internal audit's role in this development. As with ERM, there will be managerial activities that are considered inappropriate for internal audit and guidance may be needed to ensure that objectivity is not compromised.

A further issue that could impact on the role of internal audit is the provision of non-financial information by organizations. With the current emphasis on corporate sustainability and the need to mitigate and adapt to climate change, many organizations are producing sustainability reports which contain a mix of quantitative and qualitative data. Regardless of whether external assurance is obtained for these reports, internal audit can play a role in verifying this data for management purposes. However, when the information they are verifying is not quantifiable, internal auditors can face objectivity threats arising from social pressure and familiarity.

Finally, the role of internal audit as a key corporate governance mechanism is continuing to develop and strengthen. Hence there is a need to further explore the significance of internal audit objectivity in interactions with other governance parties in order to maximize internal audit's contribution to strong governance.

Conclusion

This paper has reviewed the recent literature on internal audit objectivity and independence in the current professional environment. We have focused our review on issues associated with the organizational status of internal audit, the internal auditor's dual role as a provider of both assurance services and consulting activities, internal audit's involvement in risk management, outsourcing of internal audit activities and the use of internal audit as a training ground for managers. In each case, we have discussed recent studies that have added to the body of knowledge relating to internal audit objectivity and highlighted opportunities for future research. Overall, our analysis reveals that a multitude of individual and organizational-related factors potentially affect and are affected by internal auditors' independence and objectivity. Future research will need to pay attention to the use of multi-theory and multi-method approaches to fully illumine the antecedents and outcomes of internal auditor independence and objectivity. In conclusion it is clearly evident that internal audit independence and objectivity is a rich and fruitful area of investigation where researchers can make a valuable contribution to the on-going development of the profession.

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[1] To avoid replication of these previous reviews, we do not provide a detailed discussion of internal audit's contribution to sound corporate governance. However, we address governance issues relevant to objectivity and independence throughout the paper.
[2] This work comprises Chapter 7 of Bailey *et al*. (2003).
[3] As previously noted, for a detailed review of external auditors' evaluation of and reliance on the work of internal audit, particularly from a North American perspective, see Gramling *et al*. (2004).
[4] This study extended an earlier Canadian study by Scarbrough , *et al.* (1998).
[5] The latter two threats are discussed further in later sections of the paper.
[6] Anderson (2003) provides a general discussion of research opportunities relating to assurance and consulting services in Chapter 4 of Bailey *et al*. (2003). Internal audit objectivity is only a small part of this discussion.
[7] Internal audit involvement in risk management is discussed in more detail in the next section.
[8] Internal audit involvement in risk management could be regarded as an assurance versus consulting issue. However, given the increased involvement of internal audit in risk management, we discuss the relevant independence and objectivity concerns as a separate topic.
[9] This survey involved respondents from ASX Top 200, NZX Top 100, and a cross section of federal, state and local government entities.

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Table I.
Organizational status

Authors	Method	Sample	Description of study	Results
Raghunandan, Read and Rama (2001)	Survey	114 US Internal Auditors	Examines the association between AC composition and the committee's interaction with internal audit.	Found that ACs without 'gray' directors and at least one member with financial expertise will have longer meetings with the CAE provide private access to the CAE, and review the IA program, results and interaction with management. Provides empirical support that AC composition can impact on oversight activities.
Goodwin and Yeo (2001)	Survey	65 Singaporean Internal Auditors	Examines whether the relationship between internal audit and the AC influences the independence and objectivity of internal auditors.	Found the level of interaction between an AC and internal audit was greater when the AC was comprised of independent directors.
Carcello, Hermanson and Neal (2002)	Archival	150 US Companies	Explores AC activities and identifies possible areas for further AC reform. Included disclosures relating to auditor oversight.	Found disclosures relating to external audit were more prevalent than those relating to internal audit. Less than 50% of companies reported having private meetings with internal audit.
Goodwin (2003)	Survey	120 Internal auditors from Australia and New Zealand	Explores the separate impact of AC independence and the proportion of members with accounting or finance experience on the AC’s relations with the internal audit function. It also seeks to isolate differences between public and private sector ACs and between Australia and New Zealand.	Found independence and accounting experience have a complementary impact on AC relations with internal audit. AC independence was found to be more associated with issues of process while accounting experience is associated with AC reviewing the work of internal audit.

