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Compliance with Disclosure Requirements for Interests in Joint Arrangements and Associates: Evidence from Egyptian Listed Companies

Abstract

Purpose: Previous studies indicate that compliance with International Financial Reporting Standards (IFRS) is not complete in many countries. This study empirically investigates, under the Egyptian version of IFRS, the extent to which listed companies in Egypt comply with disclosure requirements in accordance with Egyptian Accounting Standard No. 44, and provides evidence of factors associated with the level of compliance. The factors examined are sector type, the quality of the audit firm, and foreign activities.

Design/methodology/approach: A disclosure index, which includes 29 items representing disclosure requirements under EAS 44, has been developed to examine the annual reports for the year 2020 for a sample of 99 companies listed on the Egyptian Stock Exchange.

Findings: The results indicate that the overall level of companies' compliance is 62.5% of the disclosures required by EAS 44. This low level of compliance raises questions about the audit quality in Egypt, and add concerns about the lack of effective oversight in the Egyptian Stock Exchange. It also requires investigating the factors that explain this low level of compliance. Simple and multiple regressions were used to analyze the data and test hypotheses. The study found a significant positive relationship between each of foreign activities, the quality of the audit firm, and the compliance level with EAS 44. Moreover, the study found a significant negative relationship of the sector type and the compliance level.

Research limitations: This study has some limitations: The disclosure index includes only mandatory items; The composition of the items in the disclosure index does not reflect their importance as perceived by users of financial information; The data used to test the company's compliance level and characteristics were collected manually from annual reports.

Originality/value: The results contribute to the literature on compliance, and provide important insights for a post-implementation review by investigating the extent of disclosure by listed companies in Egypt.

Keywords: Interests in Joint Arrangements and Associates, IFRS 12, EAS 44, disclosure level, compliance level.

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الامتثال لمتطلبات الإفصاح عن الحصص في الترتيبات المشتركة والشركات الشقيقة: بالتطبيق على الشركات المدرجة بالبورصة المصرية

ملخص البحث

استهدفت الدراسة التحقق من مستوى امتثال الشركات المدرجة في البورصة المصرية لمتطلبات الإفصاح عن الحصص في الترتيبات المشتركة والشركات الشقيقة وفقا لمعيار المحاسبة المصري رقم (44). كما استهدفت الدراسة أيضا التعرف على العوامل التي يمكنها تفسير التباين في مستوى الامتثال فيما بين الشركات. وقد أجريت الدراسة التطبيقية على عينة مكونة من (99) شركة مدرجة في البورصة المصرية، باستخدام مؤشرا للإفصاح يتضمن (29) بندا تمثل متطلبات الإفصاح وفقا لمعيار المحاسبة المصري رقم (44)، لفحص القوائم المالية السنوية للشركات عن عام 2020م. تشير النتائج إلى أن عينة الشركات لا تلتزم بشكل كامل بمتطلبات الإفصاح، حيث أفادت النتائج أن مستوى الامتثال العام هو62.5٪ من متطلبات الإفصاح. ويثير هذا المستوى المنخفض للامتثال العديد من التساؤلات حول مدى جودة المراجعة الخارجية في مصر، ومدى فعالية الرقابة على إفصاح الشركات في البورصة المصرية، ومدى فعالية تطبيق القوانين والإجراءات التي تضمن الامتثال للمتطلبات الإلزامية لمعايير المحاسبة المصرية. ومن خلال تطبيق نماذج الانحدار البسيط والانحدار المتعدد التدريجي تم التوصل إلى مجموعة من النتائج أهمها، وجود علاقة ارتباط معنوية بين مستوى الإفصاح عن الحصص في الترتيبات المشتركة والشركات الشقيقة ونوع القطاع، وجودة مكتب المراجعة الخارجي، وانخراط الشركات في أنشطة دولية؛ وجود علاقة ارتباط معنوية موجبة بين مستوى الإفصاح عن الحصص في الترتيبات المشتركة والشركات الشقيقة وجودة مكتب المراجعة الخارجي، وانخراط الشركات في أنشطة دولية؛ وجود علاقة ارتباط معنوية سالبة بين مستوى الإفصاح عن الحصص في الترتيبات المشتركة والشركات الشقيقة ونوع القطاع الذي تنتمي إليه الشركة. ومن خلال نموذج الانحدار المتعدد التدريجي تبين أن انخراط الشركات في أنشطة دولية، ونوع القطاع الذي تنتمي إليه عاملان مهمان في تفسير التباين في مستوى الإفصاح فيما بين الشركات.

الكلمات المفتاحية: الحصص في الترتيبات المشتركة والشركات الشقيقة؛ IFRS 12؛ معيار المحاسبة المصري رقم (44)؛ مستوى الإفصاح؛ مستوى الالتزام.

