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Internal Audit Quality Evaluation and Reliance Decision: External Auditors' Perception

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Introduction

Corporate governance (CG) has witnessed overwhelming debates during the last 15 years, especially after the failure of many corporations worldwide. The accounting scandal, especially after the collapse of one of the five big accounting firms, Arthur Anderson, warns for better quality of accounting and auditing [1]. Professional bodies (i.e. AICPA, IIA, SEC, IAASB, IFAC, ISO, COSO, ICAEW) are very concern about the quality of the auditing service which is provided to the organization either internally or externally. For example, a code of practice and guidelines has been widely used to strengthen governance [2]. IFAC has ordered its member bodies to establish a quality assurance review program, and recently, ASB has issued an exposure draft of SAS titled "*Quality Control for an Audit of Financial Statements*".

There was a call for quality corporate governance in the late 1990s [3] and this call became stronger in the recent years. As defined by encyclopedia and the IIA standards, corporate governance consists of four pillars: board of directors, management, the internal auditor, and the external auditor [4]. As though, internal audit function (IAF) which performs its task effectively and comply with the standards can strongly support the board and be an essential part of the governance mechanism [5,6], and important resource to audit committee [7].

IAF, which is one of the four cornerstones of corporate governance, should not only exist, but also be effective and its quality is at an acceptable level [8,9]. Therefore, having IAF does not for sure ensure good internal control, however, internal auditors and internal audit activities with an acceptable level of quality is very likely to produce better controls [10].

Weak internal control, which cannot prevent fraud, is sometimes extremely costly to the economic. For example, in the US, as recently estimated by the Association of Certified Fraud Examiners, fraud cost the economy $994 billion last year, as compared with $660 billion in 2006 [11]. Because of this, and as a result of the recent business scandals, adoption of IAF, either forced by law or voluntary, occurred in large number of companies worldwide. Some stock exchange authorities (for example, NYSE) require listed companies to maintain IAF, which is considered as an important player in corporate governance since it helps the management in both monitoring internal control and risk management [12-14]. The growing number of internal auditors is a sign of the growing recognition of the IAF, and more concern should be given to the task of internal auditors, its quality and value.

Although it would not be possible to eradicate the audit failure as by its nature auditing has inherent limitation [15,16], reducing the risk of fraud to an acceptable level can be achieved when auditing is performed with a better quality, and this could enable the CPA firm to reduce its testing.

Internal auditing is an important function for management, board of directors (audit committee), and external auditors. However, the lack of necessary quality leads to that IAF cannot be reliable and the risk of improper activity performance becomes high. Cohen et al. [17] reported that although an existence of IAF is an important element in affecting CG, concern about the strength of the IA unit is exposed. IAF with high quality will directly or indirectly enhance the quality of audit committee, corporate governance, financial reporting, and external auditing. Strong IA unit plays significant role on eliminating fraud and errors and strengthen internal control and external audit effectiveness [18], is an important resource to audit committee, and participates heavily on cost reduction and performance improvement [19].

Organizational performance of the IAF may not insensitive the internal audit quality only if this quality is not below the acceptable level, since the low the audit quality, the high probability of audit failure, and so IAF with sufficient quality to monitor the organization and the management judgment would increase the level of transparency.

External auditors are encouraged by recent relevant regulations to use the work of others, i.e. IAF as such work is judged to be of acceptable quality, and so it is more likely that relied upon IAF with good quality would reduce non-detection risk [20]. IAF with acceptable level of quality is also expected to reduce external audit fees and cost [21], which was evidenced by Prawitt et al. [8].

Although there is a large volume of research with regard to audit quality in the developed nations, the great majority of this research focuses on external audit and audit committee. Quality of external auditing has drawn attention of researches for long. For example, Deis and Giroux [22] endeavored to establish audit quality measurement in the public sector early 1990s. In the main time, Sutton endeavored to determine the factors that could affect external audit process. Research in regard to internal audit quality is few and in fact almost all subjects of internal audit function are in need of more research. For example, Prawitt et al. reported that the effect of internal auditing on the quality of external financial reporting has received only little attention by researches. On the other hand, research in regard to audit quality in the less developed nations is very little.

IAF can provide great service to the organization and cut cost but only when it has an adequate quality. For example, Goodwin and Seow found that external auditors place more weight on the IAF as a mechanism for detecting weaknesses in controls, preventing and detecting fraud, however, when the external auditor is doubt about the quality of the IAU, external auditor's reliance on the IAF is unexpected [23], and so IAF with necessary quality is more likely to work as a

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prevention and detection mechanism and thus reduce internal control risk.

As reported by Prawitt et al. there is no consent among researches about the measurement of quality of IAF, and since there is a lack of studies focusing on modeling IAF quality, a gap exists in the literature, and we endeavor to develop a model for measurement of quality of IAF based on external auditors' perception. The analysis will be extended to compare the perceptions of external auditors from the Big 4 accounting firms to the auditors from the non-Big 4 accounting firms. Our research might be beneficial for both academicians and practitioners since both of them are concern about how to evaluate the quality of an IAF.

Quality Definition

According to Etymology Dictionary, Quality origin goes back to 1290 with spilling "qualite" or "qualité". The noun phrase "Quality control" first attested 1935 and "quality of life" was used from 1943, whereas "quality time" first recorded 1977. The meaning of Quality has been extensively discussed. In dictionaries, Quality was defined in varies meaning based on the term it used for. For example, Webster's Dictionary defines Quality as a "degree of excellence" or "a special, distinctive, or essential character: as: a character, position, or role". However, Computing Dictionary describes Quality to be "The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs." The Fifth Discipline Field book sees Quality to be "… a transformation in the way we think and work together, in what we value and reward, and in the way we measure success. All of us collaborate to design and operate a seamless value-adding system that incorporates quality control, customer service, process improvement, supplier relationships, and good relations with the communities we serve and in which we operate - all optimizing for a common purpose." The Free Dictionary provides seven definitions for quality starting with "an inherent or distinguishing characteristic", while BusinessDictionary.com stated that Quality is a "Measure of excellence or state of being free from defects, deficiencies, and significant variations."

Encyclopedias also discussed Quality in different disciplines. For example, Wikipedia explains Quality in business, engineering and manufacturing as "… is a perceptual, conditional and somewhat subjective attribute and may be understood differently by different people. Consumers may focus on the specification quality of a product/service, or how it compares to competitors in the marketplace. Producers might measure the conformance quality, or degree to which the product/service was produced correctly."

