

Audit Committee Effectiveness: Relationship with Audit Committee Characteristics and Interaction with the Internal Audit Department: Case of Egypt

Elsayed Nasser DAA*

Banking and Finance Department, Hekma School of Business, Dar Alhekma University, Jeddah, Kingdom of Saudi Arabia

Abstract

This study examines whether specific audit committee (AC) characteristics, including independence, knowledge, experience and training, and interaction between audit committee members and the internal audit function are associated with AC effectiveness. We find that AC effectiveness is higher when members are more independent affected mainly by their ability to express an opinion regarding doubt of continuity and having compensation within the acceptable limits, knowledge and experience affected mainly by the existence of at least one member who as strong accounting, financial and auditing expertise, and effective interaction with internal audit function measured mainly by AC reviews of the programs and procedures related to risk management process and AC determination of the internal audit annual budget. These findings are consistent with an increased demand for higher quality auditing by audit committees, and by firms that make greater use of internal audit.

Keywords: Audit committee; Internal audit; Auditing expertise; Risk management process

Introduction

Developing nations in general and Egypt in particular suffer from serious economic and financial problems, including: weak and illiquid stock markets, economic uncertainties, weak investor protection, frequent government intervention; high levels of ownership concentration; state ownership of companies, weak legal and judiciary systems, weak institutions, and limited human resources capabilities [1-7].

To overcome these serious problems, Egypt is actively working to develop the tools and institutions necessary to implement sound governance principles on a national scale. It is interesting to note, however, that one of the key obstacles to the successful implementation of governance standards is the private sector's lack of awareness about the subject and the benefits it provides.

Corporate governance is one of the tools that will help Egypt to realize high and sustainable rates of growth, increase confidence in the national economy, deepen capital market and increase its ability to mobilize savings. In addition, it results in raising investment rates, protecting the rights of the minority shareholders or small investors. Also, it encourages growth of private sector by supporting its competitive capabilities, helping to secure financing for projects, generating profits, and creating job opportunities [8].

Although the audit committee is only one dimension of broad-based CG, a lack of appropriate audit committee oversight can ultimately contribute to corporate failure and diminish public confidence in the mechanism [9]. The audit committee forms an important requirement of Egypt corporate governance code. Egypt started to develop a CG code only in 2005. The Egyptian Code of Corporate Governance (ECCG) was formally established in October 2005 and was largely derived from the recommendations of the Cadbury Report (1992), the Hampel Report (1998) and the Combined Code in the UK.

There are two CG codes that are now available in Arabic and English: The first is the "Guide to Corporate Governance Principles in Egypt" by Dr. Zeyad Bahaa El Din and Mr. Maged Shawqi, 2005, published by the Center for International Private Enterprise (CIPE) and the second is

the "Corporate governance executive regulations project for Egyptian Listed Companies", by the Capital Market Authority, Nov. 2006. Giving the fact that the two codes are not more than 14 pages for each and the AC section in both is not more than a page, specifying the composition of the AC, their functions and frequency of meetings without giving any details regarding the determinants of AC effectiveness to be able to perform such functions, the interaction with the internal audit department or the external auditor.

AC was formally required for all listed companies in Egypt beginning 2008 by Capital Market Authority (CMA) now the Egyptian Financial Supervisory Authority (EFSA) (CMA Board of Directors Decision No. (94) of 2008 issued on 22/9/2008; Audit Committee was mentioned in article 7). At the beginning of 2009 all listed companies on the Egyptian Exchange (EGX) have to submit the audit committee report starting from the first quarter of 2009 (ending March 31) and the companies that did not submit the audit committee report by the two months deadline were required to pay a fine of LE 15,000. Given this fact combined with the fact that the Egyptian Code is very brief in terms of AC effectiveness, the paper tries to answer this question: what are the determinants of audit effectiveness in Egypt given the briefness of the Egyptian Code of corporate governance?

