

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
ZBW – Leibniz Information Centre for Economics

Mbelwa, Latifa; Lenatusi, Munyangabi

## Article

### Assessment of factors that influence management reliance on internal audit function : evidence from oil and gas companies operating in Tanzania

#### Provided in Cooperation with:

University of Dar es Salaam (UDSM)

*Reference:* Mbelwa, Latifa/Lenatusi, Munyangabi (2018). Assessment of factors that influence management reliance on internal audit function : evidence from oil and gas companies operating in Tanzania. In: Business management review 22 (1), S. 13 - 30.

This Version is available at:

<http://hdl.handle.net/11159/3397>

#### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

#### Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

<https://zbw.eu/econis-archiv/termsfuse>

#### Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

Open Access article distributed in terms of the  
Creative Commons Attribution License  
[CC BY 4.0] (<http://creativecommons.org/licenses/by/4.0>)

## ASSESSMENT OF FACTORS THAT INFLUENCE MANAGEMENT RELIANCE ON INTERNAL AUDIT FUNCTION: EVIDENCE FROM OIL AND GAS COMPANIES OPERATING IN TANZANIA

*Latifa H. Mbelwa<sup>1</sup> and Munyangabi L. L. Lenatusi<sup>2</sup>*

### ABSTRACT

*The study investigated factors that influence reliance by senior management over internal audit function in the Tanzanian oil and gas companies. The research applied positivism paradigm, and it involved 17 oil and gas companies operating in Tanzania Mainland. Forty-two (42) questionnaires were returned out of fifty one (51) which had been administered to Chief Executive Officers (15), Chief Finance Officers (10) and Members of Audit Committee (17). Data analysis was performed specifically to identify the modelling and relationships of both dependent variable (reliance of internal audit function) and independent variables (communication, independence, objectivity, competence, work performance). The study found that the senior management personnel (CEOs, CFOs and Members of the Audit Committee) were seen to have overall reliance on works of their internal audit functions whereas some differences were revealed between propositions on competence requirements in the oil and gas sector and non-oil sectors. The study further revealed lack of significant independence of internal auditor's function and interference of senior management in day-to-day operations of the internal audit department. The study generally recommends re-examination of the position of internal audit function in the studied oil and gas companies.*

**Key words:** internal auditor, internal audit function, management, oil and gas industry.

### INTRODUCTION

*Overview of Tanzania's oil and gas industry*

Tanzania has a reasonable history of exploration of oil and gas, with the first gas discovery at SongoSongo Island in the 1970s followed by other discoveries at Mnazi Bay (located in the southeast of the country, known as Ruvuma Basin), Mkuranga, and Kiliwani North. In 2010, Tanzania's growth projections were boosted substantially after the significant natural gas discoveries that confirmed the presence of 57 trillion cubic feet of natural gas and thereafter attracting more foreign investors. The Tanzania Petroleum Development Corporation (TPDC) has signed about 25 production-sharing agreements (PSAs) with 18 companies seeking to conduct exploration activities, both offshore and onshore. TPDC is a parastatal company established by law that is mandated with the role of promoting the development of the petroleum industry (Kapinga & Thorns 2013).

Emergence of the oil and gas industry in Tanzania has triggered the need to conduct research on accountability issues including operations of the watchdogs in those companies. Ndimbwa (2014) found that the Mtwara conflicts of 2013 had been fuelled by the peoples' lack of education on natural gas projects. The people were demanding that the government should establish development investments in Mtwara, and stop transferring natural gas by pipe line to Dar es Salaam. During this saga, the government was urged to avoid the use of force in handling the resistance. The findings from this study are important for the evaluation of the extent of transparency involved in the oil and gas industry in the Tanzanian context.

It was established by the study that the oil and gas industry is characterised by lack of transparency, and corruption for which the internal audit unit was established to mitigate (Shah, 2013). Bribery and corruption are becoming increasing concerns for businesses, and company executives and firms operating in the oil and gas

---

<sup>1</sup>Department of Accounting, University of Dar es Salaam Business School, P.O. Box 35046, Dar es Salaam, Tanzania. [latifambelwa@gmail.com](mailto:latifambelwa@gmail.com)

<sup>2</sup>National Audit Office of Tanzania (NAOT), P.O. Box 9080, Dar es Salaam, Tanzania  
Business Management Review 22 (1), pp.13-30 ISSN 0856-2253 (eISSN 2546-213X) ©Jan-June 2019 UDBS.  
All rights of reproduction in any form are reserved

sector are among those that have incurred significant penalties (Shah, 2013; Obioma, 2012; Donwa *et al.*, 2015). In its most recent Bribe Payers Index, Transparency International identified companies in the oil and gas sector as being perceived to be more likely to bribe than those in other sectors; it was in the bottom 25% of 19 sectors and those involved in such bribery activities were identified as top management who are likely to frustrate the IAD in their works (Makochekanwa, 2006; Donwa *et al.*, 2015; Edwik, 2007; Brempong, 2002; Obioma, 2012; Shah, 2013; Shaxson, 2007). Therefore, this study has used the Agency Theory, which is supplemented by the Stewardship Theory, Resources Dependency Theory and the Grounded Theory of manipulating legitimacy to study factors that senior management considers and the extent of the reliance over internal audit function in Tanzanian oil and gas sector.

The results of a well-functioning audit department towards reduction of corruption cannot be underrated, as Asiedu & Deffor (2017) and Khan (2006) discovered. They found out that internal audit departments (IADs) are reliable instruments for the detection of intentional errors and frauds. They also found that auditors are effective in reduction, if not elimination, of corruption. This has been largely facilitated by huge development in the internal audit function (IAF) in such a way that the profession has been transformed from merely inspecting and auditing financial and accounting operations to examining, inspecting and assessing all activities and operations of companies (Chekouri *et al.*, 2017; Šerbetar & Sedler, 2009; URT, 1980; Badara & Saidin, 2012; Donaldson & Davis, 1991; Van Slyke, 2007).

IAF has a significant contribution of strengthening internal controls hence becoming one of the key parts of corporate governance. Peurseem (2004) highlighted that internal audit functions are important because they are aggregated either in assurance or in consulting roles. ECIIA (2007) advocated that for internal audit functions to be value additive in organisations, they should ensure systematic and disciplined approach to evaluation, and improved effective risk management, control, and governance processes. On the other hand, internal audit functions have significant contribution on both fraud prevention and detection. Salisu (2014) pointed out that internal audit functions provide information that is useful for managerial decision making, identification of organisational strengths and weaknesses, ensuring best management of economic resources, assisting organisational social responsibility, minimisation of the organisational risks of losses especially financial, ensuring value for money in terms of efficiency, effectiveness and economy for their companies. This was also supported by Sawyer (2003) as he defined internal audit as the “eyes and ears of management”, and also advocated for expanding of IAF from merely examining financial records to investigating the entire companies’ operations in order to ensure that they are properly controlled and managed. The author also stressed the importance of IAD to have a secondary role of making recommendations to the management that lead to attainment of objectives that need some degree of independence from dishonest management behaviours (IIA, 2011; Donwa *et al.*, 2015). When providing assurance and consulting roles to internal audit functions and ensuring reliance of their reports, IADs have to ensure adherence to principles of competency, objectivity, independence, work performance, clear and effective communication during reporting, and well-structured scopes (Ardiana, 2014; IIA, 2017; IIA, 2009, 2012; Stewart, 2010).

The issue of independence has not been concluded in IADs because there is no autonomy on financial or human resources, and instead it is the management that supplies resources to IADs. The resource dependency theory (Pfeffer & Salancik, 2015) argues that the functions of the IADs are compromised due to over-dependence on resources from the management, who are primary auditees. The theory stipulates for the inefficient functioning and intimidation when one organisation depends on another in terms of resources. The department that is deprived of the resources will automatically be entirely controlled and its activities will be totally directed by the organisation. This kind of control is not desirable in IAFs and this study set out to find out whether or not senior management prefers IAFs to be independent.

Sarens *et al.*, (2010), Brown’s (1983), Schneider (1985a, 1985b), and Osama (2011) revealed that independence, competence, and objectivity are necessary factors for reliance on internal auditors; however, empirically most of these studies were not specifically conducted within the petroleum sector and were conducted in highly developed countries. It was also noted that these studies focused heavily on assessing reliance of internal audit function from external auditors’ perspective and in some cases did involve senior management who are primary auditees. Assessment of the reliance on internal auditors, with exclusion of senior management operational managers, accountants, board of directors and audit committees who are considered to be the subject of IAF examinations, leads to lack of objective conclusions (Azad, 2017). Osama (2011) tried to cover such methodological and empirical gaps by conducting a study on perceptions and evaluation of the Internal Audit Function in Libya’s oil and gas companies. It was revealed that independence and objectivity, competence, work

performance, integrity and effective communication are necessary ingredients of internal audit function in the oil and gas sector.