Standards in different subjects have been focusing on quality and setting group of criteria for accepted quality. ISO established the Quality Management System (QMS) standards in 1987 which comprising series of standards (i.e ISO 9000:1987 ISO 9001:1987, ISO 9002:1987, ISO 9003:1987). These standards, which has been developing and revised continuously, are applicable in different types of industries' activity, process, design, production or service delivery. ISO 9000 saw Quality as "the totality of characteristics of an entity that bear on its ability to satisfy stated or implied needs."

IIA used the following equation for modeling quality of internal audit activity:

$Q=R^3$ (Quality=Relevance, Reliability, ROI).

According to this equation, quality can be measurement through three Rs dimensions: 1) Relevancy, which means understanding the unique issues and opportunities in the organization, 2) Rialability, which means providing comfort to audit committee and management and enhancing the organization's efficiency and effectiveness in meeting the customers' needs and helping improving its future planning, 3) Return on Investment, which can be measured through focusing on key audit risks, ways to do more with current resources, and improving communication with stakeholders.

Individuals also have their own views about Quality. Pirsig [24] considered Quality to be "The result of care", but Drucker [25] defined Quality in a product or service as is "… not what the supplier puts in. It is what the customer gets out and is willing to pay for." Edwards [26] suggested that Quality in management is to reduce costs and increase productivity, whilst Priyavrat [27] saw Quality as a quantitative measure of perfection.

Audit Quality Literature Review

Research on corporate governance has extensively spotlighted on both audit committee and external auditing which are two of the four cornerstones of the corporate governance, however research on internal auditing is still far behind. Research in relation to audit quality is less and the vast majority of audit quality research focused on audit committee and/or external audit, whilst internal audit quality research is scarce. Audit quality is extremely important and lack of the necessary quality could result in severe harm. To ensure audit quality, auditing professional bodies have been issuing a series of standards and guidelines as an attempt to enhance audit quality and since accountants are required to perform services at an acceptable level of quality [28], they must adhere to the applicable standards.

As discussed earlier, there is no one dimension of the quality of a service and many different approaches can be used to measure such a quality. Parasuraman et al. [29] stated ten characteristics of a good quality service. The service needs to be reliable, responsive, competence, accessible, courtesy, contactable, credible, secure, tangible, and its customer is identifiable. However, Chandrupatla [29] saw that the important measure of the quality of a service is the level of customer's satisfaction, and such satisfaction is a vital in the TQM routine [30]. Kaplan and Norton [31] looked at the quality of the service through its result, and they stated four key areas of measurement for successful results: financial, customer, internal processes and potential. Similarly, Kerns [32] identified seven values for quality success of any organization. These values are people, achievement, service, golden rule, success, truthfulness, and realistic optimism.

External audit

External audit quality has been the focus of many studies for decades. In early 1980s, DeAngelo [33] defined audit quality as it detects and reports material misstatement. Titman and Trueman [34] focused on the information and considered that the auditor who provides his customer with precise information about the firm's value as a provider of a valuable (good quality) service. Similar to DeAngelo's definition, audit quality as seen by Palmrose is the audit that can affirm, to a higher extent, that financial statements are free of material misstatements.

Standards may not enhance audit quality unless supported by legal system and legal regimes. In this context, Favere-Marchesi [35] studied the quality of statutory audit in Asia, focusing on the legal environment with a comparison among seven different Asian countries. The analysis of the data generated from the relevant law and regulations in these countries showed that diverse auditing legal environment caused

differences in audit quality. In line with the legal enforcement system for valuable service, quality assurance review is one way for reviewing quality standards. Alma et al. argued that audit quality is more likely to increase if independent audit firm has quality assurance review programs.

Francis reviewed audit quality empirical research since late 1970s and found evidence that audit quality varies and impacted by the audit firm size and office characteristics, industry specialization and cross-country differences. This study proved that audit quality, in general terms, was at an acceptable level, although audit quality has probably declined in the 1990s. The possible impact of managerial ownership of the audited company and audit quality was examined by Kane and Velury [36], where a negative association was documented. Kane and Velury concluded that overall audit quality is determined by divergence-of-interests. There is also evidence that earning quality has a positive relation to external audit quality, which is in tern affected by agency risk. In more recent study, Chuntao [37] examined the audit quality in relation to audit firm size and found a positive relation between audit firm size and earning quality (as a proxy for auditing quality), and so investors perceive large audit firms to be of higher quality. External audit quality in a developing country was examined by Al-Ajmi [38], who investigated the association between external audit quality, the size of the audit firm and effectiveness of audit committee. The analysis of the perception of credit and financial analysts in Bahrain showed that the Big 4 accounting firms were considered to be of higher quality. The study result evidenced that the audit quality is enhanced by an effective audit committee but impaired by the non-audit services that auditors may provide to their customers. In a more developed country, Kim and Yi [39] studied whether independent auditor designation by regulatory authority of Korea affects audit quality and concluded that auditor designation by authority enhances audit quality.

CG and audit committee

Some studies focused on quality corporate governance in general or the audit committee in particular. An indication of corporate governance quality is the reduction of the undesirable effects of earnings management along with fraud and errors [40], and this produces internal control with an appreciated quality which is a function of the quality of the control environment such as the board of directors and audit committee [41]. Understanding internal control significantly affects welfare not only for directors and management but also for shareholders, trading partners, auditors and, in general, the whole society [42].

Goodwin and Seow [43,44] emphasized that the listed companies not only must have audit committees in place but also such committees must have sound quality, which should be negatively correlated to the internal control weaknesses [45]. As seen by Rainsbury et al. [46] collapse of many corporations during the 2000s has led regulators to focus more on quality of corporate governance via improving the audit committees' effectiveness. An effective audit committee was also found to positively affect external audit quality [47-50]. Audit committee that sustains higher level of quality has higher power within the organization and this power could be achieved when the audit committee is large enough and its members are competent. Kalbers and Fogarty [51] suggested that the larger the audit committee the better power within the organization.

Several studies [52] found that audit committees with better quality (active and independent members) reduce the likelihood of fraud and increase audit effectiveness. Zhou et al. investigated the relation between the quality of audit committee and other factors using conditional logit analysis. They found some relations between the audit committee quality and both internal control weaknesses and auditor independence. In a more recent study, Rainsbury et al. investigated the effect of audit committee quality on the financial reporting quality based on a sample of 87 New Zealand firms and found no significant impact of audit committee quality on the quality of the financial reporting.

