# Measuring the level and disclosure quality in the integrated reports of the Egyptian companies listed in the (S&P/EGX–ESG) index

**Saleh Abdelraouf Hussien Mahmoud**[1]

**ملخص البحث :**

يعد إعداد التقاريرالمتكاملة نهجًا جديدًا ومبتكرًا في إعداد تقارير الشركات ، والذي يعزز فكرة دمج المعلومات المالية وغير المالية في تقرير الشركة بهدف تزويد الاطراف المهتمة وأصحاب المصالح بمعلومات أكثر صلة وملائمة حول أداء المنظمة وآفاقها استجابةً لاحتياجاتهم المتزايدة من المعلومات(IIRC,2013). ويعتبر الهدف الرئيس من هذا البحث هو تحديد وتحليل أهمية جودة الإفصاح في التقارير المتكاملة وتقييم مستوى وجودة الإفصاح عن التقارير المتكاملة في بيئة الأعمال المصرية مع الأخذ في الاعتبار الإرشادات الصادرة عن المجلس الدولي للتقارير المتكاملة ومبادرة التقرير العالمي GRI. استخدمت الدراسة أسلوب تحليل المحتوى لتحليل محتوى التقارير السنوية وغيرها من التقارير غير المالية الصادرة عن (٢٣) شركة مدرجة في مؤشر S & P / EGX–ESG من ٢٠١٨ إلى ٢٠٢٢ وقياس مستوى وجودة الإفصاح لهذه التقارير.

**نتائج الدراسة:** وأوضحت نتائج الدراسة وجود اتجاه عام متزايد في تغطية عناصر المحتوى للتقارير السنوية المتكاملة لشركات العينة .علاوة على ذلك ، أظهرت نتائج الدراسة وجود تأثير ايجابي معنوي لإصدار الشركة لتقارير الإستدامة علي جودة الإفصاح في التقارير المتكاملة. كما أوضحت نتائج الدراسة أن الشركات المصرية المدرجة في مؤشر (S&P/EGX–ESG) تحرز تقدمًا في تبني إعداد التقارير المتكاملة وفقًا للإطار الدولي لإعداد للتقاريرالمتكاملة.

**الكلمات المفتاحية:** التقارير المتكاملة ، جودة الإفصاح ، مؤشرS&P/EGX–ESG.

## Abstract

Integrated Reporting is a new and innovative approach in corporate reporting, which promotes the idea of integrating financial and non-financial information in the company's report with the intended purpose of providing the stakeholders with more relevant and useful information about the performance and prospects of the organization in response to their growing information needs (IIRC,2013). The main objective of this research is to identify and analyze the importance of the quality of disclosure in integrated reports and evaluate the level and quality of disclosure of integrated reports in the Egyptian business environment considering the guidelines issued by the International Integrated Reporting Council and the GRI Global Report Initiative.

[1] **Demonstrator at Department of accounting – Faculty of Commerce – South Valley University.**
**E-Mail:** salehraouf22@com.svu.edu.eg

The study uses the content analysis method to analyze the content of the annual reports and other non-financial reports published by (23) companies listed in the S&P/EGX-ESG index from 2018 to 2022 and measure the level and disclosure quality of these reports following the international integrated reporting framework. The results of the study show that there is an overall increasing trend in the coverage of the content elements of the integrated annual reports of the sampled companies. Moreover, the results of the study show that there is a significant and positive effect of Publishing a separate sustainability report on the Integrated Reporting Disclosure. In addition, the results of the study show that the Egyptian companies listed in the (S&P/EGX-ESG) index making progress in the adoption of integrated reports following the international integrated reporting framework.

**Keywords:** Integrated reporting, Disclosure quality, S&P/EGX-ESG index.

## Introduction:

Globalization and interconnectivity mean that world finances, people, and knowledge are closely linked. Following the global financial crisis, the need to promote financial stability and long-term development by linking investment decisions, corporate behavior, and corporate reporting, became increasingly perceived as a global call to action. As a result, evolution in corporate reporting system is required to narrow significant information gap, this, in turn, will overcome the limitations of current requirements and encourage corporate reporting that provides a more comprehensive picture of an organization's strategy, business model, governance, performance, and prospects (IIRC, 2013).

