

Antecedents and organisational performance implications of internal audit effectiveness: some propositions and research agenda

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Abstract

Purpose – This paper synthesises relevant theoretical and empirical literature to develop propositions and suggests a research agenda on the antecedents and organisational performance implications of internal audit effectiveness.

Design/methodology/approach – The paper employs institutional theory and Karl Marx’s theory of the ‘circuit of industrial capital’ to synthesize relevant internal audit literature to develop theoretically justifiable propositions and highlight an operational research agenda.

Findings – Propositions and a research agenda are provided on potential antecedents of internal audit effectiveness and its possible association with company performance measured as rate of return on capital employed. Also, key variables are identified and operationalisation issues discussed.

Originality/value – As the extant literature does not provide a canon of internal audit effectiveness, the paper’s originality is its argument that a positive association between compliance with standards for the professional practice of internal auditors and organisational goal achievement could serve as an approach to assess internal audit effectiveness. Furthermore, the use of the two theories in combination provides additional insights into identifying the antecedents of internal audit effectiveness and its measurement.

Paper type – Literature review, theory

Keywords: Internal audit effectiveness; institutional theory, Marx’s theory of the circuit of industrial capital, organisational performance; corporate governance, Marxist economics, Marxist accounting.

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INTRODUCTION

Internal audit has evolved to a stage where it is regarded as a value adding service to organisations (Al-Twajjry et al., 2003; Arena and Azzone, 2009; Bou-Raad, 2000; Enyue, 1997; J Goodwin, 2004; Moeller, 2005; Roth, 2000, 2002). The Global Institute of Internal Auditors (IIA) refers to this value adding prowess of the function in its latest definition of internal auditing (Institute of Internal Auditors, 2004):

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

It is apparent from the definition that internal audit (IA) is expected to play a value-adding role by providing a wide range of services that help improve organisational processes. The function’s role in corporate governance, through its services to the board of directors, has increased after the Sarbanes-Oxley Act (SOA) of 2002 (Antoine, 2004; Carey et al., 2006). That is, IA is purported to play a pivotal role in assisting organisations to comply with regulatory requirements. The foregoing definition and other literature (for example, Gramling et al., 2004; Yee et al., 2008) also suggest that IA contributes to accomplishment of organisational objectives by consulting the management and conducting operational audits. Based on a study of eleven US organisations, Nagy and Cenker (2002) indicate that the practice of IA has generally shifted towards what the above definition stipulates.

Internal audit could add value by helping organisations achieve economy, efficiency and effectiveness (Al-Twajjry et al., 2003) through consulting management and employees and assisting in the management of risk (Spira and Page, 2003). Thus it is argued that IA plays a value adding role not only by helping conserve existing value through prevention of wastage of capital (Marx, 1978, 1981) through fraud and inefficiency but also by improving operational processes. For example, the literature indicates that external auditors’ reliance on internal audit work is considered as an area where internal audit adds value through reduced external audit fees (Krishnamoorthy, 2001, 2002; Morrill and Morrill, 2003). Furthermore, consistent with Bryer’s (1999a, 1999b, 2006) Marxist perspective on accounting, IA can enable organisations to improve productivity of labour and increase the return on capital employed.

The validity of the notion that IA could add value to organisations rests on the implied assumption that *internal audit is effective*. Some of the limited literature in this area (for example, Al-Twajjry et al., 2003; Cohen et al., 2004; Mat Zain et al., 2006; Mihret and Yismaw, 2007), nevertheless, suggests that the function may not always be effective. Prior studies, some of which are informed by institutional theory (see for example, Al-Twajjry et al., 2003; Arena et al., 2006), show that the degree of IA effectiveness tends to vary with country- and organisation-level dynamics in an internal audit milieu (Mihret and Woldeyohannis, 2008; Yee et al., 2008)

Therefore, one approach to assess IA effectiveness could be by examining the extent to which the function meets its *raison d'être*, which is assisting organisations to meet objectives. Nonetheless, the association between internal audit effectiveness and organisational performance has not been empirically examined sufficiently so as to warrant a conclusion that empirical results conform to the definition of IA above. Moreover, although the existing literature (for example, Al-Twaijry et al., 2003; Cohen et al., 2004; Mat Zain et al., 2006; Mihret and Yismaw, 2007) suggests that IA may not always be effective, the antecedents of IA effectiveness appear not fully explored as yet. The limited prior research in this area also suggests that the extent of IA effectiveness is associated with country-level and organisation-specific dynamics prevalent in an IA setting (Al-Twaijry et al., 2003; Arena et al., 2006; Mihret and Woldeyohannis, 2008; Yee et al., 2008).

Some scholars have advocated future research on IA effectiveness and related issues. For example, Ruud (2003) called for research to examine national differences in the role of IA. Goodwin (2004) called for a study to examine variations in IA practices between government and private organisations. Furthermore, Anderson (2003) pointed out the need to identify organisational attributes influencing IA's ability to add value. Likewise, Coram et al. (2008) suggested the need to examine IA effectiveness from other perspectives than the hitherto dominant perspective of external auditors' perceptions. Also, Hermanson and Rittenberg (2003) called for research on the relationship of IA effectiveness with organisational performance. In response to these calls, this paper develops a theoretical framework for the study of IA based on institutional theory and Karl Marx's theory of the circuit of industrial capital as set out in Volume 2 of his *Capital* (originally published posthumously by Friedrich Engels in 1885 based on manuscripts written by Marx before his death). It then formulates some propositions on the relationship of IA effectiveness with a broad set of contextual antecedents and with organisational performance.

The rest of the paper is organised as follows. The next section outlines a critique of prior theories employed for IA research and suggests alternative theoretical basis. Section three develops propositions based on a critical synthesis of relevant literature. Section four discusses the outcome of the paper and offers a research agenda; then Section five concludes the paper.

THEORETICAL PERSPECTIVES

The limited IA research has mainly been based on neoclassical economic theories, for example, agency theory (Adams, 1994) and transaction cost theory (Spraaakman, 1997). In the present paper, it is argued that these theories may not sufficiently inform IA research in diverse contexts and from varied perspectives. This is because neoclassical economic theories make some assumptions that limit these theories' domains of application. For instance, the theories presume a developed market economic setting and large volume of transactions (Asechemie, 1997). However, sophistication of the market system and volume of transactions usually exhibit variations across countries (Reed, 2002; Wallace, 1999) depending on the

level of economic development. This situation limits the ability of the theories to inform internal audit research in a diverse range of settings. Moreover, the notion of market equilibrium is a core concept in neoclassical economic theories. Other perspectives, for example the Marxist approach, reject the notion of stable self-reverting equilibria (Hula, 1984, p. 200). The whole Marxist approach is based on the understanding that capitalism is beset with periodic overproduction and crisis.

Another central assumption of neoclassical economics is that organisational phenomena are driven by individuals' pursuit of maximising self-interest. Marxist and institutional theorists criticise this assumption (Hula, 1984, p. 195-6, 199) and they maintain that individuals' behaviours cannot be abstracted from the social settings in which individuals' actions take place. Therefore, neoclassical economic theories may not sufficiently explain IA's development and operation in varied settings. On the other hand, institutional theory (Barley and Tolbert, 1997) and Marx's theory (Avineri, 1971) recognise the importance of cultural and social determinations as a major influence on decision making. With this understanding, this paper suggests a combination of institutional theory (DiMaggio and Powell, 1983) and Marx's (1978) theory of the circuit of industrial capital as a useful basis for IA research.