Goodwin and Seow focused their study on the practices of corporate governance in relation to the financial reporting quality using two hypothetical cases. The first was concerned with audit committee, internal auditing, and corporate code of conduct, and in the other case, the focus was on the audit partner rotation, outsourcing of internal audit activity, and audit firm experience with other companies in the same group. The results suggest that financial reporting quality is influenced by the three variable of the first case. Existence of an IAF found to have the strongest impact on other variables of the study. However, there was no addressing of quality of IAF, which could affect the responses of the study sample.

Management and size of IAU

Management of an organization or a division is the key source of value and quality. Kerns suggested five key areas that can be used as dimensions of quality for management achievements: 1) values driven, 2) based on ethical behavior, 3) important to purpose, 4) oriented towards active learning, and 5) measurable. He saw that when the leader of a team has moral anchored values and act accordingly, his team would eventually sustain ethical behavior. IIA standards require that the directors of IADs or IAUs to effectively manage their units and establish a risk-based plan (attribute standard 2010).

AICPA produced a list of questions (tool) to help audit committee assess performance and effectiveness of the internal audit team [53]. This list covers all important aspects, such as the size and staff of IAU, plan and procedures of the audit, reporting, and quality assurance review. Size of the IAU could significantly affect the internal audit quality since relatively small size of the IAU cannot do the right job in the right time. Similar to the external audit firm, whose size is considered to be the dominant factor of audit quality [54-56], the internal audit unit size, in terms of personal and budget, might be also considered as an important factor of the internal audit quality.

When IAF has enough fund, it is expected to do its work more effectively and probably reduce external audit fees [57]. The correlation between budget and quality was documented by Francis, who reported a positive relation between cost of the audit and audit quality. Using different approach, Ashbaugh-Skaife et al. [58] found that less investment in internal control is, among other things, more likely to produce deficiencies in internal control. These studies confirm the importance of the size of the IAU as a measure of its quality.

Staff of IAU

As noted by Grogan and Cook [59], the success of any business is heavily based on the quality of its staff. They saw that the competitiveness of small to large organization in private, public, government, and non-for-profit sectors can be measured by the employees who are competent and eager to develop their professional skills. Kerns emphasized on that the key element of quality outcomes is the ethical behavior of the organizational community and its members.

Bhatti and Awan studied the role and technique of IAF for

improving quality of sports' products in Pakistan through surveying 100 ISO 9000 certified companies. They found that about 70% of the responded 88 firms have internal quality audit department with qualified personal who participated in reducing defects by 65%. Internal auditors' good relation with the production staff (auditees) was highlighted to be an important element of the audit success. In a more recent study, Sarens et al. investigated what could drive audit committee to support IAF and how the IAF can provide comfort to audit committee. They carried interviews with members of audit committees and internal auditors from four Belgium companies and their findings evidenced that when internal auditors, who have sufficient skills and appropriate inter-personal, are involved in the improvement of internal control, this bring significant level of comfort to the audit committee. The skills of internal auditors come from both educational background (either academic or professional) and experience which is gained as time goes. Therefore and based on learning curve effect, old auditors are considered as of higher quality, since new auditors are in need of acquiring knowledge of the company and this of course takes sometimes.

From this discussion, it is clear that when the staff of the IAU, including the director, acquires the required skills and personal characters; the quality of their work is expected to appreciate.

Independence of IAU

The effect of independence of the auditor either internal or external is a dominant factor in audit quality. Since the independency of the external auditor is more understandable, there is a call for outsourcing internal audit. Caplan and Kirschenheiter [60] demonstrated that the quality of the providers of outsourcing internal audit service is better than those within the organization. Power and Terziovski [61] studied audit quality by focusing on the perceptions of non-financial auditors and their clients. The analysis of the data-questionnaire-based obtained from non-financial auditors and non-financial audit clients in Australasia exemplified a major constraint in relation to some essential issues of auditor independence. Since reporting is an essential element for independence, IIA standards require the director of IAU to report directly to audit committee (attribute standard 1110) and this should strength the independence of IAF and thus enhance audit quality.

Prawitt et al. examined the relationship between IAF quality and earning management. For measuring the IAF quality, the authors used six components of the SAS No. 65 which external auditors use to assess IAF quality. These components are staff quality (experience, professional qualification, and training), the focus on financial audit, internal audit reporting line, and size of the IAF. Earning management was measured by both abnormal accruals and earnings forecasts. Based on the survey responses from chief audit executives (CAEs), the results of this study evidenced that IAF quality has a moderate effect on the level of earning management and this confirm that the higher the quality of IAF, the lower the level of earnings management.

Internal audit work and process

The focus of IAF is the internal control where internal auditors are involved in day-to-day activity. To operate effectively, internal auditors need to sufficiently understand the entity's operation, strategies, and corporate culture, and discover and report mistakes [62]. Calder [63] stated that, in order to have an effective auditing, audit procedures need to be defined, auditors must be trained and knowledgeable in all auditing processes, cooperation between auditor and auditees must exist, and efficient information retrieval (reporting strategy and following up) must be available. With regard to the audit clients perception on the audit work scope, Power and Terziovski found that the clients of the audits have an opposite perception of auditors since they believe that what they are getting from auditors is less than what they would like to have, especially in the continuous improvement focused auditing, and in the main time, they feel that the compliance auditing carried by IAU is more than the need.

Assurance of IAU

Standards of auditing insist on that the quality assurance program is in place. This is because quality review of audit performance and audit activity monitoring are expected to enhancing audit quality. Quality assurance usually includes both internal (i.e. self-assessment) and external evaluation [64]. As though IAU seeking quality should have a self-assessment and evaluate itself via recommendation standing, customer feedbacks, and individual productivity as well as an independent quality assessment review. The external quality review of internal audit work and effectiveness of the internal audit unit can be done by external auditors or audit committee, since the audit committee is expected to enhance the quality of both internal and external auditing [65,66], and in the main time, it relies on them in evaluating the effectiveness of internal control [67]. Quality review assurance can also be carried out by special agencies or professional bodies.

Reporting of IAU

What to report and when and to whom are essential questions that strongly affect audit quality. Francis argued that informational value in the audit report is a key factor of audit quality, whereas Gendron and Bedard found the internal audit report is an essential element for the audit committee members to comfort themselves with the company's internal control. This is because risk assessment can be effective only when data with an adequate quality is available on time and on regular bases [68].

Saraph et al. [69] identified several factors which derive quality. These factors include the role of management and successful department, precise data, appropriate policy and reporting, and employee relations. Inappropriate internal auditing reporting system result in low quality business [70] and reporting to management reduces the quality (in independence and objectivity) of IAF [71], however reporting the audit committee shall enhance the quality of the IAF [72].