Table I. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
James (2003)	Survey	63 US Bank Loan Officers	Examines whether internal audit reporting structure affects financial statement users' perceptions of ability of the internal audit function to prevent financial statement fraud.	Found in-house internal audit departments that report to senior management are perceived as less able to provide protection against fraudulent reporting compared to those that report solely to the audit committee.
Leung, Cooper and Robertson (2004)	Survey / interviews	85 CAEs (survey) 16 CAEs (interviews) 7 senior business representatives (interviews)	Evaluates the role of internal audit in corporate governance and management, identifying accountability structures and objectives of internal audit, the nature of internal audit, the application of IIA standards and CAE relationships.	Found a diversity of reporting structures, with more than 22% of respondents reporting only to management. Internal audit work is focused on controls and risk, with most governance work being concerned with compliance.
Van Peursem (2005)	Multiple case study	6 New Zealand Organizations	Examines the New Zealand internal auditor role and addresses how an effective internal auditor can overcome the tension of working with management to improve performance while also remaining sufficiently distant from management in order to report on their performance.	Found internal auditors' close relationship with management can place their independence from management at risk.
Sarens and De Beelde (2006a)	Multiple case study / qualitative assessment	Five Belgian companies	Aims to understand the expectations and perceptions of internal audit and senior management with respect to each other through semi-structured interviews and supporting documentation.	Found that, when internal audit operates primarily in a management support role, there is a lack of perceived objectivity and the relationship with the audit committee is weak.

Table I. continued

Authors	Method	Sample	Description of study	Results
O'Leary and Stewart (2007)	Survey	66 Australian Internal Auditors	Exploratory study that assesses the impact of corporate governance mechanisms on the ethical decision-making of internal auditors. Also explores whether ethical decision-making is influenced by years of experience in internal auditing.	Found a higher quality external audit function was positively associated with internal auditors' ethical decision making. Other governance mechanisms did not appear to influence ethical decision making. Also, more experienced internal auditors adopted a more ethical stance in some cases.
Turley and Zaman (2007)	Case study	1 UK Company	Investigates the conditions and processes affecting the operation and potential effectiveness of ACs, with particular focus on the interaction between the AC, individuals from financial reporting and internal audit functions and the external auditors.	Found that the AC was often most effective through informal processes. ACs have a significant influence on power relations between organizational participants. The perceived personal attributes of the AC and organizational culture seem to affect the ACs influence on governance outcomes.
Mat Zain and Subramaniam (2007)	Interviews	CAEs from 11 publicly listed companies in Malaysia	Seeks to provide insights into internal auditors' perceptions of their interactions with AC members in Malaysia.	Results indicate infrequent informal communications and limited private meetings between the CAE and AC, and a need for clear reporting lines. ACs are seen to be held in high esteem for their authority and are expected to take on greater leadership in the inquiry of management's decision-making.
Christopher, Sarens, and Leung (2009)	Survey	34 CAEs from Australian corporate sector	Aims to critically analyze the independence of the internal audit function through its relationship with management and the audit committee.	Identified a number of threats to independence including having the CEO or CFO approve the internal audit budget and being involved in the audit plan, not reporting functionally to the AC, the AC not ,having sole responsibility for appointing and dismissing the CAE and a lack of AC accounting expertise.

Table II.
Assurance versus consulting

Authors	Method	Sample	Description of study	Results
Brody and Lowe (2000)	Experimental questionnaire	55 US Internal Auditors	Explores whether internal auditors view their consulting role as one in which they are able to provide objective feedback to management or one in which they are to provide solutions that they believe are in the best interests of their company. Examines whether internal auditors' judgments are dependent on their company's role (buyer or seller) in an acquisition.	Internal auditors are likely to assume the position that is in the best interests of their employer. Provides evidence of the consulting role of internal auditors impairing their objectivity.
DeZoort, Houston and Reisch (2000)	Survey	179 IIA members in US	Examines the existence, nature, frequency and consequences of incentive- based compensation plans for internal auditors.	Incentive-based compensation plans were found to be available to almost half of respondents. The most common types of plans involved bonuses based on overall company performance, internal audit performance and individual performance. Respondents perceived a number of advantages of incentive-based remuneration but the key disadvantage was impairment of objectivity/independence.
Nagy and Cenker (2002)	Interviews	11 internal audit directors of large US publicly traded companies	Interviews gained an assessment of internal audit in the following four areas of audit scope, organizational structure, risk management and AC. The assessment was in terms of changes in the internal audit department over a ten-year time frame.	Found a definite shift in the role of internal audit towards more operational activities; the new internal audit definition reflected current practice.

