

INTERNAL AUDIT FUNCTION IS A GLOBAL GOVERNANCE PURSUIT: WHAT COULD BE DONE IN EMERGING MARKETS?

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Abstract

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This paper investigates the internal and the external auditors' perceptions of how compliance with the Institute of Internal Auditors (IIA) International Standards for the Professional Practices of Internal Auditing (Standards) enhances the implementation of internal audit function (IAF) as a corporate governance mechanism in the listed companies in an emerging economy. Based on the Common Body of Knowledge (CBOK) database questionnaires were sent to internal auditors (IAs) and external auditors (EAs) of listed firms, and interviews were made with individuals involved in the IAF. The results reveal that IAF in an emerging economy faces difficulties related to objectivity, qualifications, and the roles of the internal audit staff reducing its role in corporate governance (CG). Significant positive correlations between compliance with Attribute Standards of independence, objectivity, proficiency, and free of interference and performance standards enhanced the organizational status of the internal audit. But there is a weak correlation between audit documentation and the organizational status of the internal audit. Quality assurance and improvement program, ongoing monitoring, and self-assessment by other personnel inside the organization having enough knowledge of the internal audit practices are needed for IAF to fulfill its CG responsibilities. This study is considered among the first that surveyed the status of the use of the professional IIA Standards in the listed firms in one of the emerging economies characterized by having good corporate governance practices from the perspectives of both IAs and EAs of the same companies under study.

Keywords: Internal Audit Function, IIA Standards, Corporate Governance, External Auditing, Internal Audit Practice, Egypt

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1. INTRODUCTION

Scandals such as Enron, WorldCom, and Global Crossing negatively affected the public confidence in the proper operations of many organizations (Fraser & Henry, 2007; Davidson, Goodwin-Stewart, & Kent,

2005; Abdolmohammadi, 2009; Agrawal & Cooper, 2017; Carcello, Eulerich, Masli, & Wood, 2020; Eulerich, Georgi, & Schmidt, 2018). The public becomes less trusting of the operations of organizations and demands more accountability and transparency from the executives of these

organizations. Management is expected to design and follow policies, procedures, and control measures to monitor organizations' governance structure. The scandals have also raised questions regarding the existence and effectiveness of the internal audit function (IAF) in organizations (Elliott, Dawson, & Edwards, 2007; Chambers, 2012; Anderson, 2012; Bailey, 2016; Behrend & Eulerich, 2018). Surveys by Ernst & Young (2007) and Price Waterhouse Coopers (PWC) (2009) indicate that this situation may be due to insufficient attention to significant issues by the IAF. For example, Ernst & Young (2007) reports that many chief audit executives (CAEs) viewed strategic risks to be significant to their organizations, but few IAFs focused on strategic risks. Similarly, PWC (2009) reports that while strategic, business and operational themes impacting shareholders' value are important, IAFs seem to be more focused on financial and compliance activities that may pose fewer threats to their organizations. This led to increasing attention in the literature and all governing bodies to the critical role the IAF can play as an internal governance mechanism (Cooper, Leung, & Wong, 2006; Marais, Burnaby, Hass, Sadler, & Fourie, 2009; Mihret & Grant, 2017).

Some prior studies revealed that IAF does not receive the same attention and concern from many firms. Carcello Hermanson, and Raghunandan (2005) revealed that there is an absence of IAFs in many US firms. Goodwin-Stewart and Kent (2006) found that a substantial portion of Australian listed firms does not use internal audit and many of these firms that do, have only one or two internal audit staff. Both professional auditing standards and prior studies interpret internal auditors (IA) quality as specific characteristics of both the organization and the parties performing IA activities (e.g., independence, objectivity of IA staff, competency, due professional care, and managing the internal audit activity). Behrend and Eulerich (2018) indicated that the research about internal auditing is still in its infancy, particularly the empirical research where the incremental decisions within an IAF should be backed up by hard facts. Moreover, other studies (Institute of Internal Auditors [IIA], 2012c; Sarens, Allegrini, D'Onza, & Melville, 2010; Sarens & Abdolmohammadi, 2011; Serag & Daoud, 2021) discovered that the profound change that has occurred in today's corporate environment has caused IAF to transition from a supervisory function responsible for ensuring the correctness of financial information, compliance with laws and regulations, as well as compliance with policies and procedures set by management, and detecting fraud activities, to a strategic partner for management to add value to the company. IAF should assist its organization to accomplish its objectives by raising its responsibilities and developing its role within organizations. In a more recent study, Deloitte (2019) added that in the face of financial crises and considering enterprises' strategic orientation to focus on the entrance to value creation, it is necessary to re-evaluate IAF from the perspective of the value chain. This should be achieved considering the fundamental change in the concepts and objectives of the IAF. This may include a comprehensive evaluation of risks, quality of IAF's

services, monitoring and governance, and environmental and social performance. Contrary to the external audit function, IAF should move from the use of a risk-based audit approach to the use of a value-based audit approach showing the value realized to stakeholders from its function. The current role of the internal audit function and the services provided are no longer sufficient to meet the expectations of the stakeholders (Ebaid, 2011; IIA, 2012c; Sarens, Abdolmohammadi, & Lenz, 2012). By delivering assurance and advisory services to stakeholders, the IAF can create an added value to support the metrics of value creation in commercial enterprises.

In Egypt, there are no separate professional bodies organizing the internal audit profession and a code of conduct consistent with the environment in which the internal audit in this emerging economy operates (Ebaid, 2011). The IIA Standards for the Professional Practice of Internal Audit provided by Institute of Internal Auditors (IIA) are just an informal guidance with no penalties for non-compliance. The internal audit practices are expected to vary significantly among Egyptian firms. Thus, the current research closes the gap in the literature by investigating the impact of the use and compliance of the IIA Standards by the internal audit departments on the effectiveness of corporate governance (CG) in Egyptian listed companies. We believe that the higher the compliance with IIA Standards including the value-based internal audit approach, the higher the quality of IAF, and the more value it adds to stakeholders. From this main objective, there are sub-objectives emerging. First, examining the impact of the IAF's compliance with *Attribute Standards* and *Performance Standards* on enhancing the organizational status of such function and on the corporate governance responsibilities as an internal monitoring mechanism. Second, examining the impact of the IAF's compliance with Attribute and Performance Standards on the scope of activities and services performed by internal auditors (IAs), including consulting and management support activities (value-based services of the IAF). Third, examining the impact of the IAF compliance with the Attribute and Performance Standards on the level of interaction between IA and other corporate governance mechanisms. Based on the Common Body of Knowledge (CBOK) database, questionnaires were sent to IAs and external auditors (EAs) of listed firms, and interviews were made with individuals involved in the IAF.