## 1. Integrated Reporting: An Overview

### 1.1. Concept of integrated reports

Interest from professionals and scholars in integrated reporting has increased since 2010 with the launch of the Accounting for Sustainability Project (A4S), the Global Reporting Initiative (GRI), and the formation of the

International Integrated Reporting Committee which was replaced with The International Integrated Reporting Council (IIRC). IIRC defines Integrated reporting as “A process founded on integrated thinking that results in a periodic integrated report by an organization about value creation, preservation or erosion over time and related communications regarding aspects of value creation, preservation or erosion”. The product of integrated reporting – the integrated report – “A concise communication about how an organization’s strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term”.

In addition, (Vitolla et al., 2020) indicated that integrated reports provide a mechanism to address the non-financial information needs of financial capital providers, by providing a comprehensive view of the company's strategic performance in value creation, and integrating social, environmental, economic, and governance information into prevailing processes and decision-making. Also, (De Villiers et al., 2014) defined integrated reports as those reports that collect financial and non-financial information (quantitative and qualitative) on financial, sustainable, strategic, and governance performance to benefit stakeholders by reducing information risks, and improving the ability of stakeholders to make investment decisions.

by reviewing the previous definitions, it can be concluded that studies agree that integrated reports are considered a new form of voluntary disclosure in the modern business environment, as they aim to communicate financial and non-financial information side by side in one integrated and interconnected report. This will enable stakeholders to determine the extent to which the firm is able to create and preserve value over time and help them in making rational economic decisions.

### 1.2. Disclosure theories of integrated reporting

Considering that integrated reporting is a relatively new reporting approach, most studies use a variety of theories to improve comprehension of this reporting framework. Additionally, the use of integrated reporting as a corporate reporting practice can be justified using a variety of theoretical frameworks (Khatlisi, 2022). Moreover, positive accounting theory assumes that markets are efficient, and the efficient market hypothesis implies that market prices always reflect all publicly available information (Latif et al., 2011). Positive accounting theories can therefore be classified into socio-political theories and economics-based theories. The literature has used socio-political theories including institutional theory, legitimacy theory, and stakeholder theory to explain the adoption of integrated reporting. While empirical studies on the association between integrated reporting and firm value have employed economics-based theories such as agency theory and signaling theory. Therefore, the following section provide a review of the theories related to the integrated reporting disclosure.

#### 1.2.1. Institutional theory

Institutional theory becomes one of the main theories used to develop emerging insights about IR (Camilleri, 2019). According to institutional theory, Organizations are intertwined with the broader political, economic, financial, educational, and cultural framework that exerts institutional forces on them, (Jensen & Berg, 2012). As a result, studies have been conducted using institutional theory to investigate institutional pressures affecting the integrated reporting process or other forms of corporate reporting.

### 1.2.2. Legitimacy theory

Organizations and governments face new economic, social, and environmental issues, which require them to follow society's laws, values, and conventions, as well as to voluntarily disclose social and environmental information to ensure compliance (Schiopoiu Burlea & Popa, 2013). IR may be seen as a tool for communicating the organization's legitimization efforts (Velte & Stawinoga, 2017). Additionally, highly leveraged companies may choose to adopt new forms of corporate reporting, such as integrated reports, to provide stakeholders such as credit institutions with more information to gain legitimacy (Kılıç & Kuzey, 2018a).

### 1.2.3. Stakeholders theory

Stakeholder theory begins by establishing value as an essential and explicit aspect of doing business, giving managers a sense of the value they generate and a shared understanding of what their key stakeholders contribute collectively (Freeman et al., 2004). Accordingly, companies must meet and satisfy the information and interest needs of all stakeholders, not just shareholders. Therefore, organizations have started to strive to develop relationships and networks with their stakeholders (Pushpakumara et al., 2018).

### 1.2.4. Agency theory

Managers who act as agents of principles (shareholders) in profitable firms tend to disclose more information to maintain their positions and incentives (Singhvi & Desai, 1971). And, corporate disclosures can be identified as a means of reducing information asymmetries and agency costs while aligning shareholder and management interests. Hence, IR can be identified as a mechanism to reduce information asymmetry between the company's insiders and outsiders. (Farvaque et al., 2011; Healy & Palepu, 2001; Verrecchia, 2001). It can be concluded that integrated reporting is one of the most effective ways to communicate company information to the market to optimize company value and reduce agency conflicts.