Table II. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Melville (2003)	Survey	154 internal auditors from the US (94), Canada (34) and the rest of the world (28)	Examines the role of internal auditors in strategic management, in particular their Use of the Balanced Scorecard.	Internal auditors make a positive contribution to strategic management and are actively involved in the development of strategic objectives.
Schneider (2003)	Experimental questionnaire	172 US Internal Auditors	Exploratory study that attempts to determine whether incentive compensation and stock ownership affect internal auditors' objectivity. This is assessed through the internal auditors' decision on whether to report a GAAP violation.	Stock ownership did not affect the internal auditors' reporting decision. When incentive compensation was tied to stock prices a significantly higher percentage of internal auditors would not report the GAAP violation than when the compensation was tied to earnings or when it was fixed salary.
Paape, Scheffe and Snoep (2003)	Survey	105 Chief Audit Executives from European companies	Examines the relationship between the internal audit function and corporate governance among the top listed companies in the European Union.	Not all top listed EU companies have an IAF or an AC. Less than half of the respondents report to the AC. ACs generally meet four times a year. ACs are not always involved in the appointment and dismissal of the CAE. A significant percentage of respondents (28%) believe they aren't required to adhere to the Standards for the Professional Practice of Internal Auditing. Not all CAE's were aware of CG recommendations/ regulations.
Selim, Sudarsanam and Lavine (2003)	Survey / interviews	22 companies from Europe and the USA	Determines the role of internal audit in mergers, acquisitions and divestitures. Used gap analysis to compare the normative, observed and preferred models of internal audit involvement in M, A & D.	Internal audit's involvement in M, A & D is only moderate. However, internal auditors see themselves capable of playing a larger role, a view supported by the senior executives in other functions.

Table II. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Ahlawat and Lowe (2004)	Experimental questionnaire	66 US Internal Auditors	Examines whether the consulting role of internal auditors impacts on their ability to remain objective.	Significant advocacy existed in the judgement of both in-house and outsourced internal auditors.
Van Peursem (2004)	Survey	161 New Zealand Internal Auditors	Determines if internal auditors perceive the functions they perform as essential and to what extent. Also explores whether internal audit exhibits the characteristics of a true profession with authority over, and independence from management.	Characteristics of 'true' profession exist but do not dominate. Public practice and experienced auditors may enjoy greater influence over management, and accountancy trained auditors may enjoy greater status.
Van Peursem (2005)	Multiple case study	6 New Zealand Organizations	Examines the New Zealand internal auditor role and conceptualizes on the auditor's influence over that role. Also addresses how an effective internal auditor can overcome the tension of working with management to improve performance while also remaining sufficiently distant from management in order to report on their performance.	Found three concepts of those that best balanced their role: the internal auditor's external professional status, the presence of a formal and informal communication network, and the internal auditor's place in determining their own role.
Arena, Arnaboldi and Azzone (2006)	Multiple case study	Six Italian companies	Comparison of internal audit practices in participating companies through multiple sources of information including semi-structured interviews with chief internal auditors, accounting and finance staff.	The range of situations considered highlighted the diversity of internal audit department characteristics, confirming the relevance of institutional pressures, but also providing evidence of the influence of additional elements in their development.

Table II. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Sarens and De Beelde (2006a)	Multiple case study / qualitative assessment	Five Belgian companies	Aims to understand the expectations and perceptions of internal audit and senior management with respect to each other through semi-structured interviews and supporting documentation.	Senior management's expectations have a significant influence on internal audit. Internal audit is able to meet those expectations, which makes senior management support them. In most cases internal audit is able to meet the expectations of the AC.
Selim, Woodward and Allegrini (2009)	Survey	94 UK/Ireland internal auditors and 298 Italian internal auditors	Aims to provide a comparison of the nature, extent and consequences of definitional change on internal audit consulting activities undertaken by UK/Ireland and Italian internal auditors	Found that internal auditors in both jurisdictions are involved in risk management and governance; UK/Ireland internal auditors are more involved in project management and disaster recovery while Italians are more involved with legislative compliance. There was mixed support for concern about whether involvement in consulting compromises objectivity.
Christopher, Sarens, and Leung (2009)	Survey	34 CAEs from Australian corporate sector	Aims to critically analyze the independence of the internal audit function through its relationship with management and the audit committee.	Threats to independence included considering the internal auditor as a “partner” with management.
Dickins and O’Reilly (2009)	Survey	99 CAEs from middle-market US Companies	Explores the extent to which publicly traded, middle-market companies employ high quality independent internal auditors in the post-SOX era.	Found that 89% of CAEs have compensation structures that include stock-based rewards or bonuses based on operating results.
Ahmad and Taylor (2009)	Survey	101 Malaysian internal auditors	Examines the effects of role ambiguity and role conflict on internal auditors’ commitment to independence.	Role conflict associated with consultancy and assurance services is not significantly associated with commitment to independence.