Schoorman et al. (1997) ) and Donaldson and Davis (1991) under the Steward Theory found that individual interests by management are aligned closely to organisations than owners and so management strives to collect resources and ensure organisational success. The link of Stewardship Theory and internal audit function is very clear. Badara (2017), Groff, Di Pietra, and Sitar (2016) argued that management as stewards are driven by self-interests and out of trust and therefore other stakeholders have to demand internal audit function for assurance. They further emphasised of the need to have internal audit function in order to ensure management, as stewards, maintains reasonable accountability mechanisms. On the other hand, Donaldson and Preston (1995) found that the Agency Theory focuses on shareholders as the only stakeholders of company affairs, which is not proper. The theory endeavour to explain damages that one part would suffer whenever there is information asymmetry between management and owners, if management attempts to benefit from an asymmetry of information. Power (1996), Sarens and Abdolmohammadi (2011) and ICAEW (2005) contended that internal audit functions and audit practices are effective tools for eliminating such information gap and therefore increasing assurance on whether agents are performing on the best interest of the owners.

There is also a mismatch between the perceptions of management towards internal audit function, as management expects an IAF to compensate for the loss of control and assist in designing of internal controls (Osama, 2011). However, the primary role of designing and establishing internal control rests in the hands of management; and the internal audit function is part of the internal control system (ECIIA, 2007; IIA, 2017; IIARF, 2014; IIA, 2009; Osama, 2011). Another professional dilemma in the internal audit function is the balance between consultative versus assurance role, since senior management prefers IAF to assume the role of consultants in relation to improvement of internal control systems; while audit committees and other stakeholders expect IAF to assume the assurance role such as detection and reporting of fraud and corruption (IIA, 2003).

The perception gap of management towards IAF is more amplified in the oil and gas sector, which carries substantial business risks, rapid changes in supply and demand, significant environmental risks and capital intensiveness (Mohammed, 2013; Adibo, Agbodohu & Kumi 2013). The sector is also characterised by long-term recovery, non-economic viability of wells, highly regulated operations and use of unconventional accounting methods. In the petroleum sector, there is no relationship between costs and underlying assets; also the matching concept is not adhered to as compared to conventional accounting methods. In traditional finance, dividend policy largely impacts on shareholders' wealth (Asquith & Mullin, 1983) and therefore high pay-out ratio creates a positive reaction to market share price (Azhagaiah & Priya, 2008).

In addition to theoretical shortfalls, the study conducted by Osama (2011) had both methodological and empirical limitations as it focused only on Libya, whose economy largely depends on the petroleum sector. Therefore, its conclusion and recommendations cannot be applied directly in other countries like Tanzania in which the sector is emerging and government institutions have no strong muscles to control the oil and gas companies (URT, 2016).

Due to the aforementioned methodological, empirical and theoretical weaknesses, the study sought to look at the Tanzanian situation as one of the developing countries with an infant petroleum sector and with insufficient research on internal audit functions in the private sector. Most studies regarding internal audit reliance in Tanzania (Masui, 2013; Mihret & Admassu, 2011) were conducted either in the public sector or in non-profit making organisations; therefore, their results cannot be replicated in the private sector, especially the petroleum sector. On the other hand, Azad (2017) and Mihret and Admassu (2011) found that external auditors have some reliance on the internal audit function in Sudanese banks, Ethiopian private sector, and United Arab Emirates, that signify same results in countries with similar economy to Tanzania.

From this theoretical and literature review, it is evident that reliance on the internal audit function is well explained by agency, Grounded Theory of manipulating legitimacy and the Resource Dependency Theory. Furthermore, literatures suggests that reliance on the internal audit function is the dependent variable that depends on independent factors such as independence, objectivity, competence, scope of works performed by the internal auditor, work performance, integrity and effective communication that are also confirmed by the results of this study. The study is further prompted by theoretical and empirical gaps due to the fact that most studies originate from non-petroleum sectors in developed countries, and from some countries with large experience in managing the petroleum industry. In this regard, the main research question was: *What are the*

*factors that senior management considers and the extent of the reliance on the internal audit function in Tanzania's oil and gas sector?* Senior management has been included in the assessment of the internal audit function as they have overall day-to-day responsibility of company operations (Änilane & Myreteg, 2015; Coetzee & Fourie, 2009) and have generally been omitted in previous studies when assessing accountability of internal audit reports (Azad, 2017; Christopher & Leung, 2009; Mihret & Admassu, 2011; Munro & Stewart, 2010).

The significance of the study lies on its theoretical, empirical and practical contributions. Practically, the article informs managers and those charged with governance on proper handling of the internal audit functions within the petroleum industry. Theoretically, the article creates knowledge on operationalisation for the theories mentioned earlier in the oil and gas industry, particularly on assessment of practical factors that management considers when relying on the internal audit function. Empirically, the article contributes knowledge to existing literature on internal auditors and provides avenues for further research.

## LITERATURE REVIEW

### *Theoretical and empirical review*

The study uses three main theories to understand the factors that senior management considers and the extent of the reliance on the internal audit function in Tanzania's oil and gas sector. The theories used are Agency, Resources Dependency, and Grounded Theory of Manipulating Legitimacy. The Agency Theory was first invented by Ross (1973) due to lack of rigorous studies on the principal agent relationship. The cornerstone of the theory is divergence of the interests between principals and agents, and due to differences between ownership and control (Daly, 2015; Jerzemowska, 2006; Lennox, 2005; Marcel, 2016; Steyn & Stainbank, 2013). There is no reason to believe that managers who serve as agents for owners will always act in the best interest of shareholders; therefore, it is important to establish huge incentives for agents and sometimes to incur monitoring costs designed to limit optimistic behaviour of agents (Heath, 2009; Kivistö, 2007). Owners face a trade-off between monitoring costs and forms of compensation that will cause the agent to act in owner's interest, with monitoring costs including establishment of the board of directors, law governing corporate body and most importantly an independent audit in form of either external and internal audits or both (Azad, 2017; Kivistö, 2007; Mustapha, 2014). It can be realised from the Agency Theory that owners (principals) try to minimise undesirable behaviours of agents (management); in other words, the auditor (whether internal or external) must be independent, competent and objective to inform owners on adverse behaviour of management that detracts shareholders' wealth maximisation (IIA, 2015; Mustapha, 2014; Badara, 2017; Thompson, 2013; Groff *et al.*, 2016). In this regard, there exists natural conflict between management and internal auditors (Potter, 2005; Power, 2000, 1996, 2000), and the Agency Theory was used to determine the degree of this conflict (perception) and explore factors that management would like the IAF to possess in order to achieve their desired organisational goals.

The Resource Dependency Theory argues that a given organisation will respond and become dependent on organisations or entities that control resources that are critical for its operations and that have a limited control. This dependence leads to external constraint and control over organisational behaviour. Emerson (1962) suggests that a given social actor 'A' is dependent on actor 'B' to the extent that B controls some resources or performance valued by A, and to the extent that A cannot obtain this resource or behaviour from alternative persons. For Emerson, such asymmetric dependence leads to asymmetric power relations between individuals. Hence, power is conceptualised as the obverse of dependence, i.e. to the extent that A is dependent on B, B has power over A. Following such dependencies, organisations' leaders attempt to maximise autonomy using various strategies e.g. altering the behaviour and structure of the organisation in a way that makes flow of resources more certain for their own take. The Resource Dependency Theory in this study considered the internal audit department (IAD) as a separate organisation whose management is in position to influence the nature and practice of the internal audit unit. The study explored the extent of truth embedded in this theory and whether the IAD is engulfed by opportunistic behaviour of senior management by limiting resources that flow to the department. The study further explored whether there are good working relationships between internal audit departments with senior management that influence reliance and subsequent consumption of internal audit reports for managerial decision making.

Mzenzi (2013) invented the Theory of Manipulating Legitimacy and defined manipulating legitimacy as the purposeful and deliberate techniques that were deployed to influence and control the reasonability of the organisation's operations, a process which ensures the availability of resources and the attainment of individual interests of the organisation's officials. Suchman (1995) regarded legitimacy as a "generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed

system of norms, values, beliefs, and definitions” (p.574). This definition of legitimacy subscribes to the view that legitimacy comes from the reactions and opinions of society as a whole, and not from individuals. For the case of oil and gas, company regulators tend to manipulate unfavourable conditions that exist in the particular organisation, compel management to influence, control, and falsify the appropriateness of company operations to the key stakeholders, such as the government and shareholders, in order to secure resources. Thus, manipulating legitimacy is a process used deliberately by management to overcome the operational difficulties through a variety of techniques (Mzenzi, 2013). The theory was used to explore whether adverse or good reliance of management towards the internal audit function are caused by effective functioning of the internal audit department (IAD) or are caused by natural conflict between management and the internal audit function due to optimistic behaviour of agents (management) towards maximising their own welfare.