Institutional theory

Institutional theory explains how organisational structures and practices are shaped through changes induced by institutional pressures. Institutional theorists consider organisations as members of an 'organisational field', which comprises several organisations or industries that are interrelated in some way. This interrelation is exhibited in the form of relationship of dependence of some form that leads some organisations to influence others. Barley and Tolbert (1997, p. 99) state 'institutions are historical accretions of past practices and understandings that set conditions on action'. DiMaggio and Powell (1983) argue that institutions result from the processes of 'structuration' that create structures. Structures are rules and resources that enable functioning of social systems (Giddens, 1984). DiMaggio and Powell employ the concept of structures to explain the relationships between institutions and individual organisations (1983, p. 148):

'Enterprises only exist to the extent that they are institutionally defined. The process of institutional definition, or 'structuration', consists of four parts: an increase in the extent of interaction among organisations in the field; the emergence of sharply defined inter-organisational structures of domination and patterns of coalition; an increase in the information load with which organisations must contend, and the development of a mutual awareness among participants in the set of organisations that are involved in a common enterprise.'

Structures are considered as the media as well as the products of agents' actions. That is, structures constrain actors' behaviours while they are at the same time shaped by actors' practices. Giddens (1984) calls this concept the duality of action and structure. Giddens also argues that agents gain power to control others due to asymmetries in power distributions. He defines control as 'the capability that some actors, groups, or types of actors have of influencing the circumstances of action of others' (1984, p. 283). This power is possible

because agents have resources at their disposal. The resources could be *allocative*, which are material in nature, or *authoritative*, which arise from agent's capacity to organise and coordinate social actors. The concepts of structuration are therefore useful to understand DiMaggio and Powell's (1983) institutional theory

DiMaggio and Powell (1983) explain coercive, mimetic and normative isomorphism that influence organisational structures and practices. Coercive isomorphism takes place as a consequence of organisational attempts to gain legitimacy; mimetic isomorphism occurs when organisations respond to uncertainty by emulating practices of other organisations; and normative isomorphism arises when institutional changes happen due to organisations' recognition of professions. Institutional theory also explains that organisations sometimes engage in decoupling; that is, actual organisational practice may differ from what external façade of an organisation suggests. This phenomenon enables organisations to appear conforming to stakeholder expectations, thereby legitimising their practices (Meyer and Rowan, 1977). Some prior studies (for example, Al-Twaijry et al., 2003) employed this concept of decoupling to interpret variations between the actual practice of internal audit and the standard of work contained in the professional standards for the practice of internal audit.

Scott (1987, p. 493) supports DiMaggio and Powell's (1983) arguments by showing that institutional theory can explain how the 'means' and 'ends' of organisations change due to the impacts of governments and professions. In this line of thinking, internal audit fits into the 'means' and hence is arguably shaped by the influences of governments and professions. Similarly, Zucker (1987) explains institutional theory from the perspectives of isomorphic pressures on organisations. However, Zucker regards only mimetic and normative pressures as having the impact of institutionalisation. She considers coercive pressures as 'de-institutionalising' on the grounds that government imposition suggests existence of attractive alternatives for organisations to follow. The difference in Zucker's view and that of DiMaggio and Powell could be explained by the differences in their ontological perspectives to institutionalisation. While Zucker appears to consider institutionalisation as a process that is initiated by a motivation from within organisations, DiMaggio and Powell's view considers the impact of external pressures as well.

Institutional theory could inform research at different levels of units of analysis, that is, at the level of individual organisations, industries or other collectives (Barley and Tolbert, 1997). The theory is considered appropriate for IA research because it explains organisational phenomena without assuming a limited set of organisational goals; that is, without necessarily limiting the scope to profit seeking organisations. This theory could also inform IA research in countries with diverse stages of development of the market system. Many developing countries have either systems characterized by less developed market economy (Reed, 2002; Wallace, 1999), or—like the countries of the former Soviet Union and the countries of Eastern Europe—have emerged from communism only in the past 20 years (Yee et al., 2008).

Furthermore, prior research indicates that the influence of government (as compared to the impact of market forces) on the development of internal audit tends to be substantial in some countries (see for example, Al-Twajjry et al., 2003). Institutional theory could, therefore, enable a study of internal audit from diverse perspectives compared to the limited and limiting principal-agent (shareholder-manager) focus of agency theory. Moreover, prior research suggests the validity of this theory for internal audit research in the contexts of both developing (see example, Al-Twajjry et al., 2003) and developed economies (see example, Arena et al., 2006; Arena and Azzone, 2007).

Institutional theory has several implications relating to the possible context-dependence of IA effectiveness. For example, in organisations that are exposed to high risk, one might expect mimetic pressures to contribute to the development of IA. This is because organisations, as part of their efforts to manage risk, may establish IA departments by emulating practices of other organisations. This suggests a positive association between level of risk exposure of an organisation and internal audit effectiveness (Goodwin-Stewart and Kent, 2006). Likewise, the focus of internal audit as assurance or consulting might differ between government and private sector organisations (Carcello et al., 2005). Furthermore, professionalisation (of the accounting profession) may exert different levels of impact on the advancement—or otherwise—of internal audit across institutions (Al-Twajjry et al., 2003; Al-Twajjry et al., 2004; Albrecht et al., 1988; Carey et al., 2006; Yee et al., 2008).

Marx's theory of the circuit of industrial capital

Marx's (1978) theory of the 'circuit of industrial capital', outlined in the first chapter of Volume 2 of *Capital*, is brought into the accounting literature by Bryer (1999a, 1999b, 2006). Bryer highlights investors' pursuit of 'surplus-value' from capital and explains the role of accounting as an accountability mechanism in this pursuit. Marx explains capitalist production as aiming at the 'self-valorisation' or self-multiplication of capital, which signifies increasing capital by continuously generating surplus-value (profit) over time. The capitalist creates value by using capital to buy commodities and then transforming them to other commodities for sale at higher prices.

Marx presents this process in a circuit of industrial capital: $M—C—M'$, where M is the original capital invested, C represents commodities purchased for input into production and then M' is the money generated by selling the commodities produced. This simple circuit is expanded as $M—C \{MP, LP\} \dots (P) \dots C'—M' = M + \Delta M$. That is, the commodity bought as input comprises the means of production, MP , and labour power, LP . The means of production and labour power are used in the production process, P , to produce the new commodities C' that are to be sold for a higher price, M' , than the original capital invested, M . The difference between M' and M (that is, ΔM) is surplus-value, which the valorisation process aims to continuously maximize (Foley, 1986).

In explaining the role of accounting in labour control process, Bryer (2006) uses the concepts of 'formal' and 'real' subsumption of labour which Marx explained in the Appendix to

Volume 1 of *Capital* (Marx, 1976, p. 948-1084). Formal subsumption of labour applies to the early stage of capitalism, whereas real subsumption relates to advanced capitalism. When labour is formally subsumed by capital, it is only held accountable for the means of production and the production of commodities “as things” (Bryer, 2006, p. 563). On the other hand, under ‘real subsumption’, as in advanced capitalism, labour is also held accountable for increasing the rate of return on capital employed, which indicates successful surplus-value creation and realisation, or the use of capital to create more capital (Bryer, 2006, p. 562-4).

Bryer (2006) argues that accounting control systems serve to ensure accountability in the value creation process. He maintains that financial accounting serves to ensure accountability of senior management to the capitalist and management accounting serves to ensure accountability of workers to management (through the chain of command). *Internal audit could be viewed, from this perspective, as an important element of labour process control.* IA is of benefit to organisations by providing traditional assurance services and conducting performance/operational audits. While assurance audit helps prevent and detect irregularities that result from mistakes or fraud, operational/performance auditing helps enhance economy, efficiency and effectiveness of operations (Al-Twajjry et al., 2003; Allegrini and D’Onza, 2003).

Therefore, Marx’s theory illuminates the concept of value and arguably serves to explain internal audit’s possible role in organisations not only as an assurance-based control mechanism but also as a forward-looking, value adding service that maximises the rate of return on capital employed. Assurance services of internal audit play an important role in corporate governance by strengthening the accountability of management to board of directors (Gramling et al., 2004; Yee et al., 2008) (and thus to shareholders) and enhancing worker accountability to management. As IA’s roles in this regard include enhancing the quality of reported earnings (Cohen et al., 2004; Cohen et al., 2002; Gramling et al., 2004), IA arguably helps improve the accuracy of the reported return on capital employed (ROCE). This reasoning is consistent with that of Shleifer and Vishny (1997) and Doidge et al. (2006) who view corporate governance as a means by which shareholders ensure that management generates the desired ROCE.