### 1.2.5. Signaling theory

According to signaling theory, companies with high liquidity ratios will disclose more information to differentiate them from other companies. Therefore, companies with high liquidity ratios can rely on integrated reporting. (Abeywardana et al., 2021). Also, larger companies may want to signal more information to the market, and they may use new corporate reporting forms, such as integrated reporting, to signal the higher quality of their reporting models compared to those of their competitors (Frias-Aceituno et al., 2014).

## 1.3. Disclosure quality of the integrated reporting

Disclosure is defined as information released by a firm that may be financial or non−financial; qualitative or quantitative; mandatory or voluntary; disseminated via formal or informal channels (Gibbins et al., 1990). And previous studies define the disclosure quality in practice with different keywords. For example, (Gray & Skogsvik, 2004) explained that "voluntary disclosure allegedly provides information that goes beyond the requirements of company law and applicable accounting standards". "Completeness, accuracy, and reliability" were defined as disclosure quality (Singhvi & Desai, 1971). In addition (Brown & Hillegeist, 2003) defines the quality of disclosure as "the precision, timeliness, and quantity of information provided".

The term “disclosure quality” is used in accounting literature as being synonymous with the “level of information disclosed by firms” (Davide Scaltrito, 2015). Previous literature on the variables that may have an impact on the adoption of IR and, more in particular, on a better quality of IR is quite scarce, whereas some studies have dealt with the determinants of sustainability disclosure, more specifically. However, among these literature streams, only a few studies focused on the determinants of disclosure quality (Songini et al., 2020). Thus, the concept of quality of IR disclosure is a debated issue in existing disclosure literature.

### 1.3.1. Defining the quality of integrated reports

The International Integrated Reporting Framework didn’t define "quality". In contrast, it describes Fundamental Concepts, Guiding Principles, and Content Elements that, when applied within the context of an integrated thinking philosophy, result in: "a concise communication about how an organization’s strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long-term" (IIRC, 2021).

### 1.3.2. Measuring the quality of the integrated reports

Many studies in the literature resorted to using indicators extracted from some professional institutions and international databases to measure the level of disclosure quality according to integrated reports, such as the Environmental, Social and Corporate Governance (ESG) index issued by the Bloomberg database, corporate governance: vision and strategy” (CGVS) extracted from the ASSET4 database issued by Thomson Reuters as the world's largest leading source of information for companies and professionals, and the (KLD) index to measure social, environmental and governance responsibility for the top 3000 US companies issued by KLD Research & Analytics Inc., although Most of these indicators were designed as alternative measures for the performance of social responsibility and environmental performance of companies and not for disclosure of these measures. Moreover, these previous indicators which were extracted from some professional institutions and global databases include data for a wide range of companies, regardless of whether those companies have issued an integrated report or not (Hussein, 2020).

Therefore, studies have developed another alternative measure to measure the level of quality of disclosure according to the integrated reports, which rely on data sources from outside the company. (Barth et al., 2017) propose different measures of report quality as the study used the integrated reporting quality (IRQ) score of the annual EY excellence in IR awards as a starting point for analyzing a sample of reports. This measure was represented in a system for recording Points for each of the companies applying for the Scoring System to Award Integrated Reporting award.

On the hand, many studies have constructed (IR−SCORE) index as an alternative indicator to measure the quality level of disclosures according to the integrated reports. This measure is considered a content analysis of the quality of disclosures according to the integrated reports through the integrated information provided by companies in their annual reports and based on the requirements of the Integrated Reporting Framework issued by the International Integrated Reporting Council (IIRC) January 2021. Moreover, different indices or checklists based on the international integrated reporting framework have been used in the literature. A summary of these indices is presented below:

