
Effect of internal audit function on corporate governance quality: evidence from Lebanon

Abdul-Nasser El-Kassar

Department of Information Technology & Operations Management,
The Lebanese American University,
P.O. Box 13-5053, Chauran,
Beirut 1102 2801, Lebanon
E-mail: abdulnasser.kassar@lau.edu.lb

Walid Elgammal*

Department of Finance and Accounting,
The Lebanese American University,
P.O. Box 13-5053, Chauran,
Beirut 1102 2801, Lebanon
E-mail: walid.elgammal@lau.edu.lb

*Corresponding author

Mirna M. Bayoud

Department of External Audit,
Deloitte & Touche,
Beirut, 11-961, Lebanon
E-mail: mbayyoud@deloitte.com

Abstract: The internal audit function is a compliance mechanism that promotes good corporate governance. Recent studies detected a need to improve corporate governance structures in developing countries. This study evaluates the effects of the internal audit function on the quality of corporate governance in the context of multinational corporations operating in Lebanon. The results revealed that the quality of internal audit function significantly affects corporate governance, particularly on its audit committee and management aspects. Moreover, the results showed that maintaining a high level of independence and expertise in the audit department can have a great influence on the overall quality of corporate governance, as well as on the effectiveness of both the audit committee and management. The results also indicated that the reliability of the internal audit significantly influences the management characteristic of corporate governance. In contrast, the board of directors and external auditors are less influenced by the internal audit.

Keywords: internal audit function; corporate governance; audit committee; board of directors.

Reference to this paper should be made as follows: El-Kassar, A-N., Elgammal, W. and Bayoud, M.M. (2014) 'Effect of internal audit function on corporate governance quality: evidence from Lebanon', *Int. J. Corporate Governance*, Vol. 5, Nos. 1/2, pp.103–117.

Biographical notes: Abdul-Nasser El-Kassar is an Associate Professor in the School of Business at the Lebanese American University. He holds a PhD in Mathematics from the University of Louisiana, Lafayette. With a background in both Mathematics and Engineering Management, his research ranges from quantitative methods in business, production planning and inventory control, to cryptography and its underlying mathematics. His research has been published in recognised journals.

Walid Elgammal is an Assistant Professor of Accounting at the Lebanese American University. He holds a PhD in Accounting from the Manchester Business School in the University of Manchester. In addition he has a combined background in Accounting and Finance (MS, University of Birmingham; 1999 and BS, Alexandria University, 1995) and has research interests focused on corporate governance, quality of accounting information, attributes of audit quality, and determinants of audit fees in the case of Lebanon. His research has been published in recognised journals.

Mirna M. Bayoud is an external auditor at Deloitte & Touche, Beirut office. She holds an MBA from the Lebanese American University and a Bachelor of Science in Business Administration (Auditing Major) from the Lebanese University. In addition she is advancing her knowledge in internal audit through international professional internal audit certifications and additional research related to this topic.

1 Introduction

At the turn of the century, a series of financial scandals resulted in the collapse of large global companies such as Enron, WorldCom, Parmalat, and Nortel. This caused investors to become less dependent on auditing firms to provide attestations on the accuracy of financial reports. Thus, the investors have stopped relying on the objectivity and independence of the external auditors (El-Sayed Ebaid, 2011).

A 2005 survey of corporate governance in Lebanon performed by Lebanese Transparency Association (LTA) in partnership with the Centre for International Private Enterprise (CIPE) found that governance structures in Lebanese companies need improvement. In 2006, LTA published a voluntary code with the help of The Lebanese Corporate Governance Task Force (LCGTF) thus setting the corporate governance fixed standard in Lebanon. In addition to the creation of governance codes, modifications have been made to regulatory and monitoring mechanisms to enhance the governance structures. One of the many compliance mechanisms that promote good governance structures in organisations is the internal audit function. Despite several studies that recognised the role internal audit exercises in improving corporate governance (Okafor and Ibadin, 2009), little research has been conducted in Lebanon where corporate governance is just developing. A research was performed on commercial banks in Lebanon by Yassin et al. (2012) about the role the audit function plays in corporate governance. The questionnaire used to evaluate this role was inaccurate mainly because the questions had built-in assumptions that led to the desired conclusion.