Although many researchers have examined audit committee effectiveness and its determinants in developed nations, much less academic study has been made of developing and emerging nations, given the pressures related to globalization, international trade, and international investment practices [10]. Moreover, developing and emerging countries have tended to mimic the practices of developed

*Corresponding author: Elsayed Nasser DAA, Banking and Finance Department, Hekma School of Business, Dar Alhekma University, Jeddah, Kingdom of Saudi Arabia, E-mail: daliaadel2000@yahoo.com

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nations, despite evidence, for example from Rabelo and Vasconcelos, show that the factors that give rise to the need for corporate governance in developing nations and those in developed nations differ. Moreover the Egyptian setting involves firms that are smaller in size than those in the USA, where most of the studies related to AC characteristics and interaction between AC members and the internal audit function have been performed. Kapardis and Psaros reported that CG is not a new phenomenon and it has been addressed by various authoritative committees such as Cadbury Report, Greenbury, Hampel Report, Turnbull Report and Higgs. Indeed, Mertzanis noted that the effort to reform CG began in the USA as early as the 1970s [11-17]. Consequently, while CG is anything but a new area of enquiry, it has taken on greater international significance since the mid-1990s, in particular, for developing economies (including that of Egypt).

This paper examines whether, in an Egyptian setting, specific characteristics of an audit committee and the interaction between the audit committee and the internal audit department enhances AC effectiveness. Higher audit committee effectiveness implies higher audit quality (Francis). A higher quality audit should improve the quality of financial reporting and reduce the risk of the auditor providing an incorrect audit opinion.

Giving the fact that the Audit Committee report became mandatory starting from 2009 for all listed companies in the EGX, We contribute to the growing body of published literature in this area in a number of ways.

Finally, we extend the models used in previous studies by providing additional measures of audit committee independence and including: independence, knowledge and experience, and interaction with the internal audit function.

We also find that the use of internal audit is associated with higher audit committee effectiveness. This result suggests that firms that engage in greater internal monitoring through the use of internal audit also demand higher quality external auditing. This implies that directors of these firms recognize the importance of both types of audit as mechanisms to strengthen corporate governance.

The paper investigates the determinants of audit committee effectiveness in Egypt. It contributes to audit committee effectiveness and governance literature by studying audit committee effectiveness determinants in a developing country like Egypt, which is distinguished from most developed nations by three important characteristics [18]. Firstly, most companies are closely held, secondly there is considerable state ownership of privatized companies, thirdly that board independence is weak. While Bremer and Ellias note that Egyptian businesses are starting to appreciate the need for corporate governance mechanisms, they argue that together with Fawzy's three characteristics, weakness in the economic structure, and lack of awareness of corporate governance concepts and benefits, hinder the development of corporate governance in Egypt [19]. Thus the results of this research may be useful for regulators in developing and emerging nations with similar characteristics as they continue to deliberate appropriate corporate governance requirements in their own nations.

Also, this paper introduces a more comprehensive set of determinants of audit committee effectiveness including: *Independence* determined by the followings: AC members are external directors, have/manage stock ownership in the Co. or in another affiliated Co., can protect the external auditor in case of expressing an opinion regarding doubt of continuity, provide consulting services to the Co., AC members Knowledge, experience and training determined by: having at least one member who has strong accounting, auditing, and

financial expertise, having at least one member who has supervisory financial expertise that requires broad financial responsibilities, and at least one member who has professional certification that—to the best of the authors' knowledge—have been not tested before in an Egyptian context in relation to AC effectiveness as an important element of corporate Governance. Our findings relating to the determinants of audit committee effectiveness for 2013 are relatively lower than those reported by KPMG, although many regulation changes have taken place in Egypt such as the formation of the Egyptian Financial Supervisory Authority (EFSA), and the update of the CG code. All these changes aim to enhance CG including audit committee effectiveness [20].