- Study of (Stent & Dowler, 2015) used the content elements of the international integrated reporting framework as a basis for their checklist. Also, the study used a weighted method with a simple binary scoring system ranging between 0–3 as a marking guideline with occasional modifications that are indicated. The rating system simply indicates the coverage (or lack) of an IR requirement, while modifications are the first steps to also rating the quality of coverage.
- Study of (Haji & Anifowose, 2016a) constructed an integrated reporting checklist developed based on the guiding principles of the international framework for integrated reporting. The checklist consists of a total of 52 specific points in eight main categories. The study used an unweighted disclosure approach to assess the extent of the reports, assigning a score of 1 if the company disclosed a particular item at least once and 0 otherwise. In addition, the study used a weighted method to assess the quality of the reports, assigning a score range between 0 and 3.
- A study of (Lee & Yeo, 2016) constructed the IRSCORE index based on the content elements of the international integrated reporting framework consisting of eight weighted groups. Each group of the content element contains 5 questions assigning a score range between 0 to 5 for each question with a maximum score of 200 points.
- Study of (Kılıç & Kuzey, 2018b) Developed a disclosure index based on the content elements of the international integrated reporting framework. The checklist consists of a total of 50 specific points in seven main categories. The study used an unweighted disclosure approach, assigning a score of 1 if the company disclosed a particular item at least once and 0 otherwise.
- On the other hand, (Cooray, 2021) identifies certain limitations in adopting the previous indices such as: (1) the is no agreement on how to assess

compliance with the content elements of the international integrated reporting framework. (2) the different aspects of the contents elements are not accurately included. (3) the marking guideline is not comprehensive. Therefore, a careful analysis must be performed before using such indices.

## 2. Research Problem, Objectives, Methodology, and Hypotheses

### 2.1 Research Problem

Integrated Reporting is a new and innovative approach in corporate reporting, which promotes the idea of integrating financial and non-financial information in the company's report with the intended purpose of providing the stakeholders with more relevant and useful information about the performance and prospects of the organization in response to their growing information needs (IIRC,2013). Moreover, the International Integrated Reporting Council (IIRC), outlined the aim of IR in the Integrated Reporting Framework as to improve the quality of information available to the stakeholders to enable a more efficient and productive allocation of capital (IIRC, 2013). Therefore, Integrated Reporting was established with the idea of providing information to the stakeholders in an integrated form, which will provide additional value and thus make information more decision-useful when compared to traditional financial reporting. However, to this date, there is very little empirical evidence, which establishes the decision usefulness of Integrated Reporting disclosure. The current study seeks to answer the main research question:

What is the level and disclosure quality of integrated reports in the Egyptian business environment considering the guidelines issued by the International Integrated Reporting Council and the GRI Global Report Initiative?

## 2.2 RESEARCH OBJECTIVES

The main objective of the current study is to identify and analyze the importance of the quality of disclosure in integrated reports and evaluate the level and quality of disclosure of integrated reports in the Egyptian business environment considering the guidelines issued by the International Integrated Reporting Council and the GRI Global Report Initiative.

## 2.3 RESEARCH METHODOLOGY

The researcher will adopt the **inductive approach;** in reviewing the accounting literature related to the disclosure quality of integrated business reports to enrich the research theoretical framework. Given that Egyptian companies do not adopt the integrated reporting approach, the content of the annual reports issued by the companies listed in the (**S&P/EGX-ESG**) Index, during the period from 2018 to 2022 will be examined as being the most similar to an integrated report using the **content analysis approach**. Additionally, to assess the level and quality of disclosure made by companies, the researcher used a disclosure index (IR-Score). This disclosure index was constructed depending on the content elements of the international integrated reporting framework, and other relevant studies.

## 2.4 RESEARCH HYPOTHESES

### 2.4.1 The Level and Disclosure Quality of The Integrated Reports in The Egyptian Business Environment

The issuance of the information under the framework of integrated reports is now left up to management and the board voluntarily, and there is no requirement for companies in the Egyptian business environment to comply with it. Therefore, the current study seeks to measure the level and disclosure quality of integrated reports in the Egyptian business environment considering the guidelines issued by the International Integrated Reporting

Council and the Global Report Initiative. Thus, the first hypothesis was therefore stated as follows:

**$H_1$: There is an increasing trend in the level and quality of disclosure in the annual reports of the Egyptian companies listed on the (S&P/EGX-ESG) index.**

