The IFRS Adoption and Its Influence on Asymmetry Accounting Information and The Quality Accounting of Earnings Quality: Evidence from Egyptian Exchange

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Abstract

Purpose: the main research objective is to investigate the effect of the IFRS adoption on asymmetry accounting information and earnings quality for a sample of Egyptian financial statements for companies listed on the Egyptian Stock Exchange.

Design and Methodology: the study analyzing period was divided into two periods. The first period was before the application of IFRS (2020-2021), while the second period represents what after the application of IFRS (2022-2023) so it consistent with the goal of the study. The total number of the sample companies has reached (31) companies in each year. The study tested (6) variables in each company for a period of (4) connected years, with total number of views (744) observation.

Findings: hypothesis testing, there is no effect before the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality on the other hand There is an effect after the application of

International Financial Reporting Standards on accounting information asymmetry and earnings quality.

Keywords: IFRS, Asymmetry Accounting Information, Earnings quality.

الملخص

الغرض: الهدف الرئيسي للبحث هو دراسة تأثير تطبيق المعايير الدولية لإعداد التقارير المالية على عدم تماثل المعلومات المحاسبية وجودة الأرباح لعينة من القوائم المالية المصرية للشركات المدرجة في البورصة المصرية.

التصميم والمنهجية: تم تقسيم فترة تحليل الدراسة إلى فترتين. الفترة الأولى كانت قبل تطبيق المعايير الدولية لإعداد التقارير المالية (٢٠٢٠-٢٠٢١)، بينما تمثل الفترة الثانية ما بعد تطبيق المعايير الدولية لإعداد التقارير المالية (٢٠٢٢-٢٠٢٣) بحيث تتفق مع هدف الدراسة. بلغ إجمالي عدد شركات العينة (٣١) شركة في كل عام. اختبرت الدراسة (٦) متغيرات في كل شركة لفترة (٤) سنوات متصلة، بإجمالي عدد مشاهدات (٧٤٤) ملاحظة.

النتائج: اختبار الفرضيات، لا يوجد تأثير قبل تطبيق المعايير الدولية لإعداد التقارير المالية على عدم تماثل المعلومات المحاسبية وجودة الأرباح من ناحية أخرى يوجد تأثير بعد تطبيق المعايير الدولية لإعداد التقارير المالية على عدم تماثل المعلومات المحاسبية وجودة الأرباح.

الكلمات المفتاحية: المعايير الدولية لإعداد التقارير المالية، عدم تماثل المعلومات المحاسبية، جودة الأرباح.

Introduction

The change in most environmental areas in which the accounting system works because of the heightened domestic and international competition and the bankruptcy of many companies and the integration of many of them to facilitated the flow of goods, services and capital, and as a result investors ask for more fair and transparent financial reports which allow them to see events and financial operations that have already occurred.

The implementation of International Financial Reporting Standards (IFRS) signifies a substantial transformation in financial reporting, especially in emerging markets like Egypt. The shift to IFRS necessitates a rigorous examination of its consequences for accounting methods, transparency, and the quality of financial information. A primary concern in financial reporting is information asymmetry, wherein discrepancies in the information accessible to various stakeholders can result in inefficiencies in decision-making and market conduct. This study seeks to examine the impact of IFRS adoption on information asymmetry and the quality of earnings reported by firms listed on the Egyptian Exchange.

The transition to IFRS aims to improve the comparability, dependability, and transparency of financial statements, thereby bolstering investor confidence and facilitating access to financing. The efficacy of IFRS in attaining these objectives is predominantly contingent upon the extent of corporate adherence to these standards and the prevailing regulatory framework. In Egypt, where the financial landscape is swiftly transforming, comprehending the correlation between IFRS adoption and the integrity of accounting information is essential.

This introduction establishes the foundation for a comprehensive examination of the impact of IFRS on earnings quality and discusses the potential issues that may occur during the transition. This study analyzes empirical evidence from the Egyptian Exchange to elucidate how IFRS adoption can reduce information asymmetry and improve earnings quality, hence fostering a more transparent and efficient capital market.

Accounting must therefore also be developed and improved to meet the changing needs of stakeholders, leading many organizations and professional bodies to find ways of reducing information asymmetry and increasing the transparency and accountability of information, leading to the development and adoption of IAS into the international financial reporting standards. (Tawfik and Sweilem, 2011).

Moreover, the dependence on the accounting profit figure alone, without taking into consideration what might affect it of factors, may reduce in level of quality of earnings, which leads to irrational decisions. In recent period's some studies have focused on positive effect of the IFRSs on the quality of the accounting profits and the importance of the quality of earnings in decision-making process and the factors affecting the quality of earnings through the development of various rules and standards to reduce the practices of asymmetry of information. (Saleh, 2010 - Morcos, 2018).