Thus, consistent with Bryer’s (1999a, 1999b, 2006) line of thinking, which considers accounting as a framework for other organisational control mechanisms, it could be argued that IA is embedded in the broader accountability framework of organisations. Bryer (2006) argues that owners of businesses invest in machinery and systems of control to increase the productivity and intensity of labour to achieve their overriding aim of maximising the rate of return on capital. Operational auditing, assisting in the management of risk, consulting the management, and the prevention of fraud and other wastage of capital (Marx, 1978, 1981) are directly related to increasing the rate of return on capital. IA could be considered as rightly placed in the control process to serve the interest of shareholders. It contributes to the mitigation of wastage of capital (Marx, 1978, 1981) by deterring fraud (Raghunandan and Mchugh, 1994) and providing consulting services on the efficient and effective use of

resources (Al-Twaijry et al., 2003; Yee et al., 2008). By doing so, IA can help management to increase ROCE in businesses and enhance efficiency and effectiveness in public sector organisations as well.

From the Marxist perspective, therefore, IA arguably serves a useful function by helping maximize ROCE as well as enabling a society to achieve socially desirable goals such as mitigated fraud and corruption, and reduced wastage and devaluation of capital. In the developing country context, IA can contribute to poverty reduction and improved living standards by limiting the wastage of capital (and surplus-value) from fraud, inefficiency, corruption or theft. Yee et al. (2008) argue, from a predominantly Marxist economic theory perspective, in their empirical study of the role and effectiveness of IA in Singapore that internal audit is important in the prevention of wastage and devaluation of capital from fraud, corruption, and inefficiency. Capital that wastes is unable to earn the required ROCE. Marx commented in Volume 3 of *Capital* (Marx, 1981) that, in the competitive struggle between rival capitalist firms, efficient businesses will see their capital maintained in times of crisis whilst inefficient businesses will see their capital waste or devalue either in whole or in part. As Marx (1981, p. 360-2) writes, due to equilibrating mechanisms in the economy, profitability is effectively 'spread around' across firms. By contrast, if a firm suffers and dies it dies alone. Internal auditing, therefore, could assist a firm to remain competitive and maintain or increase its capital. At a societal level, strong IA, through its consulting services to management, arguably allows a society to channel capital into areas where it can yield an acceptable rate of return rather than into areas where it will waste or devalue. IA then has macroeconomic as well as social justice implications that the existing literature, with its narrow agency-theory (single firm) focus, has generally failed to appreciate.

In contrast to Bryer's (1999a, 1999b, 2006) view, Alawattage and Wickramasinghe's (2008) study of a Sri Lankan tea plantation illustrates that cultural and political hegemony is more important than accounting in labour process control. Similarly, Ezzamel et al. (2007), using China as a case in point, indicate that the mode of production influences accounting's role. These contrasting observations suggest that the role and effectiveness of IA could vary across settings. It also provides part of the justification to consider triangulation of theories.

Linking institutional theory and Marx's theory

The use of the two theories in combination enables considering social aspects of organisational dynamics as assumed by Barley and Tolbert (1997), and the economic dimensions of organisational phenomena. In this paper, while Marx's theory is mainly employed to understand economic motives for organisational phenomena, institutional theory informs the analysis of social aspects of organisational dynamics. Therefore, it is necessary to assess the compatibility of the two theories when used in combination. These theories originated from political economics and thus share similar foundations. This origin enables a study of organisational phenomena as embedded in broad social, political, and economic settings (Deegan, 2006; Hardy, Ballis, and Lacobs, 2007). The Marxist approach is also considered one of the origins of institutional theory (Scott, 2004). Beyond this general

similarity of the two theories, the rationale for employing the two theories in combination [1] is that they reinforce each other's arguments.

Marx's approach as used in this paper emphasises the economic aspects of organisational phenomena without ruling out the impact of social and institutional forces (Bryer, 2000). At a societal level, Marx (cited in Harman 1998, p. 9) states, the pursuit of surplus-value made the feudal mode of production to give way to semi-capitalist forms and semi-capitalism to fully fledged capitalism. Marx, cited in Harman (1998, p. 9) stated:

'In acquiring new productive forces, men [sic] change their mode of production; and in changing their mode of production, in changing their way of earning a living, they change all their social relations. The handmill gives society with a feudal lord; the steam mill society with an industrial capitalist.'

The quote suggests the importance of historical and social perspectives in understanding organisational phenomena. In addition to this general view of Marx on changes at societal level, his view on a capitalist organisation focuses on organisation level dynamics. The micro-economic view of Marx does not preclude social and cultural determinations on organisations (Foley, 1986). As Foley (1986, p. 1) explains:

'... the phenomena he [Marx] discusses cannot be understood independent of the history that produced them. This approach contrasts with the view that phenomena will tend to reassert themselves regardless of historical context. He sees the relations he is studying as being in a constant process of change, not just unchanging elements undergoing some rearrangement. Thus, Marx's aim is not to state universal principles that explain human and social interaction once and for all but to understand the regularities that govern the changes in specific social formations.'

As the quote explains, Marx's approach considers the importance of historical and social aspects to changes in organisational phenomena. Similarly, institutional theory underscores the importance of historical and social dynamics in shaping institutions (Barley and Tolbert, 1997). To appreciate the link between institutional theory and Marx's theory, it is necessary to understand the relationship between the ideas of 'young' and 'mature' Marx. Mature Marx's views are mostly interpreted as deterministic and those of young Marx are mostly interpreted as having a social aspect (Foley, 1986). This line of thought owes much to French Communist Party theoretician Louis Althusser (2005, p. 13, 33) who argued that an 'epistemological break' around 1845-1846 separates Marx's earlier 'ideological' work from his later 'scientific' work (Leung and James, 2010, p. 108). However, Foley (1986) and Ollman (1976) argue that Marx's thoughts need to be seen as one corpus rather than as having this kind of distinction. For example, the young Marx's early theory of alienation is subsumed within, rather than negated by, his later theory of surplus-value even though *the term* 'alienation' is not used by the mature Marx (Leung and James, 2010, p. 109). Therefore, Marx's theory of the circuit of industrial capital is considered in this paper as having both economic and social dimensions (Avineri, 1971) although the theory relates to the works of the mature Marx.

The concept of institution as applied in institutional theory refers to an ‘organisational field’, which comprises several organisations or industries. Thus, it could be argued that while Marx’s thinking on society focuses on changes in society at large, institutional theory concerns changes in parts of society as well. Despite a dominant focus on cultural aspects, institutional theory also recognises the importance of efficiency motives causing institutionalisation (DiMaggio and Powell, 1983). As Barley and Tolbert (1997, p. 94) maintain:

‘... institutional theorists acknowledge that cultural constraints do not completely determine human action. ... Rather, institutions set bounds on rationality by restricting the opportunities and alternatives we perceive and, thereby, increase the probability of certain types of behaviour. However, just as perfect rationality is rare, so too is completely bounded rationality. Through choice and action, individuals and organisations can deliberately modify, and even eliminate, institutions.’

Owners of capitalist firms determine the goals of their organisations, this goal being creating surplus-value. Marx’s theory can inform this rational aspect of organisational phenomena, without precluding the impact of social determinations (Bryer, 2000, p. 453). While owners are a group of actors, there are other actors (for example, employees, government, the management, and other components of society) that influence the structures and practices of organisations. Thus a theoretical perspective that combines Marx’s theory and institutional theory arguably enables a holistic understanding of internal audit as part of organisational systems and illuminates the link between internal audit and organisational goal achievement.