1. Introduction

Alliances and joint arrangements are a key strategic tool for facing competition, as they contribute to increasing the competitiveness of the participating entities (Gobbo, 2018). However, the financial consequences of interests in joint arrangements and associates should be reported in the entities' financial reports so that investors, lenders, or third parties can evaluate its performance in such arrangements.

In May 2011, the International Accounting Standards Board (IASB) issued IFRS 12 Disclosure of Interests in Other Entities (hereinafter referred to as IFRS 12) for aligning disclosure requirements for subsidiaries, joint arrangements, associates and unconsolidated structured entities and to present those requirements in a single IFRS (IASB, 2011). This standard, in comparison with IAS 28 and IAS 31, requires the disclosure of more detailed information about joint arrangements due to the elimination of proportionate consolidation of joint ventures, as one of the important changes resulting from the joint consolidation project, which IASB and FASB participated (IASB, 2011; Ašenbrenerová, 2016).

However, IFRS 12 does not change previous recognition or measurement criteria, but requires a higher level of disclosure (Lopes & Lopes, 2019), as the new standard requires rich disclosures about subsidiaries, joint arrangements, associates and unconsolidated structured in which the entity participates. Since previous studies on the effects of application of IFRS 12 remain limited, accounting and reporting for joint arrangements and associates remains the subject of debate (Gavana et al., 2020).

Egyptian Accounting Standard No. 44 Disclosure of Interests in Other Entities (hereinafter referred to as EAS 44) is the Egyptian version of IFRS 12. The objective of this standard is to specify disclosure requirements that enable users of financial statements to assess: (a) the nature of the entity's interests in other entities and the risks associated with them, and (b) the effects of those interests on its financial position, financial performance, and cash flows. EAS 44 requires entities to disclose information that enables users of financial statements to assess the nature, extent, and financial effects of its interests in joint arrangements and associates, including the nature and effects of its contractual relationship with other investors with joint control over joint arrangements, as well as the nature and changes of the risks associated with their interests in joint ventures (EAS, 2015).

The disclosure requirements in EAS 44 provide users with information about joint ventures when those joint ventures are material to the reporting entity. Furthermore, the summarized financial information required in EAS 44 resulting in a higher degree of detail, and gives users a better basis for assessing the effect on the reporting entity of the activities carried out through joint ventures and associates. Thus, compliance with disclosure requirements in relation to joint arrangements and associates is key issue following the adoption of EAS 44 (EAS, 2015).

The main purpose of this study is to investigate the level of compliance of listed companies in Egypt with the disclosures required under EAS 44 and the potential explanatory factors influencing the level of compliance. Specifically, the study aims to; first, determining the level of compliance in the annual reports for 2020 of listed companies in Egypt with the requirements for mandatory disclosure of interests in joint arrangements and associates under EAS 44. Second, examining whether the level of compliance varies with the sector type, the quality of the audit firm, and foreign activities. These two objectives can be summarized in the following research question: To what extent do listed companies in Egypt comply with EAS 44? What are the main factors that explain the level of disclosure compliance required under EAS 44?

This study contributes to the literature by providing insights into the level and determinants of compliance with mandatory disclosure of interests in joint arrangements and associates in developing economies using a sample of companies listed in Egypt. Hence, the results of the study are expected to contribute to the development of better disclosure practices in Egypt.

The rest of this paper is organized as follows; the next section presents the importance of compliance with accounting standards for information quality, followed by the literature and hypotheses development, and then the methodology. Finally, the analyses, discussion, conclusions, limitations, and suggestions for further research are presented respectively.

2. Compliance with Accounting Standards and Information Quality

Financial reports are one of the main tools used to provide valuable and useful information about the financial status and operational performance of the entities, and are an important source for creating investor confidence in the market. Disclosure in financial reports reduces the information asymmetry in capital markets between managers and other stakeholders (Shehata et al., 2014). Therefore, many countries around the world have adopted the International Accounting Standards (IASs)/International Financial Reporting Standards (IFRSs) with the purpose of increasing the quality of information disclosed in financial reports (Al Mutawaa & Hewaidy, 2010).

In the context of ensuring that all useful accounting information is communicated effectively, entities need to comply with the requirements of IFRS. The term ‘compliance’ is used to indicate that the company's financial reports are prepared in accordance with all the requirements of accounting standards (Wang, 2019). According to IAS 1 (Paragraph 16), financial statements should not be described as IFRS-compliant unless they comply with all the requirements of each applicable standard (IASB, 2018).