The asymmetry in accounting information arises from the separation of ownership and management, as described by agency theory. This results in certain investors obtaining privileged information about the company, while other investors lack access to the same insights. Additionally, management possesses superior knowledge regarding current and future performance compared to external parties such as investors, creditors, and lenders. This disparity influences trading volume and liquidity, subsequently affecting the cost of capital and adversely impacting the quality of accounting earnings.

The effect of the adoption of International Financial Reporting Standards (IFRS) on both the quality of earnings and the asymmetry of accounting information was discussed in several studies which shows that developing countries characterized by weak markets and less mature than developed capital markets where regulatory authorities have a limited role, and this leads to more asymmetry of information, which adversely effects on earnings quality. (Alzoubi and Selamat, 2010 - Hui & Tzu, 2014)

At the same subject, many studies have shown that the expansion in the application of IFRS, whether voluntarily or compulsory, works to reduce the phenomenon of asymmetry of accounting information, and increasing both the quality of earnings and the quality of financial reporting. (Truki et al, 2017 - Al-Akra et al, 2010 - Carmona & Marco, 2008- Liu et al., 2011).

Furthermore, certain studies have suggested that the implementation of IFRS does not affect the quality of earnings, attributable to a robust investor protection system that enhances earnings quality, alongside the comparable application of accounting standards in these countries with IFRS. (AFaanz, 2009 - Kabir et al., 2010 - Saito and Mayangsari, 2011 - Surianti et al, 2017).

The **problem** of this study is to investigate the effect of IFRS adoption on the asymmetry of accounting information and the quality of accounting earnings in order to answer the following questions:

- ✓ What is effect of IFRS adoption on the asymmetry of accounting information?
- ✓ What is impact of IFRS adoption on earnings quality?

As the **importance** of this study is analyzing the adoption of IFRS on the asymmetry of information and the quality of earnings in order to increase confidence in order to unifying the principles of, measurement, presentation and disclosure of the financial statements.

This research **aims** to achieve the following objectives:

- Analysis of the relationship of IFRS and their effect on earnings quality and asymmetry of information.

- Explain the concepts of IFRS, asymmetry of information and earnings quality.
- Testing the study hypothesis for companies listed on the Egyptian Exchange Market.

Therefore, this research aims to investigate and analyze the effect of The Effect of IFRS adoption on asymmetry accounting information and earnings quality among companies.

The rest of this research is arranged as follows: section 2 presents the literature review which demonstrates previous studies assessing the effect of IFRS adoption on asymmetry accounting information and the quality accounting of earnings and developing hypothesis, section3 include the research design and methodology, the sample and data collection, section 4 presents the hypothesis testing and empirical results and finally section 5 provides the study conclusions.

2. Literature review and Hypothesis Development

Pervious studies were divided into 2 groups to extract the research hypothesis as follows:

2.1 Studies are exposed to the impact of the application of IFRS on the asymmetry of information

2.2 Studies have linked the application of IFRS and the quality of accounting

Earning.

2.3 Studies discussed the impact IFRS application on earnings quality and asymmetry of information

2.1 Studies are exposed to the impact of the application of IFRS on the asymmetry of information.

- **(Liu et al., 2011)** The study analyzed 870 Chinese enterprises to assess information asymmetry and earnings quality before and after the implementation of IFRS from 2005 to 2008. The research identified minimal asymmetry of information among users with the implementation of IFRS beginning in 2007.
- **(Landsman et al., 2012)** The results of the study showed that the informational content of the earnings had risen after the application IFRS, and the application of IFRS has led to reduced information asymmetry due to lower period between the end of the financial period and the announcement of earnings. The study tested the relation between application of IFRS on the increase of the informational content for declared earnings using a sample of financial statements for 11 countries that did not apply IFRS and also in 16 countries applied the IFRS.
- **(Horton et al, .2013)** the aimed of this study to test the effect of the application of IFRS on the accuracy of financial analysts forecast and application on the financial statements in 46 different countries with a total number of views reached 47209 shows. The results of the study find a significant reduction in the degree of asymmetry of information at the stage of voluntarily application of IFRS.

- **(Cormier et al., 2013)** The results showed that the earnings management as a proxy of earnings quality leading to a rise in the degree of asymmetry of information, despite application of IFRS, which indicates a positive relationship correlation between earnings management practices and the accounting information asymmetry.