Baffour and Wittbom (2009) revealed that independence, organisational status and objectivity are required for effective performance of the department. Sakour & Laila (2015) revealed that communication skills and management support largely influence task performance of the internal audit function. Furthermore, they revealed four factors, namely, independence, competence, scope of work and work performance as important factors that contribute to effectiveness of the internal audit function. Gabrini (2013), employing the Legitimacy Theory, argues that the theory is the best for studying auditing and accounting as it communicates legitimate information to both internal and external shareholders. In the study, he found that competence, independence and objectivity are necessary factors for effective functioning of the internal audit unit. These factors are highly linked to propositions of aforementioned theories as the Resource Dependency Theory (Pfeffer & Salancik, 1978) which revealed possible influences of the resource supplying organisation to the resource receiving organisation, and therefore maintaining reasonable independence of IAF in terms of human, financial and physical resources that are highly recommended for their reliability.

The scope of work of internal audit staff is also affected by resources advanced to them from management (Saleh & Alsukker, 2014; Asiedu & Deffor, 2017; Mihret & Admassu, 2011), and therefore lower resources will yield lower scope and therefore lower reliance by management and other stakeholders and vice versa. Due to the asymmetric behaviour and separation of ownership from management, the Agency and Stewardship theories (Donaldson & Davis, 1991; Jensen & Meckling, 1976) stress that assurance providers should be objective with shareholders, and competent in order to be reliable and useful. Saleh and Alsukker (2014) and Sari *et al.*, 2017 found there was failure of auditors to meet expectation gap, non-desirable reputation toward auditors and therefore lower reliance. Further the Theory of Manipulating Legitimacy (Mzenzi, 2013) hypothesise that management desires to ensure disclosure of their good behaviours for entrusted resources as compared to their misappropriations. In some cases, Malagila (2013) opined that natural management behaviour influences auditors' behaviour in order to promulgate cosmetic legitimacy to shareholders and other users of audit reports for improving the performance of both internal and external auditors in controlling the inherent nature and desires of management. Furthermore, communication and work performance of internal audit functions were seen to be linked with legitimacy as Deloitte (2013) and Gabrini (2013) revealed maximum expectation of the public on the organisation.

Although studies on modelling accountability were mostly conducted in developed countries, they did not consider developing countries such as Tanzania; and they merely focused more on management and audit committees rather than attitudes of management towards the internal audit function. There is limited literature on interaction of management and internal auditors on the oil and gas sector. The researcher managed to obtain only one study conducted by Osama (2011) on *Perceptions and evaluations of the internal audit function in Libyan oil and gas companies* that revealed that independence, objectivity, scope of work, competence, work performance, and communications are necessary factors that influence perception of management in internal audit function as the theoretical framework suggests. However, their results need to be re-confirmed as far as Tanzania's oil and gas industry is concerned.

#### *Conceptual framework*

The preceding review of literature has revealed tentative factors that management may consider as key ingredients of the internal audit function as independent and objective, competence, scope of works performed by the internal auditor, ways of which internal auditors perform their works (work performance), integrity and effective communication. Literature review (Boyle *et al.*, 2012; IIA 2017; IIARF, 2014; IIA, 2009; Groff *et al.*, 2016) suggested that independence of internal audit function is the key factor in determining the reliance of internal audit function. In support of their argument, Bonner Lewis, (1990) suggested that there is a significant reduction of internal audit function reliance when there is no reasonable independence; and Power (1996) hinted on the necessity of independence of the internal audit department to improve decision-making and very big

support rather than a disciplining tool to management. Furthermore, Huibers *et al.*, (2008) emphasised the importance of auditors to avoid any impairment of independence in fact or in appearance; and Osama (2011) suggests that independence is influenced by the reporting levels of the internal audit unit, freedom of the internal auditors, appointment, removal and resignation of internal auditors and the ability of internal auditors to access information and financial independence. On the other hand, role and scope include reliability and integrity of information provided by internal auditors, compliance with policies, plans, procedures, laws and regulations; economical and efficient use of resources; providing consultations to the top management in relation to the internal control, operation management, follow up of findings and assuring that corrective actions are taken. After reviewing the literature, this study had the following hypotheses:

***H1: Independence increases reliance on internal audit function in oil and gas sector***

Competence, as elaborated by IAESB (2017), means the ability to perform roles defined by appropriate standards and it is purported to go beyond knowledge of principles, standards, concepts, facts, and procedures and is said to be application of (a) technical competence, (b) professional skills, and (c) professional values, ethics, and attitudes when performing professional work. A lot of literature (IIA, 2011, 2017; Jaffe & Soligo, 2007; Jarvinen, 2012; Munro & Stewart, 2010; Saleh & Alsukker, 2014; ICAE, 2005) revealed strong contribution of competence toward reliance on internal audit departments. Further, Salisu (2014) proposed the need of specific knowledge and competence in the specific industry such as telecommunication and petroleum. On the other hand, Hunter revealed that competence of the internal audit function comprises staffing levels, knowledge, skills and disciplines, supervision and their compliance standards, continuing education and due professional care. In addition to competence in traditional financial audit, oil and gas companies use unconventional accounting methods such as successful and full cost methods in reporting exploration and development costs that raise the need of internal auditor's specific competence in the area. Also the oil and gas industry faces substantial business risks such as a volatile market, environmental risks, and non-proportionality between returns and investments (Obro-Adibo *et al.*, 2013). In this regard, the IAF has to possess risk management skills in order to efficiently perform its duties. It was therefore plausible to form a second hypothesis on competence influence to reliance on internal audit function:

***H2: Competence increases reliance of internal audit function in the oil and gas sector***

Work performance constitutes planning of audit, quality of working papers, and follow-up of audit findings, critical examination and evaluation of information against established objectives (Azad, 2017; IIA, 2012; Saleh & Alsukker, 2014). Gabrini (2013), IIA (2012) and Mihret & Admassu (2011) established that work performance of internal audit function comprises necessary ingredients for the reliance on internal audit function; hence hypothesis number three:

***H3: Work performance increases reliance on the internal audit function in oil and gas sector***

Effective communication of the internal audit department on audit findings to management is said to be a necessary bridge between management and IAD (Azad, 2017; Coetzee & Fourie, 2009; Kinyua, 2015; Smith, 2005). Specifically, Chambers emphasised that communication between internal auditors and management should be a two-way traffic and there is need to be beyond audit reports (formal and informal) because it is one of the key factors for gauging the relationship between auditors with auditees. Its absence may lead to mistrust between IAF and auditees. Furthermore, Smith (2005) and IIM (2017) emphasised that supervisors, auditees and other employees have the two-way traffic and clear communication and obstruction of communication among them will deter audit objectives, scoping, and therefore overall audit. Necessary communication ingredients were mentioned by Osama (2011) as instrumental for having satisfactory working relationships with auditees, communication tools, and quality of audit report contents, provision of audit recommendations and attendance of meetings. This leads to hypothesis number four below.

***H4: Communication increases reliance on the internal audit function in oil and gas sector***

Scope of internal audit function is said to be either for consulting or assurance; however, IIA (2017) requires internal auditors to maintain objectivity when assuming consulting function and refrain from taking over management's responsibility. Internal audit standards require internal audit activities to be free from interference in determining the scope of internal auditing, performing work, and communicating results (Pizzini *et al.*, 2011; Gabrini, 2013; IIA, 2011; Kinyua, 2015; Myers *et al.*, 2007; Osama, 2011; Groff *et al.*, 2016). Further, Pizzini *et al.* (2011) found that the quality of internal audit scope largely influences the internal control

systems of selected firms. Osama (2011) emphasised that external auditors have to consider status of internal audit, the scope of the function, and exercise of due professional care of internal audit staff when assessing whether to rely on internal audit work or otherwise. Honselaar (2012) advised that internal auditors should scope their work more than external auditors in order to identify material weaknesses and control deficiencies before their immediate discovery. Considering the effects of role and scope to reliance of internal audit function, and sub-factors constituting the role and scope as narrated by Osama (2011). The sub-factors are, such as reliability and integrity of information provided by internal auditors, compliance with policies, plans, procedures, laws and regulations (Osama, 2011). Moreover, other sub-factors are as follows; economical and efficient use of resources; providing consultations to the top management in relation to the internal control, operation management, follow up of findings and assuring that corrective actions are taken. This explanation led to the formation of the fifth hypothesis below:

**H5:** *Scope increases reliance of the internal audit function in the oil and gas sector*

Reliance on internal audit function was mentioned by various studies (Azad, 2017; Baffour & Wittbom, 2000; Christopher & Leung, 2009; Deloitte, 2013; Donwa *et al.*, 2015; Dunford, 2013; Gabrini, 2013; Honselaar, 2012; IIARF, 2014; IIA, 2012; Kinyua, 2015; Mbelwa, 2015; Mihret & Admassu, 2011; Munro & Stewart, 2010; Sarens & Abdolmohammadi, 2011) and this is generally measured using regular use of audit internal audit reports in decision making, freedom granted by management to the internal audit function and administrative support provided by management to the IAD. In some cases, reliance of internal audit function is also measured by examining opportunity granted to internal audit unit staff to attend management meetings with senior management and board of directors, degree of response on findings raised by the internal auditor, reduction of fees payable to external auditors and the use of the internal audit unit to monitor internal control of organisations' systems.