1.1 Purpose

The purpose of this study is to determine the effects of the quality of the internal audit function on the quality of corporate governance practices in the context of multinational companies operating in Lebanon excluding the banking sector. Recent studies have examined the effects of internal audit function on certain aspects of corporate governance. For instance, Sarens et al. (2009) qualitatively investigated the relationship between the internal audit function and the audit committee by examining one particular aspect of internal audit: the notion of comfort provided to the audit committee. Other recent qualitative studies in this field have all mentioned, with no further explanations, the growing importance of this relationship from a corporate governance viewpoint (Beasley et al., 2009; Gendron et al., 2004; Gendron and Bédard, 2006; Turley and Zaman, 2007). Little research has been conducted on this particular matter, especially in Lebanon where corporate governance is neither obligatory nor legally required.

1.2 Design

The following study uses an objective questionnaire designed to determine the quality level of corporate governance in relation to the board of directors, management, audit committee, and external auditors, as well as the quality level of the internal audit function. Head of internal audit departments, audit committee chairpersons, and chief executive officers (CEOs) of multinational companies operating in Lebanon were surveyed. Analysis of the data was conducted to determine the effects of internal audit function quality, measured by independence, reliability, and qualification of internal audit team, on corporate governance practices.

1.3 Findings

The findings of the study revealed that a high level of internal audit quality favourably affects corporate governance. These results revealed that maintaining a high level of independence and expertise in the internal audit department greatly influence the overall corporate governance quality, in general, and its audit committee and management in particular. On the other hand, this study showed that board of directors and external auditors are less influenced by the internal audit quality level.

1.4 Contribution

This paper contributes to the limited quantitative research related to the impact of internal audit function on corporate governance by examining the effects of the various quality aspects of internal audit. The overall effects on the quality of corporate governance as well as the effects on the quality of its individual components are thoroughly investigated. The findings led to recommendations and corporate governance implications that are not only applicable to national and multinational corporations operating in Lebanon, but also to corporations found throughout the world.

1.5 Plan of the paper

The remainder of this paper is organised as follows. The next section offers a review of prior corporate governance studies as well as papers related to internal auditing. It also surveys research works on the theoretical connections and relationships between the quality of internal audit function and the quality of corporate governance, including the board of directors, the audit committee, management, and the external auditor. The third section describes the research methodology of this study, followed by a fourth section, in which statistical data analysis is presented. The paper ends with a discussion of the constructed arguments as well corporate governance implications.

2 Literature review

2.1 Corporate governance

A tremendous increase in interest regarding corporate governance has resulted from the collapse of many corporations that followed the '80s crisis along with many other factors. In particular, the stakeholders' demands worldwide are that the best corporate governance practices should be implemented so that their investments are protected (D'Silva and Ridely, 2007). Other factors include the rapid expansion in global markets and the transformation in the ownership arrangements of many companies (Aguilera and Cuervo-Cazurra, 2004). In 1992, Sir Adrian Cadbury issued a report on corporate governance investigating the consequences of the crisis of the late 1980s and the primary causes for the bankruptcies of many companies in that period. The report defines corporate governance as a system that guides and controls companies; this system is the responsibility of the board directors who are appointed by shareholders (Cadbury Report, 1992).

In a similar manner, the Organization for Economic Cooperation and Development (OECD) issued the principles of corporate governance, and defined corporate governance as a structure that ensures that there is a clear plan to attain company objectives and to monitor performance; the definition also mentions the importance of cooperation between all stakeholders and shareholders of the company (OECD, 2004).

In 2006, the Institute of Internal Auditors (IIA) reported in its "Guidance for Internal Auditors" that by implementing good governance standards, corporations meet their goals of good management and accountability to their stakeholders (IIA, 2006). Thus, a worldwide trend was initiated for establishing codes and standards for good governance practices. This prompted several governmental and professional organisations to follow suit by publishing a series of reports and studies leading up to the establishment of corporate governance regulatory practices and standards. The Lebanese Transparency Association published the Lebanese Code of Corporate Governance (LCCG) in 2006 which states that good governance can improve corporations' internal control systems and increase their returns, attracting and holding investors and consequently generating higher profit margins than competitors (LCCG, 2006).

This code of corporate governance that focused mainly on Lebanese joint stock companies combines definitions and principles from diverse international best governance practices such as the Organization for Economic Cooperation and Development (OECD). The code defines corporate governance broadly as a system that

directs and controls the company, and as a reference to evaluate the performance of those responsible for directing and controlling management (LCCG, 2006). This report also served as a guide for the establishment of similar codes throughout the entire Middle East and North Africa (MENA) region.

The IIA provided a more frequently used definition for governance and considers it as the processes that the board uses to monitor and ensure the appropriate achievement of objectives (IIA, 2009).

One can conclude from the list of definitions mentioned above that there is not a universally accepted explanation for corporate governance. A more comprehensive and brief description considers it as the process that manages and controls organisations for businesses worldwide (Gao et al., 2008). Most of these definitions consider the board of directors, audit committee, management of the company, and external auditors to be the characteristics for sound corporate governance.