The remainder of this paper is structured as follows. Section 2 includes a review of the IAF in the Egyptian business environment. Section 3 contains the literature review concerning how the use and compliance with the IIA Standards by internal audit departments may lead to effective corporate governance. This Section 3 will also provide discussions of corporate governance characteristics leading to the development of the research's hypotheses. Data collection, questionnaire design, and descriptive and statistical methods of analysis are presented in Section 4. Section 5 includes findings and a discussion of the results. Conclusion, limitations, and recommendations for future research are presented in the last Section 6.

2. THE INTERNAL AUDIT FUNCTION IN THE EGYPTIAN CONTEXT

Corporate governance in Egypt has gained significant importance in recent years due to the integration of the Egyptian economy with the global economy, the internationalization of capital markets, and the increasingly significant role played by the private sector in the economy (Samaha & Hegazy, 2010). The move toward a free-market economy has been remarkably swift and the process of privatization has stimulated the stock market activity (Abdel Shahid, 2001). The principal method utilized to activate the stock market was through public offerings of state-owned enterprises (Samaha & Hegazy, 2010). Egypt, among other countries, has responded to the growing attention on corporate governance by reforming the Egyptian Code of Corporate Governance with several amendments most recently in 2015. The code includes various aspects of corporate governance such as the board of directors, internal audit departments, external auditors, and the disclosure of social policies (Bremer, Hegazy, & Sabri, 2011). The code assigned to the board the responsibility for the firm's risk management. Such responsibility shed light on the importance of the IAF to assist the board in achieving their responsibilities (Bremer et al., 2011). Furthermore, the Egyptian listed companies are obliged to evaluate the structure of their internal control and adhere to the principles and rules of corporate governance (Khalil, 2012).

However, there are no separate professional bodies organizing the internal audit profession, like the IIA in the USA (Ebaid, 2011). Also, there is no separate code of conduct consistent with the environment in which the internal audit in this emerging economy operates. The Standards for the Professional Practice of Internal Audit provided by IIA are just informal guidance but are not obligatory for the IAF in Egypt. There are no penalties for non-compliance with such guidance. This implies that the internal audit practices may vary significantly among Egyptian firms. This gap means there is a need to assess the impact of the internal audit departments' compliance with IIA Standards on their monitoring roles as part of a sound corporate governance structure. Ebaid (2011) indicated that a considerable proportion of the Egyptian listed firms have an IAF and adequate internal audit staff. However, IAF in these firms is less mature and faces many challenges that negatively affect its effectiveness as part of a sound corporate governance structure. Moreover, IAF has low levels of organizational independence, management support, and qualified internal audit staff. IAF in the Egyptian listed companies is still focused on traditional financial audit and internal controls compliance and has not yet moved towards the value-added role explained in IIA's new definition (Ebaid, 2011). Finally, the IIA Standards only act as informal guidance but are not mandatory. Thus, internal audit practices may vary significantly among Egyptian firms and there is a need to assess the impact of the internal audit departments' compliance with IIA Standards on their monitoring role as part of a sound corporate governance structure.

3. THE INTERNAL AUDIT FUNCTION AND CORPORATE GOVERNANCE MECHANISMS

This section aims at identifying the role of IAF as a mechanism to apply corporate governance and achieve its effectiveness. IAF is based on the following three key elements which determine how IAF influences *corporate governance*: 1) internal auditor's competence, 2) independence, 3) objectivity, and 4) the IAs performance. The CBOK indicated that 41.7 percent of the IAFs do not play an active role in corporate governance (Burnaby, Hass, & Abdolmohammadi, 2007). CBOK also indicated that only 6.5 percent of the IAFs' working time is allocated to governance issues. At the same time and since the endorsement of the Sarbanes-Oxley in 2002, companies have set up audit committees (AC), added financial experts to their boards, improved financial whistle-blowing capacity, and enhanced corporate governance transparency in the disclosure of their financial reports. A company that is well-governed is one that is accountable and transparent to its stakeholders by having efficient and effective and entrepreneurial management that can deliver shareholders' wealth and growth (Jones & Pollitt, 2004; Financial Reporting Council [FRC], 2012). Poor corporate governance leads to waste, mismanagement, and corruption. The success of governance depends on the involvement of boards of directors, management, and internal and external auditors. Each of these stakeholders must be effective and collaborate to ensure the achievement of organizational strategies and objectives (Bariff, 2003, Munro & Steward, 2011).

Agency theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether their interests are being properly served by agents (Sarens & Abdolmohammadi, 2011). Moreover, agency theory provides insights into the need for a system by which companies are managed. This can be achieved by establishing an internal system encompassing policies and processes as well as people to serve the needs of the stakeholders by directing and controlling management activities with objectivity, accountability, and integrity. Moreover, a well-documented agency problem is managerial "empire-building", where managers tend to grow the firm beyond its optimal size or to maintain unutilized resources with the purpose of increasing personal utility (Hope & Thomas, 2008). To reduce the likelihood of this problem, principals and agents engage in establishing a monitoring process such as an IAF. An IAF is considered a bonding cost borne by managers (agents) to satisfy the owners' (principals) demands for accountability (Roussy & Rodrigue, 2018). Thus, the IAF plays a key role in reducing information asymmetries between principals and agents. Sarens and Abdolmohammadi (2011) indicated that agency variables are associated with the relative size of the IAF. They argued that the more diffused the ownership of a company, the higher the demand for monitoring on behalf of the board who will ask for a larger IAF to satisfy this greater need for information. Carcello et al. (2005) report that an increased proportion of debt also affects a company's investment in its IAF. There is a positive relationship between the proportion of

debt and the relative size of the IAF. Raghunandan, Read, and Rama (2001) indicated that listed firms are more influenced by corporate governance guidelines and laws than private companies. This implies that listed firms have better governance mechanisms for their monitoring role, including a more effective IAF than non-listed firms (Goodwin-Stewart & Kent, 2006). IAFs are expected to play a significant role in corporate governance in international firms than in domestic firms. Moreover, Sarens and Abdolmohammadi (2011) reported that in the countries that are required by law to have an IAF, they put more extensive budgets for their IAFs than in countries where having an IAF is not required by law. Such findings increased the likelihood of IAF playing an active role in corporate governance. They also showed that a supportive control environment has a significant positive effect on the relative size of the IAF, which they view as a proxy for the relative importance of the IAF in organizations.

Prior studies also examined the factors associated with internal audit existence and financial investment in internal audit (internal audit budget). For example, Carcello et al. (2005) examined factors associated with US public firms' investment in internal audits showing that the total internal audit budgets are positively related to the company's size, leverage, financial, service, and utility industries, operating cash flows, and audit committee's review of the internal audit budget. Similar findings were found in Burnaby et al. (2009). Another study conducted by Goodwin-Stewart and Kent (2006) argued that the use of internal audits by Australian firms is associated with a commitment to strong risk management and firm size. Also, IAs have become the spotlight in the events of discovering irregularities (Hay, Stewart, & Botica-Redmayne, 2017). One such event was \$3.8 billion of dubious accounting was unearthed through the work of the IAs at WorldCom (Burnaby et al., 2007). The internal audit staff in is a key position to gather intelligence on ineffective governance and other regulatory functions. This supports the notion that IAs have the expertise in alerting the board and management about elements that give rise to irregularities, risk exposure, and controls (Munro & Stewart, 2011; Anderson, 2012).