Despite the importance of CG, there is surprisingly little professional guidance on which factors to consider in assessing the effectiveness of AC. In recognition of the need to enhance the level of confidence of foreign portfolio investors in the Egyptian capital market, the ministry of investment through the Egyptian Institute of Directors (EIoD) introduced a corporate governance code in 2005 for companies listed in the stock market, especially those being actively trading. The Egyptian Corporate Governance Code (ECGC) is initially prepared in accordance with the Guidelines on Corporate Governance of State-Owned Enterprises in the Organization for Economic Cooperation and Development (OECD). Subsequently, a team of Egyptian experts drafted the initial code, which was then subjected to in-depth examination and extended discussions. At the end, the code was reviewed by experts from the OECD, the International Finance Corporation (IFC) and also the World Bank.

However, the Report on the Observance of Standards and Codes (ROSC): A Corporate Governance Country Assessment for The Arab Republic of Egypt argued that Egypt can take a major step forward in closing these gaps by: 1. requiring companies to implement the Egyptian Corporate Governance Code (ECGC) on a 'comply-or-explain' basis, 2. amending the ECGC to better meet good practice, 3. strengthening enforcement capacity, and 4. supporting the EIoD to roll-out its director training program, focusing on family-owned businesses outside the EGX 30 [21].

Numerous publications issued by accounting firms have advocated approaches and guidelines for more effective ACs [22]. A number of these recommendations have been made legally mandatory (e.g., Egypt through Egypt Corporate Governance Code). Accounting academics also have participated in the quest for AC effectiveness. For example, archival studies have sought to identify and assess factors (e.g., degree of independence and expertise of AC members) that are correlated with proxies of effectiveness.

The remainder of the paper is structured as follows. The next section discusses the background to the study and develops our hypotheses. The third section describes the research design. The results of our study are reported in the fourth section while in the final section conclusions are drawn and the implications of the study are discussed.

Background and Hypotheses

Existence of an audit committee

The expectation that audit committees exercise an active monitoring of the company financial reporting process is well established and this role has been confirmed by many CG codes and professional pronouncements over the last 10-15 years.

Davidson reported that prior published literature indicates that the effectiveness of an audit committee is dependent, in part, on

the extent to which the committee is independent, its frequency of meetings and its size. It is contended that audit committees are unable to function effectively when members are also executives of the firm. Both the published literature and governance reports suggest that audit committees should consist exclusively of non-executive or independent directors. This is supported by research that demonstrates a relationship between audit committee independence and a higher degree of active oversight and a lower incidence of financial statement fraud.

The academic literature and recent CG pronouncements recognized the pivotal role of audit committees in financial reporting. The Cadbury Report, in the UK, highlighted the audit committee as a central mechanism for ensuring good financial reporting and internal control. In the USA, the BRC (1999) made specific recommendations on how to improve the effectiveness of audit committees.

The recommendation of the Egyptian's CG code to establish audit committees in listed companies includes some recommendations concerning audit committee features and potential tasks. The most important of these is the notion that committee formation and composition in general should be exclusively content-driven. These tasks are considered in No. 6 of the Code. The ECCG prescribes a series of characteristics an effective audit committee should possess. The ECCG extends the notion of director independence that has been widely applied to boards to emphasize that audit committees should also be independent. The rationale is that independent directors serving on audit committees are more likely to be free from management's influence in ensuring that objective financial information is conveyed to shareholders. Second, to monitor effectively the quality of financial information that is disclosed by the firm, committee members should have essential skills in understanding and interpreting that information correctly. The ECCG suggests that audit committees should be composed of at least three non-executive board members. At least one of its members should have financial and accounting expertise. If the number of non-executives on the BOD is less than three, one or more members may be appointed from outside the corporation. Also, the board should constitute at minimum an audit committee consisting of a number of non-executive board members. The audit committee shall be responsible for the oversight of the internal audit department and the corporation's procedures.

Audit committee characteristics and audit effectiveness

AC team should not be less than 3 members and no more than 6, one of them at least should possess financial expertise and the others should be financially literate. All the members should have integrity, objectivity, confidence and informed judgment.