## RESEARCH METHODOLOGY

### *Research paradigm*

The study was centred on the ontological principle and doctrine of truth whereas reality is free and there is little influence of the researcher to the study, which has also been explained by several authors (Aliyu *et al.*, 2014). The study was also conducted in Mainland Tanzania due to the infancy of the industry and there are huge public expectations over the oil and gas industry. The study employed a cross-sectional survey whereby information was collected at one point of time. The cross-sectional approach has major advantages of proving/disapproving theories, less time and cost effective, and it captures a specific point in time, accommodates multiple variables and can be generalised. Purposive sampling technique was used to identify respondents who gave relevant data. The respondents included audit committees, board members, chief accountants and other executive members who are directly involved in the day-to-day operations of oil and gas companies. Questionnaires were administered to 17 members from each group and a five-point likert scale was adopted. The likert scale (Johns, 2010; Carifio & Perla, 2008) is said to have multiple advantages of being quick and economical to administer, and is easily adopted. The scale is said to be further reliable and easily analysed. The study was non-parametric due the rank-based nature of the likert scale (Mircioiu & Atkinson, 2017; Carifio & Perla, 2008). Neideen and Brasel (2007) advised on the application of the likert scale to non-parametric studies that are within an arbitrary range since it is more favourable within scope of measurement. Relationship between independent and dependent variables was modelled by using ordered logistic regression. Ordered logistic regressions are mentioned to be mostly suitable when dependent variables are discrete and represent outcomes of choices between finite sets of alternatives, and when are naturally qualitative and ordered (Williams, 2016). On the other hand, reliability was tested using Cronbach Alfa. The content, criterion and construct validities were insured through panel discussion and by the way of factor analysis, comparing coefficient of correlation between tests scores with those of known validity and comparison of findings with theoretical propositions.

### *Data collection and analysis*

Regarding the questionnaires, the overall response rate was 82%; 17 members were from audit committees and heads of units in oil and gas companies, 15 were chief executive officers (CEO), 10 were chief financial officers (CFO), making a total of 42 out of 51 who had been served with the questionnaires. Majority of respondents in the study (48%) had experience between 5-10 years and 36% possessed a Masters degree. Regarding the composition of the internal audit function, 50% of respondents admitted that the internal audit functions in selected oil and gas companies was composed of 0-4 staff and the 64% of the respondents said that the internal audit departments reported to senior management, compared to 36% who said that they reported to audit committees.



Eighty items were subjected to a reliability test and they included independence and objectivity (15 items), role and scope (11 items), work performance (12 items), competence (14 items), communication (12 items), and managements' degree of reliance on the IAF (16 items). Šerbetar and Sedler (2009) and Tavakol and Dennick (2011) set the acceptable number of Cronbach Alpha to more than 0.5. The overall Cronbach Alpha that was found was 0.6739 which was more than 0.5. Therefore, it can be concluded that the instrument that was used in the study was stable over time and therefore reliable and valid, as summarised in Table 1 below.

Table 1: Results of Cronbach Alpha

Measurement	Scale total number of items	Cronbach's Alpha
Independence	15	0.5069
Role & scope	11	0.5641
Competence	14	0.7329
Work performance	12	0.5001
Communication	12	0.6283
Reliance	16	0.7585
<b>Total test scale</b>		<b>0.6739</b>

Construct, content and criterion validity were tested using exploratory factor analysis (EFA) whereby SPSS software was used to merge 64 independent variables to five factors in order to ensure construct validity and identify right measures for the study. The analysis was conducted to obtain critical variables and consistency in measuring construct. Cumulative eigenvalues after rotation sums of squared loadings on five factors were observed to be 71.282% indicating reliance on the internal audit function is well explained by five factors by more than 71.282%, which proves the construct validity of factors and the modal in general. Costel (2014) argued that eigenvalues (a measure of explained variance) greater than 1.0 is a good indication of the usefulness of factors under study and hence ensure the content validity. It was further noted that 11.83% of the reliance was contributed by independence and objectivity; 16.162% was derived from role and scope; 13.266% was contributed by competence; 12.901% was contributed by work performance; and 11.124% was derived from communication, as summarised in Table 2.

Table 2: Rotated component matrix and the total variance matrix

S/N	Independence and objectivity	Role and scope	Competence	Work performance	Communication
Total eigenvalues	11.411	10.344	8.49	8.257	7.119
% of Variance	17.829	16.162	13.266	12.901	11.124
Cumulative %	17.829	33.992	47.258	60.159	71.282

NB: Eigenvalues have been omitted for the purpose of clarity and neatness.

Square multiple scores and correlation residuals were used to test validity of individual factors and whether those factors were not correlated to each other. Results of square multiple correlations were between 0.62 and 0.82. Summary of SMC results for each factor are shown in Table 3. Regarding the multi-collinearity problem, all factors indicated correlation residuals were lower to the tune of 0.0455 as shown in Table 4. This indicates lack of a linear relationship among independent variables, and therefore proving the model's fitness.

Table 3: Square multiple scores (SMC) among factors inflecting reliance

Variable	SMC
Independence and objectivity	0.8282
Scope of internal audit function	0.6223
Competence	0.699
Work performance	0.6911
Communication	0.7779

Table 4: Matrix of correlation residuals

Variable	Independence	Scope of the internal audit function	Competence	Work performance	Communication
Independence	0.0000				
Scope of internal audit function	0.03270	0.0000			
Competence	0.02170	-0.0430	0.0000		
Work performance	-0.03220	0.03760	0.0455	0.0000	
Communication	0.01670	0.02130	0.04530	-0.0241	0.0000

## STUDY FINDINGS

Kruskal Wallis test and ordered logistic regression was employed in testing relationships of independent and dependent variables due to the nature of data collected (non-parametric). Output from STATA noted all factors to have significant influence over reliance at different degrees of freedom at 95% confidence interval as shown in Table 5.

Table 5: Results of significant levels under Kruskal Wallis test

S/N	Factor	Chi-Square	Degree of Freedom	Probability	Chi-Square with ties	Probability for Chi-Square with ties
1	Independence of the internal Audit function	39.439	18	0.0025	39.719	0.0023
2	Scope of the internal audit function	39.402	13	0.0002	39.682	0.0002
3	Competence	39.392	13	0.0002	39.672	0.0002
4	Work performance	40.234	15	0.0004	40.52	0.0004
5	Communication	40.189	15	0.0004	40.475	0.0004

In arriving at appropriate dependence and independence model between reliance on internal audit function with underlying factors, namely, independence and objectivity, role and scope, competence, work performance and communication, five hypotheses were formulated and dependence relationships were tested using chi-square test at 95% confidence interval.

### *H1: Competence increases reliance on internal audit function*

Null hypothesis (Ho): Competence increases reliance of the internal audit function ( $P \leq 0.05$ ) at 95% C.I.  
Alternative hypothesis (H1): Competence do not increase reliance on internal audit function ( $P > 0.05$ )

Regression analysis between competence sub-factors and reliance at 95% confidence interval revealed competence having the overall significant effect of reliance on internal audit function since its P-Values amounted to 0.0000, which is greater than 95% confidence interval as shown in Figure 1. This is consistent with some theoretical propositions that argued for experience and strong education background to be among necessary factors for reliance on IAF (Christopher & Leung, 2009; IIA, 2011, 2012, 2013; Masui, 2013). However, the study revealed that knowledge of risk management practices does not significantly decrease

reliance on internal audit function. This is not in line with arguments and theoretical edges of some literature (IIA, 2009; Anderson, 2006), which might have been influenced by uniqueness of the sector. Most companies have ready-made sophisticated risk management policies in place and therefore making it unnecessary for internal auditors to invest much towards acquiring and maintaining robust knowledge on existing risk management practices (Adibo *et al.*, 2013) and furthermore, this finding might posit a need to carry a qualitative study for the purpose of understanding the context better.