3.1. Internal audit, internal control, and governance processes

The Institute of Internal Auditors Research Foundation (IIARF, 2010) defined the concept of value-added internal audit as being the value provided by improving opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure through both assurance and consulting services. Several researchers indicated that an organization accomplishes its objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control, and governance processes (Liebenberg & Hoyt, 2003; Lin & Hwang, 2010; Liu, 2012; Ferramosca, D'Onza, & Allegrini, 2017). The value-based internal audit is a methodology where internal auditors can perform forward-looking internal audit services to offer insights and actively seek innovation to improve

the operations of an organization and add value to all stakeholders. IAs must incorporate knowledge of controls gained from consulting engagements into the evaluation of the organization's control processes (IIARF, 2010; IIA, 2016). Section 302 of Sarbanes Oxley Act (SOX) requires that CEOs and CFOs certify, in each quarterly or annual report, that they have evaluated and reported on the effectiveness of the company's internal controls. Inadequate internal monitoring in the absence of effective internal controls is likely to result in a higher agency problem because it provides an opportunity for managers to make operating and financial reporting decisions that are likely to serve their own interests at the cost of other stakeholders. Thus, weak internal controls are deemed to exacerbate managers' aggressive risk-taking behavior and their tendency to misreport financial information (Arena & Azzone, 2009; Al Sawalqa & Qtish, 2012). Deloitte (2019) found that the internal audit has a new opportunity to improve the quality of its work because of the changing business environment by providing a variety of services that provide value to the company and its stakeholders. Assurance and consulting services are needed to address a variety of performance issues; strategic, environmental, and social performance of the business. Internal auditors should look at the enterprise's major value-generating drivers, in addition to the established role of internal audit in governance, whistle-blowing, risk management, and internal control to improve the company's operations and assist it in achieving its goals.

Other studies such as Mitra, Jaggi, and Hossain (2013) assumed that stricter regulatory requirements in the post-SOX period are likely to result in higher expectations for better-quality financial reports. Such results would encourage the internal control weakness firms to adopt a more conservative reporting strategy that would send positive signals on the reliability of reported information to various contracting parties. The IAF has a vital role in governing the organization, such as controlling, evaluating, monitoring, and advising the management and its board about the design and implementation of the company's internal control systems (Suyono & Hariyanto, 2012). Davidson et al. (2005) found that IAF had a significant role in preventing corruption and supporting good governance practices. Similar findings were also confirmed in other studies (Gramling, Maletta, Schneider, & Church, 2004; Carcello et al., 2005; Al Sawalqa & Qtish, 2012).

Extensive research conducted recently shed the light on the notion that IAs add value to an organization and secure enough resources for their function. In general, internal audit performs both assurance and consulting services. Assurance involves governance, risk management, and control while consulting involves being a facilitator, coordinator, and educator (IIARF, 2010). The inclusion of assurance and consulting in the IIA extended definition of the internal audit means that IAF becoming a proactive or an initiative-taking, consumer-focused activity concerned with issues of control, risk management, and governance (Hass et al., 2006). Thus, the IAF has been promoted as the cornerstone on which effective corporate governance is built (McCollum, 2006).

Eulerich, Theis, Velte, and Stiglbauer (2013) using 3294 responses to the 2010 CBOOK study from 26 EU-member states and a structural equation model composed of “professional ethics”, “value added”, “governance” and “three lines of defense” found that IAF has a significant influence on the design of governance structure. As a result, an internal audit must be viewed as a strategic partner in the enterprise’s management, and its added value must include all stages of internal audit activity. First is the planning phase, during which the needs of stakeholders should be prioritized when preparing the internal audit plan, with the importance of linking the annual internal audit plan to the enterprise’s strategic objectives, as this will help the enterprise achieve its goals and add greater value to its stakeholders. Second, internal audit resources should be used efficiently to satisfy the needs of stakeholders, and appropriate procedures and tests should be selected and implemented. The third phase is the reporting phase, in which the internal audit report should focus on addressing the needs of users including the presentation of observations and suggestions based on their importance and priority, as determined by management.

Similarly, Abbott, Parker, and Peters (2010) and Abbott, Daugherty, and Peters (2016) investigated the association between the AC oversight of the IAF and the nature of IAF activities. They documented a strong, positive association between the AC’s oversight of the IAF and the amount of IAF budget allocated to internal controls-based activities. Selim, Woodward, and Allegrini (2009) documented a significant increase in the consulting practice in the UK, Ireland, and Italy. While risk management, project management, governance, contingency planning, and, disaster recovery are the most common consulting activities in the UK and Ireland, legislative compliance, governance, and risk management are the most common consulting activities in Italy. Management is still ultimately responsible for the internal control assessment to which EAs will opine. And though final attestation still lies in the hands of the EAs, companies continue to take this opportunity to streamline documentation and testing efforts with their internal audit departments. This may reduce the time and resources a company spends on 404, especially considering that IAF is focused on enterprise-wide risk management and operational controls, not just financial controls. This could help identify the work on which EA can rely on the IAF, and identify priority in choosing specific areas to test, particularly for high-risk areas that usually are tested by EAs. Management can then perform the remainder of the tests in conjunction with financial statement closing processes, and the company can reduce overall duplicative efforts.

3.2. The role of internal audit function in enterprise risk management

IAs play a vital role in monitoring the processes of enterprise risk management (ERM) and the quality of performance (Desender, 2011). They also act as assistants for management, the board, and the AC by monitoring, examining, evaluating, reporting, and recommending improvements to the adequacy and

effectiveness of ERM processes. Effective IAF facilitates financial and operational services of companies to achieve key business objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of corporate governance, ERM, and internal control processes (Ferramosca et al., 2017). PWC (2010a, 2010b) conducted two studies to identify the most critical areas and challenges that IAF should focus on in the next years. The studies aimed to develop a proposed scenario to increase the value of the IAF and improve its performance to add value to the company and its stakeholders. PWC concluded that internal audit should broaden its assurance and consultation services in a variety of sectors, including strategic performance, financial performance, legal services, environmental performance, governance and risk management, and operational performance. Sarens and Abdolmohammadi (2011) pointed out that the IAs should put forward suggestions and help the managerial staff fulfill its responsibility through monitoring the adequacy and the effectiveness of the risk management. Moreover, Liu (2012) pointed out that the risk-oriented internal audit is an independent, objective guarantee that consulting activity is oriented by risk. It sets up the procedures of the audit project according to the scope of the audit, the basis of risk determination, the process of the risk management and its appraisal, internal control, and corporate governance to realize the value increment of the enterprise. Furthermore, Carcello et al. (2020) using a quasi-experimental design, examined if internal audit adds value in reducing risks and improving performance. They sampled three distinct groups: managers of audited units within the organization, managers of matched non-audited units, and CAEs. They found that IAF reduces perceived risks of the audited units and perceives greater improvements in performance relative to non-audited units. Thus, internal audit is an ongoing activity aimed at adding value and improving the enterprise’s processes including ERM.