Table III.   **Roles of internal audit in enterprise risk management**
Core internal audit roles in ERM
• Giving assurance on risk management processes
• Giving assurance that risks are correctly evaluated
• Evaluating risk management processes
• Evaluating the reporting of risks
• Reviewing the management of key risks
Legitimate internal auditing roles with safeguards
• Facilitating identification and evaluation of risks
• Coaching management in responding to risks
• Coordinating ERM activities
• Consolidating the reporting on risks
• Maintaining and developing the ERM framework
• Championing establishment of ERM
• Developing risk management strategy for board approval
Roles internal auditing should not undertake
• Setting the risk appetite
• Imposing risk management processes
• Management assurance on risks
• Taking decisions on risk responses
• Implementing risk responses on management's behalf
• Accountability for risk management

Source: IIA (2009)

Table IV.
Internal audit's role in risk management

Authors	Method	Sample	Description of study	Results
Allegrini and D'Onza (2003)	Survey	52 Chief internal auditors of Italian listed companies	Examines the state of the art of internal auditing in large Italian companies, focusing primarily on risk assessment practices and the execution of a risk-based approach to internal audit	The study found that 67% of respondents provide some contribution to the risk management process.
Sarens and De Beelde (2006b)	Interviews	4 US CAEs and 6 Belgian CAEs	Describes and compares how internal auditors perceive their current role in risk management with US and Belgian companies	In the US cases, internal auditors provide valuable input to the internal a control review and disclosure requirements of SOX. In the Belgian cases, internal auditors play a pioneering role in the creation of a higher level of risk awareness and a more formalized risk management system.
Gramling and Myers (2006)	Survey	361 global Internal Auditors	Examines the extent to which internal audit functions adhere to the ERM roles recommended by the IIA.	Survey found internal audit's role in core ERM roles could be extended as it is less than the department would prefer. Also found that IA's involvement in inappropriate activities is greater than it should be.

Table IV. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Fraser and Henry (2007)	Interviews	5 UK listed companies and 'big four' audit firms	Examines mechanisms for the identification and management of critical risks and also identifies what the role of internal audit and the audit committee should be in risk management.	Found that internal audit did have a role to play in risk management. However, due to expertise and independence issues it is recommended a separate risk function should be set up. Also found AC are increasingly involved in risk management but also recommends a risk committee be set up with the time and expertise to direct risk management.
de Zwaan, Subramaniam and Stewart (2009)	Survey	117 Australian Certified Internal Auditors	Examines whether internal auditor involvement in ERM, and the relationship with the AC have an impact on perceived objectivity.	Found that internal auditor involvement in ERM negatively impacts perceived objectivity. The relationship between internal audit and the AC has only a marginal effect on perceived objectivity.

Table V.
Outsourcing and co-sourcing internal audit activities

Authors	Method	Sample	Description of study	Results
Caplan and Kirschenheiter (2000)	Analytical model		Uses agency theory to examine incentives for outsourcing the internal audit function to public accounting firms.	Found public accountants provide higher levels of testing, but possibly for a higher expected fee. This supports internal audit as the lower cost provider but the public accountant as a higher quality provider.
Selim and Yiannakas (2000)	Survey	165 UK Finance and/or Audit Directors	Examines the practice of outsourcing the internal audit function in the UK public and private sectors. Also examines how internal audit is perceived and the likely impact an outsourcing decision may have on auditors' independence and the quality of internal audit service.	Found that most organizations prefer an in-house internal audit function. The most important factor in seeking to outsource is access to specialized skills. Not all respondents believed independence to be compromised when internal audit is outsourced to the external auditor.
James (2003)	Survey	63 US Bank Loan Officers	Examines whether internal audit sourcing arrangement affects financial statement users' perceptions of ability of the internal audit function to prevent financial statement fraud.	No difference found in users' perceptions of financial statement fraud prevention between outsourced and in-house internal audit departments that report to the audit committee. An outsourced internal audit team is perceived as having greater competence and objectivity but their limited presence in the company limits their ability to protect against fraud.
Ahlawat and Lowe (2004)	Experimental questionnaire	66 US Internal Auditors	Examines whether the consulting role of internal auditors impacts on their ability to remain objective and whether an outsourced internal audit function is susceptible to client advocacy.	Found the extent of client advocacy was less severe in the case of outsourced internal auditors, as opposed to in-house auditors.