Figure 1: Results on the effect of competence toward reliance of the IAF

```

. ologit reliance experience training education_background risk_management knowledge_accounting

note: experience omitted because of collinearity
Iteration 0:  log likelihood = -114.29548
Iteration 1:  log likelihood = -97.510722
Iteration 2:  log likelihood = -90.729401
Iteration 3:  log likelihood = -90.187601
Iteration 4:  log likelihood = -90.182343
Iteration 5:  log likelihood = -90.182337

Ordered logistic regression          Number of obs   =          42
                                     LR chi2(5)      =          48.23
                                     Prob > chi2     =          0.0000
Log likelihood = -90.182337          Pseudo R2      =          0.2110
    
```

reliance	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
experience	.1725776	.109215	1.58	0.114	-.0414799	.386635
training	.7898766	.2328138	3.39	0.001	.33357	1.246183
education_background	.1565723	.2324336	0.67	0.501	-.2989892	.6121338
risk_management	-.4565763	.3547956	-1.29	0.198	-1.151963	.2388103
knowledge_accounting	3.103316	.6049732	5.13	0.000	1.91759	4.289041
experience	0	(omitted)				

**H2: Independence increases reliance of the internal audit function**

Assessment of independence was made using two hypotheses:

Null hypothesis (Ho): Independence increases reliance of the internal audit function positively ( $P \leq 0.05$ ) at 95% C.I. Alternative hypothesis (H1): Independence does not positively increase reliance of the internal audit function ( $P > 0.05$ ).

The overall model regarding the influence of independence and objectivity to the reliance on the IAF was proved to be significant at 95% confidence interval and the reporting level indicated to have the significant influence to reliance of the internal audit function. These findings are congruent with the arguments of the Agency Theory (ICAEW, 2005a) and other literature (Badara & Saidin, 2012; Stewart, 2010) that support the null proposition of the null hypothesis. The findings further indicate that the level of reporting increases competence significantly whereas other components of independence have different effects as tabulated in Figure 2.

For the purpose of measuring effects of the internal audit scope towards reliance on internal audit function, there were two hypotheses at 95% confidence interval.

Null hypothesis (Ho): The role and scope increase reliance on the internal audit function positively ( $P \leq 0.05$ ) at 95% C.I. Alternative hypothesis (H1): The role and scope do not increase reliance on the internal audit function positively ( $P > 0.05$ ).

Figure 2: Effect of independence on reliance of the internal audit function

```

. ologit reliance level_reporting org_status appointment access_info financial_indep freedom_work

Iteration 0:  log likelihood = -114.29548
Iteration 1:  log likelihood = -100.12774
Iteration 2:  log likelihood = -98.220141
Iteration 3:  log likelihood = -98.116244
Iteration 4:  log likelihood = -98.115451
Iteration 5:  log likelihood = -98.115451

Ordered logistic regression              Number of obs   =          42
                                         LR chi2(6)      =          32.36
                                         Prob > chi2     =          0.0000
Log likelihood = -98.115451              Pseudo R2      =          0.1416
    
```

reliance	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
level_reporting	.4954594	.1713523	2.89	0.004	.159615	.8313039
org_status	-.550446	.127813	-4.31	0.000	-.8009548	-.2999372
appointment	-1.044383	.6546345	-1.60	0.111	-2.327443	.2386773
access_info	-.5079612	.2192474	-2.32	0.021	-.9376783	-.0782442
financial_indep	.4747579	.7735022	0.61	0.539	-1.041279	1.990794
freedom_work	-.2719124	.1694277	-1.60	0.109	-.6039846	.0601599

**H3: Internal audit scope increases reliance of internal audit functions**

The overall model indicated that role and scope of internal audit function have significant influence over reliance on the work of IAF due to having an overall probability value of 0.0002, which is less than the critical value of 0.05, as summarised in Figure 3. In this regard, based on findings from respondents, the study failed to reject the null hypothesis - that the role and scope affect reliance of the internal audit function. Significance increase of the role and scope to reliance of internal audit functions does not only coincide with proposition of some studies (IIA, 2011, 2009; Pfeffer & Salancik, 2015) but also contravenes with the Theory of Manipulating Legitimacy (Mzenzi, 2013) and the Resource Dependence Theory (Salisu, 2014; Pfeffer & Salancik, 2015) which argues on the presence of the interest gap between management perception, consultancy role and internal audit assurance role. The study therefore finds the role and scope of internal audit functions to have a positive influence on reliance of internal audit function.

Figure 3: Effect of the internal audit scope toward reliance of the internal audit function

```

. ologit reliance reliability compliance audit_use examination

Iteration 0:  log likelihood = -114.29548
Iteration 1:  log likelihood = -104.39373
Iteration 2:  log likelihood = -103.3133
Iteration 3:  log likelihood = -103.2972
Iteration 4:  log likelihood = -103.29719
Iteration 5:  log likelihood = -103.29719

Ordered logistic regression              Number of obs   =          42
                                         LR chi2(4)      =          22.00
                                         Prob > chi2     =          0.0002
Log likelihood = -103.29719              Pseudo R2      =          0.0962
    
```

reliance	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
reliability	-.2901832	.1940524	-1.50	0.135	-.6705189	.0901524
compliance	.8468938	.3572627	2.37	0.018	.1466718	1.547116
audit_use	-.8961939	.3563817	-2.51	0.012	-1.594689	-.1976986
examination	.5737307	.1538608	3.73	0.000	.2721692	.8752923

**H4: Work performance increases reliance on internal audit function**

In proving some theoretical and empirical propositions, two hypotheses were formed: the null hypothesis proposed that work performance influences reliance on internal audit function, and the alternative hypothesis was that work performance does not influence reliance on the work of the internal audit function. Overall, the model indicated there is a significant influence of work performance to reliance on IAF since overall model probability was noted to be 0.0399, which is less than critical value of 0.05. It was further noted that audit plans and programmes do not significantly increase reliance on the internal audit function since corresponding P-Value was 0.472, which is larger than the critical value of 0.05. This is in line with propositions of international

professional practice framework (IIA, 2011) which suggest that audit planning should constitute significant time before auditing commences. It was further noted that inadequate audit planning and coverage significantly decrease the reliance of internal audit function due to having P-Values of 0.010, and follow up of audit findings does not increase reliance on the function since it has the P-Value of 0.115, compared to the critical value of 0.05. Having noted the overall significance and model fitness of the study, we fail to reject the null hypothesis at 5% significance level that says work performance influences reliance on the internal audit function. The responses from the respondents are in agreement with the propositions of several studies (IIA, 2009; Masui, 2013). The summary of the aforementioned findings is presented in Figure 4.

**H.4: Effect of work performance on reliance of the internal audit function**

Null hypothesis (Ho): Work performance has the positive effect on reliance on the work of internal audit departments ( $P \leq 0.05$ ) at 95% C.I. Alternative hypothesis (H1): Work performance does not have the positive effect on reliance of internal audit department ( $P > 0.05$ ) at 95% C.I

Figure 4: Effect of work performance to reliance on the internal audit function

```

. ologit reliance audit_program audit_planning review_evaluation followup_audit

Iteration 0:  log likelihood = -114.29548
Iteration 1:  log likelihood = -109.46064
Iteration 2:  log likelihood = -109.27987
Iteration 3:  log likelihood = -109.27941
Iteration 4:  log likelihood = -109.27941

Ordered logistic regression      Number of obs   =          42
                                LR chi2(4)      =         10.03
                                Prob > chi2     =         0.0399
Log likelihood = -109.27941      Pseudo R2      =         0.0439
    
```

reliance	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
audit_program	.1413361	.1964732	0.72	0.472	-.2437444	.5264166
audit_planning	-.2359474	.0910521	-2.59	0.010	-.4144062	-.0574885
review_evaluation	-.4380772	.2039327	-2.15	0.032	-.8377779	-.0383766
followup_audit	.4312225	.2735264	1.58	0.115	-.1048794	.9673244

**H5: Communication increases reliance on internal audit function**

Osama (2011) divided communication into four sub-factors: attendance of senior management meetings, tools and features of communication, satisfactory working relationships, and contents of audit reports. These sub-factors were derived from responses of 11 statements that aimed at testing the effect of communication. Two hypotheses for testing effects were formed, one a null hypothesis and the other an alternative hypothesis. The null hypothesis assumed the increase of reliance due to effective communication between senior management and IAF and the alternative hypothesis assumed non-increase of reliance. Results indicate that attending meetings of senior management and of board of directors significantly increases reliance on the work of IAF since it has P-Values of 0.001, which is significantly below the critical value of 0.05. The study further revealed that satisfactory working relationships significantly increase reliance and tools and communication, i.e. periodic issuance of audit reports, reporting to audit committees and senior management does not significantly decrease reliance on internal audit function. The study also revealed the contents of audit reports do not significantly decrease reliance on internal audit function due to having the P-Value of 0.064, which is above the critical value of 0.05. Based on results from respondents, overall factors on the model indicated to have a significance level of 0.0000, which is significantly below the critical value of 5%. This lacks evidence for rejecting the null hypothesis which proposed that there is a significant increase of reliance on the internal audit function when there is an effective communication between management and internal auditors. A summary of those findings is presented in Figure 5.