The absence and weak implementation of governance processes provides an ideal setting for corruption and fraud (Mensah et al., 2003). Belay (2007) found that corruption is less in companies when there is good implementation of corporate governance practices. As a result, international companies have become more aware about governance issues (Khanchel, 2007).

In his study about corporate governance, Campos et al. (2002) concluded that high governance principles are important to investors who are ready to pay up to 30% premium in Eastern Europe and Africa. A similar research performed in Lebanon concluded that more than 84% of global and rational investors have a preference in investing their capital in a well governed organisation and will pay a premium for its shares as compared to another company with an equivalent financial record but which lacks corporate governance and transparency (LCCG, 2006). The study consequently suggested that Lebanese companies start abiding by modern governance practices in order to attract investors instead of keeping them away with their obsolete governance mechanisms.

Different sources have distinct views regarding the number of governance contributors. The guidance for internal auditors stated that the five parties that contribute to the organisation's governance system are the following: the board of directors, senior management, operations management, internal auditors, and external auditors (IIA, 2006). Other studies determined only four contributors of organisational governance: the board, audit committee, internal auditors, and external auditors (Goodwin-Stewart and Kent, 2006; Gramling et al., 2004). Other sources have also mentioned organisational culture as a contributor to the quality of good governance (IIA, 2006). Regardless of their numbers, contributors should have corresponding and separate responsibilities in governance. IIA stated that it is very important to respect the role boundaries of each while combining their efforts (IIA, 2006).

Many studies evaluated sound corporate governance based on the following characteristics: the board of directors, audit committee, management of the company, and external auditors. To begin with, research has established a correlation between sound corporate governance and the board of directors. The King II principles consider the independence of board of directors members to be the main criteria for good corporate governance (IOD, 2002). Bhagat and Black (2002) stated that independent directors are more valuable in monitoring the performance of management. The board members should be prepared and available to set meetings other than those already scheduled when the situation demands high direction and control (Shivdasani and Zenner, 2004).

According to the King II report, one to four meetings for the board members should be held every year in order to ensure good oversight of organisational activities (IOD, 2002). Hence, the board plays a major role in corporate governance. However, sound governance is also based on other characteristics.

Research has focused on the role of the audit committee. The audit committee members should be independent to avoid conflict of interest and the possibility of making decisions that benefit the CEO instead of the company as a whole (IOD, 2009). Their independence decreases the chance of earnings management and improves transparency (Klein, 2002). A minimum of one member of the committee is required to be proficient in finance and accounting so as to be able to evaluate financial reports (Bedard et al., 2004). The head of the audit committee is solely responsible for evaluating the performance of the internal audit staff and for assigning or dismissing the head of the internal audit department (Christopher et al., 2009). Apart from the audit committee, other aspects of governance have been examined.

The last two contributors are management of the company and external auditors. Internal controls are the responsibility of management; they should establish effective and proper control procedures and enforce their application (IIA, 2009). To ensure better disclosure of information, it is recommended that the external auditor possesses a global reputation or is one of the Big Four audit firms (IOD, 2009).

In the above mentioned section, the concept of governance was presented. After exploring its history, the main attributes that provide a good basis for measuring board member effectiveness were explored. Enhancing one or more of these attributes contributes to the improvement of corporate governance practices. Hence, it is imperative to identify the mechanisms and tools which positively affect the individual characteristics of corporate governance. The following section will focus on the internal audit function.

2.2 Internal audit function

In the past, internal auditors were mainly responsible for monitoring the level of compliance with the rules and procedures and for double-checking the correct posting of financial transactions to the appropriate account in a way to detect frauds (Skinner and Spira, 2003). Recently, the internal audit function evolved significantly. Internal auditors today serve as consultants and assistants to achieve company goals and objectives. The audit function is considered as one that adds value, facilitates the foundation of appropriate controls, and gives assertion on their reliability. Internal auditors are expected to reveal improper accounting practices and financial reporting, poor internal controls, and ineffective organisational governance (Belay, 2007). As per the definition of the IIA (2009), internal auditing is characterised by its independence and objectivity to assist companies in achieving goals by evaluating and improving the organisations' risk management, controls, and governance processes.

There are differing views regarding internal audit. Some consider internal audit to be a major component of organisational governance. Others view the function of internal audit as a tool which improves the effectiveness of the board's governance by assessing and monitoring risks and internal controls (Belay, 2007; Goodwin-Stewart and Kent, 2006; Gramling et al., 2004; Sarens, 2009). In this paper, the adopted point of view is that internal audit serves as a tool and a mechanism for improving corporate governance in all its aspects and not restricted to the effectiveness of the board.