2.2 Studies have linked the application of IFRS and the quality of accounting
Earning.

- **(Sun et al., 2011)** which examines the impact of the application of IFRS on the quality of earnings in the USA environment. The study was applied on three samples of financial statements, first sample represents the number of 1698 registered a foreign company in the United States comprises 23 countries globally, while the second sample indicates 849 registered foreign corporations from 7 countries that adhere to common law as a local criterion. The third sample has 506 registered entities international corporation in the United States. The analysis revealed no substantial change in the quality of earnings for companies listed in the US market before to and following the implementation of IFRS. Based on the absolute value of the optional benefits standards and the timing of loss recognition. Furthermore, there is an enhancement in the quality of earnings following the implementation of IFRS, aligned with the goal profit scale and profit continuity.

- **(Ahmed et al. 2013)** analyzed over 1,600 companies from 20 countries that mandatorily adopted IFRS in 2005, contrasting them with a sample of companies from 15 countries that did not implement IFRS and adhered to local accounting standards. The research Identified a rise in earnings management strategies to augment the likelihood of securing bank loans, generating profits, mitigating losses, or achieving elevated stock valuations. The quality of earnings declined for organizations who implemented required IFRS compared to those that did not.

2.3 Studies discussed the impact IFRS application on earnings quality and asymmetry of information.

- **(Cameron et al., 2011)** the study tested a number of 500 companies from 2005 to 2008 to measure the impact of the application of IFRS on earnings quality and asymmetry of information through a number of variables. The study result shows that the level of quality profits has not yet improved after adopting the application of IFRS in the Italian private sector companies. In addition, the study showed that the adoption of IFRS increase earnings management practices and thus lower the quality of accounting earnings.

- **(Jiao et al., 2012)** the study found a rise in the degree of forecasting profits after the application of IFRS, and there is an existence of an inverse relationship between the application of

IFRS and the low degree of asymmetry of information between beneficiaries.

- **(Bhattacharya et al., 2013)** the study clarifies the relationship between the quality of earnings and the asymmetry of information through the verification of the extent to which the quality of earnings in influencing users' information in the stock market. The study found that the quality of the negative earnings indicates the high asymmetry of information, and that the diversified quality of earnings affects the asymmetry of information for companies with low information environment, and the asymmetry of information increases at the time of earnings declared.
- **(Hui, Tzu, 2014)** the result of this paper provide other countries will use IFRS to improve the predictive value and timeliness, and it can't influence representational faithfulness significantly. Also, the information asymmetry degrades the quality of accounting information. As a result, adopting IFRS could enhance the quality of accounting information significantly. Nevertheless, IFRS need to reduce information asymmetry and use corporate governance mechanism to promote the quality of accounting information.
- **(Turki et al, 2017)** in this study, the most important results were found evidence that for the two first years of adoption, international standards reduce significantly the cost of capital

and the dispersion of the financial analysts' forecasts. And the effect of IFRS adoption on financial analysts' errors is not immediate and that the errors decrease from the third year following the date of the first adoption. Overall, the findings of this study highlight the importance of adopting IFRS in the reduction of information asymmetry.

- **(Surianti et al, 2017)** the purpose of this study is to obtain empirical evidence that the adoption of IFRS improves the quality of accounting information, the adoption of IFRS lowers cost of equity capital, either directly or through information asymmetry on the corporate Indonesia Stock Exchange during 2010-2013. The findings show that the full adoption of IFRS in Indonesia has not met the expected results. No. of IFRS adoption and the quality of accounting information has decreased information asymmetry.

- **(Morcos, 2018)** this study examines the impact of IFRS to reduce the information asymmetry gap among corporate in the Egyptian financial stock market to get high quality accounting information during time series years of 2008-2015. The results show a positive effect of the IFRSs on the quality of the accounting profits, namely reducing the cost of capital and reducing the information gap in the financial services, and the Real Estate companies are less committed to the disclosure requirements according to IFRS, it results in asymmetric information, and low quality of accounting profits.

summary of literature review

According to the previous studies, the results has been showed a relationship, either direct effect of the application of IFRS on the asymmetry of accounting as in the study (Cormier et al., 2013), and an inverse relationship, as indicated in studies of (Liu et al.,2011), (Horton et al.,2013), (Landsman et al.,2012), (Jiao et al,.2012) and (truki et al.,2017).

And some studies were found a link between the effect of IFRS on asymmetry of accounting and earnings quality (Cormier et al., 2013), (Surianti et al, 2017), (Hui, Tzu, 2014), (Morocs, 2018). In addition of there is no effect of IFRS on earnings quality as in the study (Cameron et al., 2011).

Hypothesis Development

And because of the different results of previous studies on the results of that relationship, and to verify the nature of this relationship between IFRS, Asymmetry information and earning quality. The study will draft the following hypothesis:

"There is an effect of the application of International Financial Reporting Standards on the accounting information asymmetry and earning quality"

To test the validity of this hypothesis, it should be divided into two sub hypotheses:

H1a: There is an effect before the application of International Financial Reporting Standards on accounting information asymmetry and earning quality.