3.3. Internal auditor communication with stakeholders parties

The academic literature presents little empirical evidence on how IAFs are effective in achieving corporate governance objectives in various organizations (Sarens & Abdolmohammadi, 2011; Tricker, 2015; Raiborn, Butler, Martin, & Pizzini, 2017). Sarens and Abdolmohammadi (2011) identified several variables that are expected to be associated with the IAF having an active role in corporate governance including its role with the various stakeholders (such as the AC and management), its organizational status, interactions with the EAs and the type of services they provide. The interaction between the AC and the IAF, especially when responding to audit findings and avoiding scope restrictions, is significant (Goodwin-Stewart & Kent, 2006; Ratcliffe, 2009). The relationship between the IAF and senior management is a two-way relationship, one that results in enabling and supporting the IAF in its relationship with senior management, and the other in enabling and supporting the IAF in its pursuit of

an active role in corporate governance (Koutoupis, Pazarskis, & Drogalas, 2018).

Similarly, fewer studies have addressed the actual extent of an EA's reliance on internal audit and its economic implications (Munro & Steward, 2011). In one of the earlier studies, Felix, Grambling, and Maletta (1998) found substantial interactions between the internal and external auditors including the planning of the audit and accessing each other's working papers and reports. Gerrard, Houghton, and Woodliff (1994) examined the EAs' evaluation of the objectivity, competence, and work performance of IAs. The results showed that evidence relating to work performance was of little value to the EAs when they have negative perceptions about either IA objectivity or competence. Al-Twaijry, Brierley, and Gwilliam (2004) confirmed such findings and indicated that objectivity, competence, and work performance have a significant effect on the judgment of the EAs as to whether to rely on or not on the IAF. Factors that were less important were the age, size, and nationalities of the internal audit departments. The extent of reliance by the EA on the work of the IA also varied according to the perceived quality of the internal audit department. The study concluded that only 37% of the internal audit directors said they co-operated often or always with the EAs and 40% stated they seldom or never co-operated. A total of 68% claimed that they met the EAs periodically. Such findings were confirmed in the interview responses made with both IAs and EAs who also suggested that access to the IAs files was restricted to specific issues.

On the other hand, Al-Twaijry et al. (2004) study also showed that EAs had a more positive view of cooperation with IAs. They stressed that the extent of such cooperation was dependent upon the quality of the IAF including IAs are trustworthy professionals who understand their work. EAs were very reluctant to allow IAs to see their working papers. At the same time, when Al-Twaijry et al. (2004) discussed the size of the internal audit department and staff qualifications, they found out few specific shortcomings and weaknesses. Companies had an internal audit department consisting of only one person and suffered from a general lack of qualified internal audit staff due to the poor development of the internal audit profession. Those interviewed commented that the scope of duties was not clearly defined, the internal audit directors do not report to senior management, they lack independence, and mostly IAs participate in the ordinary daily non-audit work. Finally, IAs may not be given full access to needed documents and information, or management does not listen consciously to their recommendations. Recently, Vuko, Cular, and Slapnicar (2018) found that the specific competence and experience, rather than uncertainty and complexity, were significantly related to the internal audit department contributing to the external audit. Another study made by the Institute of Internal Auditors (IIARF, 2011) assessed the demand, responsibilities, and roles for internal audit services, as well as the needs and expectations of stakeholders (i.e., executives, external auditors, regulators, customers, and suppliers). The study provided useful findings for internal audit managers to help them design internal audit plans and programs to meet stakeholders' needs and increase internal audit's added value. It

emphasized the need for good and continuous communication with stakeholders, and regular discussions with the board of directors and the AC to constantly update the internal audit plan. Both Jiang, André, and Richard (2018) and KPMG (2018) found that the higher the quality of internal audit services, the more value it adds to stakeholders. These studies confirmed the need to expand the scope of internal audit to include non-financial information as value creation drivers of the IAF, and the need to revolutionize the way auditors think to create a radical change in the audit plan and the implementation of the audit process.

Moreover, Deloitte (2019) demonstrated that the IAF can provide essential value to the organization and its stakeholders. It can add value to the board of directors by emphasizing the level of commitment to pursuing the management strategies and policies, as well as delivering facts accompanied by analysis and recommendations for continuous innovation. The IAF also can provide the necessary assurance to the AC by verifying the effectiveness of the internal control structure, the accuracy and reliability of the information provided by the entity's management, and the extent of compliance with laws governing the company's activities, as well as the efficient use of available resources. The researchers believe that the extent of the EA's reliance on the internal audit work is correlated with the status of the IAF, its scope, and its size within the entity. Based on the above literature review of the role of IAF in corporate governance mechanisms and its effectiveness, the main and subhypotheses (null hypotheses) are formulated as follows:

H1₀ (main): There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of internal control, governance, and risk management processes.

H1a₀: There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of internal control processes.

H1b₀: There are no significant differences between the perceptions of the internal and the external auditors that the IAF evaluates, monitors, and improves the effectiveness of governance processes.

H1c₀: There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of risk management processes.

H1d₀: There are no significant differences between the perceptions of the internal and external auditors that the IAF communicates the results of their audit work.

H2₀ (main): There are no significant relationships between the compliance of IAF with the IIA Standards and the effectiveness of corporate governance.

H2a₀: There are no significant relationships between compliance with the IIA Standards and enhancing the organizational status of the IAF in the organization.

H2b₀: There are no significant relationships between compliance with the IIA Standards and the scope of activities performed by the IAF in the organization.

H2c: There are no significant relationships between compliance with the IIA Standards and the interaction between the internal audit and other corporate governance mechanisms.

4. RESEARCH METHODOLOGY

4.1. The questionnaire design and data collection and analysis

This section describes the population and sample, the questionnaire design, and data analysis methods using SPSS (Statistical Package for Social Sciences). The population of this research includes the Egyptian listed firms which are reported in the Egyptian Institute of Directors (EIoD) in 2018 index for corporate governance practices and social responsibility. The questionnaire was designed to investigate the perceptions of the internal and external auditors about the compliance with the IIA Standards and the effective role of IAF as a corporate governance mechanism. The effectiveness of the internal auditor role is assessed by statements examining the organizational status of the IAF, the scope of the activities, and the coordination and interaction between the internal auditor and other corporate governance mechanisms. The researchers used the survey method as it is the most appropriate for the research question and objectives (Bryman & Bell, 2011). A series of interviews with confidentiality assured in late 2019 and early 2020 were conducted with the CAEs in 20 Egyptian listed companies to understand the nature and the characteristics of IAF considering corporate governance factors. 150 close-

ended questionnaires were sent to the internal and external auditors of the 30 companies included in the index for corporate governance practices and social responsibility of the EIoD by e-mail and by direct contact. Reliability statistics are used to measure internal consistency by calculating Cronbach's alpha coefficient. Nonparametric tests are used to examine whether there is a significant association among variables (Smith, 2015). The Mann-Whitney U test examines whether there is an association between two independent samples: the internal and external auditors. Finally, Spearman's rank correlation coefficient is conducted to measure the strength of association between the variables (Hair, Money, Samouel, & Page, 2007). Table 1 summarizes the response rates among participants.