IAQM and Research Methodology

Based on the literature as discussed above, the quality of the IAU might be measured through the quality of seven pillars, as shown in Figure 1:

To measure the quality of each of these seven pillars, a check listing questions should be asked. For example, professional institutional establishment could be evaluated using the following seven factors:

1) IA has a written charter and a set of core values.

2) IA has a written code of ethics.

3) IAF covers all different aspects of the company (financial, operational, governance, etc.).

4) IAF covers all different assessments of the company (risk management, control process, ethics, programs, activities, etc.).

5) IAF insures that the companies' strategic goal and objectives are met.

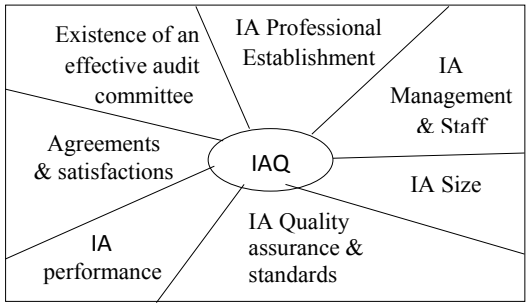

Figure 1: Quality seven pillars measures

6) IA members' skills cover all different disciplines within the company.

7) IA works on a risk-based plan.

Each question takes between 0-10 where 0 means no relation to IAQ and 5 means mid importance for measuring quality and 10 means extremely important for quality measurement. The following Internal Audit Quality Model (IAQM) can be used as a general measure for quality of internal audit function:

IAQ=Professional Establishment*%+Management and Staff*%+IA Size*%+Existence of an effective audit committee*%+Audit performance*%+Agreements and satisfactions*%+Quality assurance and standards*%.

Where % is used for weighting, and so it ranges between 0-100% for each segment, and then the overall rate will be recalculated to be scaled by 100% in total (by adding% up must equal 100%).

To achieve the objective of this study and based on the literature, 36 factors with relation to the seven quality pillars were determined and then included in a questionnaire which was developed and distributed to a random sample of 120 external auditors (50 from the Big 4 firms and 70 from other audit firms) 87 (73%) was returned.

Research Questions

In addition to developing IAQM, this study aims to find answers to the following questions:

1) What are the most important factors to affect the IAQ based on the external auditors' perception?

2) What are the least important factors to affect the IAQ based on the external auditors' perception?

3) Are there significant differences between external Big 4 accounting firms and the other local (non-Big 4) accounting firms auditors perceptions of IAQ.

Data Analyses

The data collected from external auditors in the returned questionnaire will be analyzed in three ways: demographical, reliance, and quality. Then the IAQM will be evaluated and developed.

Demographical analysis

Nearly 30% of the study samples are under 30 years, but the majority (more than 50%) is between 30 and 50 years old, and 15% of the study sample is 50 years old or older. About 75% of the study sample is holding bachelor as an educational degree, while about 20% have a master, and about half of the sample hold professional certificate(s), of which the CPA represents one forth and CIA represents 17%.

In general, half of the study sample has 10 years' experience or less while the rest have more than 10 years' experience. The great majority of the sample previous experience was in auditing. Nearly one third of the study sample has previously worked as an internal auditor of which 67% has at least 6 years work experience in internal auditing, and nearly 13% of the study samples are members of the IIA (Institute of Internal Auditors). Over 60% of the study samples are either audit manager or senior auditor while the auditors are 22%, however partners are small percentage (7%).

Reliance analysis

The external auditors' study sample were asked whether they have had closely worked with the clients' internal auditors. 12% answered "Always" and 25% answered "Often", while 46% answered "Sometimes". The remaining percentage (17%) suggests that external auditor either "Seldom" or "Never" worked closely with the clients' internal auditors.

Regarding the question of the degree of the complexity of the audit in the recent client organizations, the overall response was 55 (scale from 0=very law and 100=very high). The average number of the Big 4 firm was 60.42, but non-Big 4 firms' average was 50.92. The overall quality of the above clients internal audit (IA) department/unit was about 43.82 out of 100, which may mean that, in general term, the quality of the internal audit function within the companies is, on average, less than medium from the external auditors' viewpoint (Big 4 mean=45.28, and non-Big 4 mean=42.67). Lack of quality does normally affect the external auditor reliance of the internal audit work.

The study samples were asked the following question:

Internal auditors are considered to have completed work related to the financial statement audit if the external auditors:

- Used the internal auditors as assistants during the financial statement audit; AND/OR
- Used work already performed by the internal auditors.

For the most recently completed financial statement audit of the clients, please use the scale provided below to indicate the percentage of the external auditors' reliance on the work of internal auditor related to the financial statement audit.

Table 1 shows the answers to this question. On average, the Big 4's percentage reliance on the internal audit work is about one third, whilst non-Big 4's reliance in nearly 40%. Such reliance could affect the total fees to be charged to the client.

Approximately, the total number of audit hours for last two years were, on average per firm, 38958.91 and 42441.30, respectively. As long as there is a reliance on the internal audit work with regard to the financial statements, we expect the total number of hours to be less than if there were no such reliance. Assuming that the consequence of a reliance of 40% will yield a 10% reduction on the total work to be done through the years. This reduction on external audit work will result

	Big 4	Non-Big 4	Total
Mean	32.43%	39.59%	36.61%
Std. Deviation	18.49%	24.66%	22.46%

Table 1: The percentage of the external auditors' reliance on the work of internal auditor related to the financial statement audit.

in about 4000 hours cut, and this decrease on external audit time is expected to lower the total external audit fee.

The external auditors in the sample were asked whether they have utilized an internal audit as assistance in undertaking the audit work or have they relied on their work/reports in the last two years' audit. 38% of the study sample answered "Yes". The approximate number of hours of their reliance on the internal audit work for the last two years was, on average per firm per year, 3426.82, and the total number of hours of audit assistance undertaken from the internal audit department for the last two years was, on average per firm per year, 749.21. These results suggest that external auditors rely heavily of the internal audit work but they are less likely taking assistance from the internal audit unit or department.

External auditors were asked to rate the level of inherent risk (i.e. risk of material misstatement occurring in financial statements) in the absence of controls in the client's organization using a scale of 1 (low)-7 (high). The rate of the risk was seen to be quit high (average=5.89). If the client's controls are weak as a result of nonexistence or ineffective internal audit, external auditors will probably either deny the audit or invest more efforts and in both cases, the client will face difficulties [73-76].