H1b: There is an effect after the application of International Financial Reporting Standards on accounting information asymmetry and earning quality.

3-Methodology

The methodology covers clarification of the following:

3.1 The theoretical approach: to explain different concepts of IFRS, asymmetry information and earning quality by reviewing accounting literature.

3.2 The applied approach: by using appropriate statistical analyses to test the study hypotheses.

3.1.1 International Financial Reporting Standards (IFRS)

There is no a doubt the adoption of IFRS promotes a standardized approach to accounting practices, which facilitates cross-border investment and economic integration. By providing guidelines for the recognition, measurement, presentation, and disclosure of financial transactions, IFRS helps companies present their financial performance and position in a manner that is understandable and useful to stakeholders. In essence, IFRS aims to improve the quality of financial reporting globally, thereby fostering trust and confidence in financial markets.

Moreover, The International Accounting Standards Committee was founded in 1973 to promote consistency in financial statement preparation globally. In 2001, the International Accounting Standards Board (IASB) was established to revise and enhance the existing standards and interpretations, subsequently issuing International Financial Reporting Standards (IFRS) to supersede the international accounting standards. (Alqadi, Hamdan, 2008).

The beginning of the adoption of international accounting standards in Egypt was by the Minister of Investment Decision at 2006 which included five standards for IFRS issued during the years 2004 and 2003 and then adopted five standards for IFRS in the updated version of the standards in the Minister of Investment Decision.

The standards were applied to companies listed on the Egyptian Stock Exchange starting 1/1/2016 according to Egyptian Standard No. 46 regarding the provisions of the transitional phase, and this means the direct application once the IFRS are adopted during the year 2015. (KPMG, 2015)

Furthermore, the using of application of IFRS aims to commitment the rules and principles of accounting treatments in order to increase confidence in the information contained in the financial statements in order to reduce the asymmetry of information and increase the quality of accounting profits and therefore higher financial reporting quality.

Additionally, the global trend of adopting international financial reporting standards (IFRS) signifies a substantial regulatory transformation in the creation of financial reports. This program aims to bolster investor trust by enhancing the comparability of accounting information, hence reducing the incentives for private information seeking due to diminished information asymmetry. It also diminishes in amount relative to publicly accessible information (Al-Otabibi et al., 2013).

3.1.2Asymmetry of information

Asymmetry of information means when a company's management is deliberately withholding certain information for investors to use it in achieving an extraordinary dividend of the shares owned by them, which leads to the superiority of the management to other parties as a result of their prior knowledge of private information (Bhattacharya et al., 2013).

The phenomenon of asymmetry of information represents the unequal possession of certain information between management and external parties so that those parties are working to achieve unusual return for management personal benefits or investors for their shares, which works to damage the company’s competitive position (Hemant & Chen, 2012).

Information asymmetry arises in a transaction when one party (the corporation) possesses superior or more comprehensive information than the other party (the investor), or when investors encounter inadequate information and flawed information. Consequently, investors will encounter investment risk. Empirical data supports the notion that enhanced financial information quality, attainable through IFRS, fosters increased investor confidence by mitigating information asymmetry (Abad et al. 2017).

The researcher concluded that Information asymmetry denotes a scenario when one participant in a transaction holds superior or more comprehensive information than the other participant. This disparity can result in adverse selection and moral hazard, profoundly affecting decision-making processes and market efficiency. Moreover In financial markets, information asymmetry frequently exists between corporate management and external stakeholders, including investors and creditors. Management possesses comprehensive knowledge on the company's activities, future prospects, and risks, whereas external parties depend on publicly accessible information. This discrepancy may lead to mispricing of assets, inefficient resource allocation, and heightened risks for investors.

3.1.3 Earnings Quality

Earnings quality can be assessed through various factors, including the underlying accounting principles used, the presence of aggressive accounting practices or earnings manipulation, and the extent to which earnings are supported by cash flows. Sustainable earnings, which are derived from core business operations rather than one-time events or accounting adjustments, are generally viewed as indicative of high earnings quality.

The earning quality the ability of earnings disclosed in the expression of the true performance of the company (Bellovary et al., 2005).

The importance of the earnings quality is due to the ability of earnings disclosed to express the real earnings for the company, and its usefulness in predicting future profits, and in assessing the financial situation of economic units by investors and lenders and current and prospective creditors.