**H5: Efficient communication has the positive effect of reliance on internal audit function**

Null hypothesis (Ho): Communication influences reliance on internal audit function positively ( $P \leq 0.05$ ) at 95% C.I. Alternative hypothesis (H1): Communication does not increase reliance on internal audit function positively ( $P > 0.05$ ) at 95% C.I

Figure 5: Effect of efficient communication on reliance on internal audit function

```

. ologit reliance meeting_attendance tools_communication working_relationship contents_report

Iteration 0:   log likelihood = -114.29548
Iteration 1:   log likelihood = -96.652813
Iteration 2:   log likelihood = -93.342138
Iteration 3:   log likelihood = -93.212277
Iteration 4:   log likelihood = -93.21204
Iteration 5:   log likelihood = -93.21204

Ordered logistic regression              Number of obs   =          42
                                         LR chi2(4)      =          42.17
                                         Prob > chi2     =          0.0000
                                         Pseudo R2      =          0.1845

Log likelihood = -93.21204

```

reliance	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
meeting_attendance	3.611871	1.098221	3.29	0.001	1.459397 5.764345
tools_communication	-.0735509	.112242	-0.66	0.512	-.2935413 .1464395
working_relationship	6.908591	1.373913	5.03	0.000	4.215772 9.601411
contents_report	-.2411677	.1300346	-1.85	0.064	-.4960308 .0136953

#### Summary of hypothesis tested

All the tested five hypotheses revealed overall model significance towards reliance on internal audit function that was consistent with the reviewed literature and theoretical propositions. The study therefore confirmed that all five factors had significant influence over management reliance toward internal audit functions in the oil and gas sector. All five factors had computed significant values between 0.0000 to 0.0399 whereas competence, independence and objectivity and communication had a perfect influence 0.0000 at 95% confidence interval. Other two factors, namely, role and scope together with work performance had significance -values of 0.0002 and 0.0399, as summarised in Table 6.

Table 6: Summary of hypothesis tested

S/N	Hypothesis	Computed significance value	Critical value	Results
1	Competence positively influences reliance on internal audit function	0.0000	0.05	Positive and significant
2	Independence and objectivity positively increase reliance on internal audit function	0.0000	0.05	Positive and significant
3	The role and scope positively increase reliance on internal audit function	0.0002	0.05	Positive and significant
4	Work performance have a positive effect of reliance on the work of internal audit departments	0.0399	0.05	Positive and significant
5	Communication positively influences reliance on internal audit function	0.0000	0.05	Positive and significant

#### CONCLUSION AND RECOMMENDATIONS

The study revealed the importance of relying on independent and objective internal audit function due to nature and organisational status, ability of internal auditors to work freely, objectivity of internal audit staff in carrying out their duties, free access of information, support from the board of directors, full rank reporting level, and insignificant conflict of interest of internal audit members. It was also discovered that a decrease on the freedom of performing work does not heavily decrease the reliance on internal audit function. Also, financial and budgetary independence do not contribute much to reliance on internal audit functions as propagated by many authors; it is caused by liquidity nature of the petroleum industry (Asquith & Mullin, 1983). Unlike traditional business, the oil and gas industry is lucrative and the issue of budget constraint is out of question. Regarding competence, the study noted little contribution of experience, and educational background to reliance on the internal audit function in the oil and gas sector; however, it revealed a significant contribution of periodic and continuous on-job trainings to reliance on internal audit functions.

The study also discovered that there is an important contribution of unconventional accounting knowledge to the reliance on internal audit but revealed lower requirements of risk management skills. Role and scope were heavily advocated by IIA (2012) as one of the factors that influence reliance of internal audit function. That is

consistent with the findings of this study since its overall model described its maximum contribution to reliance whereas examination and review of internal control system have notable contribution to reliance on IAF and the effective use of resources does not significantly decrease reliance. The study also noted that the compliance with laws and regulations has the influence of increasing the reliance. However, examination of financial statements and financial reliable information does not significantly reduce reliance. Work performances were strongly advocated by Gabrini (2013) as one of the ingredients for reliance on the work of the IAF, which is consistent with findings of this study.

The study has revealed that quality of audit plans and programmes does not significantly increase reliance; spending more time on audit planning reduces reliance to the large extent and quick follow-ups of corrective actions on findings of internal auditors do not increase reliance to a large extent; whereas spending more paper work and time on checking quality of working papers and supervision significantly decreases reliance on internal audit function. Osama (2011) stressed the fact that communication is one of the main factors that influence reliance. This study has also come up with similar findings. The study has again discovered that a friendly working managerial environment with internal auditors has significant influence over reliance. Communication of audit findings by attending meetings of top management and board of directors was also noted to have large influence over reliance. However, communication tools and architecture do not seem to have significant reduction over reliance. On the other hand, contents of audit reports did not seem to have significant reduction over reliance.

Although knowledge of risk management skills does not significantly decrease reliance on internal audit function, oil and gas companies face exploration, development, price, expropriation, environmental and other risks, so that trainings on risk management skills have to be periodically assimilated to internal auditors instead of making them available to the management only. It was also observed that education background does not have much significance concerning the reliance on IAF in the sector; however, appointing internal audit members with no solid educational background especially in accounting and auditing may compromise objectives of the function and demand much in-job trainings. On the other hand, financial independence was observed not to increase reliance significantly; however, reasonable autonomy has to be instituted in terms of budget and expenditure approvals. It is reasonable that budget and work plans of internal audit units should be submitted to the board of directors by the Chief Auditor, and if possible, to be referred to shareholders in the annual general meetings in order to enhance full independency, rather than the current practice of incorporating the budget in normal administrative expenses.

Organisational status of IAD was seen to decrease the reliance on audit function significantly; and it has been caused by weaknesses noted in formation of the organisational charter whereby internal auditors are under the authority of senior management. Organisational charters should be amended so that issues of administration, and if possible, discipline, should be monitored by the chair of the audit committee or non-executive directors. Appointment and removal of internal auditors were observed not to significantly decrease reliance on internal audit functions. However, much attention has to be paid to security of tenure and be guaranteed by all shareholders rather than the current practice whereby the tenure is determined by executive directors. Furthermore, freedom of performing work was observed not to significantly decrease reliance on internal audit function. Therefore, management of oil and gas companies should avoid conflicts of interest by avoiding interfering with internal auditors' work and their work plans. Management should offer more training to their internal auditors that will equip them with knowledge on unconventional accounting methods due to risks involved in the sector and its large contribution in increasing reliance. This is attributed to the fact that contents of audit reports were noted to influence reliance of internal audits; and it is recommended that resources should be given to internal audit so as to produce findings and recommendations that are linked to corporate governance and risk management.

## REFERENCES

- AGyimah-Brempong, K. 2002. Corruption, economic growth, and income inequality in Africa. *Economics of Governance*, 3(3), pp.183–209.
- Aliyu, A. A. et al. 2014. Positivist and Non-Positivist Paradigm in Social Science Research: Conflicting Paradigms or Perfect Partners? *Journal of Management and Sustainability*, 4(3), 79–95.
- Änilane, V. & Myreteg, S.G. 2015. The Process of Internal Audit 's Involvement in Enterprise Risk Management : The Influence on Internal Audit 's Objectivity and Independence Date of Submission : 2015-06-22 Jonatan Bermudez Cuevas Anastasia Mörtzjö.
- Ardiana, P.A. 2014. The role of external audit in improving firm's value: Case of Indonesia. *The 5th International Conference of The Japanese Accounting Review (TJAR) to be held on December 21, 2014*