Relationships between internal audit departments and their external auditors may take on one of many levels of interactions. Coexistence, coordination, integration, and partnering are the four possible relationships between internal and external auditors. The responses of the external auditors which describe their relations with the internal audit department/unit are summarized in Table 2.

About one forth (28%) of the Big 4 auditors chose that their relationship with internal audit department/unit to be coexistence, which means there is no cooperation nor coordination between the two groups, but the percentage is much lower (6%) with non-Big 4 auditors. Almost the same percentages (11%, 12%) of Big and non-Big 4 Firms' auditors went the other end (partnering) in describing their teams' relationships with internal audit teams. However, the majority of the respondents describe the relations with the internal auditors to be either coordination (45%) or integration (28%). These findings suggest that, in general term, both external and internal teams are cooperating in one form or another, and therefore as long as external auditors feel that the client's internal audit team sustains the necessary quality, they have the willing to cooperate with it.

Quality Analysis

Based on the literature, 36 factors were determined as measures of internal audit quality. External auditors were asked to give their perceptions on each factor's extent of effect on the quality of internal audit function using a scale of 0 (no effect) to 10 (very high effect). Based on the percentage of effect, these factors can be used to evaluate the overall quality of internal audit function.

		Coexistence	Coordination	Integration	Partnering
Big 4 Firms	No	10	18	4	4
	%	0.28	0.50	0.11	0.11
Non-Big Firms	No	3	20	20	6
	%	0.06	0.41	0.41	0.12
Total	No	13	38	24	10
	%	0.15	0.45	0.28	0.12

Table 2: The internal-external auditors' relations from the point view of external auditors.

Professional institutional establishment

The following seven factors are related to the professional institutional establishment of the internal audit department/unit within the organization.

1) IA has a written charter and a set of core values.

2) IA has a written code of ethics.

3) IAF covers all different aspects of the company (financial, operational, governance, etc.).

4) IAF covers all different assessments of the company (risk management, control process, ethics, programs, activities, etc.).

5) IAF insures that the companies' strategic goal and objectives are met.

6) IA members' skills cover all different disciplines within the company.

7) IA works on a risk-based plan.

As explained in Table 3, all these factors were recognized by external auditors from both Big and non-Big audit firms to have high impact the internal audit quality.

The overall average level of impact for each factor is higher than 7.5 out of 10, which means that these seven factors are essential elements in evaluating the internal audit quality from external auditors point view. Std. Deviation figures and mean comparison statistical analysis explain that there is a consensus between the two groups (Big and non-Big Firms) and among all individual auditors on the importance of these factors in measuring internal audit quality (there is no significant differences at all levels of significances).

Internal audit management and staff

The following nine factors are relating to the internal audit staff and director.

1) Director of IAF is a member of the IIA.

2) Director of IAF has sufficient knowledge about the English language.

3) IA staff is not involved in any activity other than auditing.

4) Director of IAF is a CIA or has any equivalent certificate.

5) IA staff have at least bachelor in a related degree.

6) IA staff has 5 years' experience in auditing or related fields.

7) At least half of the IA staff has professional certificates, such as CIA, CPA, etc.

8) IA director and staff have faith or ethical believe and ethical behavior.

9) At least half of the IA staff including the director takes training per year in related subjects.

The external auditors' rating of these factors is presented in Table 4. The overall means of following three factors: 1) Director of IAF is a member of the IIA, 2) Director of IAF is a CIA or has any equivalent certificate, 3) At least half of the IA staff have professional certificates, such as CIA, CPA, etc., were less than 7.00 (but still above 6.00) and this means that external auditors consider these factors to be comparatively less important in measuring internal audit quality. The overall means

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) IA has a written charter and a set of core values.	8.00	35	1.93	7.90	48	2.19	7.94	83	2.07
2) IA has a written code of ethics.	7.78	36	2.14	7.76	49	2.33	7.76	85	2.24
3) IAF covers all different aspects of the company (financial, operational, governance, etc.).	8.00	36	1.99	8.51	49	1.75	8.29	85	1.86
4) IAF covers all different assessments of the company (risk management, control process, ethics, programs, activities, etc.).	8.00	34	1.69	8.16	49	1.94	8.10	83	1.83
5) IAF insures that the companies' strategic goal and objectives are met.	7.36	36	2.09	7.88	49	2.02	7.66	85	2.05
6) IA members' skills cover all different disciplines within the company.	7.19	36	2.15	7.84	49	1.76	7.56	85	1.95
7) IA works on a risk-based plan.	7.97	36	1.61	7.27	49	2.44	7.56	85	2.15
Average	7.76			7.90			7.84		

Table 3: The study sample rating means of the professional institutional establishment factors.

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) Director of IAF is a member of the IIA.	6.33	36	2.67	7.04	49	2.72	6.74	85	2.71
2) Director of IAF has sufficient knowledge about the English language.	6.78	36	2.45	7.59	49	1.96	7.25	85	2.20
3) IA staff are not involved in any activity other than auditing.	7.36	36	2.18	7.59	49	2.47	7.49	85	2.34
4-Director of IAF is a CIA or has any equivalent certificate,	6.81	36	3.00	7.02	48	2.26	6.93	84	2.59
5) IA staff have at least bachelor in a related degree.	7.83	36	1.78	7.96	48	1.79	7.90	84	1.77
6) IA staff has 5 years' experience in auditing or related fields.	6.83	36	2.04	7.51	49	2.00	7.22	85	2.03
7) At least half of the IA staff have professional certificates, such as CIA, CPA, etc.	6.64	36	2.54	6.71	49	2.47	6.68	85	2.48
8) IA director and staff have faith or ethical believe and ethical behavior.	7.69	36	2.34	8.27	49	1.95	8.02	85	2.13
9) At least half of the IA staff including the director takes training per year in related subjects.	7.89	36	2.16	8.20	49	1.78	8.07	85	1.94
On average, how many hours per year per person?	57.00	30	29.14	65.00	38	25.86	61.47	68	27.44
Average	7.13			7.54			7.37		

Table 4: The study sample rating means of the internal audit management and staff factors.

of other three factors: (1) Director of IAF has sufficient knowledge about the English language, 2) IA staff are not involved in any activity other than auditing, 3) IA staff have 5 years' experience in auditing or related fields) locate between 7.00 and 7.49, which probably mean that these factors are somewhat important. However, the three remaining factors: (1) IA staff have at least bachelor in a related degree, 2) IA director and staff have faith or ethical believe and ethical behavior, 3) At least half of the IA staff including the director take training per year in related subjects) were ranked higher (>7.5), to be in the top 25%. From the Std. Deviation analysis, we can notice that in factor 1 and 4, overall S.D.>2.5, which means that there is less agreement among the auditors on these two factors. T-test analysis between the two groups (Big and non-Big) suggests that there is no significant difference except for factor No. 2 (Director of IAF has sufficient knowledge about the English language) where the difference between the two groups is significant at the 10% level.