Employing a combination of the two theories in a theoretical framework is beginning to appear in empirical research. For example, Vidal (2009) employed this approach to study institutionalisation of lean production in US manufacturing firms. As Vidal (Vidal, 2009, p. 1) maintains:

‘The manufacturing environment is constituted by interwoven technical and institutional pressures, as well as embedded organisational relations that generate institutional space for variation in organisational performance. Inside the factory, managers, who must strategically interpret and react to multiple environmental pressures, seek to alter workforce routines in pursuit of operational goals and ultimately to extract labour effort sufficient to achieve a satisfactory profit rate.’

Vidal argues that the pursuit of surplus-value underlies the institutionalisation process in competitive environments. This notion implies that institutional and Marxist theory arguments can inform studies of organisational phenomena. With this understanding, the present paper employs these theories to develop propositions on antecedents and organisational performance implications of IA effectiveness.

LITERATURE REVIEW AND PROPOSITIONS

The role and effectiveness of internal audit

The role of internal audit has been transforming along with changes in its environment. McNamee and McNamee (1995) sketch three major phases of transformation in the history of internal audit (IA). Pre 1940s, IA was mainly focused on checking propriety of transaction

and records. In the 1940s, the development of information economy based on the concept of systems caused the emergence of modern IA with a systems evaluation approach. In this phase, IA has been concerned with checking compliance with policies and procedures. Then, since the 1990s, another wave of transformation led IA to be viewed as a value adding service with a broader scope of activities including assisting organisations in the management of risk.

Similarly, Spira and Page (2003) explain contemporary IA's shift in emphasis as a result of pressures on organisations. They argue that these pressures caused changes in responsibilities of boards of directors, management, and external auditors. Various corporate governance initiatives in the USA and the UK brought about a change in the meaning of internal control to incorporate the management of risk. For example, Committee of Sponsoring Organisations (COSO) framework's definition considers internal control as aiming to provide assurance regarding efficiency and effectiveness of operations, reliability of financial reports, and compliance with applicable laws and regulations (Committee of Sponsoring Organisations, 1992). Such changes created opportunities for IA to provide consulting services to management and assist boards of directors to manage risk.

Furthermore, the meaning of risk has evolved and the scope of internal control has broadened to incorporate the aim of achieving organisational efficiency and effectiveness. The shift in top management responsibility about internal control from compliance with policies to a focus on important risks put IA at advantage. Management took responsibilities for internal control systems and board of directors' responsibility expanded to incorporate organisational prosperity as well as accountability to shareholders. This gave internal auditors advantage over external auditors. As a result, IA grew a pre-eminent position as advisers to the board of directors although the tension remains between the consulting role of IA and the need for IA independence (Spira and Page, 2003).

Internal auditors' endeavours toward professionalisation, under the leadership of the IIA, could also have helped redefine the scope of IA as necessary (McNamee and McNamee, 1995). This endeavour could further be seen in the lens of inter profession competition of IA with external auditing (Rittenberg and Covaleski, 2001). External auditors change in focus from a systems approach to a business risk approach coupled with their attempts to provide IA services on the one hand and societal pressure for external audit independence (following high profile corporate failures) on the other hand made IA an alternative mechanism to enter into the consulting arena (Spira and Page, 2003).

The Institute of Internal Auditors' (Institute of Internal Auditors, 2004) latest definition of internal auditing claims the broad scope and value-adding focus of the function. The definition and other literature (for example, Davidson et al., 2005) also present both assurance and consulting activities as key components of the IA function. Similarly, Al-Twaijry et al. (2003) and Albrecht et al. (1988) explain that IA can be of benefit to organisations by ensuring compliance to policies, rules, and regulations, which are largely of a financial nature, and by working in partnership with management to help improve

operations and manage risk. Although the value-adding notion of IA presumes that *IA is usually effective*, this is never guaranteed. In fact the literature suggests that IA effectiveness tends to be influenced by the contextual dynamics within which internal audit is practiced.

The literature also indicates contemporary IA's emphasis on a consulting approach as compared to 'traditional' IA, which has largely been assurance-oriented (Bou-Raad, 2000; J Goodwin, 2004; Roth, 2000, 2002; Yee et al., 2008). The assurance focus of internal audit promotes IA independence from management. On the other hand, the consulting paradigm advocates the notion that IA operates as a partner of management. Cooper et al. (2006) reviewed the Asia Pacific IA literature and concluded internal audit is shifting towards a consulting orientation in this region. Similarly, a review of European IA literature by Allegrini et al. (2006) and a similar work on the American IA literature by Hass et al. (2006) generally confirm this paradigm shift. Despite the general undercurrent about this paradigm shift, nevertheless, the empirical literature provides mixed results on IA's dominant focus.

For example, Hass et al. (2006) observed, although IA has generally shifted to a consulting approach, it tended to re-emphasize compliance audit following the enactment of the Sarbanes Oxley Act (SOA) (Congress of The United States of America, 2002). Also, Roth (2000, 2002) and Yee et al. (2008) documented evidence of a consulting approach to IA in North American and Singaporean organisations respectively. Yee et al. (2008) attribute their results to the Western-styled corporate sector and the well-developed external auditing profession in Singapore. Similarly, Allegrini et al. (2006) highlighted that IA was assurance-focused in some European countries. Furthermore, surveys of IA in Saudi Arabia (Al-Twajjry et al., 2003) and Belgium (Institute of Internal Auditors Belgium, 2006, cited in Allegrini et al. 2006) reported dominance of the assurance audit paradigm.

Al-Twajjry et al. (2003) consider compliance with the Standards for Professional Practice of Internal Auditors (SPPIA) as indicator of value adding IA. They explored IA practices of Saudi Arabian companies from an institutional theory perspective, taking a sample of 135 companies listed on the Saudi Stock Exchange. They used questionnaires and interviews to assess the extent of compliance of IA practices with SPPIA and found that there was a low level of IA effectiveness and value-added in Saudi Arabia. IA was mainly focused on checking reliability of financial record keeping and information, compliance with rules and regulations, and evaluation and examination of internal controls. The study found low levels of auditee cooperation in Saudi Arabian companies, particularly when the audit scope extended beyond the traditional areas. The authors argue that this situation led to low levels of implementation of IA recommendations. The study's results further suggest that internal audit may be sometimes *decoupled* in that the function may not operate in compliance with SPPIA despite stakeholders' expectations of compliance. In addition, they noted that the establishment of the IIA chapter in Saudi Arabia provided a normative isomorphic pressure for the development of IA in the country.

Similarly, Arena et al. (2006) and Arena and Azzone (2007) employed institutional theory for a study of IA in Italian companies. Arena et al. (2006) focus on the coercive isomorphic

pressure of stock exchange regulations influencing the development of IA. They describe and explain IA characteristics, activities, and levels of reporting in the context of the institutional settings in which companies operate. Specifically, they draw on recent developments in corporate governance requirements for listed companies in the contexts of USA, UK, and Italian stock exchanges. They characterise the regulations of SOA of the USA, the Turnbull Report of UK, and Italian regulations (namely, the Draghi's law, the Preda Code, and legislative decree number 231/2001). The authors observed variations in the three institutional settings pertaining to the degree of cooperation between the management and IA; influence from market competition; influence from professional bodies and consultants; and IIA's role in promoting the profession.

Arena et al. (2006) point out that institutional pressure on companies leads IA to take on a particular audit focus. They show that coercive pressures led IA to a financial audit focus and argue that the stock exchange rules and regulations substantially impacted on the development of IA in Italy. The authors identified three categories of firms they studied. In the first category were companies without internal audit as a stand-alone function. For this category, listing rules did not require having a separate IA function. The second category comprised companies with formal IA departments that mainly focused on compliance audits. Thus, in these organisations, IA was adopted as a result of institutional pressures. In category three, more focus was afforded to risk assessment and consulting. Nevertheless, assurance and financial audit were also within the domain of IA's services. Reasons for IA adoption in these companies went beyond a mere response to institutional pressures. In addition to meeting regulatory requirements, internal control assessments were aimed to improve processes and add value. There were frequent interactions of IA with audit committees; IA departments also reported to boards of directors and audit committees. In addition, audit committees tended to require further investigations on specific issues following IA findings. Arena, Arnaboldi and Azzone's (2006) findings are consistent with that of Carcello et al. (2002) which suggests that IA plays a prominent role in the internal control structures of organisations in regulated industries.