Compliance with accounting standards, including disclosure requirements, is fundamental to the quality of accounting information (Wang, 2019), as compliance with accounting standards will result to more disclosure of appropriate information (Shehata et al., 2014). In addition, accounting standards make the financial statements credible, allowing economic decisions to be made based on accurate and consistent information. Thus, compliance with accounting standards result in greater investor confidence, reduces the information asymmetry in capital markets, and makes fair market prices possible.

Noticeably, according to the IASB’s conceptual framework, comparability is a key attribute of financial information attributes as it enhances the usefulness of the information (IASB, 2018). Therefore, comparable financial information is needed. Accounting standards ensure the financial statements are comparable. Compliance with IFRS enhances the comparability of financial information and improves the efficiency of capital allocation and fair pricing. In addition, there is also a need to ensure the quality of financial information disclosure, to reduce information asymmetry (Fernando, 2011). High-quality disclosure is important to ensuring that markets are fair and efficient, and that investors are well informed (Wang, 2019). If an entity demonstrates a high level of compliance, its financial statements should be more comparable and of Higher quality. This allows investors and other users of financial statements to have better compare entities.

However, when adopting a new set of standards, accountants and auditors may take some time to fully master relevant specialized knowledge and skills, since there is a learning process involved in adopting a new set of accounting standards (Wang, 2019). Some of the reasons for non-compliance in the first years of IFRS adoption can be expected due to problems with compliance quality issues, making data inconsistent and incomparable in the early application period. Another issue, there are arguments that full implementation of IFRS is very complex and likely to impose significant costs on preparers (Ozu et al., 2018).

3. Literature Review and Hypotheses Development

3.1 IFRS 12 Compliance

As mentioned earlier, reporting joint arrangements is a critical issue that academics have debated for decades. Previous empirical studies that investigated the extent of disclosure of interests in joint arrangements and associates prior to IFRS 12 revealed either a complete lack of disclosure or insufficient/low disclosure (Sarquis et al. 2021). After IFRS 12, there has been no change. For example, the study by Ašenbrenerová (2016) investigated whether companies listed on the Prague Stock Exchange disclose all the requirements under IFRS 12, in particular the summary financial information required on joint ventures and associates. The empirical study focused on the first year after the implementation of IFRS 12, which has been in place since 2014. The study indicates that more than half of the companies have not disclosed information in line with IFRS 12, and the largest lack of information falls under of summarized financial information category. The majority of companies disclosed information about total assets; total liabilities; expenses; revenue and profit, while no risk associated with investments in joint ventures was disclosed.

Gobbo (2018) investigated whether the companies listed on three European indexes had already provided the required disclosures in IFRS 12 in relation to the financial information summarized for each material joint venture. The empirical study focuses on the first year following the application of IFRS 12. The study indicated that the degree of disclosure is heterogeneous even within each index, with companies listed in the CAC 40 disclosed the least financial information, and while companies listed in FTSE MIB disclosed the most comprehensive summarized financial information for each material joint venture. Moreover, the study indicated that less than half of the companies in each European index provided disclosure of the relevant risks, unrecognized commitments or contingent liabilities connected with their investments in joint arrangements.

Sarquis et al. (2020) examined the impact of eliminating proportionate consolidation of accounting for interests in joint ventures as an IASB's decision, through the issuance of the IFRS 11. From 26 countries, the study analyzed the financial statements of 2,059 companies with interests in joint ventures. The results indicate that the comparability of accounting information decreased after the application of IFRS 11. The study also collected and analyzed financial information about interests in joint ventures that were disclosed in the notes, and the study indicates that the increase in disclosure requirements proposed by IFRS 12 do not mitigate the consequences of the proportionate consolidation elimination.

In a related study, Sarquis et al. (2021) examined the changes in entities' reporting of their interests in joint ventures after adoption of IFRS 11, and the extent to which IFRS 12 disclosure requirements have been applied. The study sample includes 551 companies from 26 countries (1,858 financial statements). The empirical study focuses on disclosure requirements related to "the nature, extent and financial effects" and, more specifically, the summarized financial information. The findings indicate that many companies do not fully comply with the disclosure requirements of IFRS 12, and the company's characteristics (such as leverage, size, and ownership concentration) contribute to explaining the level of non-compliance.

Additional literature on interests in joint arrangements and associates (e.g. Lourenco & Curto, 2010; Lopes & Lopes, 2019; Gavana et al., 2020) addresses issues of IFRS 11, 12 adoption, such as the effect of the removal of the proportionate consolidation option and the mandatory use of the equity method on the reporting for joint ventures on the value relevance of ventures' total assets and liabilities, the impact on the changes in the classification and accounting for interests in arrangements under joint control through IFRS 11, the effect of the type of the jointly controlled entity of management's choice of reporting method of interests in the joint venture.