Several studies including one performed in Lebanon on commercial banks examined whether there is a relationship between internal audit and corporate governance (Beasley et al., 2009; Gendron and Bédard, 2006; Gendron et al., 2004; Okafor and Ibadin, 2009; Sarens et al., 2009; Turley and Zaman, 2007; Yassin et al., 2012). The positive effect of internal audit on company governance is only achieved when there is right support of the audit function from the board of directors and the audit committee members (Guruswamy, 2012). The compliance, assurance, and consulting functions of internal auditing are recognised worldwide as powerful contributors to better organisational governance for all sectors (D'Silva and Ridely, 2007). Effective internal function is considered as a driver to better corporate governance systems by aiding the board in carrying out its governance responsibilities (IOD, 2009).

According to the IIA, internal auditors can have two roles in the governance of the organisation. They can either limit their role to giving an objective opinion on the governance structures already in place or they can serve as change catalysts by providing suggestions to improve the current governance practices. A position paper published by IIA lists best practices of effective governance that aid internal auditors in discharging their governance role (IIA, 2009).

Various studies have identified independence, reliability, and competency as the most important characteristics of internal audit quality. Regarding independence, the head of internal audit should have an administrative reporting line to either the CEO or CFO and a functional reporting relationship to the audit committee chairman (Fraser and Henry, 2007; Kaplan and Schultz, 2007). The internal audit plan and budget should be prepared without a significant contribution from senior management (Christopher et al., 2009). The meetings of the head of internal audit with either the audit committee chairman or the board executive should be private and confidential without the attendance of management. As for reliability, an internal audit charter approved by the board and senior management is required, along with a list of defined audit standards and open access of the audit staff to all types of audit evidence (Belay, 2007; Staden and Steyn, 2009). The internal audit department must be formed of highly qualified staff, experienced and competent enough to discover frauds and perform their tasks appropriately (Mihăilescu and Ducu, 2011). The head of internal audit should build strong relationships within the company especially with the audit committee chairman (Stuart, 2008). The head of internal audit is preferred to have business experience in many fields and not strictly in the auditing profession (Stuart, 2008). The majority of the internal audit staff should hold professional certifications and should attend regular training sessions to increase the effectiveness of the function (IIA, 2009). Moreover, the work of external auditors should be coordinated with that of internal auditors to enhance efficiency and avoid wasting time and effort on a job already done (Mihret and Admassu, 2011). The above mentioned attributes provide a good basis to measure the quality of the main characteristics of internal audit and to determine their relationships with the characteristics of corporate governance. Several studies have considered particular types of these relationships. Bishop et al. (2000) found that internal auditors should work in collaboration with audit committee members to enhance corporate governance quality. D'Silva and Ridely (2007) examined internal auditing's international contribution to governance. Sarens et al. (2009) qualitatively investigated comfort provided by the internal audit function to the audit committee. Other recent studies have stated the growing importance of this relationship from a corporate governance perspective with

no further explanations (Beasley et al., 2009; Gendron et al., 2004; Gendron and Bédard, 2006; Turley and Zaman, 2007). Little research has been conducted on this particular matter, especially in Lebanon where corporate governance is neither obligatory nor legally required.

3 Methodology

The main objective of this study was to determine the effects of the quality of the internal audit function and its characteristics on the effectiveness of corporate governance. In particular, it investigates the extent of the relationship between the internal audit function quality and corporate governance effectiveness.

Using previous questionnaires and the requirements taken from the King II and III as well as IIA, an objective questionnaire was designed to determine the quality level of corporate governance in terms of board of directors, management, audit committee, and external auditors, as well as the quality level of the internal audit.

Using convenient sampling, questionnaires were distributed to 80 heads of internal audit departments, audit committee chairpersons, and CEOs of multinational companies operating in Lebanon. Out of the 80 questionnaires sent, 68 were completed. The survey consisted of three sections with a total of 34 questions.

The first section includes the following demographic questions:

- 1 Educational qualifications (high school, bachelor, master degree, PhD)
- 2 Specialisation (accounting and auditing, banking science, business administration, other)
- 3 Years of experience (less than 5, 5 to 10, more than 10)
- 4 Professional certifications (CFA, CPA, CIA, other, no certification)
- 5 Age (under 30, 30 to 40, over 40)
- 6 Gender (male, female)

The second section includes the following internal audit function quality questions (IAF):

- 1 The head of internal audit has a functional reporting line to the audit committee chairman.
- 2 The head of internal audit has an administrative reporting line to the CEO.
- 3 The internal audit plan and budget are prepared without the contribution of senior management.
- 4 The head of internal audit meets privately with the board or audit committee chairperson without management attendance.
- 5 The internal audit department has a formal strategy in the form of an audit charter.
- 6 The internal audit function complies with government internal audit standards.
- 7 Internal audit function reconsiders the board's strategy and its directions to protect the interests of shareholders.