KPMG's Global Audit Committee Survey captures the views of some 1800 audit committee members around the world on a number of issues, including factors affecting audit committee effectiveness. Many Survey respondents point to the need for "additional expertise" (e.g., IT, M&A, and risk) as a key to improving the committees effectiveness.

Additional expertise and greater diversity of thinking and backgrounds would most improve the AC composition and effectiveness. In light of the increasing complexity of the global risk environment and the pace of technology change, it is perhaps not surprising that most survey respondents said the audit committees effectiveness would be most improved by additional expertise (e.g., IT, risk, M&A, industry knowledge) at the highest rank 64%, and "greater diversity of thinking, background, perspectives, and experiences among members in the second rank, 50%.

Overall, respondents gave the lowest ratings to the audit committees ability to stay up to speed on changes impacting the company (e.g., accounting, risk, IT).

Canadian analysis suggests that AC effectiveness is to some extent related to the background that members possess in terms of expertise and independence, which is consistent with the present regulatory approach that regulators have favored for some time, which consists (more or less coercively) of specifying prime features needed by AC members (especially in terms of expertise and independence), and to make these features visible through disclosures.

It is reasonable to argue that regulators to a large extent grope along in their quest to make ACs more effective. It is also difficult to make sense of conflicting findings or claims in literature. For example, while archival studies generally suggest that the quality of financial reporting is positively related to members degree of independence from corporate management and experience in financial reporting matters, a number of stakeholders are keen to point out that some of the largest corporate governance failures involved ACs that were described in corporate proxies as being made up of independent, financially literate members [23].

Independence: Independence of the committee members is necessary to safeguard the credibility of the organization. As a prerequisite to the effective performance of the AC, the BD should formulate a clear definition of the AC's authority. It should define the purpose of the charter: to help the BD fulfill its oversight responsibilities with a detailed description of the authority of AC [24]. Moreover, independence of AC members influences the construction of AC effectiveness. Independence means unrelated directors.

Here, independence is conceived of as one's ability to be detached from managers' reports, which allegedly allows members to review financial documents in a way that unquestioningly benefits shareholders. Outside directorship is believed to be sufficient to provide members with an inner ability to examine documents and reports from an angle different than that of management, thereby pointing to a potentially significant difference between attendees' conception of member independence and that of regulators. (Independence and leadership are found to be important if the self assessment process is to be meaningful leading to improvement, as it will highlight whether there is a need for a "fresh set of eyes", or a greater diversity of views?. The results of prior research provide support for a positive association between audit committee characteristics and AC effectiveness. Therefore, we test the following hypothesis:

Skills, experience, and training: The Egyptian AC Code was very brief about the expert, "One member should be a financial and accounting expert". Aday finds that the AC financial expert should possess professional experience that will be relevant to the operations of the AC, such as: (1) thorough understanding of AC's oversight function; (2) expertise in financial matters as well as having a through grasp of financial statements;(3) the capacity to ask the right questions to decide whether the corporation's financial statements are accurate and complete; (4) the size of the organization with which the individual has experience; (5)the scope of that corporation's operations; and (6) the complexity of its accounting and financial statements. Previous experience in accounting jobs by itself does not validate the BD to hire a given applicant as an AC Financial Expert; the BD must guarantee that it names an AC Financial Expert who embodies the highest values of professional and personal integrity. Companies must include the Financial Expert disclosure in their AC section of the annual report.

When the company reaches the maximum number of AC members; then it could hire Financial Experts as advisors to the AC, where they should be financially qualified and have experience of working in the concerned country.

Gendron and Be´dard argued that formal competencies, extensive financial and accounting background may generate feelings of self-confidence in AC members minds, thereby possibly affecting their performance during meetings (e.g., being more confident may translate into members asking more challenging questions or, alternatively, it may prevent members from asking “naive” but fundamental questions).

Similarly, managers and auditors appeared to take into account members_ expertise background when constructing effectiveness. For example, boards of directors put their “stronger heads” on the AC—because ACs deal with matters for which boards tend to be sued. In the following quote, B_s external auditor links the effectiveness of the company’s AC to the credential profile of its members.