- at Rokkodai Campus of Kobe University in Japan. 1–15.
- Asiedu, K.F. & Deffor, E.W. 2017. Fighting Corruption by Means of Effective Internal Audit Function: Evidence from the Ghanaian Public Sector. *International Journal of Auditing*, 21(1): 82–99.
- Asquith, P & Mullins, D. W. 1983. .Impact of Initiating Dividend Payments on Shareholders' Wealth. *The Journal of Business*, 56(1), 77-96.
- Azad, A. N. 2017. The extent of external auditors' reliance on internal audit function : case of the UAE. *International Journal of Economics, Commerce and Management*, 4, 451–464.
- Azhagaiah, R., & Sabari Priya, N. 2008. The Impact of Dividend Policy on Shareholders' Wealth. *International Research Journal of Finance and Economics*, 20(20), 180–187.
- Badara, M. S 2017. The Relevant of Contingency Theory and Stewardship Theory on the Internal Audit Research. *Journal of World Economic Research*, 6(2):17.
- Badara, M. S., & Saidin, S. Z. 2012. Impact of the effective internal control system on the internal audit effectiveness at local government level. *Journal of Social and Development Sciences*, 4(1), 16-23.
- Badara, S. & Saidin, S.Z. 2012. The status of Internal Audit at Local Government Level in Nigeria. *Journal of Business and Management*, 5(5), pp.37–41.
- Baffour, A. & Wittbom, E. 2009. The Compliance or Non-Compliance of the Internal Audit Department of Organisations With the Guidelines Specified by the Institute of Internal Auditors ( IIA ) A Case Study of Star Assurance Company. *Interdisciplinary Journal of Contemporary Research in Business*, 2(3): 29–33.
- Bonner, S., & Lewis, B. 1990. Determinants of Auditor Expertise. *Journal of Accounting Research*, 28, 1–20.
- Boyle, D.M., Dezoort, F.T. & Hermanson, D.R. 2012. The Effects of Internal Audit Report Type and Reporting Relationship on Internal Auditors ' Judgments. *Accounting Horizons*, 29(3):695–718.
- Brown, P. R. 1983. Independent auditor judgment in the evaluation of internal audit functions. *Journal of Accounting Research*, 21(2), 444-455.
- Carifio, J. & Perla, R. 2008. Resolving the 50-year debate around using and misusing Likert scales. *Medical Education*, 42(12), pp.1150–1152.
- Chambers, B. R., & Mcdonald, P. 2012. *7 Attributes of Highly Effective Internal Auditors 7 Prized Attributes Areas. Succeeding as a 21st Century Internal Auditor*: Institute of Internal Audit. Robert Half.
- Chekouri, S.M., Chibi, A. & Benbouziane, M. 2017. Algeria and the natural resource curse: oil abundance and economic growth. *Middle East Development Journal*, 9(2):233–255.
- Christopher, J., & Leung, P. 2009. A critical analysis of the independence of the internal audit function : Evidence from Australia. *Accounting Auditing & Accountability Journal*, 22(February), 200-220.
- Ciprian-Costel, M. 2014. Arguments on Using Computer-Assisted Audit Techniques (Caat) and Business Intelligence To Improve the Work of the Financial Auditor. *Management Strategies Journal*, 26(4):212–220.
- Coetzee, P. & Fourie, H. 2009. Perceptions on the role of the internal audit function in respect of risk. *African Journal of Business Management*, 3(13):959–968.
- Daly, H. 2015. Conflicts of Interest in Agency Theory: A. *Global Journal of Human-Social Science: E Economics*, 15(1).
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *The Academy of Management Review*, 22(1), 20-47.
- Deloitte. 2013. The changing role of internal audit: moving away from traditional internal audits. pp.1–8. Available in [https://www2.deloitte.com/content/dam/Deloitte/za/Documents/risk/ZA\\_RA\\_TheChangingRoleOfInternalAudit\\_2015.pdf](https://www2.deloitte.com/content/dam/Deloitte/za/Documents/risk/ZA_RA_TheChangingRoleOfInternalAudit_2015.pdf)
- Donaldson, T. & Preston, L. E. 1995. The stakeholder's theory of the corporation: Concepts, evidence and Implication. *The Academy of Management Review*, 20(1), 65-91.
- Donaldson, L. & Davis, J.H. 1991. Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management*, 16(1):49–64.
- Donwa, P.A., Mgbame, C.O. & Julius, O.M. 2015. Corruption in the Oil and Gas Industry: Implication for Economic Growth. *European Scientific Journal*, 11(22), pp.1857–7881.
- Dunford, M. 2013. Globalization and theories of regulation. *Global Political Economy: Contemporary Theories*, 2<sup>nd</sup> ed, (44):140–161.
- ECIIA, 2007. The Role of Internal Audit in Corporate Governance in Europe.
- Edwik, A.A. 2007. Oil Dependency, Economic Diversification and Development: A Case Study of Libya Available at: <http://usir.salford.ac.uk/2189/1/490199.pdf>.
- Edwik, A.A. 2007. Oil Dependency, Economic Diversification and Development A Case Study of Libya. , p.249. Available at: <http://usir.salford.ac.uk/2189/1/490199.pdf>.
- Emerson, R. M. 1962. Power dependence relations. *American Sociological Review*, 27(1), 31-41.



- Gabrini, C.J. 2013. The effect of Internal Audit on Governance : Maintaining Legitimacy Of Local Government. *Electronic Theses, Treatises and Dissertations*, 7(7383). Available at: <http://diginole.lib.fsu.edu/etd>.
- Heath, J. 2009. The Uses and Abuses of Agency Theory. *Business Ethics Quarterly*, 19(04):497–528.
- Honselaar, W. 2012. The Internal Audit Function: A Study Examining the Impact of Emerging IT on the Development of the Function. pp.1–73. Available at [http://www.vuroro.nl/images/vuroro/downloads/1074\\_Definitief\\_Wesley-Honselaar.pdf](http://www.vuroro.nl/images/vuroro/downloads/1074_Definitief_Wesley-Honselaar.pdf)
- Huibers, Sam C.J.; van Hecke, E. A. C. M. 2008. The role (s) of the internal auditor in projects, Amsterdam Business School.
- Hunter, T. 2010. Legal regulatory framework for the sustainable extraction of Australian offshore petroleum resources: A critical functional analysis, (April). Retrieved from [http://epublications.bond.edu.au/law\\_pubs/354/](http://epublications.bond.edu.au/law_pubs/354/)
- IIARF, 2014. *Internal Audit Around the World*, Available at: <https://na.theiia.org/special-promotion/PublicDocuments/Internal-Audit-Around-the-World.pdf?spMailingID=9634714&spUserID=NjM5NjQ5MjEwMDMS1&spJobID=343860572&spReportId=MzQzODU4NTgxS0>.
- Institute of Internal Auditors (IIA). (2013). Model Internal Audit Activity Charter.
- Institute of Internal Auditors (IIA), 2009. IIA position paper: The role of internal auditing in enterprise-wide risk management. *Institute of Internal Auditors (IIA)*. pp.1–8.
- Institute of Internal Auditors (IIA). 2012. International standards for the professional practice of internal auditing. pp.1–22.
- International Accounting Education Standards Board. 2017. Handbook of International Education Pronouncements. New York: International Federation of Accountants. pp. 1-119.
- Jaffe, A.M. & Soligo, R. 2007. The International Oil Companies. *James Baker Institute for Public Policy*, p.48.
- Jarvinen, T. 2012. Factors Influencing Auditors' Information Usage : Experience , Risk , Task Structure and Information Reliability, (272), pp.179.
- Jensen, M.C. & Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), pp.305–360.
- Jerzemowska, M. 2006. The Main Agency Problems and Their Consequences. *Acta Oeconomica Pragensia*, 14(3), 9–17.
- Johns, R. 2010. Likert Items and Scales. *Survey Question Bank: Methods Fact Sheet*, 1(March), pp.1–11.
- Kapinga, B. & Thorns, A. 2013. The oil and Gas law review: Tanzania Chapter. [https://www.mkono.com/pdf/Tanzania%20OIL\\_GAS%202013.pdf](https://www.mkono.com/pdf/Tanzania%20OIL_GAS%202013.pdf)
- Khan, M.A., 2006. Role of Audit in Fighting Corruption. “Ethics, Integrity, and Accountability in the Public Sector: Re-building Public Trust in Government through the Implementation of the UN Convention against Corruption, (September), pp.1–32.
- Kinyua, J.K. 2015. Effect of Internal Control Environment on the Financial Performance of Companies. *The Nairobi Securities Exchange*, 3(4):29–48.
- Kivistö, J. 2007. *Agency Theory as a Framework for the Government-University Relationship*, Available at: <https://tampub.uta.fi/handle/10024/67724>.
- Lawrence, S.B. 2003. “The Practice of Modern Internal Auditing”, the Institute of Internal Auditors, 5th ed., pp. 1061-1102.
- Lennox, C. S. 2005. Managerial ownership and audit firm size. *Contemporary Accounting Research*, 22(1), 205–227.
- Makochekanwa, A. 2006. An Empirical Test of the Dutch Disease Hypothesis on Botswana's Main Exports. *Commonwealth Secretariat, Ministry of Trade and Industry, Addis Ababa, Ethiopia*.1–29.
- Malagila, J. 2013. *External Auditing in Tanzania : A Theory of Managing Colonising Tendencies*. University of Southampton, School of Management, Doctoral Thesis, 292pp.
- Marcel. 2016. Guidelines for Good Governance in Emerging Oil and Gas Producers 2016, *Energy, Environment and Resources Department* (July), 1–58.
- Masui, D. S. 2013. The Role of Internal Audit in Improving the Performance of Local Government Authorities: The Case of Morogoro Municipal Council. *Interdisciplinary Journal of Contemporary Research in Business*, 2(3), 30–35.
- Mihret, D. G& Admassu, M. A. 2011. Reliance of External Auditors on Internal Audit Work: A Corporate Governance Perspective. *International Business Research*, 4(2):67–79.
- Mircioiu, C. & Atkinson, J. 2017. A Comparison of Parametric and Non-Parametric Methods Applied to a Likert Scale. *Pharmacy*, 5(2):26.
- Mohammed, A. 2013. Regulating the Oil and Gas Industry. Available at: <http://sta.uwi.edu/conferences/12/revenue/documents/AnneMarieMohammed.pdf>.
- Munro, L., & Stewart, J. 2010. External auditors' reliance on internal audit: The impact of sourcing