Table 1. Summary of the questionnaires response rates

Details	Internal auditors	External auditors
Questionnaires mailed	50	100
No. of responses	32	80
Usable questionnaires	30	75
Response rate	0.6	0.75

4.2. Demographic profile of the respondents

The analysis of respondents' demographic characteristics indicates that 100% of the respondents of the IAs were CAEs. The demographic data collected from the external auditors on their current position and professional qualifications are shown in Table 2.

Table 2. Summary of the demographic data on respondents from external auditors

Current position	Frequency	Percent	Cumulative
Audit partners	2	2.9	2.9
Audit managers	2	2.9	5.7
Head of audit departments	18	25.7	31.4
Experienced auditors	16	22.9	54.3
Medium experienced auditors	32	45.7	100.0
Professional accounting/auditing qualification			
Professional qualifications (CPA, ACCA, Diploma, Master's degree, etc.)	38	54.2	54.2
No professional qualification	32	45.7	100

Approximately, 90% of the internal auditors have an undergraduate academic degree as a minimum whereas the remainders have a diploma in accounting. The average working experience of the internal auditors' respondents was 8.4 years, and the average working experience of the external auditors' respondents was 9.5 years. Appendix (Table A.1) shows the results of a test of the reliability of the questionnaire and the respondents answering questions using Cronbach's alpha. The reliability values of each question and for all questionnaires' questions, either for the internal auditors' responses or the external auditors' responses, are greater than the benchmark of 0.70 for a good indicator of reliability.

5. RESULTS AND DISCUSSION

5.1. Descriptive statistics

In relation to compliance with the IIA Standards in achieving corporate governance, *Performance Standard 2100* states that the internal audit activity must evaluate and contribute to the improvement of

governance, risk management, and control processes using a systematic and disciplined approach. Moreover, the new definition of the internal audit (IIA, 2012c) moved the role of internal audit from performing traditional oversight functions to adding value to the organization by participating in evaluating, monitoring, and improving risk management, control, consulting, and governance processes. To explore the compliance of the internal audit with the standards, the respondents were asked about their perceptions of the nature of activities conducted by the IAF in their firms. Table 3 shows that most of the internal audit departments perform their financial audit and control compliance responsibilities with a mean of 4.57, while few contributions are made by IAs regarding risk management and management support activities. IA ensures that the bookkeeping, posting, and adjustments made when preparing the financial statements are adequate as well as risk exposures relating to the safeguarding of the assets with a mean of 4.47. IA evaluates the adequacy of controls regarding risk exposures relating to compliance with laws, policies, procedures, and contracts.

Table 3. The perceptions of the internal auditors (Part 1)

Variable code	Variable name	Mean	Standard deviation	Ranking	Median	Skewness	Kurtosis	Shapiro test, Sig.
QA3I2	Internal auditors communicate control and risk information to appropriate areas "Internal control and governance processes"	4.47	0.730	1	5.00	-1.584	3.157	0.000
QA3I19	The internal audit report is accurate, timely, complete, and clear "Communicating results"	4.47	0.571	2	4.50	-0.456	-0.748	0.000
QA3I8	The internal audit evaluates the adequacy of the controls regarding compliance with laws and regulations "Internal control"	4.47	0.730	3	5.00	-1.584	3.157	0.000
QA3I18	The internal audit report is reviewed by the audit committee "Communicating results"	4.40	0.498	4	4.00	0.430	-1.950	0.000
QA3I1	The internal audit assesses whether the organizational objectives/internal audit strategy align with organization's mission "Value-based approach Governance processes"	4.40	0.675	5	4.50	-0.693	-0.517	0.000
QA3I12	The internal auditors have sufficient knowledge of the key information technology risks and controls "Risk management"	4.37	0.615	6	4.00	-0.404	-0.567	0.000
QA3I3	Material risks are identified, assessed, and aligned with the organization's risk appetite "Risk management and Governance processes"	4.37	0.765	7	4.50	-1.250	1.741	0.000
QA3I9	The internal audit activity assesses the adequacy of the controls in responding to risks associated with safeguarding of the assets "Internal control"	4.33	0.547	8	4.00	0.050	-0.699	0.000
QA3I7	Internal audit activity evaluates the adequacy of the control regarding the risk exposures associated with achievement of strategic objectives "Internal control"	4.30	0.750	9	4.00	-1.094	1.621	0.000
QA3I4	Internal audit activity evaluates the adequacy of the controls of governance operations and information system "Internal Control-Governance processes"	4.17	0.699	10	4.00	-0.890	2.013	0.000
QA3I10	Internal audit activity participates in assessing the risks associated with current and potential claims "Risk management"	4.13	0.730	11	4.00	-0.214	-1.019	0.000
QA3I6	Review of the risks associated with accounting estimates "Risk management"	4.03	0.928	12	4.00	-1.457	3.132	0.000
QA3I14	Internal audit is engaged in assessing material risks associated with huge and quick expansions "Risk management"	3.97	0.765	13	4.00	0.058	-1.233	0.000
QA3I11	Internal audit assesses risks associated with partial or inappropriate compliance with new release "Risk management"	3.93	0.868	14	4.00	-0.204	-0.916	0.001
QA3I13	Internal auditors have sufficient knowledge of the material risks associated with local and international competition "Risk management"	3.93	0.785	15	4.00	0.121	-1.332	0.000
QA3I5	Financial scope activities bookkeeping	3.93	0.907	16	4.00	-1.347	2.932	0.000
QA3I17	The external auditor views the results of the internal audit work "Communicating results"	3.87	0.937	17	4.00	-0.797	0.063	0.000
QA3I15	Internal auditors have sufficient knowledge of the risk exposures associated with international expansions decisions, deep knowledge of the nature of operations, industry characteristics, effective communication skills with positive behavior and leadership of change in the business "Risk management"	3.80	0.714	18	4.00	0.316	-0.911	0.000
QA3I16	Internal auditors focus on the value creation drivers in business enterprises, risk exposures associated with consulting engagements and increasing qualifications and professional experience of internal audit "Risk management and Consulting activities"	3.80	0.925	19	4.00	-0.135	-0.919	.001

Table 3. The perceptions of the external auditors (Part 2)