Formal competencies are a manageable input. The more professional accountants on the AC, the more “effective” is the AC in terms of adhering to best practices. The longer the members have been on the AC, the better enabled they are to deal with specifics.

With regard to experience and training, The Egyptian AC Code stated; “Gather all the international developments in accounting and auditing and notify the BD, including what AC believes is important for the company” [25]. In order to formulate a more detailed CG Code to develop the AC practice in Egypt, the researcher proposes the following provision: Training should be offered to all members of the AC on a timely and ongoing basis and should include an understanding of related company bylaws and recent developments in financial reporting. The training may take many forms including seminars and internal company talks, formal conferences and courses, and briefings by external advisers. There should be more focus on training new AC members. Every member of the AC must be financially literate; specifically, AC members must have expertise, or access to expertise, that goes beyond mere familiarity with financial statement. Potential gaps in AC members’ business and technical knowledge should be identified and offers training made as needed. Corporations, with a stated market capitalization, must have AC members financially literate or who will become financially literate within a reasonable time after their appointment. The AC should identify, and agree with the BD on the skills required; the required set of skills should be periodically reviewed.

The results of prior research provide support for a positive association between audit committee characteristics and AC effectiveness. Therefore, we test the following hypothesis: Regulators emphasize the need for audit committees to be comprised of members who are independent and at least some of whom have financial expertise. These views are supported by the results of research studies that show that audit committee characteristics impact the committee’s effectiveness [26].

Abbott argue that independent audit committee members might both demand a higher level of assurance and also support the auditor’s demand for more testing leading to higher audit quality [27]. This support is likely to be greater when committee members have the financial and auditing expertise that enables them to better understand the risks associated with a lower quality audit. Furthermore, audit committees that meet frequently are likely to be better informed and more diligent in performing their duties.

From the previous discussion, we can propose the following hypotheses:

H1: Higher AC effectiveness is associated with more independent AC members.

H2: Higher AC effectiveness is higher when AC members have financial, accounting, and auditing experience.

Internal Audit Function

A strong internal audit function begins with a strong AC. With regard to the Internal Audit Process, The supervisory authority’s regulations state that, “The company should maintain a tight internal control system established by the BD members and directors”. The same function was also required in the Sarbanes-Oxley act. The responsibility of AC to hire the CAE was mentioned in the Egyptian Code but in the part dealing with the IAF as follows: “The audit department’s head is appointed, reappointed, financial terms arranged and dismissed by the CEO; subject [to] the approval of the AC” [28].

In the time of economic crises and cost cutting, the IAF should not be part of this, in fact it should be asked to do extra work especially in these times. AC should create an agenda or approve the CAE’s agenda for next year [29]. Two researchers emphasized the AC’s responsibility to review the IAF budget and plan to match them against the CPA firm’s objectives. Another study asserted that IAF team performance should be parallel to the performance of the rest of employees in the company to develop their experience. The Egyptian AC Code included only some details in this part stating that the AC should, “Review the reports submitted by the internal auditor and any corrective measures taken”. Therefore, Auday proposed the following provisions that the Egyptian Code missed to enhance implementation of CG practice: The internal audit function should have a direct reporting relationship with the AC and the AC should provide oversight of its activity. The AC and the internal audit team should maintain a strong positive relationship. The CAE should have a solid line reporting relationship to the AC. The AC should create an agenda for the coming year or approve and review the CAE’s agenda. The BD and senior management may desire objective assurance and advice on control and risk. An adequately resourced internal audit function may provide such assurance and advice. The AC should review the internal audit function, including the internal audit budget and proposed audit plans for the coming year and how such plans reflect the CPA firm’s objectives. The AC should guarantee that the function has resources and access to information to fulfill its mandate, and is equipped to perform in line with appropriate professional standards for internal auditors. In times of cutting costs, the internal audit function should not be the victim of a company downsizing; in fact, it should be doing extra monitoring at precisely this time.