- 8 Internal audit reports are sent in time to prevent fraud and illegal acts to the appropriate management level
- 9 Internal auditors have complete access to records and people that will enable them to achieve the quality of the job.
- 10 Internal auditors have received adequate training on a continuing basis for them to carry out their duties.
- 11 Internal auditors have the experience and expertise that assist them in achieving the quality of the job.
- 12 The majority of the internal audit staff holds professional certifications.
- 13 The head of internal audit has the right skills and experience.
- 14 The head of internal audit brings rounded business experience to the job rather than coming straight from a pure auditing background.

The third section includes the following questions examining the requirements and characteristics of corporate governance (CG):

- 1 The board of directors is formed of independent members.
- 2 The board members have sufficient knowledge and experience.
- 3 The board members have enough time to serve effectively.
- 4 Four or more board meetings are held per annum.
- 5 The audit committee is formed of independent members.
- 6 The audit committee comprises at least one member who is financially literate.
- 7 The audit committee approves the internal audit plan and major changes to the plan.
- 8 The audit committee reviews the internal audit reports.
- 9 Audit committee appoints, evaluates the performance, and dismisses the head of internal audit.
- 10 There is good collaboration of work between internal auditors and audit committee members.
- 11 The internal control procedures as described in the policy procedures manuals are effective.
- 12 The internal control procedures as described in the policy procedures manuals are actually applied.
- 13 One of the Big Four accounting firms is the external auditor.
- 14 There is good coordination of work between the internal and external auditors.

Scores measuring the quality of the internal audit function (IAQS) and the quality of corporate governance (CGQS) were obtained by averaging the related responses which were answered based on a five-point Likert scale. In addition to the overall quality scores, sub-measures were identified. The three sub-measures of internal audit function quality considered are:

- the independence of internal audit function measured by IAQS1 (IAF 1–4)
- the reliability of internal audit function measured by IAQS2 (IAF 5–9)
- the qualifications of internal audit staff measured by IAQS3 (IAF 10–14).

The four sub-measures of corporate governance quality identified are:

- the effectiveness of the board of directors measured by CGQS1 (CG 1–4)
- the effectiveness of the audit committee measured by CGQS2 (CG 5–10)
- the effectiveness of management measured by CGQS3 (CG 11–12)
- the effectiveness of the external auditor measured by CGQS4 (CG 13–14).

The quality scores were used to analyse the extent of the relationships among the various quality aspects of internal audit function and corporate governance.

4 Statistical analysis

Statistical analysis of the data collected from participants includes descriptive statistics, correlation analysis, and regression analysis. First, reliability analysis was conducted. The following Cronbach's alpha values related to corporate governance quality aspects were obtained: 0.821 for questions related to board of directors, 0.832 for audit committee, 0.758 for management, and 0.768 for external audit. Similarly, Cronbach's alpha values related to internal audit were: 0.835 for questions related to independence, 0.864 for reliability, and 0.895 for qualification of internal audit team. Thus, we can conclude that the results obtained from the questionnaire are reliable and valid for further analysis.

The demographic results can be summarised as follows: 82.4% of the respondents are males and 17.6% females; 67.6% are in the age range 30–40 years, 11.8% of less than 30 years, and 20.6% over the age of 40; 60.3% hold a Master's degree, 25.0% a bachelor's degree, 8.8% a high school diploma, and 5.9% a doctorate degree; 47.1% have a CPA, 7.4% CFA, and 5.9% CIA; 45.6% are specialised in accounting and auditing, 44.1% in business administration, and 5.9% in finance; 50.0% have a minimum of 10 years' work experience and 44.1% between five and 10 years.

The aforementioned figures suggest that the sample is comprised of knowledgeable, specialised, and mature experts, qualified to complete the questionnaire. This fact increases the trustworthiness of the responses and the respective conclusions.

The descriptive statistics of internal audit and corporate governance quality scores revealed the following: The internal audit quality scores IAQS, IAQS1, IAQS2, and IAQS3 had averages varying between 4.26 and 4.40 based on a 5-point Likert scale. This indicates that on average multinational companies operating in Lebanon display all criteria necessary to achieve high quality internal audit in terms of independence, reliability, and qualified internal audit team members.