Table V. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Subramaniam, Ng and Carey (2004)	Survey	52 Australian Public sector entities	Examines the practice of outsourcing the internal audit function in Australian (Queensland) government entities.	The study found the practice of co-sourcing and outsourcing is common. The determinants of outsourcing primarily relate to non-financial reasons rather than financial. When the internal audit function is outsourced, audit committees play a key role in the outsourcing process.
Sharma and Subramaniam (2005)	Survey	87 Australian Public Listed companies	Uses Transaction Cost Economics perspective to examine the influence of several organizational-level variable on the decision to outsource or in-house their internal audit function. Also identifies the type of internal auditing (IA) services that were likely to be outsourced rather than in-housed, the extent to which incumbent external financial statement auditors participated in outsourced arrangements and the level of interaction between the internal audit provider and audit committee.	Only environmental uncertainty was found to affect IA in-housing. Further analyses into the different reasons affecting the level of outsourcing indicates that qualitative factors such as lack of technological know-how, service quality, goal congruence and unit-level communication and coordination issues may play a greater role in the managerial decision to outsource IA.
Gramling and Vandervelde (2006)	Experimental questionnaire	21 Internal Auditors and 23 External Auditors from US	Tests the influence of the source of the internal audit function, whether in-house or external, on both the internal and external auditors' evaluation of the quality of the internal audit function.	Found assessments of competence, work quality and overall quality were not influenced by the internal audit sourcing arrangement but that objectivity was. Specifically, they found external auditors rate the objectivity of an outsourced function higher than in-house while internal auditors rate the objectivity of an in-house function higher.

Table V. continued

Authors	**Method**	**Sample**	**Description of study**	**Results**
Carey, Subramaniam and Ching (2006)	Survey	304 Australian Listed Companies	Investigates the determinants of internal audit outsourcing.	Results suggest that internal audit outsourcing is associated with perceived cost savings and the technical competence of the external provider. Larger firms and smaller firms that are adopting internal audit for the first time are more likely to outsource.
Dickins and O'Reilly (2009)	Survey	99 CAEs from middle-market US Companies	Explores the extent to which publicly traded, middle-market companies employ high quality independent internal auditors in the post-SOX era.	Found that 77% of respondents outsource some internal audit work and 15% outsource more than half of the work. The frequency of material weaknesses in internal control is positively related to the amount of outsourced internal audit. The likelihood of reporting to the audit committee is negatively related to the extent of outsourcing.

Table VI.
Internal audit as a management training ground

Authors	Method	Sample	Description of study	Results
Goodwin and Yeo (2001)	Survey	65 Singaporean Internal Auditors	Examines whether the use of internal audit as a management training ground influences the independence and objectivity of internal auditors.	Found that the internal auditor function is used quite extensively as a management training ground. Some 32% of respondents believed that the practice could impair internal audit objectivity.
Selim, Sudarsanam and Lavine (2003)	Survey / interviews	22 companies from Europe and the USA	Determines the role of internal audit in mergers, acquisitions and divestitures. Uses gap analysis to compare the normative, observed and preferred models of internal audit involvement in mergers and acquisitions.	Found some companies established rotation programs whereby new employees were offered a rotation through internal audit as part of their training program.
Arena, Arnaboldi and Azzone (2006)	Multiple case study	6 Italian companies	Comparison of internal audit practices in participating companies through multiple sources of information including semi-structured interviews with chief internal auditors, accounting and finance staff.	Found that internal audit was seen as a training function in two of the six companies in their case study.
Sarens and De Beelde (2006a)	Multiple case study / qualitative assessment	5 Belgian companies	Explores the expectations and perceptions of internal audit and senior management with respect to each other through semi-structured interviews and supporting documentation.	Found in one case that the CFO expected internal audit to be a training ground for future potential managers, describing the function as a “fishing pond” of talented staff.
Christopher, Sarens and Leung (2009)	Survey	34 CAEs from Australian corporate sector	Aims to critically analyze the independence of the internal audit function through its relationship with management and the audit committee.	Found that, in 50% of cases, internal audit staff are transferred to management positions. In 60% of companies, employees remain in internal audit for less than four years.