Although the IASB believes that the disclosure requirements of IFRS 12 will provide better information, the above findings indicate that compliance with disclosure requirements is incomplete. This paper aims to contribute to providing insights on the implementation of accounting standards in Egypt. Contrary to the study by Asenbrenerovà (2016); Sarquis et al. (2020); Sarquis et al. (2021) which focuses only on disclosures of summarized financial information for each material joint venture, this study strives to assess whether all the disclosures required under the Egyptian version of IFRS 12 are actually provided by companies listed in Egypt. Another issue, through a review of the existing literature on disclosure of interests in joint arrangements and associates, it is clear that previous empirical studies have not been conducted in Middle East economics. This study aims to fill the gaps, by investigating the disclosure level of interests in joint arrangements and associates in Egypt.

3.2 Company Characteristics Influencing Disclosure Compliance

A large number of studies have been conducted on the characteristics of companies and how they affect the extent to which companies comply with the disclosure requirements of IFRS (e.g. Al-Shammari et al. 2008; Al Mutawaa & Hewaidy, 2010; Al-Shammari, 2011; Juhmani, 2012; Demir & Bahadir, 2014; Marfo-Yiadom & Atsunyo, 2014; Shehata et al., 2014). Characteristics of companies that influence the level of compliance include size, age, ownership dispersion, profitability, liquidity, leverage, assets-in-place, sector type, type of auditing, and foreign activities (internationality). According to the study of Shehata et al. (2014) these characteristics fall into three groups: those related to structure, those related to performance, and those related to market. Given the conflicting results regarding the relationship between market-related characteristics and the level of disclosure compliance required, further testing this relationship is needed. Hence, this study focuses on the characteristics of the market as follows:

3.2.1 Sector Type

The sector type in which the company operates may affect the management's interest in publishing information in the company's annual report. Previous studies provide conflicting results regarding the relationship between the sector type and level of disclosure. While Al Mutawaa & Hewaidy (2010), and Marfo-Yiadom & Atsunyo (2014) found a positive relationship between the sector type and level of disclosure, Demir & Bahadir (2014), and Shehata et al. (2014) had no evidence of such relationship. To further test the relationship between type of sector and the level of disclosure compliance required, this study examines the type of sector; Especially the service and industrial sectors as a possible explanatory factor for the level of compliance with EAS 44 disclosure requirements by testing the following hypothesis:

***H1*: *"There is a significant positive relationship between the sector type and the extent of compliance with disclosure requirements under EAS 44"*.**

3.2.2 Quality of Audit Firm

Audit firms are categorized on the basis of size for large and small audit firms. Large audit firms are the largest accounting and auditing firms in terms of revenue, and usually belong to the Big-4, the top 10, the top 20, ... etc. While small audit firms refer to local audit firms other than the global audit firms. Many researchers (e.g. Al Mutawaa & Hewaidy, 2010; Juhmani, 2012; Al-Shammari, 2011; Demir & Bahadir, 2014; Marfo-Yiadom & Atsunyo, 2014; Shehata et al. 2014) have reported a significant positive relationship between audit firm size and the disclosure level.

In additionally, because global audit firms have reputation concerns, they are more likely to pressure firms to disclose more information, or may only deal to those firms disclose more information in their financial reports (Demir & Bahadir, 2014; Shehata et al., 2014). Accordingly, local audit firms affiliated with one of a global audit firm are expected to disclose more information than those without external affiliation. In this study, to examine the quality of the audit firm as the possible explanatory factor for the level of compliance with EAS 44 disclosure requirements, the following hypothesis is tested:

***H2*: *"There is a significant positive relationship between the quality of the audit firm and the extent of compliance with disclosure requirements under EAS 44"*.**

3.2.3 Foreign Activities (Internationality)

Firms involved in international activities are more likely to comply with IFRS disclosure requirements, and to disclose more information about their activities (Shehata et al., 2014). Previous studies provide conflicting results regarding the relationship between foreign activities and level of disclosure. While Al-Shammari et al. (2008) and Al-Shammari (2011) found a positive relationship between internationality and the level of disclosure, Demir & Bahadir (2014), Marfo-Yiadom & Atsunyo (2014), and Shehata et al. (2014) had no evidence for this. To further test the relationship between foreign activities and the level of disclosure compliance required, this study examines the involvement of firms in foreign activities; Especially foreign sales or foreign entities as a possible explanatory factor for the level of compliance with EAS 44 disclosure requirements by testing the following hypothesis:

***H3*: *"There is a significant positive relationship between the foreign activities and the extent of compliance with disclosure requirements under EAS 44"*.**