On the other hand, averages for corporate governance scores CGQS, CGQS1, CGQS2, CGQS3, and CGQS4 were found to be between 4.21 and 4.74. Hence, these companies also possess good corporate governance effectiveness in terms of well governing boards, well-functioning audit committees, effective management, and good quality external auditors.

4.1 Correlation analysis (see Table 1)

Based on the critical value $\pm 0.239^*$ at 0.05 level of significance and $\pm 0.310^{**}$ at 0.01, the following results can be concluded:

At a 0.05 level of significance, there is no correlation between the three internal audit quality scores IAQS1, IAQS2, and IAQS3 presented by low correlation coefficients. This supports that the three mentioned scores can be used as independent variables to evaluate their effect on the dependent variable, quality of corporate governance, and its determinants.

A correlation exists between CGQS and IAQS, representing the overall quality of corporate governance and internal audit, respectively. Also, CGQS was found to have a significant positive relationship with the independence of internal audit score IAQS1 at 0.01 level, and with the qualification of internal audit staff represented by IAQS3 at a 0.05 significance level. The only internal audit quality score that doesn't correlate with CGQS is IAQS2 which measures internal audit reliability. These results provide evidence that the internal audit function, specifically its independence and the level of expertise of its staff, influence the overall quality of corporate governance.

When examining the corporate governance sub-measure scores, no correlation was found between both the quality of the board CGQS1 and the quality of external auditors CGQS4 with any of the internal audit scores. Based on this result, it can be concluded that the function of internal audit doesn't have an effect on the quality of the board nor on that of the external auditor.

The CGQS2 score, assessing the quality of the audit committee, was found to have a significant correlation, at the 0.01 level of significance, with the internal audit scores IAQS1 and IAQS3, but not with IAQS2 which measures reliability. The implication here is that internal audit highly influences the effectiveness of the audit committee except for its reliability aspect.

As for the CGQS3, which measures the quality of internal management, significant correlations were detected at a 0.01 level of significance, with all internal audit function characteristics scores. Thus, internal audit has a major effect on the quality of management.

To further analyse the effects, regression analysis was conducted and the results are shown in Table 2.

From the regression outputs for the two dependent variables CGQS1 and CGQS4, no significant effects were detected on the quality of both the board and the external auditor. This conclusion is consistent with the results of the correlation analysis. As for the variable CGQS2, the regression analysis showed that the quality of the internal audit function, particularly in terms of independence and qualifications of the internal audit staff, positively influences the audit committee governance. Similar results were concluded using the correlation analysis in the previous section.

Finally, the regression model having CGQS3 as the dependent variable showed that the quality of the internal audit function positively influences the audit committee governance in terms of independence (at the 0.01 level of significance), reliability, and qualifications of the internal audit staff (both at the 0.05 level of significance).

Table 1 Correlation matrix

	<i>IAQS</i>	<i>IAQS1</i>	<i>IAQS2</i>	<i>IAQS3</i>
CGQS	0.312**	0.361**	0.011	0.284*
CGQS1	-0.02	0.098	-0.05	-0.04
CGQS2	0.423**	0.446**	0.042	0.386**
CGQS3	0.488**	0.345**	0.245*	0.373**
CGQS4	-0.155	-0.05	-0.18	-0.06
	±0.239*	Critical value 0.05 (two-tail)		
	±0.310**	Critical value 0.01 (two-tail)		

Table 2 Regression models

<i>Dependent variable</i>		<i>Intercept</i>	<i>Independent variables</i>			<i>Overall</i>
			<i>IAQS1</i>	<i>IAQS2</i>	<i>IAQS3</i>	
CGQS1	Coefficients	4.1069	0.1139	-0.0243	-0.045	0.8194
	p-value	0.0000	0.4146	0.8367	0.6652	
CGQS2	Coefficients	0.0652	0.5945	0.03	0.3387	0.0001
	p-value	0.9484	0.0007	0.8334	0.0087	
CGQS3	Coefficients	0.3004	0.4707	0.2795	0.2703	0.0002
	p-value	0.7575	0.005	0.0457	0.0287	
CGQS4	Coefficients	6.1481	-0.1353	-0.3082	-0.008	0.4682
	p-value	0.0001	0.5819	0.1413	0.9651	

5 Conclusions and implications

In recent years there has been a growing focus on corporate governance as well as its individual components. Particularly, attention has been given to determining factors that improve corporate governance practices. Internal audit is a central part and plays a strategic role in improving organisational governance and consequently enhances accountability of reported results. To evaluate the effects of internal audit in promoting corporate governance, data collected from multinational companies in Lebanon was analysed. The relationships between the internal audit quality characteristics, independence, reliability, and qualifications of the audit staff, as well as the corporate governance effectiveness, in terms of board of directors, audit committee, management, and external auditor, were investigated.