In relation to the evaluating of the IAF, Auday 2010 noted the need for the quality assurance program for the IAF to be done by an independent reviewing team from outside the organization. Another researcher asserted that the HR also has some role in the evaluation of the IAF in parallel with the overall organizational strategy. The Egyptian AC Code did mention the evaluation of the IAF briefly, stating: the AC should “Review and discuss the internal audit department plan and its efficiency”. Due to proposing the following: The AC should ensure that the internal auditor team has direct access to the BD’s chairman and to the AC and is accountable to the AC. Companies should establish an Improvement and Quality Assurance Program that includes both periodic and ongoing internal QAs and undergoes an external QA a minimum of once every 5 years, by a qualified independent reviewer or review team from out-side the organization. Internal audit’s behavior

should be parallel with the organization's overall HR strategies to enhance the employees' experiences. AC should meet annually with executive managers and the CPA firm to discuss the performance of CAE.

AC members mentioned paying careful attention to the extent to which managers adopt appropriate measures to solve deficiencies highlighted in internal audit reports.

Ideally, the internal auditor should report directly to an audit committee comprised of non-employee members of the board of directors. Reporting at this level should allow the auditor the greatest access to all levels of the institution, and assure prompt and independently objective consideration of audit results. It also enables the auditor to assist the AC members in fulfilling their responsibilities. The AC should regularly receive a report of all internal audit activity. This report should include the status of all audits on the internal audit schedule, and summaries of all audits completed during the period including audit conclusions. In addition, this report should provide the resolution status of previous internal audit findings and recommendations. If the internal auditor does not report to the board or its audit committee, the reporting line should be to an individual with no financial or operational responsibilities.

Data Statistics Analysis

Sample and method of data collection

A survey was presented to professionals involved in the auditing profession including AC members, auditors and accounting professors. Most of the auditors surveyed were from leading accounting firms in Egypt while the professors were from the Accounting Department at the different universities in Egypt. Collecting the opinions of different categories of respondents was necessary to get a non-biased opinion, rather than narrowing participants to only the AC members. Using Likert scales, respondents were asked, if they agree or disagree with each statement; expressing each answer using a scale, from one to five, to reflect the degree of acceptance or rejection. Auday 2010 assessed the opinion of the participants concerning the determinants of AC effectiveness. Respondents are Surveyed using the traditional method (Paper and pencil questionnaires) and through the internet (surveymonkey).

After decoding and transforming the data into the computer for data processing, the 17th version of the statistical tool SPSS was used to perform data statistical analysis of the field study as follow:

First : Reliability and Validity coefficients

Second: Testing the hypotheses

The researcher will discuss each of the previous elements in details as follow :

First : Reliability and Validity coefficients: With Cronbach's alpha tool the the reliability is tested and the validity for the proposed determinants. The reliability coefficient (Cronbach's Alpha) measures the internal consistency of an assessment by comparing the answers to related questions. This measurement indicates the extent to which reliability is without bias (free of error) and offers consistent measurements of variables and so, the extent to which the results of the field study could be generalized, while the validity test measures the strength of our proposition, inferences or conclusions. This measurement will provide the expected score of variables in the same domain even if the domain is diverse. These tools were used to identify possible explanations for the responses.

Reliability and validity coefficients of the study variables were calculated. In Table 1 it is clear that values of reliability and validity coefficient are reasonable for all variables. The reliability coefficient ranged from 0.641 for "Competence" to 0.981 for "Characteristics of the Audit Committee", while the validity coefficient ranged from 0.801 to 0.990 respectively (the value of validity coefficient is the square root of the reliability coefficient). It could be said that it is a coefficient with good significance for research aims, and could be useful in results generalization.