The following regression model is used to test the research hypotheses:

$$DISC = \beta_0 + \beta_1 INDS + \beta_2 AUDT + \beta_3 FORN + \varepsilon$$

where:

DISC	=	Disclosure compliance level
β_0	=	Constant
INDS	=	Sector type. It is a dummy variable: 0 = company belongs to the service sectors, 1 = company belongs to the industrial sectors.
AUDT	=	Quality of the audit firm. It is a dummy variable: 0 = external auditor is not affiliated with a global auditing firm, 1 = external auditor is affiliated with a global auditing firm.
FORN	=	Foreign activities. It is a dummy variable. 0 = company is not involved in foreign activities, 1 = company is involved in foreign activities.
ε	=	Error

4. Methodology

4.1 Sample Selection

The study targets the companies with interests in joint arrangements and associates that have been affected by the adoption of EAS 44, and that are likely to implement the disclosure requirements contained in the standard. The sample selection process started with identifying the companies listed on the Egyptian Stock Exchange at the end of 2020. 2020 was chosen because it is relatively recent, and represents the last year in which annual reports were submitted for listed companies at the time of this research. According to the Egyptian Stock Exchange, the total number of listed companies consists of 218 companies in 18 sectors.

As a second step, the researcher investigated their 2020 financial statements to identify which companies with interests in associates and joint ventures. Hence, the 218 companies are categorized into two groups: (1) 106 companies that have interests in associate or joint ventures; (2) 112 companies have no interests in associate or joint ventures. A list of the remaining 106 companies was prepared, and the availability of annual report for each of them was checked.

In the third step, two criteria established for the final selection of companies: (1) the company has joint control of an arrangement or significant influence over another entity; and (2) the interests in associate or joint ventures are accounted for using the equity method. This process yielded 99 companies representing all sectors of the Egyptian Stock Exchange.

4.2 Data Collection

For the data source, great efforts have been made to obtain the annual reports of the selected companies. The researcher obtained the annual reports of 218 companies from the official websites of the selected companies, and MUBASHER website at: https://english.mubasher.info/markets/EGX. Next, the researcher selected only those companies that meet the selection criteria. The data for measuring the dependent and independent variables investigated in this study were manually collected from the annual reports.

4.3 Disclosure Index

A critical issue for research on disclosure is to determine the scoring method to avoid random assignment of weights to items that included in the disclosure index (Sarquis et al., 2021). Disclosure index refers to the level or degree of disclosure by each of the sampled companies (Al Mutawaa & Hewaidy, 2010). According to Tsalavoutas et al. (2020), Cook's method is the most widely used, whereby the disclosure index for each company is calculated by dividing the number of items actually disclosed in the company's annual report by the number of required/applicable items (That is, the number of items the company should disclose).

Using a similar approach, the researcher calculated the disclosure index based on whether or not the company discloses financial information related to its associates and joint ventures. In the process of calculating the disclosure index, the researcher assigned "1" if the company discloses the information about its joint ventures and associates, "0" if the company does not discloses, or "N/A" if the item is not applicable. The score obtained for calculating this Index ranges from zero (no financial information is disclosed) to one (all financial information is disclosed), and the higher the value of the index the higher the level of compliance with disclosure requirements. After calculating the ratio between the score obtained by the company and the maximum possible score, the Index is converted into a percentage.

In the process of calculating the disclosure index, there are two common approaches to measuring the extent of disclosure; scoring with weighting and scoring without weighting (Urquiza et al., 2009). In this study, each of the disclosure items was scored without weighting, as it tends to avoid subjectivity and bias when assigning or rating items in the indicator. Thus, the all items in the index are of equal importance.

Using a self-constructed disclosure index, includes about 29 disclosure items related to the interests in joint ventures and associates based on reviewing the EAS 44, the compliance of 99 companies listed on the Egyptian Stock Exchange was measured at the end of 2020. Data were collected manually from annual reports of the companies. Appendix 1 presents the items included in the disclosure index, which are divided into 6 categories.

5. Analyses and Discussion

This section provides an analysis and discussion of the research findings. Preliminary indicators are presented first, followed by presentation and discussion of the regression Analysis.

5.1 Preliminary Indicators

Table 1 below presents the descriptive statistics of the disclosure level. Panel (A) shows that the overall compliance level of the companies included in the sample is 62.5% of the disclosures required by EAS 44. The results indicate that the maximum disclosure level reached 100%, reflecting that there are companies that fully complied with the mandatory requirements. While the minimum disclosure level recorded 13.6%, which is a very low level. Panel (B) shows that the average level of disclosure in the service sectors (60 companies) reached 67.3%, which represents a higher level of disclosure than the industrial sectors (39 companies), which recorded 55.1%. While the average level of disclosure of audited companies by one of the external auditors affiliated with a global auditing firm (67 companies) was 66.8%, which represents a higher level of disclosure than the companies audited by local external auditors (32 companies), which recorded only 53.6% of the disclosure level. The disclosure level of companies involved in foreign activities (48 companies) reached 69%, while the disclosure level of companies involved only in local activities (51 companies) was 56.5%.