From a slightly different perspective, Yee et al. (2008) examined the role and effectiveness of IA in Singapore. They studied the perception of Singaporean managers on IA practice. Specifically, they identified whether IA is viewed as a partner with management or as a watchdog for routine compliance mechanisms. The authors argue that the importance of IA in organisations is increasing, and that the function can play a value adding role in modern organisations by expanding its scope of services to embrace operational areas. In contrast to Al-Twaijry, Brierley and Gwilliam's (2003) findings, Yee et al. (2008) found that Singaporean managers at the senior-level (but not mid-level managers) were generally satisfied with the proficiency and services of internal auditors. The authors link their findings with Singapore having a well-developed corporate sector and a strong external auditing profession. Thus the resulting experience and competence of Singaporean internal auditors means that they are better able to serve in a value-adding capacity than those in Saudi Arabia. Yee et al. (2008) maintain that Marx's framework explains how IA can assist management to meet its accountability to investors. The management is accountable for increasing ROCE

and IA not only assists management by enhancing timeliness and accuracy of reporting this rate but also by helping increase this rate. The dissatisfaction of mid-level managers in this study is interesting. It could be due to the recommendations of IA being ‘pushed through’ in an authoritarian manner and/or recommendations not fully understanding work-life realities on the factory floor.

Conclusions on the dominant or ideal focus of IA cannot be drawn from the exiting limited literature. This is because the scope of prior studies, except for Roth (2000, 2002) and Yee et al. (2008), is restricted to private sector companies. Also, the studies were not aimed at explaining variations in IA’s dominant orientation—and possibly in IA effectiveness. The evidence from the literature, nevertheless, suggest that IA effectiveness is possibly influenced by the context in which IA operates. Results of recent studies (for example, Arena et al., 2006; Arena and Azzone, 2009; Mihret and Woldeyohannis, 2008; Mihret and Yismaw, 2007) consolidate this notion of the possible context-dependence of IA effectiveness. Mihret and Woldeyohannis (2008) examined IA in an Ethiopian state-owned enterprise to identify factors that determine the value adding attributes of internal audit. They underscore that organisational goals and strategies and the level of risk exposure of organisations tend to shape the dominant focus of IA as either assurance or consulting. Mihret and Yismaw’s (2007) study in the same country context as Mihret and Woldeyohannis’ study indicates management support and internal audit quality as the major determinants of IA effectiveness.

The view of Albrecht et al. (1988) appears to explain differences in IA focus and suggests the context-dependence of IA’s value adding orientation. They conducted a study to identify factors that make IA to be perceived as effective by managers, IA directors, boards of directors, and external auditors. The study involved 13 best internal audit departments in the USA identified by the IIA. The results indicate that corporate environment, top management support, quality of internal auditors, and quality of IA work characterize effective IA. However, this result should also be interpreted in view of the results of Yee et al. (2008), which suggest that satisfaction with IA is likely to vary according to the level of management and there can be cultural tension in organisations between commercial and production worldviews.

Albrecht et al. (1988) stress the widening scope of IA to embrace a consulting role instead of a total de-emphasis of financial and compliance audit. They comment (1988, p. 3) that IA may be perceived as effective in both the consulting and traditional financial audit roles.

‘[...] At the onset of the project, the researchers anticipated that the roles of internal auditing could be conveniently grouped into “types” of audits performed, i.e., financial, operational, EDP, compliance or performance audits.

Moreover, the researchers assumed that highly effective audit functions would concentrate their efforts in their operational or performance audits, because these would benefit the company most. This proved fallacious. In fact, quite the contrary was true. In several of the companies reviewed, the audit departments were strictly financial audits, yet were evaluated as being very effective. The conclusion is that the critical issue is not the type of audit work performed, but rather that the audit work is

completely consistent with the objectives and role as determined by top management and the audit committee.’

This quote suggests that IA is considered effective when it is value adding regardless of whether its role is assurance or consulting oriented. This notion is supported by other literature (for example, Al-Twaijry et al., 2003; Arena et al., 2006) and is consistent with the IIA’s (Institute of Internal Auditors, 2004) definition of internal auditing. The definition embodies both consulting and assurance services of IA and stresses the necessity of IA’s value adding role as well as its contribution to accomplishment of organisational objectives. Therefore, it appears reasonable to consider that effective IA is characterised to a larger extent by a broad scope of services than a de-emphasis of financial and compliance audits. Under this broader scope, IA assists management in the management of risk and conducts operational, traditional financial, and compliance audits (Al-Twaijry et al., 2003; Albrecht et al., 1988).

Overall, it is apparent from the literature that IA is considered value adding when it is effective. The literature however indicates that there exist few generally accepted approaches to assess IA effectiveness as yet. Arena and Azzone (2009) summarize three approaches employed in the extant literature to evaluate IA effectiveness as: a) those using the level of implementation of internal audit recommendations; b) output or outcome measures (using opinions of internal audit customers, for example management); and c) process measures (compliance with Statements for the Professional Practice of Internal Auditing [SPPIA]).

Under the first approach, Mihret and Woldeyohannis (2008) compared IA reports of two periods to identify IA findings that were not repeated. They considered the percentage of non-repeated findings to total audit findings of an earlier audit period as a measure of implementation of IA findings, which they employed as an indicator of IA effectiveness. Similarly, Arena and Azzone (2009) used a four point scale to measure the extent of implementation of IA recommendations as an indicator of IA effectiveness. Arena and Azzone indicate as a limitation of this approach that it does not consider the type and quality of IA services provided. That is, the approach assumes that all audit findings are equally significant and that the service offer of IA is complete. In addition, when it is employed as in Mihret and Woldeyohannis (2008), it assumes that the audit findings that are not repeated in subsequent audit reports are implemented; however, this may not necessarily be the case. It could be that some recommendations simply prove too unpopular, costly or impractical to implement and are then quietly shelved and forgotten about. The second approach has a conceptual merit of considering IA’s customers’. This is a considerable advantage especially given that IA is expected to be customer-oriented. Nevertheless, it is difficult to operationalise this approach because backgrounds and experiences of IA’s customers are apparently diverse (Arena and Azzone, 2009).

Under the third approach, Al-Twaijry et al. (2003) employed compliance with Standards for the Professional Practice of Internal Auditing (SPPIA) as an indicator of IA effectiveness. This approach, which is adopted for the present paper, possibly offers a more comprehensive

set of IA effectiveness indicators. It also relates to the normative standards (IIA standards) that internal auditors are supposed to follow. SPPIA compliance arguably provides the best approach to measure IA effectiveness because it helps to examine IA systems and processes. This approach also helps to take into account the multi-dimensional nature of IA effectiveness, which appears to be lacking in the existing internal audit literature. That is, it helps measure IA effectiveness from several dimensions rather than using a single proxy measure. The literature on these measures is discussed in what follows. Major prior studies on IA effectiveness are summarized in Table 1.

(Insert Table 1 about here)

Independence and Objectivity

Raghunandan and Mchugh (1994) consider IA effectiveness as a function of independence and objectivity. Objectivity is considered essential for internal auditors' proper discharge of responsibilities (Christopher et al., 2009). Internal audit's independence from the units being audited has been regarded as a surrogate for objectivity. The IIA stresses this need for independence when it recommends that the IA function report to the highest level of authority in the organisation (Institute of Internal Auditors, 2004). Mat Zain et al. (2006) point out that audit committees could enhance IA effectiveness. Reporting to and having frequent meetings with audit committees contribute to internal auditors' objectivity (Cohen et al., 2004; Jenny Goodwin and Yeob, 2001; Mat Zain and Subramaniam, 2007; Raghunandan and Mchugh, 1994; Scarbrough et al., 1998). Mat Zain, Subramaniam and Goodwin's study also indicates that audit committees assist in enhancing management action on IA recommendations. Similarly, based on a study of Singaporean companies, Goodwin and Yeob (2001) suggest that IA interaction with audit committee enhances IA independence and objectivity. Furthermore, they find that organisational size is associated with independence and objectivity.