Internal audit department/unit's size

Regarding the possible effect of the internal audit department/unit's size in terms of personal and budget on the internal audit quality, external auditors were asked to rate the following factors:

1) Size of the IAU in terms of personal.

On average, for 1000 employees, how many internal auditors?

2) Size of the IAU in terms of budget.

On average, what is the appropriate percentage of the IAU budget to the total budget of the company?

As presented in Table 5, both the size the internal audits department/unit in terms of personal and budget was not seen to have high impact (overall means <5.5) on the quality of internal auditing. Based on the mean t-test, there is a significant difference at the 1% level between the means of the two groups for the personal size factor. The respondents suggest that about 10 internal auditors for each 1000 employees (on average one auditor for each 100 employees). According to the study sample, the appropriate budget in terms of percentage of the total budget of the company is 8% (the Big 4 Firm=10%, non-Big=7%, and the difference between the two is significant at the 10% level).

Existence of an effective audit committee

The following factors which are related to an existence of an effective audit committee were also considered by the external auditors to have strong effect on the internal audit quality:

1) An existence of an audit committee.

2) Effectiveness of the audit committee.

3) Ultimate report goes to the audit committee.

4) Director of IAU attends audit committee's meetings.

5) Appointing and removable of director of IAU in the hand of audit committee or board of directors.

As presented in Table 6, all of these factors were rated more than 7.5 by the external auditors in both groups, which is considered to be important quality measure. The small standard deviation (<2.5) indicates that there is a general agreement among the auditors on the importance of these factors. On the other hand, there are no significant differences between the responses of the auditors from the Big 4 accounting Firms and non-Big Firms. This means than both groups carry the same feeling regarding the importance of the existence of an effective audit committee factors in quality evaluation.

Internal audit performance

With regard to the internal audit performance practice, the six following factors were determined as measures of internal audit quality:

1) Planning all audits in written documents (time, activity, team, etc.).

2) Fraud and mistake detection.

3) Audit staff has free access to all employees and documents.

4) Use of technology (electronic interaction, software, internet, etc.).

5) Providing recommendations in the report.

6) Following up with the recommendations.

Table 7 shows that all of the six factors were considered by the external auditors to have high effect on the quality of the internal audit (means >7.5). Following up with the recommendations was recognized by the study sample to be the most important factor in measuring internal audit quality (overall mean=8.55, Big 4 mean=8.58, non-Big 4 mean=8.53). However, fraud and mistake detection factors has received the lowest rate (overall mean=7.88, Big 4 mean=7.72, non-Big 4 mean=8.00). Std. deviations (<2.5) and t-test (no significant differences between the means of the two groups) analysis in all of the six variables confirm that there is an agreement between individual external auditors and also between the two groups on the importance of these factors in determining the internal audit quality.

Agreements and satisfactions

The following four factors are related to the agreements and satisfactions of concerned parties:

1) Getting auditees' agreement on findings.

2) The level of satisfaction of IA staff.

3) The level of satisfaction of auditees.

4) The level of satisfaction of shareholders.

External auditors were asked to rate these factors based on their possible impact on the quality of internal audit function. Table 8 represents these rates of which two were below 7.00 (Getting auditees' agreement on findings, the level of satisfaction of auditees) and in the other two, the means were about 7.50 (The level of satisfaction of IA staff, the level of satisfaction of shareholders). Std. deviation of the first factor (Getting auditees' agreement on findings) is comparatively high (>3.00) which reflects less agreement between the auditors on

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) Size of the IAU in terms of personal.	6.20	30	2.06	4.30	37	2.31	5.15	67	2.38
On average, for 1000 employees, How many internal auditors?	10.77	31	6.21	9.49	39	6.39	10.06	70	6.30
2) Size of the IAU in terms of budget.	5.90	30	2.09	4.97	32	2.51	5.42	62	2.34
On average, what is the appropriate percentage of the IAU budget to the total budget of the company?	0.10	32	0.07	0.07	37	0.06	0.08	69	0.06
Average	6.05			4.64			5.29		

Table 5: The study sample rating means of the internal audit department/unit size factors.

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) An existence of an audit committee	7.94	36	1.77	7.55	49	2.13	7.72	85	1.98
2) Effectiveness of the audit committee	8.11	36	1.69	7.57	49	2.31	7.80	85	2.08
3) Ultimate report goes to the audit committee.	8.42	36	1.95	7.71	49	2.35	8.01	85	2.20
4) Director of IAU attends audit committee's meetings.	8.47	36	1.87	7.94	48	1.80	8.17	84	1.84
5) Appointing and removable of director of IAU in the hand of audit committee or board of directors.	8.39	36	1.78	8.13	48	2.11	8.24	84	1.97
Average	7.44			6.60			6.97		

Table 6: The study sample rating means of an existence of an effective audit committee factors.

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) Planning all audits in a written documents (time, activity, team, etc.).	8.03	36	2.06	8.25	48	1.58	8.15	84	1.79
2) Fraud and mistake detection.	7.72	36	2.13	8.00	49	1.94	7.88	85	2.01
3) Audit staff have free access to all employees and documents.	8.31	35	1.84	8.51	49	1.85	8.43	84	1.84
4) Use of technology (electronic interaction, software, internet, etc.).	8.17	36	1.98	8.02	49	1.83	8.08	85	1.88
5) Providing recommendations in the report.	8.31	36	2.10	8.49	49	1.82	8.41	85	1.93
6) Following up with the recommendations.	8.58	36	2.10	8.53	49	1.77	8.55	85	1.91
Average	8.19			8.30			8.25		

Table 7: The study sample rating means of an existence of internal audit performance practice factors.

this factor's level of importance in measuring internal audit quality. No significant differences were detected between the means of these variables of the two groups.

Quality assurance and standards

The following three factors were related to the quality assurance and standards:

1) Internal quality assurance review at least once a year.

2) External quality assurance review at least once every five year.

3) Level of conformance with the internal audit standards of IIA.

As shown in Table 9, external auditors consider the level of conformance with the internal audit standards of IIA to be the most important measure of the internal audit quality (mean >8.00) while external quality assurance review (at least once every five year) was seen to be the lowest important among the three variables. Based on t-test, no significant differences existed between the means of the two groups for the three variables.