- arrangements and consulting activities. *Accounting and Finance*, 50(2), 371–387.
- Mustapha, M. 2014. Monitoring costs of multinational companies: An agency theory perspective. *Asian Journal of Business and Accounting*, 7(2): 23–43.
- Mzenzi, S. 2013. Accounting Practices in the Tanzanian Local Government Authorities ( LGAs ): The Grounded Theory of Manipulating Legitimacy. Unpublished PhD thesis.
- Ndimbwa, M. R. 2014. *Natural Gas Conflict in Tanzania and the Impacts to the Population in Mtwara Municipality*. Masters dissertation. Norwegian University of Life Sciences.
- Neideen, T. & Brasel, K. 2007. Understanding Statistical Tests. *Journal of Surgical Education*, 64(2):93–96.
- Obert, S. & Munyunguma, I. N. 2014. Internal audit perceptions and their impact on performance of the internal audit function. *IOSR Journal of Business and Management*, 16(5):81–85.
- Obioma, B.K. 2012. Corruption Reduction in the Petroleum Sector in Nigeria : Challenges and Prospects,(3): 98–107.
- Obro-Adibo, D., Agbodohu, G. & Kumi, W. 2013. Analysis of Risk Management Practices in the Oil and Gas Industry in Ghana. Case Study of Tema Oil Refinery (Tor). *European Journal of Business and Management*, 5(29):2222–2839.
- Osama, I. A. 2011. *Perceptions and Evaluations of the Internal Audit function in Lybia Oil and Gas Companies*. PhD thesis, University of Gloucestershire.
- Peursem, K. V. 2004. Internal auditors' role and authority: New Zealand evidence. *Managerial Auditing Journal*, 19(3), 378-393
- Pfeffer, J. & Salancik, G. 2015. Resource dependency theory, pp.1–5. Available at: [http://istheory.byu.edu/w/index.php?title=Resource\\_dependency\\_theory&oldid=493](http://istheory.byu.edu/w/index.php?title=Resource_dependency_theory&oldid=493).
- Pizzini, M., Lin, S. & Ziegenfuss, D. E. 2011. The impact of internal audit quality and contribution on audit delays. *Social Science Research Network*. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1673490](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1673490).
- Potter, B.N., 2005. Accounting as a social and institutional practice: Perspectives to enrich our understanding of accounting change. *Abacus*, 41(3), pp.265–289.
- Power, M. 2000. The Audit Society - Second Thoughts. *International Journal of Auditing*, 4(1), pp.111–119.
- Power, M., 1996. Making things auditable. *Accounting, Organisations and Society*, 21(2–3), pp.289–315.
- Ross Stephen A. 1973. The economic theory of Agency: The principal Agent problem. *American Economic Review*, 63(2), 134-39.
- Saidu Badara, M. 2017. The Relevant of Contingency Theory and Stewardship Theory on the Internal Audit Research. *Journal of World Economic Research*, 6(2), 17.
- Sakour, A. S., & Laila, N. H. 2015. Internal audit effectiveness in Libyan public enterprises : An Approach to the development of a theoretical framework. *Global Business and Management Research: An International Journal*, 7(2), 12–19.
- Saleh, A. & Alsukker, M. 2014. The influence of objectivity , competence , and work performance on external auditors' judgements relating to the internal audit function in Jordan. Available at: <http://researchbank.acu.edu.au/theses/506/>.
- Salisu, A. 2014. An Empirical Investigation of the Efficiency , Effectiveness and Economy of the Nigerian National Petroleum Corporation's Management of Nigeria's Upstream Petroleum. Robert Gordon University, Doctoral Thesis.
- Sarens, G. & Abdolmohammadi, M.J. 2011. Monitoring effects of the internal audit function: Agency theory versus other explanatory variables. *International Journal of Auditing*, 15(1):1–20.
- Sari, N., Ghozali, I. & Achmad, T. 2017. The effect of internal audit and internal control system on public accountability: The emperical study in Indonesia state universities. *International Journal of Civil Engineering and Technology*, 8(9).
- Sawyer, L. B., Dittenhofer, M. A., & Scheiner, J. H. 2003. Sawyer's internal auditing. The Institute of Internal Auditors, Altamonte Springs, FL.
- Schneider, A. 1985b. Consensus among auditors in evaluating the internal audit. *Accounting and Business Research*, autumn 297-301.
- Šerbetar, I. & Sedler, I. 2009. Assessing Reliability of a Multi-Dimensional Scale. *Revija za elementarno izobraževanje št.* (XIX): 9–11.
- Shah, A. 2013. 'Corruption in Oil and Gas and the Extractive Industries Transparency Initiative ( EITI )' , CEPAL Conference, Santiago, Chile.
- Shaxson, N. 2007. Oil, corruption and the resource curse. *International Affairs*, 83(6):1123–1140.
- Smith, G. 2005. Communication skills are critical for internal auditors. *Managerial Auditing Journal*, 20(5), pp.513–519.
- Stewart, J. 2010. Internal audit independence and objectivity: emerging research opportunities. *Managerial Auditing Journal*, 25(4):328-360,

- Steyn, B., & Stainbank, L. 2013. Separation of Ownership and Control in South African-Listed Companies. *Sajems Ns*, 16(3), 316–328.
- Suchman, M. 1995. Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571-610.
- Tavakol, M. & Dennick, R., 2011. Making sense of Cronbach's alpha. *International journal of medical education*, (2):53–55.
- The Institute of Chartered Accountants of England and Wales. 2005. Agency theory and the role of audit. *Audit Quality*, 1–15.
- The Institute of Internal Auditors (IIA). 2009. IIA position paper: The role of internal auditing in Enterprise-wide risk management. New York: IIA. Pp. 1-8.
- The Institute of Internal Auditors (IIA). 2013. Model Internal Audit Activity Charter. Available at <https://global.theiia.org/standards-guidance/public%20documents/modelcharter.pdf>
- The Institute of Internal Auditors (IIA). 2016. International Standards for the Professional Practice of Internal Auditing. Lake Mary, FL: IIA. pp.1-25.
- The Institute of Internal Auditors (IIA). 2011. Independence and objectivity. New York: IIA. pp.1-26.
- The Institute of Internal Auditors Malaysia (IIA Malaysia). 2017. *Guidance for an Effective Internal Audit Function*. Kuala Lumpur: IIA Malaysia. 1-17.
- Thompson, R.M. 2013. A Conceptual Framework of Potential Conflicts with the Role of the Internal Auditor in Enterprise Risk Management. *Accounting and Finance Research*, 2(3).
- United Republic of Tanzania (URT). (2016). Controller and Auditor General Report: General Report on the Performance and Specialized Audits for the Period Ending 31st March, 2016. National Audit Office. Dar es Salam Press.
- United Republic of Tanzania. 1980. The Petroleum Exploration and Production Act 1980.
- Van Slyke, D.M. 2007. Agents or stewards: Using theory to understand the government-nonprofit social service contracting relationship. *Journal of Public Administration Research and Theory*, 17(2):157–187.
- Williams, R. 2016. Understanding and interpreting generalized ordered logit models. *Journal of Mathematical Sociology*, 40(1):7–20.
- Zaman Groff, M., Di Pietra, R. & Sitar, A.S. 2016. Contemporary Role of Internal Auditing in Corporate Governance. *Dynamic Relationships Management Journal*, 5(1):51–63.