Internal auditors' objectivity is also enhanced when a board retains the authority to hire and fire an IA director (Raghunandan and Mchugh, 1994) and when it reviews IA's plans and performance (Scarbrough et al., 1998). Thus, although complete independence is literally impossible because internal auditors are organisational employees, an independent frame of mind is essential. This should manifest itself in IA's ability to make the 'tough' recommendations without fear or favour.

Another substantial body of literature concerning the relationship between IA and the board of directors also explains internal audit's corporate governance role. Gramling et al. (2004, p. 194) underscore the importance of IA in enhancing quality of corporate governance. They view IA as a cornerstone of corporate governance that 'serves as a resource to each of the other three parties [2] responsible for corporate governance' (p. 194). Gramling et al. consider IA quality as a measure of the value of this resource. Similarly, Cohen et al. (2004) explain IA's essential position in corporate governance. Furthermore, other literature (for example, Antoine, 2004; Carey et al., 2006; Christopher et al., 2009) indicates that the enactment of the SOA following the major financial reporting scandals affirmed the

importance of IA in corporate governance. Independent and objective IA could help enhance quality of reported earnings (Cohen et al., 2004; Cohen et al., 2002; Gramling et al., 2004) and possibly minimize earnings management (Davidson et al., 2005).

Under the SOA, New York Stock Exchange listed companies are required to maintain IA that provides assistance to the audit committee in risk management and ensuring sound internal control (Gramling et al., 2004). IA contributes to financial reporting quality and fraud prevention (Beasley et al., 2000; Cohen et al., 2004). Independence of the IA director from management determines the nature of IA work and its corporate governance role (Miguel and Govindarajan, 1984). Furthermore, from Marx's (1981) perspective, internal auditing helps prevent capital from remaining in loss-making areas and assists in detecting fraud (Yee et al., 2008).

IA Proficiency

The IIA's Standards for Professional Practice of Internal Auditing (1210-Proficiency), require that internal auditors possess the knowledge, skills and competencies needed to conduct an audit (Institute of Internal Auditors, 2008). Technical competence and continuous training are considered essential for effective IA. Consistent with this thinking, Gramling and Meyers (1997) find that certification of internal auditors is perceived as an indicator of IA's competence. Also, Al-Twajry et al. (2003) argue that internal auditors could not have power unless they possess the necessary competencies. Given the broad scope of contemporary IA, an IA department should employ internal auditors with a variety of skills to be able to undertake audits beyond the audit of financial activities (Flesher and Zanzig, 2000).

Furthermore, Butt (1988) and Libby and Frederick (1990) suggest the importance of auditor experience in enhancing auditors' knowledge. Similarly, Bonner and Lewis (1990) consider years of experience as an indicator of auditors' knowledge and expertise. Although these authors focused on external audit, the concept of expertise applies equally to internal auditors. This is because internal and external audit share a common body of knowledge and largely possess similar competencies (Krishnamoorthy, 2001).

Scope of work and performance

The scope and quality of work is another important factor that reflects IA effectiveness. Specifically, the sufficiency of internal audit's scope of work and the standard with which the audits are planned, executed and reported are important illustrations of effective IA (Al-Twajry et al., 2003; Albrecht et al., 1988).

Antecedents of IA effectiveness

The variations in empirical research results pertaining to the dominant focus of internal audit—highlighted in the preceding section—may arguably be explained by differences in context factors grounded in the environments in which the empirical evidence was produced. Following DiMaggio and Powell (1983) it is logical to argue that internal audit's role and effectiveness is possibly associated with the isomorphic pressures that could shape IA practices. Hass, Abdolmohammadi and Burnaby's (2006) review of the American internal

auditing literature supports this claim. They point out that the issuance of the SOA (2002) engendered internal audit's re-emphasis on assurance services. Consistent with this notion, Arena et al. (2006) provide evidence that in companies to which strict regulations apply, greater focus tends to be accorded to compliance audit. A key insight here is that both assurance and consulting approaches could arguably be considered value adding depending on the context (Roth 2002). Nonetheless, few detailed studies of the role and effectiveness of IA with inter-sector comparisons have been conducted as yet to explore variables associated with variations across organisations.

Goodwin (2004) compared IA in public and private sector organisations in Australia and New Zealand. She reported that IA's status and the tendency to outsource IA are higher in the public sector. Goodwin found little differences in IA activities and the extent of IA interaction with external auditors. She attributes the observed similarities in IA practices to the similarity of contexts in the two sectors resulting from public sector reforms in the two countries. This suggests the need for researching related issues in different settings—where the two sectors exhibit variations. Studies in such other settings arguably help identify country- and organisation-level contextual factors that possibly influence IA effectiveness.

Organisational category

The objectives, operating practices and stakeholders of organisations in different sectors could vary because different institutional pressures may apply in different sectors. For example, Jacobs (1998) suggests that value for money audit is influenced by institutional context. The type of business in which a company is engaged may also influence the type of internal control and the extent and type of professional advice that IA provides to management (Roth, 2002). As a result, the services required from internal auditors may differ by type of business. Goodwin (2003) highlights some differences in the relationship between IA and audit committees across sectors. Propensity to outsource IA and all the resulting issues are also likely to vary by sector (J Goodwin, 2004).

Company size

As the size of an organisation increases, the complexity of the necessary organisational controls as well as the regulatory requirements imposed on it are also likely to increase. Increased complexity and regulation may mean greater demands from internal audit regarding IA's services relating to the control systems of organisations (Arena et al., 2006). Consistent with this notion, Carcello et al. (2002) find that audit committees are likely to make reviews of IA results in large companies. They also note that large companies are likely to allocate more resources to IA activity.

Similarly, Goodwin and Yeob (2001) suggest that organisational size is associated with the variables that could impact on IA independence and objectivity. Furthermore, Raghunandan and Mchugh (1994) point out that company size is positively associated with the strength of internal control systems. Increased company size is also sometimes associated with a propensity to outsource IA to external auditors (Carey et al., 2006). Moreover, company size

is related to risk and it has been employed as a proxy to measure risk (Cheng and McNamara, 2000).

Risk exposure

Felix et al. (2001) find that availability of IA in an organisation depends on the level of risk. When organisations are exposed to high risk, management's demand for IA in the management of risk may be greater. IA's focus on risk management in turn enables it to align its plans with organisational goals and strategies (Selim and McNamee, 1999). As different organisations may be exposed to different levels of risk, the demand for IA services may vary accordingly (Arena et al., 2006). Goodwin and Kent's (2006) hypothesis of a positive association between business complexity and existence of IA in an organisation could also suggest that the level of risk in an organisation may influence IA practices. Likewise, Allegrini and D'Onza (2003) examined risk assessment and IA in Italian organisations and find variations in IA approaches among organisations.

Management support, auditee cooperation, and organisational policy

Management support to IA is considered as a determinant of IA effectiveness (Mihret and Yismaw, 2007). This support could, for instance, be by allocating adequate human and material resources to IA. It could also be by setting the overall tone in organisations that determines the level of cooperation of auditees to IA. The level of auditee cooperation in turn influences the extent to which IA properly accomplishes its objectives (Al-Twaijry et al., 2003; Mihret and Yismaw, 2007). Organisational policy authorising IA (for example, IA charter) is another potential influence that is closely related to management support and auditee cooperation (Mihret and Yismaw, 2007). The management also sets the overall policy setting that enables IA to garner authority in the organisation and thus gain auditees' acceptance.