All the 36 factors are presented in Table 10 ordered based on their level of important in measuring the quality of internal audit function. Only one factor (following up with the recommendations) exceeded 8.5 (or 85%), which is considered to be the most important factor to affect the IAQ from the point view of external auditors. However, 12 factors were rated between 8.00 and 8.5 (80-85%). These factors, which are considered to be the second most important factors, are:

1) Audit staff has free access to all employees and documents.

2) Providing recommendations in the report.

3) IAF covers all different aspects of the company (financial, operational, governance, etc.).

4) Appointing and removable of director of IAU in the hand of audit committee or board of directors.

5) Director of IAU attends audit committee meetings.

6) Planning all audits in written documents (time, activity, team, etc.).

7) IAF covers all different assessments of the company (risk management, control process, ethics, programs, activities, etc.).

8) Use of technology (electronic interaction, software, internet, etc.).

9) At least half of the IA staff including the director takes training per year in related subjects.

10) Level of conformance with the internal audit standards of IIA.

11) IA director and staff have faith or ethical believe and ethical behavior.

12) Ultimate report goes to the audit committee.

Eleven factors were rated between 7.5 and 8.00 (75-80%). These factors are the following:

1) IA has a written charter and a set of core values.

2) IA staff have at least bachelor in a related degree.

3) Fraud and mistake detection.

4) Effectiveness of the audit committee

5) Internal quality assurance review at least once a year.

6) IA has a written code of ethics.

7) An existence of an audit committee.

8) IAF insures that the companies' strategic goal and objectives are met.

9) The level of satisfaction of shareholders.

10) IA members' skills cover all different disciplines within the company.

11) IA works on a risk-based plan.

Five factors were rated between 7.00 and 7.5 (70-75), which are:

1) IA staff is not involved in any activity other than auditing.

2) The level of satisfaction of IA staff.

3) External quality assurance review at least once every five year.

4) Director of IAF has sufficient knowledge about the English language.

5) IA staff has 5 years' experience in auditing or related fields.

Another five factors were rated between 6.5 and 7.00 (65-70%). These factors are the following:

1) Director of IAF is a CIA or has any equivalent certificate.

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) Getting auditees' agreement on findings	6.97	35	2.48	6.79	48	3.02	6.87	83	2.79
2) The level of satisfaction of IA staff	7.63	35	1.93	7.33	48	2.06	7.46	83	2.00
3) The level of satisfaction of auditees	6.77	35	2.07	6.43	49	2.81	6.57	84	2.52
4) The level of satisfaction of shareholders	7.64	36	2.13	7.51	49	2.48	7.56	85	2.32
Average	7.25			7.02			7.12		

Table 8: The study sample rating means of the agreements and satisfactions factors.

The Factor	Big 4			Non-Big 4			Total		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
1) Internal quality assurance review at least once a year	7.56	36	2.13	7.94	48	1.93	7.77	84	2.01
2) External quality assurance review at least once every five year	7.69	35	2.01	7.00	49	2.40	7.29	84	2.26
3) Level of conformance with the internal audit standards of IIA	7.69	36	2.30	8.29	49	1.70	8.04	85	1.98
Average	7.65			7.74			7.70		

Table 9: The study sample rating means of the quality assurance and standards factors.

The Factor	Overall Rate	Std. Deviation
Following up with the recommendations.	8.55	1.91
Audit staff have free access to all employees and documents.	8.43	1.84
Providing recommendations in the report.	8.41	1.93
IAF covers all different aspects of the company (financial, operational, governance, etc.).	8.29	1.86
Appointing and removable of director of IAU in the hand of audit committee or board of directors.	8.24	1.97
Director of IAU attends audit committee meetings.	8.17	1.84
Planning all audits in a written documents (time, activity, team, etc.).	8.15	1.79
IAF covers all different assessments of the company (risk management, control process, ethics, programs, activities, etc.).	8.10	1.83
Use of technology (electronic interaction, software, internet, etc.).	8.08	1.88
At least half of the IA staff including the director take training per year in related subjects.	8.07	1.94
Level of conformance with the internal audit standards of IIA.	8.04	1.98
IA director and staff have faith or ethical believe and ethical behavior.	8.02	2.13
Ultimate report goes to the audit committee.	8.01	2.20
IA has a written charter and a set of core values.	7.94	2.07
IA staff have at least bachelor in a related degree.	7.90	1.77
Fraud and mistake detection.	7.88	2.01
Effectiveness of the audit committee	7.80	2.07
Internal quality assurance review at least once a year.	7.77	2.01
IA has a written code of ethics.	7.76	2.24
An existence of an audit committee	7.72	1.99
IAF insures that the companies' strategic goal and objectives are met.	7.66	2.05
The level of satisfaction of shareholders.	7.56	2.32
IA members' skills cover all different disciplines within the company.	7.56	1.95
IA works on a risk-based plan.	7.56	2.15
IA staff are not involved in any activity other than auditing.	7.49	2.34
The level of satisfaction of IA staff.	7.46	2.00
External quality assurance review at least once every five year.	7.29	2.26
Director of IAF has sufficient knowledge about the English language.	7.25	2.20
IA staff has 5 years' experience in auditing or related fields.	7.22	2.03
Director of IAF is a CIA or has any equivalent certificate,	6.93	2.59
Getting auditees' agreement on findings.	6.87	2.79
Director of IAF is a member of the IIA.	6.74	2.71
At least half of the IA staff have professional certificates, such as CIA, CPA, etc.	6.68	2.48
The level of satisfaction of auditees.	6.57	2.52
Size of the IAU in terms of budget.	5.42	2.34
Size of the IAU in terms of personal.	5.15	2.38

Table 10: The study sample rating means and Std deviation of all 36 factors.

2) Getting auditees' agreement on findings.

3) Director of IAF is a member of the IIA.

4) At least half of the IA staff has professional certificates, such as CIA, CPA, etc.

5) The level of satisfaction of auditees.

Non factors were rated neither between 6.0 and 6.5 (60-65%) nor between 5.5 and 6.0 (55-60%). However, the last two least rated factors were rated between 5.00 and 5.5 (50-55%), and these are:

1) Size of the IAU in terms of budget.

2) Size of the IAU in terms of personal.

We can conclude that the great majority (24 factors, 67%) of the listed 36 factors were rated above 7.5 (75%) to be in the top 25% level of importance in measuring internal audit quality. The remaining 12 factors, ten of them were rated above 6.5 (65%) to be in the top 35% level importance in measuring internal audit quality.