The results revealed a significant relationship in general between both the internal audit function and corporate governance. Also, significant relationships were detected between the characteristics of the audit function and those of corporate governance. In particular, both corporate governance qualities of audit committee and management were found to be significantly affected by the overall internal audit quality and its particular characteristics. Moreover, the results showed that maintaining a high level of independence and expertise in the audit department can have a great influence on the overall quality of corporate governance, as well as on the effectiveness of both the audit

committee and management. The results also indicated that the reliability of the internal audit significantly influences the management characteristic of corporate governance. In contrast, the board of directors and external auditors are less influenced by the internal audit.

Based on the findings, to enhance the companies' corporate governance qualities with respect to the audit committee, the head of internal audit should maintain two direct independent and confidential reporting lines, a functional one to the audit committee chairman and an administrative one to the CEO. In addition, the internal audit committee should prepare its plan and budget without the contribution of senior management. These internal audit characteristics, as well as its reliability in terms of having a formal strategy, complying with governmental standards, and protecting the interests of shareholders, contribute significantly to the effectiveness of the management function.

Another aspect that helps companies improve their corporate governance, with respect to the quality of external audit and management, is staffing their internal audit departments with highly qualified auditors, in terms of skills, education, experience, and appropriate training. The existence of an approved charter, defined audit standards, sufficient access to all types of audit evidence, and proficiency in the performance of the auditing job, are all essential for good functioning of the audit department but have a low effect on corporate governance.

References

- Aguilera, R. and Cuervo-Cazurra, A. (2004) 'Codes of good governance worldwide: What is the trigger?', *Organization Studies*, Vol. 25, No. 3, pp.415–443.
- Beasley, M.J., Carcello, J., Hermanson, D. and Neal, T. (2009) 'The audit committee oversight process', *Contemporary Accounting Research*, Vol. 26, No. 1, pp.65–122.
- Bedard, J., Chtourou, S.M. and Courtean, L. (2004) 'The effect of audit committee expertise, independence, and activity on aggressive earnings management', *Auditing: A Journal of Practice and Theory*, Vol. 23, pp.13–35.
- Belay, Z. (2007) *A Study on Effective Implementation of Internal Audit Function to Promote Good Governance in the Public Sector*, Available at: http://www.benafrica.org/downloads/belay_effect_internal_audit.pdf
- Bhagat, S. and Black, B. (2002) 'The non-correlation between board independence and long term firm performance', *Journal of Corporation Law*, Vol. 27, pp.231–274.
- Bishop, W., Hermanson, D., Lapidés, P. and Rittenberg, L. (2000) 'The year of the audit committee', *Internal Auditor*, pp.46–51.
- Cadbury Report (1992) *Report of the Committee on the Financial Aspects of Corporate Governance*, Available at: <http://www.ecgi.org>
- Campos, C.E., Newell, R.E. and Wilson, G. (2002) 'Corporate governance develops in emerging markets', *McKinsey on Finance*, Vol. 3, pp.15–18.
- Christopher, J., Sarens, G. and Leung, P. (2009) 'A critical analysis of the independence of the internal audit function: evidence from Australia', *Accounting, Auditing & Accountability Journal*, Vol. 22, No. 2, pp.200–220.
- D'Silva, K. and Ridley, J. (2007) 'Internal auditing's international contribution to governance', *International Journal of Business Governance and Ethics*, Vol. 3, No. 2, pp.113–126.
- El-Sayed Ebaid, I. (2011) 'Corporate governance practices and auditor's client acceptance decision: empirical evidence from Egypt', *Corporate Governance*, Vol. 11, No. 2, pp.171–183.
- Fraser, I. and Henry, W. (2007) 'Embedding risk management: structures and approaches', *Managerial Auditing Journal*, Vol. 22, No. 4, pp.392–409.