Tab 1: Descriptive statistics of Disclosure Compliance Level

Panel A

	Range	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Disclosure Level	0.864	0.136	1.000	0.625	0.161488

Panel B

	Number of Companies	**Disclosure Level**
Disclosure Level Based on Sector Type:		
Service sectors	60	67.3%
Industrial sectors	39	55.1%
Disclosure Level Based on the Quality of the Audit Firm:		
External auditor is a local audit firm	32	53.6%
External auditor is affiliated with a global audit firm	67	66.8%
Disclosure Level Based on Foreign Activities:		
Company is not involved in foreign activities	51	56.5%
Company is involved in foreign activities	48	69.0%

Table 2 below shows the average level of disclosure within each sector. The average level of disclosure in the utilities sector reached 90%, which represents the highest level of disclosure. While the energy and support services sector recorded the lowest level of disclosure at 45.5%.

Tab. 2: Average Disclosure Level Based on Sector Classification

Sector	Disclosure Level
Service Sectors:	
Utilities	90.0%
Shipping and Transportation Services	74.6%
Trade and Distributors	72.7%
Non-Bank Financial Services	68.3%
Banks	67.5%
Travel Leisure	67.4%
IT, Media and Communication Services	65.1%
Real Estate	63.3%
Education Services	61.4%
Industrial Sectors:	
Building Materials	64.5%
Food, Beverages and Tobacco	62.8%
Basic Resources	58.2%
Industrial Goods, Services and Automobiles	57.6%
Health Care and Pharmaceuticals	50.2%
Textile and Durables	47.5%
Contracting and Construction Engineering	47.3%
Paper and Packaging	46.8%
Energy and Support Services	45.5%

Table 3 below presents the disclosure level categories for the companies included in the sample. The low disclosure level category included 49 companies representing 49.5% of the sample size. The moderate disclosure category of 32 companies represented by 32.3%. Whereas only 18 companies, 18.2% have a high disclosure level more than 80%.

Tab. 3: Disclosure Level Categories

Disclosure Level Categories	Number of Companies	%
High (more than 80%)	18	18.2%
Moderate (60-80%)	32	32.3%
Low (less than 60%)	49	49.5%
Total	99	

Table 4 below presents the initial analysis of the variables and their correlations. Correlation analysis was conducted by Pearson Correlation with a two-tailed significance test to analyze the relationship between variables. The results indicate that there are significant positive correlation between compliance level with disclosure requirements under EAS 44 and both the quality of the audit firm and foreign activities, while the correlation between compliance level with disclosure requirements and sector type was negative. As for the sector type, the results indicate that there is a significant negative correlation between the sector type and the quality of the audit firm. Finally, with regard to the quality of the audit firm, the results indicate that there is a significant positive correlation between it and foreign activities.

Tab. 4: Correlation Analysis Among Research Variables

Variables	Mean	Std. Deviation	DISC	INDS	AUDT	FORN
DISC	0.625	0.161488	1.00			
INDS	0.39	0.491	**-.371**** .000	1.00		
AUDT	0.68	0.470	**.386**** .000	**-.327**** .001	1.00	
FORN	0.48	0.502	**.389**** .000	-.120 .235	**.627**** .000	1.00

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

According to the correlation analysis as previously shown in the above table, there are very significant correlations with all of the variables at the 0.01 level.

5.2 Regression Analysis

As a first stage, simple regression analysis is conducted to test the research hypotheses.

5.2.1 The Test of the First Hypothesis:

The results of simple regression analysis for the first hypothesis are shown in Table 5 below:

Tab. 5: The Relationship between Sector Type and Disclosure Level

Predictor	B	Beta	R	R^2	T	Sig. T
Sector Type	-0.122	-0.371	0.371	0.138	-3.934	0.000
(Constant)	0.673					
Adjusted R^2	0.129					
F	15.472					
Sig. F	0.000					

The above table indicates a significant negative correlation between the sector type and the level of disclosure. The Adjusted R2 asserts that sector type interprets 12.9% of the disclosure level variance. In addition, sig. F indicates the significance of the results at ($P < .01$), and the T. value and sig T. indicate that the regression coefficients are significant.