Internal and external audit linkages

External audit impacts on the development of IA. Rittenberg and Covaleski (2001) analysed the dynamics underlying the issue of internalization versus externalisation of IA. They argue that external audit and IA engage in volitional behaviour which leads each profession to redefine its roles to encompass IA activities. The authors illustrated this notion with the AICPA's view of CPA firms providing IA services to their clients and the IIA's reaction by promoting the maintenance of the service in-house. This suggests that external auditors' interest to provide IA services impels the IA profession to improve its services with a view to preserving a separate professional status. This maps onto the argument that external audit provides a normative isomorphic pressure for the development of IA.

Furthermore, external audit assists the development of IA by serving as a market for recruitment of internal auditors (Al-Twaijry et al., 2003; Albrecht et al., 1988; Arena et al., 2006). Also, companies could establish IA by initially outsourcing the function to external

auditors (Carey et al., 2006). On the other hand, where organisations prefer to outsource IA services to their external auditors, establishment of IA could be delayed or its development attenuated. For instance, Yee et al. (2008) find that some Singaporean organisations did not establish IA because of reliance upon external auditors. The SOA banned non-audit services by external auditors (Quick and Warming-Rasmussen, 2005) and severely restricted internal audit outsourcing to external auditors (Abbott et al., 2005). This restriction could necessitate launching IA in-house. Furthermore, to determine the extent of their reliance on IA work, external auditors assess IA effectiveness. This reliance is also an area where IA adds value to organisations through reduced external audit fees (Krishnamoorthy, 2001, 2002; Morrill and Morrill, 2003). IA may therefore gain some feedback and improve its effectiveness when internal and external audit linkages are strong. This could be another possible normative pressure for internal audit's development.

In sum, it is apparent from the literature that context factors have the potential to shape IA practices. The literature has largely examined how these factors influence IA adoption. A logical step forward could be to see the implications of these factors and their interplay in shaping the extent of internal audit effectiveness. Therefore, consistent with institutional theory arguments, the following propositions are worth pursuing (the first part of Figure 1 shows these relationships between the propositions):

P₁. The pattern of contextual antecedents and the interplay among them shape the extent of internal audit effectiveness.

P_{1a}. Internal audit effectiveness differs in a systematic way between public sector and private-sector organisations.

P_{1b}. Managers of organisations that are exposed to high risk will greatly seek the support of internal audit and thus establish effective internal audit departments.

P_{1c}. Managers of large organisations will appreciate the support of internal audit in managing the complex setting and thus establish effective internal audit departments.

P_{1d}. The attributes of the linkage between internal and external audit can promote or constrain internal audit effectiveness.

(Insert Figure 1 about here)

Internal audit effectiveness and organisational performance

Effective IA is expected to help organisations achieve objectives (Dittenhofer, 2001). The IIA's (2004) definition also states that IA 'helps an organisation accomplish its objectives'. Similarly, IA's role in organisational goal achievement has been recognised in other literature (see for example, Gramling et al., 2004; Hass et al., 2006; Roth, 2003; Yee et al., 2008). Because assisting organisations to achieve objectives is apparently a central rationale for the existence of IA, examining the linkage between IA and organisational performance could be an alternate way of assessing IA effectiveness. Consistent with this notion, Hermanson and Rittenberg (2003) called for research on the relationship between IA effectiveness and

organisational performance. This possible nexus between IA effectiveness and performance of companies might be explained by employing Marx's (1978) theory of the circuit of industrial capital, which is outlined in section two of this paper.

As argued previously, following Bryer (1999a, 1999b, 2006) and Yee et al. (2008), Marx's (1978) theory of the circuit of industrial capital explains investors' pursuit of 'surplus-value' from capital and the role of control mechanisms designed to guarantee and further the achievement of that end. The theory illuminates the concept of value and arguably serves to explain internal audit's role in organisations not only as a compliance based control mechanism but also as a forward-looking, value adding service. Thus, increase in the rate of return on capital employed (ROCE) is used as an indicator of internal audit effectiveness. IA can assist in enhancing the quality of ROCE reported (Cohen et al., 2004; Cohen et al., 2002; Gramling et al., 2004) and help increase this rate through its operational auditing, assisting in risk management (Spira and Page, 2003), and preventing wastage of capital by deterring fraud (Coram et al., 2008; Raghunandan and Mchugh, 1994; Yee et al., 2008). By helping improve economy, efficiency, and effectiveness and providing consulting services on the efficient and effective use of resources (Al-Twaijry et al., 2003; Yee et al., 2008), IA could play a value adding role in public sector organisations as well. In addition, internal audit possesses the authority to report about management to the board of directors to enhance accountability of the former (Gramling et al., 2004; Yee et al., 2008).

Following the general undercurrent in the limited literature in this area and from the perspective of Marx's (1978) theory of the circuit of industrial capital, the following proposition is worth pursuing (Figure 1).

P₂. Organisations that have effective internal audit will exhibit greater achievement of organisational objectives.

Internal audit cannot be regarded as having completed its role unless its findings and recommendations are implemented (Sawyer, 1995). Therefore, management action on IA recommendations is considered vital for internal audit's contribution to organisational performance (Raghunandan and Mchugh, 1994). Consequently, management support for IA is considered essential to enhance IA's role in organisational goal attainment (Albrecht et al., 1988; Rittenberg and Covaleski, 2001). Thus the following proposition is worth pursuing.

P₃. Management's action on internal audit recommendations enhances the positive contribution of effective internal audit to organisational goal achievement.

Furthermore, it would be useful to study how internal audit was used in the communist era in the former Soviet Union and Eastern Europe and how effective IA (even if it was not called by that name) related to Communist-era measures of performance/ achievement.

DISCUSSION AND RESEARCH AGENDA

This paper argues that the dynamics in an internal audit setting influence IA effectiveness and that effective IA could be positively associated with organisational performance. The existing

literature shows that: a) although some prior studies have considered some contextual influences in isolation, a complete set of contextual antecedents of IA effectiveness and their possible interactions has not been fully explored; b) the limited literature largely focused on private sector companies in developed economies; and c) measures and theoretical bases of various concepts related to IA effectiveness, its antecedents, and contribution to organisational performance are not consistent or are at times not clearly identified. Thus, this paper has developed research propositions based on an approach that combines institutional theory and Marx's theory of the circuit of industrial capital. While institutional theory is employed to identify potential contextual antecedents of IA effectiveness, Marx's theory of the circuit of industrial capital is used to illuminate IA as a value-adding activity.

We emphasise the need to empirically examine IA effectiveness, within the suggested theoretical framework, to identify its potential contextual antecedents by further developing the propositions offered in this paper into research hypotheses. Examining the factors that influence IA effectiveness and the possible interactions among them is likely to bear fruit. This is because, as it is apparent from the literature, the contextual antecedents appear interrelated. Thus, the first proposition and the sub-propositions could be used as a starting point to formulate testable hypotheses. These propositions could also serve as a basis to develop research questions for more detailed qualitative inquiry. Such descriptive and explanatory studies would ultimately enable deeper understanding of IA practice and theory in relation to the 'what' and 'why' of IA practice. This understanding could help predict the direction of further developments of IA theory and practice.

Results of future research under such a paradigm are also expected to inform professional associations of IA to identify the focal point in their endeavours to design strategies for the development of the profession. Understanding of the motives for the establishment of IA departments, identification of the contextual forces that determine the focus of IA practice and understanding of the values that organisations seek to realize from investments in IA would help develop pragmatic approaches to further promote the recognition of the profession in contemporary organisational milieu. Institutional theory explanation for the formation of IA could enable deeper understanding of the types of services that management is likely to seek from IA. Specifically, the theory can help explicate the motives of management that lead to establishment of IA.

Although some literature (for example, Gramling et al., 2004; Institute of Internal Auditors, 2004) indicates internal audit's expected contribution to organisational goal achievement, this notion has not been empirically examined as yet. The present paper has argued that empirical examination of this notion would serve as an additional approach to assess IA effectiveness because assisting organisations to meet objectives appears a central rationale for the existence of IA. Therefore, P₂ and P₃ are expected to play a useful role by initiating this examination to see whether IA has reached a stage of development where its profile reflects on the extent of organisational goal achievement.