Variable Code	Variable name	Mean	Standard deviation	Ranking	Median	Skewness	Kurtosis	Shapiro test, Sig.
QA3E19	The internal audit report is accurate, timely, complete, and clear "Communicating results"	4.37	0.726	1	4.00	-1.408	2.803	0.000
QA3E8	The internal audit evaluates the adequacy of the controls regarding compliance with laws and regulation "Internal control"	4.36	0.682	2	4.00	-0.873	0.803	0.000
QA3E9	The internal audit activity assesses the adequacy of the controls in responding to risks associated with safeguarding of the assets "Internal control"	4.34	0.634	3	4.00	-0.432	-0.639	0.000
QA3E18	The internal audit report is reviewed by the audit committee "Communicating results"	4.33	0.631	4	4.00	-0.746	1.351	0.000
QA3E6	Review of the risks associated with accounting estimates "Risk management"	4.31	0.627	5	4.00	-0.346	-0.627	0.000
QA3E2	Internal auditors communicate control and risk information to appropriate parties "Internal control and Governance processes"	4.29	0.705	6	4.00	-0.981	1.543	0.000
QA3E5	Financial scope activities "Bookkeeping"	4.26	0.557	7	4.00	0.028	-0.353	0.000
QA3E7	Internal audit activity evaluates the adequacy of the control regarding the risk exposures associated with achievement of strategic objectives "Internal control"	4.21	0.635	8	4.00	-0.558	1.095	0.000
QA3E17	The external auditor views the results of the internal audit work "Communicating results"	4.20	0.844	9	4.00	-0.993	0.601	0.000
QA3E1	Internal audit plan assesses whether the organizational objectives/internal audit strategy align with organization's mission "Value-based Governance processes"	4.19	0.937	10	4.00	-1.037	0.246	0.000
QA3E11	Internal audit assesses risks associated with partial or inappropriate compliance with new release "Risk management"	4.19	0.687	11	4.00	-0.533	0.324	0.000
QA3E4	Internal audit activity involved in evaluating the adequacy of the controls of governance operations and information system "Governance /internal control"	4.17	0.722	12	4.00	-0.986	1.796	0.000
QA3E12	Internal auditors have sufficient knowledge of the key information technology risks and controls "Risk management"	4.17	0.742	13	4.00	-0.727	0.570	0.000
QA3E16	Internal auditors focus on the value creation drivers in business enterprises, risk exposures associated with consulting engagements and increasing qualifications and professional experience of internal audit "Risk management and Consulting activities"	4.10	0.903	14	4.00	-0.930	0.285	0.000
QA3E3	Material risks are identified, assessed, and aligned with the organization's risk appetite "Risk management and Governance processes"	4.07	0.729	15	4.00	-0.805	1.229	0.000
QA3E14	Internal audit is engaged in assessing material risks associated with huge and quick expansions "Risk management"	4.00	0.917	16	4.00	-0.813	0.042	0.000
QA3E10	Internal audit activity participates in assessing the risks associated with current and potential claims "Risk management"	3.99	0.860	17	4.00	-0.818	0.367	0.000
QA3E15	Internal auditors have sufficient knowledge of the risk exposures associated with international expansions decisions, deep knowledge of the nature of operations, industry characteristics, effective communication skills with positive behavior and leadership of change in the business "Risk management"	3.89	0.941	18	4.00	-0.626	-0.367	0.000
QA3E13	The internal auditors have sufficient knowledge of the material risks associated with local and international competition "Risk management"	3.76	0.939	19	4.00	-0.570	-0.444	0.000

On the other hand, the results revealed low levels of acceptance among both the internal and the external auditors concerning the internal audit activities that add value to the organization namely contributing to risk management, consulting activities, and management support activities with a mean of around 3.3. Such internal audit activities included: the adequacy of controls regarding risk exposures for the organization's strategic objectives and legislative compliance, project management,

mergers, acquisitions, divestitures, and disaster recovery. These results are inconsistent with those found in prior studies in developed economies. For example, Paape, Scheffe, and Snoep (2003) indicated that most of the CAEs across 15 European countries engaged in consultancy and management support activities. Also, Leung, Cooper, and Robertson (2003) revealed that a large majority of the IAs in Australian firms regarded risk management as an important internal audit objective. Similar results

were found in the UK, Ireland, and Italy (Selim et al., 2009). Thus, IAF should move towards a value-added role to increase its effectiveness as a corporate governance mechanism using the training provided to IAs to understand changes occurring in the role of IAF in the global economies. This may also require that IAF be given an appropriate status in the organization to achieve organizational independence and objectivity.

In addition, the respondents were also asked about their perceptions concerning the interaction between IA and both the EAs and the AC with regard to their audit work. EAs had poor access to all internal audit reports and working papers having a negative effect on the effectiveness of the IAF in corporate governance. However, Table 3 shows high levels of interaction between IAs and ACs providing

positive implications about the effectiveness of the IAF in corporate governance. Moreover, EAs agreed with the IAs that the position of the IAF in the organizational structure affects its effectiveness in fulfilling its corporate governance responsibilities. The IAF should maintain a high level of independence and objectivity, despite the close working relationship with management. Also, there is consensus among both auditors that the compliance with the IIA Standards increased the level of interaction between IAs and both EAs and the AC since the standards require IAs to communicate the results of their works to the AC and the EAs. Table 4 provides a summary of the ranking for internal audit and corporate governance elements.

Table 4. Descriptive statistics for internal audit and corporate governance effectiveness

<i>Variable name</i>	<i>N</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>Rank</i>
Communicating results "internal audit report"	100	4.2833	0.54097	1
Direct interaction with the board	100	4.2825	0.49830	2
Internal control processes	100	4.2794	0.53834	3
Planning	100	4.2533	0.53101	4
Governance processes	100	4.2300	0.59637	5
Due professional care	100	4.1700	0.54487	6
Independency	100	4.0822	0.57543	7
Risk management	100	4.0747	0.57131	8
Quality assurance and improvement program	100	4.0622	0.65522	9
Audit documentation	100	4.0467	0.74764	10
Free of interference	100	4.0225	0.48474	11
Objectivity and proficiency	100	3.9087	0.61465	12

5.2. Inferential statistics

In this subsection, the two-sample *Kolmogorov-Smirnov test* shows that the normality assumption was not achieved and therefore the nonparametric tests are considered appropriate for testing the research hypotheses. The *Mann-Whitney U test* is used to examine whether there is an association between two independent samples: the internal and external auditors. Spearman's rank correlation coefficient is also conducted to measure the strength of the correlation between the two variables. The following section presents the results of testing the research hypotheses using the above non-parametric tests.

5.2.1. Mann-Whitney U test

Table 5 provides evidence to accept the main H_{10} (main) and subhypotheses of the research as

the p-value is greater than 0.05. Such results indicate that both the internal and the external auditors agreed to a high extent that most of the internal audit activities are still focused on financial audit and internal control activities. The results also show that both auditors agreed but with low levels that part of the internal audit activities is engaged in evaluating, monitoring, and improving the effectiveness of governance processes. Similarly, low levels of acceptance were shown concerning the internal audit activities engaging in evaluating, monitoring, and improving the effectiveness of risk management processes. Both auditors agreed with a low level of acceptance that there are interactions between IAs and EAs and the AC. Also, the low levels of acceptance among both auditors indicated that EAs do not rely to a great extent on the internal audit workings. However, the results show that interaction between the IAs and the AC is better and higher than that with the EAs.