Quality and reliance

When external auditors decide to rely on the internal audit work or seek assistance from internal auditors, they may not proceed if they are doubt about the internal audit quality or internal auditors' quality. The study sample external auditors were asked the following couple questions at the end of the questionnaire:

- To what extent the quality of the internal auditing affects your reliance decision on the client's internal auditors and their work?

0 10 20 30 40 50 60 70 80 90 100

Very low Moderate Very high

- When you decide to rely on your client's internal auditors and their work, approximately by what percent, this reliance may reduce:

1. The total audit time (hours)?

2. The total audit fee?

The answers to these questions are presented in Table 11.

The means for both Big 4 (mean=66) and non-Big 4 (mean=65) confirmed that the quality of the internal audit work and internal auditors is highly recognized by external auditors. This probably means that when the quality of the internal audit function measured by the already discussed seven segments and their 36 factors is low, the

external audit reliance will be low or disappear.

The study sample estimated the percentage reduction on the total external audit time (hours) in case of reliance to be more that 15%, and hence the percentage reduction on the total audit fees to be about 9%. These results suggested that improving the quality of the internal audit function via improving internal auditors and the internal audit performance will not only benefit the company overall performance but also participate in an immediate profit gain.

Discussion and Conclusion

From the above analysis, we are able to answer the research questions, which are:

1) What are the most important factors to affect the IAQ based on the external auditors' perception?

2) What are the least important factors to affect the IAQ based on the external auditors' perception?

3) Are there significant differences between external Big 4 accounting firms and the other local (non-Big 4) accounting firms auditors perceptions of IAQ.

The most important factors to affect the IAQ from the point view of external auditors are the following five factors: 1) Following up with the recommendation, 2) Audit staff have free access to all employees and documents, 3) Providing recommendations in the report, 4) IAF covers all different aspects of the company (financial, operational, governance, etc.), and 5) Appointing and removable of director of IAU in the hand of audit committee or board of directors.

However, the least important factors to affect the IAQ from the point view of external auditors are the following two factors: 1) the size of the IAU in terms of personal, and 2) The size of the IAU in terms of budget.

Regarding whether there are significant differences between Big 4 and non-Big 4 auditors' perceptions of IAQ measuring factors, in 34 of the total 36 quality measure factors there is no evidence of any significant difference at all common level of significance. However, there is significant difference at the 1% level regarding the size of the IAU in terms of personal factor. There is also significant difference at the 10% level in the factor: director of IAF has sufficient knowledge about the English language.

Nonexistence of significant differences between the perceptions of the two groups (Big and non-Big audit firms) in the vast majority of the quality measure factors (34 out of 36) indicates that auditors working for local or international accounting firm share similar perceptions regarding the possible internal audit quality measures.

Based on the study sample overall rating scale, as showing in Table 12, we can develop the following internal audit quality theoretical model (IAQTM):

IAQ=Professional Establishment*78.4%+Management and Staff*73.7%+IA Size*52.9%+Existence of an effective audit committee*69.7%+Audit performance*82.5%+Agreements and satisfactions*71.2%+Quality assurance and standards*77%

In order for the quality model to provide a grade between 0 and 100, we have to recalculate the quality segment percentages to be totaled to 100%. The model after recalculating quality measure percentage will be as follows:

IAQ (total=100 points)=Professional Establishment*15.51%+Management and Staff*14.58%+IA Size*10.47%+Existence of an effective audit committee*13.79%+Audit performance*16.32%+Agreements and satisfactions*14.09%+Quality assurance and standards*15.24%

This model might be used by internal or external parties as an approximate estimate of the internal audit quality. The 36 factors (questions) survey can be applied to an internal audit department or unit and depending on the actual condition, the seven segment factors actual value can be determined by dividing the achieved total by the maximum possible value of the segment multiplied by 100, and so, the outcome must range between 0 and 100. For example, if the actual position of an internal audit department at company X supports a "Yes" answer to the seven factors within the professional institutional establishment, then the achieved total is 7, and the value is 100 (7/7 × 100). However, if the surveyed internal audit department achieved only 4 out of the seven points, the value will be 57.14 (4/7 × 100). Assuming that the following values were achieved by an internal audit unit at company Y:

Professional Establishment=43

Management and Staff=62

Internal Audit Size=58

Existence of an effective audit committee=85

Audit performance=59

Agreements and satisfactions=73

Quality assurance and standards=47

Then, the IAQ can be calculated as follows:

IAQ=Professional Establishment (43*15.51%)+Management and Staff (62*14.58%)+IA Size (58*10.47%)+Existence of an effective audit committee (85*13.79%)+Audit performance (59*16.32%)+Agreements and satisfactions (73*14.09%)+Quality assurance and standards (47*15.24%)=60.58.

The total quality of this internal audit unit is 60.58 out of 100. Assuming that no quality less than 75% would be accepted in this industry, this IAU needs to improve its quality level.

In order for the IAQTM to be official and widely accepted more research and study surveys need to be carried and different related

Question	Accounting Firm	N	Mean	Std. Deviation	Std. Error Mean
The extent the quality of the internal auditing affects the reliance decision on the client's internal auditors and their work?	Big 4	37	66.08	18.53	3.05
	non-Big 4	48	64.79	23.22	3.35
Percentage reduction on the total audit time (hours).	Big 4	34	15.03%	0.08	0.013
	non-Big 4	47	16.79%	0.09	0.013
Percentage reduction on the total audit fees.	Big 4	34	8.57%	0.08	0.014
	non-Big 4	48	8.81%	0.09	0.012

Table 11: The response answers to: what extent the quality of the internal auditing affects the reliance decision on the client's internal auditors and their work.

Segment Factor	Overall %	% to the Total
Professional Establishment	78.4	15.51%
Management and Staff	73.7	14.58%
Internal Audit Size	52.9	10.47%
Existence of an effective audit committee	69.7	13.79%
Audit performance	82.5	16.32%
Agreements and satisfactions	71.2	14.09%
Quality assurance and standards	77	15.24%
Total	505.4	100%

Table 12: Overall rating scale for segment factors.

parties (i.e. managers, directors of internal audit departments, standards setters committees) should be consulted. The same with the standards, a quality measure model may not be the best model for all times and all communities. However, the reliance on the internal audit function is unlikely to occur whenever external auditors are doubt about the quality on the work done by the internal audit department or unit. Reliance on the client's internal audit will save time and money and the final beneficial is the client's company.

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