Such a study will help understand whether the current definition of IA and standards of professional practice exhibit empirical significance. Thus, P₂ is a typically suitable starting point to formulate a hypothesis in a quantitative study. Using proxies for performance such as ROCE, a positive association between IA effectiveness and company performance could be empirically tested. Such a study could also be conducted in public and other not-for-profit organisations by identifying appropriate measures of performance. The contribution of IA to performance of companies is expected to be determined by the extent to which management takes action based on internal auditors' recommendations. Therefore, studies examining the association of IA effectiveness with company performance need to consider the level of management's actions on IA recommendations as a moderating variable, for which P₃ could be used to develop and test a hypothesis.

CONCLUSION

This paper has attempted to provide a theoretical foundation for the study of IA effectiveness and its linkages to the context in which internal audit is practiced, and to organisational performance. The paper has employed institutional theory and Marx's theory of the circuit of industrial capital to synthesize the extant IA literature to develop some propositions as well as offer an operational research agenda. The review has argued that IA effectiveness is influenced by the dynamics prevailing in an IA setting. It is also argued that, as IA is aimed to assist organisations to achieve objectives, a positive association between internal audit's level of compliance with the standards for professional practice of internal auditors and with organisational performance could serve as an additional approach to assess IA effectiveness. As always, propositions developed in this paper need to be empirically tested to establish their validity. However, as has been pointed out above, empirical testing should not require the adoption of a hardcore positivist mindset or an exclusive focus on agency theory.

Endnotes

[1] Also, Sturgeon (1984) indicates that institutional theorists have been using the Marxist approach as one way of filling methodological gap of institutional theory. This is despite the fact that Sturgeon advocated inquiry within institutional theory rather than borrowing from other theories to fill the methodological gap.

[2] The other three parties are external auditors, management, and boards of directors.

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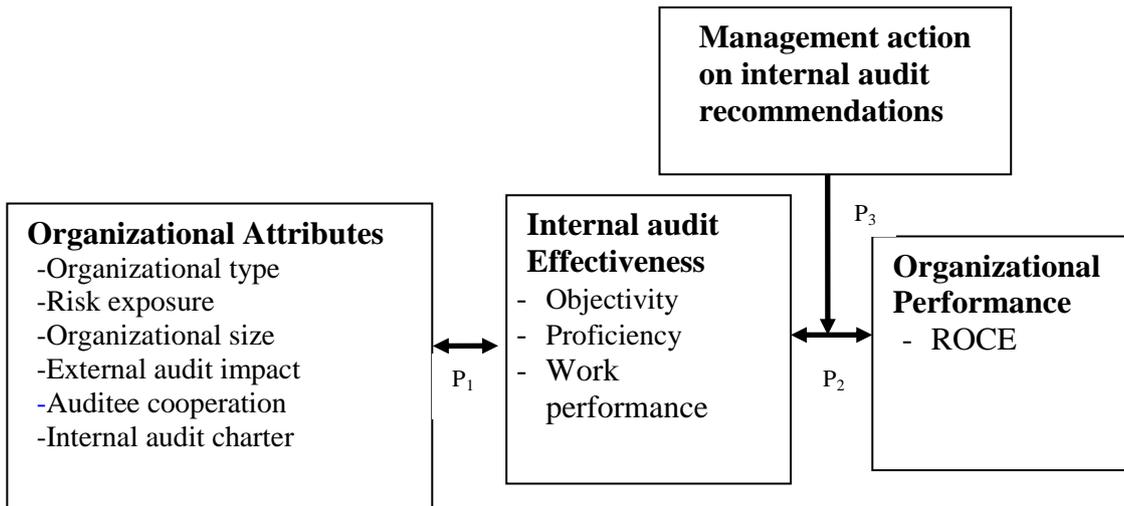


Figure 1 - Conceptual framework with propositions

Table I: Summary of key relevant literature on internal audit effectiveness

Study	Method	Sample	Study focus and findings/conclusions
Allegrini et al. (2006)	Literature review	N/A	This study is a review of the European internal audit literature. The review concludes that internal audit has shifted to a value adding orientation as contrasted with the traditional compliance orientation.
Cooper et al. (2006)	Literature review	N/A	This paper reviewed the internal audit literature of the Asia Pacific region. This study concludes that internal audit in the Asia Pacific region has shifted to a value-adding orientation.
Abdolmohammadi and Burnaby (2006)	Literature review	N/A	This study reviewed the American internal audit literature. The review concludes that internal audit in the USA has shifted to a value-adding orientation in general. However, the review also noted that after the issuance of the Sarbanes-Oxley Act (2002), internal audit has emphasized to a compliance approach.
Al-Twajjry et al. (2003)	Questionnaire survey and interviews	145	This study is survey of internal audit in Saudi Arabian companies listed in the Saudi Stock exchange. It also involved interviews with managers and external auditors of companies. This study employed compliance with SPPIA as an indicator of IA effectiveness. The study concludes that internal audit in Saudi Arabia is mainly compliance-focused. The study established the positive contribution that government brought about for the development of internal audit in the Country. It also noted the normative pressure of the IIA-Saudi Arabian Chapter.
Yee et al (2007)	Questionnaire survey	83	This study is a survey of managers of Singaporean organisations aimed at identifying the perceptions of Singaporean managers on internal audit services. It concludes that Singapore managers consider internal audit as a business partner. The study attributed this value adding orientation of internal audit in Singapore to the Westernized business environment of Singapore and the existence of well-developed external audit profession.
Albrecht et al. (1988)	Multiple Case study	13 cases	The study aimed to identify the factors that lead internal audit to be perceived as effective. It concludes that good corporate environment, top management support, quality of internal auditors and quality of internal audit work characterize effective internal audit
Arena et al. (2006)	Multiple case study	6 cases	The study examined the attributes of internal audit departments of companies listed in Stock exchanges with different characteristics. It concludes that the characteristics of the stock exchange in which companies are listed determine the orientation of internal audit.

Table I: Summary of key relevant literature on internal audit effectiveness (Cont.)

Study	Method	Sample	Study focus and findings/conclusions
Arena and Azzone (2007)	Preliminary in-depth case study followed by a questionnaire survey	230 companies	The study was aimed at identifying the adoption and characteristics of IA in Italian companies in the context of changes in the politico-economic setting. The results of this study affirm the diffusion of internal audit practices induced by isomorphic pressures. This provides additional evidence to those of Arena et al. (2006) and Al-Twajry, Brierley and Gwilliam's (2003) on the relevance of institutional theory for IA research.
Arena and Azzone (2009)	Questionnaire survey	153 companies	This paper examined internal audit in Italian companies to identify the determinants of internal audit effectiveness. They found that (a) internal audit team characteristics, (b) IA processes and activities, and (c) the organisational links influence IA effectiveness.
Goodwin (2004)	Questionnaire survey	120 organisations	This study aimed to identify differences between internal audit in private and public sector organisations in Australia and New Zealand. It reported that internal audit's status and the tendency to outsource internal audit are higher in the public sector. The study found little differences in internal audit activities and the extent of internal audit interaction with external auditors. The observed similarities in internal audit practices of the two sectors were attributed to the similarity of contexts in the two sectors resulting from public sector reforms in the two countries.
Mihret and Woldeyohannis (2008)	Case study	1 organisation	This study examined internal audit in an Ethiopian State-owned enterprise to identify factors that determine the value adding attributes of internal audit. They interpreted their results in view of Mihret and Yismaw's (2007) case study of a government organisation in the same country setting. The study concludes that organisational goals and strategies and the level of risk exposure of organisations could be potential factors that shape the dominant focus of internal audit as either assurance or consulting.
Mihret and Yismaw (2007)	Case study	1 organisation	This study aimed to evaluate the effectiveness of internal audit in an Ethiopian public-sector organisation and identify the factors that determine the level of effectiveness. The study concludes that management support to IA and IA quality as the major determinants of internal audit effectiveness.