Second: Testing the hypothesis: The first hypothesis: 'There is no significant relationship between characteristics of the audit Committee and AC effectiveness'

To test this hypothesis was tested Sub hypotheses:

H1: 'There is no significant relationship between the independence of committee members and AC effectiveness'

To test this hypothesis we can use Correlation and Regression model as follows:

Correlation coefficients

Table 2 provides the correlation coefficients of the variables used in the multivariate analysis. As it can be seen, the correlation coefficients reported indicated that there is a strong positive correlation between (Audit committee members compensation is within the acceptable limit) and dependent variable (AC effectiveness) where the value of the correlation coefficient is (0.748), it is a significant at the significant level of 1%. Generally, there is a positive relationship between the dependent variable and the independent variables (The independence of committee members), and it is significant at significance level 1%.

Regression model

Table 3 represents the stepwise regression model of independent variables (The independence of committee members) on the dependent variable (Audit Committee effectiveness).

It is clear the significance of the regression model as the F value (61.399) and it is significant at a significant level of 1% as the value of (Sig= 0.000) is less than the significant level 1%, a significant regression coefficients and constant show through T test and the value of p-value as it is significant at the significant level 1%, The most important independent variables that affect the dependent variable (AC effectiveness) are: AC compensation is within the acceptable limit (0.748) and then for AC members to be external directors (0.744). The determination coefficient is (0.627), which means that the independent variables explain 62.7% of the changes that occur in the dependent variable (Audit fees).

From the above H1: is incorrect and we accept the alternative hypothesis:

'There is significant relationship between the independence of committee members and AC effectiveness.

H2: There is no significant relationship between committee members' knowledge and experience and AC effectiveness.

To test this hypothesis we can use Correlation and regression model as follows:

Correlation coefficients

Table 4 provides the correlation coefficients of the variables used in

Variables	Cronbach's Alpha	Validity
Characteristics of the Audit Committee	0.981	0.990
Independence	0.911	0.954
Financially Literate	0.803	0.896
The extent of interaction between the audit committee and the internal audit function	0.928	0.963

Table 1: Reliability and Vliadtiy coefficient of the measurements used in the questionnaire.

Independence	AC Effectiveness
Audit committee members are external directors.	.744**
Audit committee members have stock ownership in the Company.	.619**
Audit committee can protect the external auditor in case of expressing an opinion regarding doubt of continuity.	.753**
Audit committee members provide consulting services e.g, financial consultation to the Co.	.554**
Audit committee members compensation is within the acceptable limit	.748**
Audit committee members manage/have stock ownership in another affiliated business.	.741**
Audit committee members have personal relations with current or prior officers, legal consultants, bank officers, main suppliers or customers officers.	.601**
Audit committee members have cooling off periods in case of historical work relations.	.612**
The more the independence the audit committee the stronger the audit committee and the more willingness to incur higher audit fees to secure a higher level of assurance.	.662**

** Correlation is significant at the 0.01 level (2-tailed).

Table 2: Correlation coefficients between the independence of committee members and AC effectiveness.

P-value	t	β		R ²	F (P-value)
.009	-2.669	-.640	Constant	0.627	61.399 (0.000)
.000	6.089	.683	x2.1.5		
.001	3.635	.374	x2.1.9		

Table 3: The stepwise regression.

the multivariate analysis. As it can be seen, the correlation coefficients reported show that there is a strong positive correlation between the financial, accounting, and auditing literacy of the audit committee members (independent variable) and the effectiveness of the AC (dependent variable) where the value of the correlation coefficient is (0.843). It is significant at the significant level of 1%.

Regression model

Table 5 represents the stepwise regression model of independent variable (The experience and training of committee members) and the dependent variable (AC effectiveness).

It is clear the significance of the regression model as the F value is (92.954) and it is significant at a significant level of 1% as the value of (Sig= 0.000) is less than the significant level 1%, a significant regression coefficients and constant shown through T test and the value of p-value as it is significant at the significant level 1%, The most important independent variables (derminants) that affect the dependent variable are the existence of at least one member who has strong accounting, financial, and auditing expertise (0.834) and the existence of at least one independent accounting consultant to train AC members on important accounting issues.