Also, can use the earnings quality as an indicator of the dividend when making investment decisions, where many of the decision makers depend on the annual profits as a basic and most important figure in the financial statements, although there are several factors may lead to a decline in the quality of earnings such as management of earnings, which leads to irrational decisions because of its focus the size of the profits without focusing on quality (Chen et al., 2006 - Tong & Miao, 2011) . Furthermore, Earnings quality can be described as the profits shown in the income statement that serve as a reliable indicator of future profits (lymp,2014). This decrepitation posits that high-quality earnings are those that allow for reliable forecasts of future profits.

Based on the above, the researcher can summarize the definition of earnings quality Earnings quality denotes the extent to which reported earnings authentically represent a company's actual financial performance and are sustainable in the long term. High-quality earnings are defined by their stability, consistency, and predictability, offering stakeholders a transparent understanding of the company's operating efficiency and prospective profitability.

3.2 Data collection and study sample

The Applied study aimed to measure the impact of IFRS on the asymmetry of information and the quality of accounting earnings through analyzing financial statements for companies listed on the Egyptian Stock Exchange works in the which applies IFRS in Egypt.

The study used 31 of financial statements listed of the companies in the stock market from 2020 to 2023 as a time series from the stock exchange site.

The data analysis period will be 4 years, from 2020 to 2021 as a years before applied IFRS, and the other two years from 2022 to 2023 represent the implementation of IFRS.

Number of Egyptian companies listed on the Egyptian stock market at the end of 2023 was (59) company. The following conditions in the selection of the sample companies as follows:

a) The company’s sample are continuing as operational running activities during the years of analysis from 2020 to 2023.

b) The data and information of the study sample companies and the annual financial reports must be available during years of analysis.
c) The financial year for companies in the sample should be ended at 31/12 of every year.

After applying the conditions mentioned, the sample companies were limited to 31 companies every year with a (6) variables in each company for a period of (4) connected years, so the total number were reached (744) views.

3.3 The study model and variables:

According to the results of many previous studies referenced in determining regulatory variables that affect the measurement models, so the **model (1)** followed to measure the asymmetry of accounting information contain a number of regulatory changes as follows:

$$\mathbf{EPS = \propto_0 + \beta_1\, IFRS + \beta_2\, Size + \beta_3\, Lev + \beta_4\, CFO}$$

The model (2) also contains some of the following regulatory changes to measure the earnings quality as a dependent variable:

$$\mathbf{NI = \propto_0 + \beta_1\, IFRS + \beta_2\, Size + \beta_3\, Lev + \beta_4\, CFO}$$

The Dependent variables

The two dependent variables based on the goal and the hypotheses of the study:

1- Asymmetry of accounting information: (EPS)

The asymmetry of information is one of the dependent variables in this study. According to the studies of (Dimitropoulos, 2013) and study (Liu, 2011) when measuring the asymmetry of information by the yield on the price of the stock (EPS = earnings per share of net profit for the year).

Earnings Quality: (NI)

This variable aimed to verify the effect of the application of IFRS to reduce the degree of earnings management and increase earnings quality.

According to the studies of (Cameran, 2011) and study (Ahmed, 2013) the model used to measure the earnings quality through measurement of net income to total assets.

The Independent variable:

The independent variable represents in the application of IFRS and its impact on the asymmetry of information and the quality of earnings, takes the value of one when the applying of standards and a zero value in the case of non-applying of standards, according to study of (Cameran, 2011).

The control variables:

1. The size of the company **(Size)**: This variable is linked to the quality of accounting earnings and asymmetry information.

where many of the previous studies, including the study (Ahmed et al., 2013) showed that large-sized companies are trying to maintain its reputation and share price, which contributes to the reduction of management earning practice, as they tend to reduce the value of its assets, which lead to an inverse relationship (negative) with earnings quality.

The sized of company is measured by the natural logarithm of the total of assets.

The size of leverage **(Lev)**: This variable is related to earnings quality which companies that rely on debt in economic activity management, the leverage ratio will rise up, so the management is trying to manage earnings depending on the accruals to avoid the risk of pledges of debt, leading to a negative impact on quality earnings and a positive impact on the asymmetry of information. (Dimitropoulos, 2013)

The size of leverage is measured by the divided total liabilities to the book value of the shares at the end of the year.

Operating cash flows **(CFO)**: This variable is used in profit management cases through tax evasion or reducing the gains from selling some assets or some government obligations by add losses while calculating operating cash flow.

According to a study (Liu et al., 2011) showed that the rise of cash flows size will affects positively the quality of earnings and negatively on the asymmetry of information.

The Operating cash flows is measured by divided net operating cash flow to total assets.