### 2.4.2 Publishing a Separate Sustainability Report and Integrated Reporting Disclosure

Sustainability reports include information on a company's activities, objectives, and public perception in connection with social and environmental issues (Fasan, 2013). Moreover, (Mervelskemper & Streit, 2017) suggested that there is a strong incentive for companies that already publish a stand-alone sustainability report to switch immediately to an integrated report because of the expected benefit of higher market valuation of environment, social, and corporate governance (ESG) performance. This is in accordance with the findings of (Lueg et al., 2016), who found that adopting CSR standards and guidelines tended to be beneficial for successfully implementing integrated reporting. Given the preceding discussions, it is clear that sustainability reporting plays an essential role in the extent to which firm disclosures comply with the IIRC framework. Thus, the following hypothesis is proposed:

**$H_2$. There is a significant and positive effect of Publishing a separate sustainability report on the Integrated Reporting Disclosure.**

### 2.4.3 Adopting Global Reporting Initiative Standards and Integrated Reporting Disclosure

Several reporting guidelines have been developed and employed to regulate non-financial reporting. The GRI, for instance, just released the G4 guidelines, the most recent development of the GRI framework developed in 1999 (Fasan, 2013). This framework seeks to establish minimum disclosures that encompass indicators such as environmental, social, or governance. To develop comparable and comprehensive sustainability reports (Lueg et al., 2016). Currently, the majority of companies that issue standalone sustainability reports adhere to the GRI's requirements (James, 2015). Much prior research determined that the adoption of GRI has a significant and positive impact on corporate disclosures. According to (Frias- Aceituno et al., 2014), companies that issue standalone sustainability reports in compliance with GRI principles are more likely to adopt the integrated reports. Given the preceding discussions, the following hypothesis is proposed:

**$H_3$. There is a significant and positive effect of Adopting the GRI standards on Integrated Reporting Disclosure.**

### 2.4.4 Assurance of Sustainability Reporting and Integrated Reporting Disclosure

According to (Hodge et al., 2009) Information regarding the environment and social performance is more credible and reliable when third-party assurance is provided. In addition (Rivera-Arrubla et al., 2017), found that the level of disclosures in integrated reports is positively impacted by assurance (external verification) of reports. Furthermore, (Moroney et al., 2012) indicated that the quality of voluntary environmental disclosures is greater for assured firms than for non–assured companies, indicating a positive association between assurance and the quality of corporate disclosures. Given the preceding discussions, the researcher anticipates that the provision of third–party assurance for sustainability reports will enhance the level and quality of disclosures, increasing the overall level of compliance of company disclosures with the IIRC framework. Thus, the following hypothesis is proposed:

**$H_4$. There is a significant and positive effect of the existence of third–party assurance on Integrated Reporting Disclosure.**

## 2.5 Sample selection

Using the judging–sample approach, the researcher selected the components of the study sample; however, to achieve homogeneity of the companies selected over the study period, the following criteria and conditions must be met:

**a)** Availability of financial and non–financial reports and data of the selected companies to calculate the variables of the study during the period of study.

**b)** For standardization, consistency of assessment and to avoid deficiencies or weaknesses that may arise when comparing the results, the financial year of the selected company ends at the end of December. Companies whose financial statements are prepared on other dates are excluded.

**c)** To avoid the impact of financial asset transfers and exchange rate fluctuations, the selected company must maintain its accounts in the local currency (Egyptian Pound) and companies maintaining their accounts in other currencies (i.e. The United States dollar – USD) are excluded.

**d)** The Selected company must maintain all actual data necessary for the calculation of the study variables and the conduct of research tests regularly throughout the study period and excluding any missing observations of any variable of the models used in the study.

**e)** The selected companies do not belong to financial institutions (banks, insurance companies), because of their special nature, and are subject to certain procedures by the Central Bank of Egypt and different governance mechanisms.

**f)** The selected company has been registered on the Egyptian Stock Exchange for more than five years (i.e. it was registered before the beginning of 2018, which represents the first year of the period specified for the study period). and they must not have made losses regularly for more than a year, moreover, Companies should not have been merged, bankrupt, or reorganized within (5) years before the current study.