Table 5. Results of testing the main (H_{10}) and subhypotheses

<i>Null hypotheses</i>	<i>Mann-Whitney U test, Sig.</i>	<i>Decision</i>
H_{10} (main): There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of internal control, governance, and risk management processes.	0.75	Accept H_0
H_{1a} : There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of internal control processes.	0.675	Accept H_0
H_{1b} : There are no significant differences between the perceptions of the internal and the external auditors that the IAF evaluates, monitors, and improves the effectiveness of governance processes.	0.212	Accept H_0
H_{1c} : There are no significant differences between the perceptions of the internal and external auditors that the IAF evaluates, monitors, and improves the effectiveness of risk management processes.	0.284	Accept H_0
H_{1d} : There are no significant differences between the perceptions of the internal and external auditors that the IAF communicates the results of their audit work.	0.413	Accept H_0

5.2.2. Spearman's rank correlation coefficient tests

Testing the correlation for main $H2_0$ and subhypothesis $H2a_0$

Table 6 shows that there is a significant and positive correlation ($r_s = 0.485$, $p = 0.000$) between the compliance with *Attribute Standard 1110* (specifically *1110.A1*), and enhancing the organizational status of the internal audit in the organization. *Standard 1110.A1* requires the internal audit activity to be free of any form of interference, when performing an assurance or value-added services, in determining the scope of the internal audit activity, and communicating the results. Similarly, there is a significant positive correlation between the *Attribute Standard 1120 – Objectivity* and the recognition of the internal audit and its status in the organizational structure. When the internal audit enjoys a considerable degree of independence and objectivity, this will increase the reliability of the assurance and consulting services provided by the IAF and consequently increase its position in the organizational structure. These results also indicate that the internal audit should be given the appropriate status in the organization including organizational independence, management support, and adequacy of talented and skilled staff.

Moreover, there is also a significant and positive correlation ($r_s = 0.457$, $p = 0.000$) between compliance with the *Attribute Standard 1300* and enhancing the status of the IAF in the organization. Ongoing periodic internal and external assessments of the performance of the IAF increase the quality of the assurance and consulting services provided by the internal audit to the management. There is also a positive correlation between the *Attribute*

Standard 1200 – Proficiency and due professional care and increased recognition of the internal audit's role in corporate governance. This implies that the level of knowledge and skill of IAs has a significant impact on the effectiveness of the audit as well as its credibility. On the other hand, there is a weak correlation between audit documentation and the organizational status of the internal audit. Table 6 also shows a significant and positive correlation ($r_s = 0.561$, $p = 0.000$) between compliance with *Performance Standard 2130 – Control* and the organizational status of the internal audit. These results reveal that the IAF is still focused on financial audit and has not yet moved to the value-added role explained in the IIA's new definition. Moving the internal audit towards a more value-added activity increases the value and the credibility of the assurance, consultancy, and management support activities and enhanced its organizational status and corporate governance status.

Also, there is a significant positive correlation ($r_s = 0.497$, $p = 0.000$) between communicating the results and interaction between IAs and EAs, the AC, and the status of the internal audit in the organization. Coordination between all parties reduces the time and effort spent on redundant work, thus reducing the audit fees for EAs. Reliance on the work of the IAF as well as effective coordination with the IA is dependent on the independence, objectivity, and competence of the IAs. Based on these results, we statistically reject the null hypothesis $H2a_0$ and accept the alternative hypothesis that supports the existence of a positive correlation between compliance with the IIA Standards and enhancing the role of the IAs in the organizations.

Table 6. Results of testing the correlation between the compliance with IIA Standards and the organizational status of the internal audit (for $H2_0$ (main) and $H2a_0$)

<i>The (IIA) International Standards for the Professional Practices of Internal Audit</i>	<i>Organizational status of the internal audit</i>
<i>1. Independency and objectivity</i>	
1110 – Organizational independency	0.392* (0.000)
1110.A1 – Free of interference in the scope of the work of the internal audit	0.485* (0.000)
1111 – Direct interaction with the board	0.273* (0.006)
1120 – Objectivity	0.411* (0.000)
<i>2. Management of the internal audit activity and due professional care</i>	
1200 – Proficiency and due professional care	0.356* (0.000)
1300 – Quality assurance and improvement program	0.457* (0.000)
2000 – Managing the internal audit activity	0.382* (0.000)
2330 – Documentation	0.374* (0.000)
<i>3. Nature of the internal audit work</i>	
2110 – Governance processes	0.380* (0.000)
2120 – Risk management processes	0.379* (0.000)
2130 – Control	0.561* (0.000)
2400 – Communicating the results	0.497* (0.000)

Note: * Spearman rank coefficient (r_s).

Testing the correlation for subhypothesis $H2b_0$

Table 7 shows a positive correlation ($r_s = 0.362$, $p = 0.000$) between independence and objectivity standards and the scope of activities performed by the internal audit. A high degree of independence and objectivity increases the value and the credibility of the assurance, consultancy, and management support activities provided by the IAF. These results are consistent with Selim et al. (2009) findings that documented a significant increase in

the consulting practices in the UK, Ireland and, Italy due to the effectiveness and quality of the IAF. Also, there are significant and positive correlations between compliance with *Standard 1200 – Proficiency* and due professional care and the scope of activities performed by the internal audit. The level of experience and the certification of IAs are considered an indicative of the quality of internal audit, the advancement within the internal audit departments and increased recognition of its monitoring role in the organization (Pickett, 2012).

Also, there is significant and positive correlation ($r_s = 0.483$, $p = 0.000$) between the documentation of the internal audit work and the scope of activities provided by the IAF. Internal audit can take the form of internal consultants for the enterprise identifying and documenting key internal control processes and the appropriate tests needed for their compliance audit. Such task should be approved by the management and reviewed by the EAs and the AC. Mitra et al. (2013) assumed that stricter

regulatory requirements in the post-SOX period are likely to result in higher expectation for better-quality financial reports which encourage the internal control weakness firms to adopt a more conservative reporting strategy. Such strategy would send positive signals on the reliability of reported information to various contracting parties and points to the role IAF can play in enhancing the quality of internal control.

Table 7. Results of testing the correlation between the compliance with the IIA Standards and the scope of internal audit activities (for $H2b_0$)

<i>The (IIA) International Standards for the Professional Practices of Internal Audit</i>	<i>Scope of the internal audit activities</i>
<i>1. Independency and objectivity</i>	
1110 — Organizational independency	0.362* (0.000)
1110.A1 — Free of interference in the scope of the work of the internal audit	0.346* (0.000)
1111 — Direct interaction with the board	0.309* (0.000)
1120 — Objectivity	0.385* (0.000)
<i>2. Management of the internal audit activity and due professional care</i>	
1200 — Proficiency and due professional care	0.417* (0.000)
1300 — Quality assurance and improvement program	0.475* (0.000)
2000 — Managing the internal audit activity	0.353* (0.000)
2330 — Documentation	0.483* (0.000)
<i>3. Nature of the internal audit work</i>	
2110 — Governance processes	0.537* (0.000)
2120 — Risk management processes	0.581* (0.000)
2130 — Control	0.620* (0.000)
2400 — Communicating the results	0.481* (0.000)

Note: * Spearman rank coefficient (r_s).