Table No. 1 Variables and methods of measurement

Variables	Measurement method
α	The fixed part in the regression equation is considered part of the lump vertical axis y which gives a value to the dependent variable when the value of the independent variable is equal to zero.
Dependent variables	
EPS	An annual per-share profits (losses) for the company which is a measure used to denote the symmetry or asymmetry of information.
NI	It is used to measure the quality of earnings, which represents net income to total assets.
Independent variables	
IFRS	A variable refers to International Financial Reporting Standards, a fictitious variable and takes 1 in the case of application of standards and value (zero) in the case of nonapplication.
Control variables	
Size	It represents the size of the company and measured the natural logarithm of the total of assets.
Lev	It represents the size of the debt and measured as total liabilities to the book value of the shares at the end of the year (stock ownership rights)
CFO	Measured by net operating cash flows before extraordinary items divided by total assets.

3.4 Validity test data for statistical analysis

The researcher depends on Ordinary Least Squares (OLS) to test the study hypotheses. before using the OLS method in testing the research hypotheses, these assumptions must be verified because violating these assumptions will result in biased and misleading results. The assumptions of OLS regression as explained by (Brooks ,2008) are as follows:

✓ (Shapiro-Wilk) test to detect the normality of residuals.

- ✓ (Breusch-Pagan/Cook-Weisberg) test to detect Homoscedasticity of residuals.
- ✓ (Variance Inflation Factor VIF) test to detect multicollinearity between independent variables with each other.
- ✓ (Durbin Waston DW) test to detect Autocorrelation or the chronology between the remains.

3.4.1 Normal Distribution Test

Most studies in social sciences are not normally distributed because it always represents the ideas and thoughts of people that are subject to variations among different cultures and societies. It is known that when the sample is more than 30 observations, normal distribution can be neglected. and in this study case the observation 744 is more than 30 observation so normal distribution ignored.

3.4.2 Autocorrelation Test

The autocorrelation test aims to detect random errors in time series, and to verify that the proposed models are free from the problem of autocorrelation between variables. The researcher used the Durbin Watson Test. If the correlation result is positive, this is evidence that the result is close to zero, and if the correlation result is close to (4), this is evidence of the presence of a strong negative correlation. The optimal result for the absence of an autocorrelation problem should fall within the appropriate range between (1.5 - 2.5).

3.4.3 Multicollinearity Test

This assumes that there should be no linear relationship between the independent variables. Statistically, multicollinearity can be tested through the Variance Inflation Factor (VIF) to determine the degree of correlation between independent variables in the study models. (Brooks 2008) indicated that the multicollinearity problem between independent variables occurs when the value of VIF is greater than 10.

3.4.4 Homoscedasticity Test

Homoskedasticity should be checked that error disturbances have an equal spread (scatter) in the linear regression model. This means that errors are equally distributed; constant across observations to ensure validity, unbiasedness, and reliability of the model. However, if the error variances are nonconstant and variances change for each different observation; unequal spread, thus, a heteroskedasticity problem has existed.

The Breusch-Pagan / Cook-Weisberg test was used to verify constant variance between residuals. The null hypothesis of this test assumes that the residuals are homoscedasticity, whereas the alternative hypothesis is that the residuals are heteroscedasticity. A null hypothesis is accepted if the probability calculated by the Breusch-Pagan / Cook-Weisberg test is greater than 5%, while the alternative hypothesis is accepted if the probability of the Breusch-Pagan / Cook-Weisberg test is less than 5%. Table NO.2 shows the results of applying these tests on the proposed models.

Table NO.2 Hypothesis Verification Tests

Models	Multicollinearity	Autocorrelation	Homoscedasticity
	Mean VIF	**Durbin Watson (DW)**	**Breusch-Pagan/Cook-Weisberg**
Model 1	**1.39**	**2.02111**	**Prob.>chi2= 6.125**
Model 2	**1.109**	**1.68524**	**Prob. >chi2= 5.235**

From the previous table NO.2, it can be concluded the following:

<u>Model 1</u>

The multicollinearity assumption is verified as VIF is less than 10, the autocorrelation assumption is verified with a value out of the range of 1.5 to 2.5 (2.0211) and homoscedasticity assumption also verified because Breusch-Pagan/Cook-Weisberg probability more than 5% (6.125). Therefore, the OLS regression provides biased results for this model.

<u>Model 2</u>

The multicollinearity assumption is verified as VIF is less than 10, the autocorrelation assumption is verified with a value out of the range of 1.5 to 2.5 (1.68524) and homoscedasticity assumption also verified because Breusch-Pagan/Cook-Weisberg probability more than 5% (5.235). Therefore, the OLS regression provides biased results for this model**.**

3.5 The statistical analysis for hypothesis of the study:

The study will use multiple regression to test the study hypothesis and sub-hypotheses through a program of SPSS.