From the above H2 is incorrect and we accept the alternative hypothesis:

‘There is significant relationship between committee members’ knowledge, experience, and training and AC effectiveness.

H2: There is no significant relationship between the extent of interaction between the audit committee and the internal audit function and AC effectiveness.

To test this hypothesis we can use Correlation and regression model as follows:

Correlation coefficients

Table 6 provides the correlation coefficients of the variables used in the multivariate analysis. As shown, the correlation coefficients show a strong positive correlation between Audit committee review of the programs and procedures related to coordination of activities with external auditors.) and dependent variable (AC effectiveness) where the value of the correlation coefficient is (0.786), it is a significant at the significant level of 1%. Generally, there is a positive relationship between the dependent variable (AC effectiveness) and the independent variable (The extent of interaction between the audit committee and the internal

Committee members’ knowledge, experience, and training	AC Effectiveness
There is at least one independent accounting consultant to train AC members on important accounting issues.	0.759**
There is at least one member who has strong accounting, financial, and auditing expertise.	0.834**
There is at least one member who has supervisory financial expertise that requires broad financial responsibilities.	0.654**
There is at least one member who has professional certification such as CPA	0.643**

** Correlation is significant at the 0.01 level (2-tailed).

Table 4: Correlation coefficients between Committee members’ knowledge and experience and AC effectiveness.

P-value	t	β		R ²	F (P-value)
.000	-4.712	-.884	Constant	0.795	92.954 (0.000)
.001	3.433	.442	x2.2.4		
.001	3.453	.298	x2.2.1		
.002	3.263	.331	x2.2.3		

Table 5: The stepwise regression.

The extent of interaction between the audit committee and the internal audit function	AC Effectiveness
The chief internal auditor CIA meets regularly with the audit committee	.754**
Internal audit reports to the Audit Committee	.656**
The audit committee is involved in the dismissal of the CIA.	.432**
The Audit Committee determines Internal Audit’s annual budget	.759**
Audit committee reviews the programs and procedures related to the internal audit budget regularly	.739**
Audit committee reviews the programs and procedures related to the internal control reports	.682**
Audit committee reviews the programs and procedures related to coordination of activities with external auditors.	.786**
Audit committee reviews the programs and procedures related to risk management processe	.764**

** Correlation is significant at the 0.01 level (2-tailed).

Table 6: Correlation coefficients between the extent of interaction between the audit committee and the internal audit function and AC effectiveness.

audit function), and it is significant at a significant level 1%.

Regression model

Table 7 represents the stepwise regression model of independent variables (The independence of committee members) on the dependent variable (AC effectiveness).

It is clear significant regression model as the F value (65.994) and it is significant at a significant level of 1% as the value of (Sig= 0.000) is less than the significant level 1%, a significant regression coefficients and constant show through T test and the value of p-value as it is significant at the significant level 1%. The most important independent variables that affect the dependent variable are:

- Audit committee reviews the programs and procedures related to coordination of activities with external auditors.
- Audit committee reviews the programs and procedures related to the internal audit budget regularly.
- Internal audit reports to the Audit Committee
- The Audit Committee determines Internal Audit's annual budget

The determination coefficient is (0.825), which means that the independent variables explain 82.5% of the changes that occur in the dependent variable (Audit fees).

From the above H3: is incorrect and we accept the alternative hypothesis:

Conclusion

There is significant relationship between the extent of interaction between the audit committee and the internal audit function and AC effectiveness. From the above the second hypothesis is incorrect and we accept the alternative hypothesis: There is significant relationship between interaction between AC members and internal auditors and AC effectiveness.

References

P-value	t	β		R ²	F (P-value)
.000	-6.488	-1.311	Constant	0.825	65.994 (0.000)
.033	2.176	.262	x2.3.13		
.000	5.371	.662	x2.3.11		
.000	4.530	.486	x2.3.3		
.000	5.127	.939	x2.3.2		
.000	4.550	.745	x2.3.8		

Table 7: The stepwise regression.

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