Finally, a strong, and a positive correlation exists between compliance with *Performance Standards* regarding the nature of work performed by the internal audit and the scope of the IAF ($r_s = 0.620$, $p = 0.000$). Compliance with these standards brings the internal audit to the forefront in leading the business units with regards to the internal control system, risk management, and governance processes and focusing on strategic objectives. A significant and positive correlation also exists between the compliance with standards of risk management and governance processes and the scope of internal audit work. IA is expected to act as a business partner and a management reviewer. He/she provides expertise to assist an organization in meeting its objectives by providing managers with the bases for judgment and action in relation to weaknesses in control and performance and recommending improvements and business solutions. As such, the expanded scope of the IAF practices including assurance and consulting

activities is considered the cornerstone of its role in corporate governance. Based on these results, we statistically reject the null hypothesis $H2b_0$ and accept the alternative hypothesis that supports the existence of a positive correlation between the compliance with the IIA Standards and the scope of internal audit activities.

Testing the correlation for subhypothesis $H2c_0$

Table 8 shows that there is a significant positive correlation between independence and objectivity standards and the level of interaction between the IA and other stakeholders. Also, the value the internal audit adds to the organization is affected by its coordination with other stakeholders. A high degree of independence and objectivity increases the value and the credibility of the assurance, consultancy, and management support activities provided by the IAF. In addition, there will be increased levels of reliance by the EAs on the work of the IAs.

Table 8. Results of testing the correlation between the compliance with the IIA Standards and the scope of internal audit activities (for $H2c_0$)

<i>The (IIA) International Standards for the Professional Practices of Internal Audit</i>	<i>Interaction and cooperation with other corporate mechanisms</i>
<i>1. Independency and objectivity</i>	
1110 — Organizational independency	0.362* (0.000)
1110.A1 — Free of interference in the scope of the work of the internal audit	0.346* (0.000)
1111 — Direct interaction with the board	0.309* (0.000)
1120 — Objectivity	0.385* (0.000)
<i>2. Management of the internal audit activity and due professional care</i>	
1200 — Proficiency and due professional care	0.417* (0.000)
1300 — Quality assurance and improvement program	0.475* (0.000)
2000 — Managing the internal audit activity	0.353* (0.000)
2330 — Documentation	0.483* (0.000)
<i>3. Nature of the internal audit work</i>	
2110 — Governance processes	0.537* (0.000)
2120 — Risk management processes	0.581* (0.000)
2130 — Control	0.620* (0.000)
2400 — Communicating the results	0.481* (0.000)

Note: * Spearman rank coefficient (r_s).

The results also indicate the association between the internal audit quality and the coordination with the board which is consistent with the results of Johl et al. (2013). Finally, a significant, and positive correlation exists between the compliance with the performance standards regarding the nature of the audit work and standards of risk management and governance processes, and the level of interaction between the IAs and other stakeholders. Based on these results, we statistically reject the null hypothesis $H2c_0$ and accept the alternative hypothesis that supports the existence of a positive correlation between the compliance with the IIA Standards and the interaction between internal audits and other corporate governance mechanisms.

6. CONCLUSION

This research study aims to explore the impact of compliance with the IIA Professional Practice Standards on the effectiveness of the IAF as a corporate governance mechanism. It extends the IAF literature in the following ways. First, it would not be reasonable to expect that the mere presence of the IAF will deter earnings management and enhance the quality of the financial reporting. There is a need to ensure that such function possesses the attributes necessary to fulfill its monitoring role effectively. Second, the researchers examined the association between the adherence to the IIA standards and enhancing the IAF in corporate governance given the value-based audit approach for stakeholders. Such examination would enhance the internal audit role in achieving the quality of financial reporting to prevent and minimize the blame placed on the IAF for several corporate scandals worldwide.

The results reveal that the IAF in the Egyptian listed firms faces many difficulties concerning free of interference, objectivity, and qualifications of the internal audit staff which reduces its ability to fulfill its role in corporate governance. Also, significant positive correlations existed between compliance with Attribute Standards of independence, objectivity, proficiency, and free of interference as well as performance standards associated with audit work and enhancing the organizational status of the internal audit. Compliance with the standards achieved a higher degree of independence and objectivity which consequently increases the credibility of the services performed by the IAF. There is also a positive strong

correlation between the compliance with *Attribute Standard 1300* and the scope of activities performed by the IA. On the other hand, there is a weak correlation between audit documentation and the organizational status of the internal audit. Finally, the study also reveals a positive significant correlation between compliance with the IIA Standards and the level of interaction between the IA and other corporate governance mechanisms.

The findings of this study are significant from a theoretical and practical perspective. This study is among the first to survey the external and internal auditors' perceptions concerning the impact of IAs' compliance with IIA Standards on corporate governance in an emerging economy such as Egypt. It extends prior literature findings in developed economies, exploring the status of IAs' compliance with the IIA Standards and how it affects corporate governance in an emerging economy. Such an approach helps to assess the robustness of the above findings, adding to the base of knowledge in this field. Also, the findings of the research reveal deficiencies in the practices of the IAF in listed companies in such an emerging economy. A matter which should attract the attention of the regulators by highlighting the importance of the IIA Standards and the need to add requirements for the application of IIA Standards in the existing code of corporate governance. Moreover, regulators should begin developing the status of the IAF in emerging economies by establishing a governing body that monitors and oversees the internal auditing profession to enhance its ability to provide services that add value to organizations as well as the corporate governance practices. This should include a strong and permanent focus on business improvement to appropriately fulfill the position of a modern IAF adding value to the companies. This research study has a few limitations. The small sample size may have influenced the results given the difficulties faced by the researchers when implementing the survey as most experienced and qualified internal auditors were busy. The research only used individuals who were CAEs regarding the perceptions of the IAs. In addition, the researchers only explored the compliance with IIA Standards that are important to the IAF in corporate governance. Future research may assess the costs and benefits of having a separate professional body that governs the internal audit profession in any emerging economy given the limited resources for the IAF in such an economy.

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APPENDIX

Table A.1. Reliability statistics

Respondents	Questions	Number of items	Cronbach's alpha
Internal auditors	Section I	21	0.781
	Section II	22	0.904
	Section III	19	0.866
	Section IV	13	0.843
	Total	75	0.939
External auditors	Section I	21	0.888
	Section II	22	0.94
	Section III	19	0.927
	Section IV	13	0.837
	Total	75	0.968