Testing the first sub-hypothesis:

This first hypothesis (H1a) state that:

"There is an effect before the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality "

Table No.2 showed both correlation and multiple regression of the dependent variable (NI) on control variables before applying the IFRS and is referred to:

$$\mathbf{EPS= \propto_0+\beta_1\ IFRS + \beta_2\ Size+ \beta_3\ Lev+ \beta_4\ CFO}$$

$$\mathbf{NI= \propto_0+\beta_1\ IFRS + \beta_2\ Size+ \beta_3\ Lev+ \beta_4\ CFO}$$

Table No.2
Multiple regression results for earnings quality (NI) and accounting information system (EPS) variable before applying IFRS

Control variables	NI		EPS	
	Regression value (β)	Correlation R	Regression value (β)	Correlation R
Constant	0.205		0.632	
LEV.	-0.079	-0.225	-0.063	0.017
CFO.	0.038	0.104	0.087	0.021
SIZE	0.019	0.124	0.003	0.025
F Test	value	Sig.	value	Sig.
	1.505	0.223	0.28	0.994
R square	0.78		0.200	

Source: depending on the statistical results in a significant level 5%.

Table (2) covers independent variables that affect the dependent variable where the results showed the followings:

- Size of leverage **(lev)**: in the (NI) the correlation has inverse relationship (-0.225) before applying IFRS which indicate that management follow a less method as earnings management practices and thus high-quality earnings.
  While (EPS) the correlation has positive relationship (0.017) that the size of the debt is high before applying the IFRS and an increase asymmetry of information prior to the adoption of IFRS are reverse.
- Operating cash flow **(CFO)**: A positive correlation relationship (0.104) before applying IFRS with (NI) which shows that increase in operating cash flow has been accompanied by an increase in the earnings quality. While (EPS) A positive

correlation relationship (0.021) before applying IFRS as an indicator of a high degree of asymmetry information.

Firm size **(size)**: A positive correlation relationship (0.124) before applying IFRS with (NI) because of lower volume of receivables in some sample companies' study, and thus increase earnings quality.

While (EPS) has a positive correlation relationship (0.025) before applying IFRS as an indicator of a high degree of asymmetry information.

- The R square (**R^2**): was reached as a value in earnings quality (NI) before applying IFRS (0.78) which mean that the model variables explain 78% of the change that occurs in the dependent variable earnings quality. On the other hand, the R square of the asymmetry of information (EPS) before applying IFRS (0.200) which mean that the model variables explain 20% of the change that occurs in the dependent variable of the asymmetry of information, which shows low explanatory value.

From the above results, there is no significant before applying IFRS. Where the results show no significant of (NI), (EPS) because it is more than 5% in value. Which confirm that the first sub-hypothesis is not true and accept it in nihilistic form:

"There is no effect <u>before</u> the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality "

Testing the second sub-hypothesis:

This second hypothesis (H1b) state that:

"There is an effect relationship after the application of International Financial Reporting Standards and accounting information asymmetry and earnings quality "

Table No.3 showed both correlation and multiple regression of the dependent variable (NI) on control variables after applying the IFRS and is referred to:

$$\textbf{EPS} = \propto_0 + \beta_1\ \textbf{IFRS} + \beta_2\ \textbf{Size} + \beta_3\ \textbf{Lev} + \beta_4\ \textbf{CFO}$$

$$\textbf{NI} = \propto_0 + \beta_1\ \textbf{IFRS} + \beta_2\ \textbf{Size} + \beta_3\ \textbf{Lev} + \beta_4\ \textbf{CFO}$$

Table No.3

Multiple regression results for earnings quality (NI) and accounting information system (EPS) variable after applying IFRS

Control variables	NI		EPS	
	Regression value (β)	Correlation R	Regression value (β)	Correlation R
Constant	-0.026		1.830	
LEV.	-0.029	-0.174	0.493	-0.200
CFO.	0.175	0.087	1.733	-0.094
SIZE	0.003	0.324	0.021	-0.138
F Test	Value	Sig.	value	Sig.
	0.000	0.004	0.004	0.006
R square	0.880		0.605	

Source: depending on the statistical results in a significant level 5% (See appendix No.3)

Table (3) covers independent variables that affect the dependent variable where the results showed the followings:

- Size of leverage **(lev)**: the correlation in (NI) has inverse relationship (0.174) after applying IFRS because some of companies' commitment to reduce elective accruals to increase earnings quality.

While (EPS) the correlation has negative relationship (-0.200) that the size of the debt is low after applying the IFRS and a decrease in asymmetry of information.

Operating cash flow **(CFO)**: the result showed a positive correlation relationship (0.087(after applying IFRS with (NI) Which shows that increase in operating cash flow has been accompanied by an increase in the earnings quality.