Based on the presented results, the first hypothesis that states: “There is a significant positive relationship between the sector type and the extent of compliance with disclosure requirements under EAS 44” can be partially accepted. Furthermore, these results are inconsistent with some studies in the literature that reported no evidence of a significant relationship between industry type and level of disclosure (e.g. Demir & Bahadir, 2014; Shehata et al. 2014). While this is in agreement with the results of Al Mutawaa & Hewaidy (2010), and Marfo-Yiadom & Atsunyo (2014) who found a significant relationship between the type of industry and level of disclosure required, the relationship was positive when it was negative in this study. These results can be interpreted by the fact that companies with highly competitive industries may disclose less information to prevent loss from the leakage of information (Ferguson et al., 2002). Moreover, adoption of industry-related practices may result in different levels of disclosure of similar items in financial reports of companies in different industries (Marfo-Yiadom & Atsunyo, 2014). In addition, the services sector includes banks and utility companies, which have achieved a high level of disclosure. Thus, they are more likely to be subjected to a broader range of regulatory authorities, and to disclose more detailed information.

5.2.2 The Test of the Second Hypothesis:

The results of simple regression analysis for the second hypothesis are shown in Table 6 below:

Tab. 6: The Relationship between Quality of the Audit Firm and Disclosure Level

Predictor	B	Beta	R	R^2	T	Sig. T
Quality of the Audit Firm	0.133	0.386	0.386	0.149	4.121	0.000
(Constant)	0.536					
Adjusted R^2	0.140					
F	16.981					
Sig. F	0.000					

In the above table, the results indicate a significant positive correlation between the quality of the audit firm and the level of disclosure. The Adjusted R2 asserts that audit firm quality interprets 14% of the disclosure level variance. In addition, sig. F indicates the significance of the results at ($P < .01$), and the T. value and sig T. indicate that the regression coefficients are significant.

Based on the presented results, the second hypothesis that states: "There is a significant positive relationship between the quality of the audit firm and the extent of compliance with disclosure requirements under EAS 44" can be accepted. Similar to Al Mutawaa & Hewaidy (2010), Al-Shammari (2011), Juhmani (2012), Demir & Bahadir (2014), Marfo-Yiadom & Atsunyo (2014), Shehata et al. (2014) the study found a positive association between audit firm quality and level of compliance with EAS 44 disclosure requirements. These results can be interpreted by the fact that large audit firms serving as a mechanism to reduce agency costs, and exercising a supervisory role by reducing opportunistic behavior by managers. This result supports the fact that large audit firms have a stronger incentive to protect their reputation, thus encouraging their clients to have a higher level of disclosure. Furthermore, large audit firms are more likely to associate with clients who disclose a high level of information in their annual reports.

5.2.3 The Test of the Third Hypothesis:

The results of simple regression analysis for the third hypothesis are shown in Table 7 below:

Tab. 7: The Relationship between Foreign Activities and Disclosure Level

Predictor	B	Beta	R	R^2	T	Sig. T
Foreign Activities	0.125	0.389	0.389	0.152	4.162	0.000
(Constant)	0.565					
Adjusted R^2	0.143					
F	17.323					
Sig. F	0.000					

In the above table, the results indicate a significant positive correlation between foreign activities and the level of disclosure. The Adjusted R2 asserts that foreign activities interpret 14.3% of the disclosure level variance. In addition, sig. F indicates the significance of the results at ($P < .01$), and the T. value and sig T. indicate that the regression coefficients are significant.

Based on the presented results, the third hypothesis that states: "There is a significant positive relationship between the foreign activities and the extent of compliance with disclosure requirements under EAS 44" can be accepted. Similar to Al-Shammari et al. (2008) and Al-Shammari (2011) the study found a positive association between foreign activities and level of compliance with EAS 44 disclosure requirements. While the above results are inconsistent with Demir & Bahadir (2014), Marfo-Yiadom & Atsunyo (2014), Shehata et al. (2014) which reported a non-significant relationship between these two variables. These results can be interpreted by the fact that companies with foreign activities have foreign customers, suppliers and financiers. Thus, they are more likely to be subjected to a broader range of regulatory authorities, and to disclose more detailed information.

In the next step, the researcher used a multiple regression analysis to assess the predictive power of the regression model through interring both of sector type, the quality of the audit firm, and foreign activities as predictors, as shown in the Table 8.