- Gao, S., Gao, G. and Zhang, T. (2008) 'Corporate governance reform and firm performance: evidence from China', *Research in Accounting in Emerging Economies*, Vol. 8, pp.189–209.
- Gendron, Y. and Bédard, J. (2006) 'On the constitution of audit committee effectiveness', *Accounting, Organizations and Society*, Vol. 31, No. 3, pp.211–239.
- Gendron, Y., Bedard, J. and Gosselin, M. (2004) 'Getting inside the black box: a field study of practices in effective audit committee', *Auditing: A Journal of Theory and Practice*, Vol. 23, No. 1, pp.153–171.
- Goodwin-Stewart, J. and Kent, P. (2006) 'The use of internal audit by Australian companies', *Managerial Auditing Journal*, Vol. 21, No. 1, pp.81–101.
- Gramling, A.A., Maletta, M.J., Schneider, A. and Church, B.K. (2004) 'The role of the internal audit function in corporate governance: a synthesis of the extant internal auditing literature and directions for future research', *Journal of Accounting Literature*, Vol. 23, pp.194–244.
- Guruswamy, D. (2012) 'Role of internal auditing to promote good corporate governance in the public sector', *International Journal of Multidisciplinary Management Studies*, Vol. 2, No. 1, pp.234–248.
- Institute of Directors (IOD) (2002) *King Report on Corporate Governance for South Africa*, IOD, Johannesburg, Available at: <http://www.iodsa.co.za>
- Institute of Directors (IOD) (2009) *King Report on Corporate Governance for South Africa*, IOD, Johannesburg, Available at: <http://www.iodsa.co.za>
- Kaplan, S.E. and Schultz, J.J. (2007) 'Intentions to report questionable acts: an examination of the influence of anonymous reporting channel, internal audit quality and setting', *Journal of Business Ethics*, Vol. 71, pp.109–124.
- Khanchel, I. (2007) 'Corporate governance: measurement and determinant analysis', *Managerial Auditing Journal*, Vol. 22, No. 8, pp.740–760.
- Klein, A. (2002) 'Audit committee, board of director characteristics, and earnings management', *Journal of Accounting and Economics*, Vol. 33, No. 3, pp.375–400.
- Lebanese Code of Corporate Governance (LCCG) (2006) Available at http://www.wamda.com/web/uploads/resources/lebanon_cg_2006.pdf
- Mensah, S., Aboagye, K., Addo, E. and Buatsi, S. (2003) 'Corporate governance and corruption in Ghana: empirical findings and policy implications', *African Capital Markets Forum, Centre for International Private Enterprise*, ISBN 9988-8030-1-4.
- Mihăilescu, C. and Ducu, C. (2011) 'Internal audit-a key element of corporate governance in credit institutions', *Annales Universitatis Apulensis-Series Oeconomica*, Vol. 13, No. 2, pp.387–395.
- Mihret, D. and Admassu, M. (2011) 'Reliance of external auditors on internal audit work: a corporate governance perspective', *International Business Research*, Vol. 4, No. 2, pp.67–79.
- Okafor, C. and Ibadin, P. (2009) 'The imperatives of internal audit in Nigerian banks: issues and prospects', *Global Journal of Social Sciences*, Vol. 8, No. 2, pp.21–27.
- Organization of Economic Cooperation and Development (OECD) (2004) *Principles of Corporate Governance*, OECD, Paris, Available at: <http://www.oecd.org>
- Sarens, G. (2009) 'Internal auditing research: where are we going?', *Editorial International Journal of Auditing*, Vol. 13, pp.1–7.
- Sarens, G., De Beelde, I. and Everaret, P. (2009) 'Internal audit: a comfort provider to the audit committee', *The British Accounting Review*, Vol. 41, No. 2, pp.90–106.
- Shivdasani, A. and Zenner, M. (2004) 'Best practices in corporate governance: What two decades of research reveals', *Journal of Applied Corporate Finance*, Vol. 16, Nos. 2–3.
- Skinner, D. and Spira, L.F. (2003) 'Trust and control – a symbiotic relationship?', *Corporate Governance*, Vol. 3, No. 4, pp.28–35.
- Staden, M. and Steyn, B. (2009) 'The profile of the chief audit executive as a driver of internal audit quality', *African Journal of Business Management*, Vol. 3, No. 13, pp.918–925.

- Stuart, S. (2008) *The Changing Face of Internal Audit*, Available at: http://content.spencerstuart.com/sswebsite/pdf/lib/audit_web.pdf
- The Institute of Internal Auditors (IIA) (2006) *Organizational Governance: Guidance for Internal Auditors*, Available at: <http://www.theiia.org>
- The Institute of Internal Auditors (IIA) (2009) *Internal Auditing: All in a Day's Work*, Available at: <http://www.theiia.org>
- Turley, S. and Zaman, M. (2007) 'Audit committee effectiveness: informal process and behavioural effect', *Accounting, Auditing and Accountability Journal*, Vol. 20, No. 5, pp.765–788.
- Yassin, N., Ghanem, M.J. and Rustom, L. (2012) 'The role of internal audit function in corporate governance: an empirical study on commercial banks in Lebanon', *Proceedings of the Academic and Business Research Institute Conference*, Orlando, <http://www.aabri.com/OC2012Proceedings.html>