While (EPS) A positive correlation relationship (-0.094) after applying IFRS as an indicator of a low degree of asymmetry information.

Firm size **(size)**: represent that the correlation relationship is positive

(0.324) after applying IFRS with (NI) as a result of the company's commitment to implement IFRS.

While (EPS) has a negative correlation relationship (-0.138) before applying IFRS as an indicator of a low degree of asymmetry information.

- The R square (**R^2**): was reached as a value in earnings quality (NI) after applying IFRS (0.880) which mean that the model variables explain 88% of the change that occurs in the dependent variable earnings quality. On the other hand, the R square of the asymmetry of information (EPS) before applying IFRS (0.605) which mean that the model variables explain 60.5% of the change that occurs in the dependent variable of the asymmetry of information, which shows high explanatory value.

From the above results, there a good significant regression model after applying IFRS. Where the results showed a significant of (NI), (EPS) because it is less than 5% in value. Which confirm that the first hypothesis is true and accept as it.

"There is an effect after the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality "

4-Summary and conclusions

This study tried to explain the effect of international financial reporting standards (IFRS) on the Asymmetry of accounting information & earning quality. The total number of the companies sample reached (31) companies in each year from the Egyptian Exchange Market during the period from (2020-2023).

The first period was before the adoption of IFRS (2020-2021) while the second period after the adoption of IFRS (2022-2023). The study tested (6) corporate variables in each company, with total number of views (744) observation.

The most important results there is no effect before applying IFRS on asymmetry accounting & earning quality. On the hand, there is an effect after applying IFRS on asymmetry accounting & earning quality.

Conclusion:

The study shows the result reached as follows:

1) The International Financial Reporting Standards are a guide to accounting practices to improve confidence in the information contained in the financial statements.
2) The application of international financial reporting standard unifies the basis for comparison and measurement methods to increase the similarity of information and earnings quality.
3) The earnings quality index reflects the current performance of the company's fact of profits, as well as the ability to predict future earnings.

Asymmetry of information lowers the degree of obtaining equal information between different parties, and this leads to the company's management conducting profit management practices which affects information asymmetry and low earnings quality.

4) The result of the main hypothesis test for the study were showed that it is partially correct based on the statistical results of the sub-hypotheses divided into:

a) Rejected of the First sub-hypothesis and accept it in alternative hypothesis form:

"There is no effect before the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality "

b) Accepted Second sub-hypothesis test showed which refers to:
"There is an effect after the application of International Financial Reporting Standards on accounting information asymmetry and earnings quality "

5) The applied study results on applying IFRS on the earnings quality (NI):

a) Highly significant level after the application IFRS during the years of 2016 until the end of 2017 all the values less than 5% of significance.

b) An inverse correlation between earnings quality (NI) and leverage (lev) before applying IFRS and also inverse correlation after applying IFRS.

c) There is a positive correlation between earnings quality (NI) and cash flow operating (CFO) after applying IFRS.

d) The size firm (SIZE) has been associated with a positive correlation to the quality earnings before applying IFRS because of lower volume of accruals.

e) R square was 78% before applying IFRS. While (R^2) was 88% after applying IFRS, which indicates that the regression model variables of the earnings quality explain the change that occur in the dependent variables (NI) in a higher way.

The applied study results on applying IFRS on the asymmetry information (EPS):

a) There was a significant level between the measurements of the asymmetry of information variables after applying IFRS, where result showed that all model variables less than the level of significance at 5%.

b) R square was 20% before applying IFRS. While (R^2) was 60.5% after applying IFRS, which indicates that the regression model variables of the asymmetry information explain the change that occur in the dependent variables (NI) in a higher way.

Study limitations:

The study did not expose to:

1-Earning management and their causes and motives and effects, because they are not from the goals of the research.

2-the applied study will not use financial statement of bank sectors in Egypt.

The contribution of the study are:

- An indication that it meets the criteria of international lending companies, prepares financial statements in compliance with international accounting standards and conditions in preparation and presentation to reduce the possibility of information.
- An opportunity for the transfer of capital and the intensification of international competition as a result of the unification of the IFRS.

- Helps investors to make rational decisions on investing in companies that apply IFRS.

Recommendations:

- Work to accelerate the application of IFRS on all sectors working in Egypt accordance with the expected plans to decrease the asymmetry of information between the investors in order to increase the trading volume which reflect on higher earnings quality.
- Companies should leverage technology to improve access to financial information for investors and stakeholders. Implementing user-friendly financial reporting platforms can enhance transparency and facilitate informed decision-making.
- Organizations should develop a communication strategy that clearly explains the implications of IFRS adoption and its impact on financial performance. This will help demystify complex financial information and build trust among stakeholders.

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