Tab. 8: Multiple Regression Model of the Relationship between Disclosure Level and the Independent Variables

Independent Variables	B	Beta	Std. Error	T	Sig. T
(Constant)	0.613		0.024	25.925	0.000
Foreign Activities	0.112	0.350	0.028	3.949	0.000
Sector Type	-0.108	-0.329	0.029	-3.713	0.000
R	0.508				
R^2	0.258				
Adjusted R^2	0.243				
F	16.697				
Sig. F	0.000				

As shown in the above table, the results indicate that the predictive power of the multiple regression model increased as by 24.3% of the disclosure level variation. In addition, foreign activities and sector type are a significant variable at ($p <.05$). As the researcher explained earlier, while the foreign activities have a positive relationship to the level of disclosure, the type of sector has a negative relationship. However, based on the presented results in Table 8, and the results presented previously in Tables 5, 6 and 7, the foreign activities variable has the highest explanatory power for the disclosure level variation. The researcher does not have an appropriate literature that has examined these results. Having said that, the results described above are a contribution to the current literature as they enhance understanding regarding the relationship between foreign activities and the level of disclosure, and thus explain the conditions of disclosure level variation.

6. Concluding Remarks

The current study empirically investigated the extent to which listed companies in Egypt comply with disclosure requirements in accordance with Egyptian Accounting Standard No. 44 Disclosure of Interests in Other Entities. The results revealed that many companies do not fully comply with the disclosure requirements, as the results reported that the overall compliance level is 62.5% of the disclosures required. This is an indication of weak regulatory oversight, and raises questions about the quality of auditing in Egypt. Therefore, this requires the regulator agencies begin to enforce laws that ensure compliance with mandatory requirements.

Moreover, simple and multiple regressions were used to test the explanatory factors associated with the disclosure level variable. The results provided evidence that the level of disclosure is related to the sector type, the quality of the audit firm, and foreign activities. The results indicated that there is a significant positive relationship between foreign activities, the quality of the audit firm, and the level of compliance with EAS 44, while there is a significant negative relationship of the sector type and the level of compliance. These results are consistent, and extend the results of the literature. Furthermore, multiple regression model revealed that foreign activities and sector type are significant in explaining the disclosure level variation.

This study has some limitations. First, the disclosure index includes only mandatory items, and the results may change if voluntary items are included. Second, the composition of the items in the disclosure index does not reflect their importance as perceived by users of financial information. Hence, the approach used in this study does not reflect the importance of the items. Third, the data used to test the company's compliance level and characteristics were collected manually from annual reports. With these caveats in mind, care must be taken when interpreting the results.

This study clearly shows that there is still a research gap in examining potential explanatory factors for the low level of corporate compliance. Future research could address the following suggestions: including voluntary items in the disclosure index; mandatory disclosure test in separate groups; incorporation other firm characteristics, such as Entity country and state ownership; constructing a disclosure index that reflects the importance that users of financial information perceive to the disclosure items.

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Appendix 1. Disclosure Index

Significant judgments and assumptions that have been made to determine:

1. The significant influence or nature of control.
2. The type of joint arrangement.

Interests in joint arrangements and associates that is material to the reporting entity:

3. The name of the joint arrangement or associate.
4. The nature of the entity’s relationship to the joint arrangement or associate by describing the nature of the activities of the joint arrangement or associate and whether it is strategic for the entity’s activities.
5. The principal place of business and the country in which the joint arrangement or associate is incorporated.
6. The proportion of ownership interest or the participating share that the entity owns and, if different, the proportion of voting rights it owns.

Interests in joint venture and associates that is material to the reporting entity:

7. Whether the investment in the joint venture or associate is measured using the equity method or at fair value.
8. The fair value of the reporting entity's investment in the joint venture or associate, if the joint venture or associate accounted for using the equity method, and if there is a quoted market price for the investment.

Summarised financial information about the joint venture or associate:

9. Dividends received from the joint venture or associate.
10. Current assets including cash and cash equivalents.
11. Non-current assets.
12. Current liabilities.
13. Non-current liabilities.
14. Revenue.
15. Profit or loss from continuing operations.
16. Post-tax profit or loss from discontinued operations.
17. Other comprehensive income.
18. Total comprehensive income.

19. Depreciation and amortization.
20. Interest income.
21. Interest expense.
22. Income tax expense or income.

Interests in joint venture and associates that are not individually material to the reporting entity, and are accounted for using the equity method:

23. Profit or loss from continuing operations.
24. Post-tax profit or loss from discontinued operations.
25. Other comprehensive income.
26. Total comprehensive income.

Risks associated with an entity's interests in joint ventures and associates:

27. The nature of, and changes in, the risks associated with an entity's interests in joint ventures and associates.
28. Commitments that has related to the entity's interests in joint ventures separately from the amount of other commitments.
29. Contingent liabilities and contingent assets in accordance with IAS 37, unless the probability of loss is remote, contingent liabilities incurred relating to its interests in joint ventures or associates separately from the amount of other contingent liabilities.