- After applying the above criteria, 23 companies were selected from the total companies that were listed in the (S&P/EGX-ESG) Index during the period from 2018 to 2022. Covering ten different economic sectors of the Egyptian capital market.
- After removing certain missing observations of specific variables of the used models of the study, the total number of observations of the non-financial companies represented in the study sample over the study period is 106 observations.
- Using Table (1), the researcher explains the distribution of non-financial companies listed in the S&P/EGX-ESG Index, according to the economic sectors to which they belong.

| Sector type | The size of the sample companies examined |
|---|---|
| **Basic Resources** | **1** |
| **Health Care & Pharmaceuticals** | **2** |
| **Industrial Goods, Services, and Automobiles** | **2** |
| **Real Estate** | **5** |
| **IT, Media & Communication Services** | **4** |

| | |
|---|---|
| **Food, Beverages, and Tobacco** | **2** |
| **Shipping & Transportation Services** | **1** |
| **Non-bank financial services** | **3** |
| **Textile & Durables** | **1** |
| **Building Materials** | **2** |
| **Total** | **23** |

**Table (1): Distribution of non-financial companies listed in the S&P/EGX-ESG Index by the economic sector**

## 2.6 Content Analysis Method

The researcher depends on a comprehensive disclosure checklist based on content elements of the International integrated reporting framework. The checklist includes a simple scoring system with mostly binary scores and some occasional modifications (i.e. "maximum score" of two or more). The binary scores indicate the existence or absence of an aspect. Some modifications were made to the scores when several available items had to be evaluated under a certain aspect. This index was initially introduced by (Stent & Dowler, 2015) and further developed by (Cooray, Senaratne, et al., 2020; Herath & Gunarathne, 2016) based on the instruction of (Kılıç & Kuzey, 2018b). Table (2) presents a summarized checklist.

| Content element | No. of disclosure items | The weight of each element in the score |
|---|---|---|
| **Organizational overview and external environment** | **7** | **0 up to 16** |
| **Governance** | **6** | **0 up to 10** |
| **Business model** | **5** | **0 up to 10** |
| **Risks and opportunities** | **3** | **0 up to 8** |
| **Strategy and resource allocation** | **4** | **0 up to 6** |
| **Performance** | **5** | **0 up to 11** |

| | | |
|---|---|---|
| Future outlook | 3 | 0 up to 4 |
| Basis of preparation and presentation | 3 | 0 up to 5 |
| Total | 36 | Up to 70 points |

Table (2): Summary checklist and the weights for each of the eight content items

## 3. DESCRIPTION AND MEASUREMENTS OF THE STUDY VARIABLES

The researcher defines and describes the variables of the study and the methods for its measurement as follows:

### 3.1 Measurement of the independent variables

| Variable | Measurement |
|---|---|
| SR | Dummy Variable = 1 If a company publishes a standalone sustainability report, 0 otherwise. |
| GRI | Dummy Variable = 1 if a company adopted the GRI framework, 0 otherwise. |
| ASSUR | Dummy Variable = 1 If a company obtains assurance on a standalone sustainability report, 0 otherwise. |

Table (3): Independent Variables that Affect the Integrated Reporting Disclosure

### 3.2 Measurement of The Dependent variable

| Variable | Measurement |
|---|---|
| IRSCORE | The level and quality of disclosure according to the integrated reports expressed by the integrated reports disclosure index [IRSCORE] |

Table (4): Dependent variable of the integrated reporting Disclosure

## 3.3 Measurement of the controlling variables

**The control variables of the study are the size of the firm, the leverage, and the return on equity.**

In addition to the independent and dependent variables of the study, there are certain that may affect the level and disclosure quality of the integrated reports. Therefore, the researcher adopted the following variables to control the relationship between dependent and independent variables (Cooray, Gunarathne, et al., 2020; Haji & Anifowose, 2016b; Lee & Yeo, 2016; Zhou et al., 2017).

| Variable | Measurement |
|---|---|
| **SIZE** | Firm size, measured using the natural logarithm of total assets. |
| **LEV** | Leverage is measured as total long-term liabilities divided by total equity. |
| **ROE** | Return on assets as a proxy for financial performance, measured as net income before extraordinary items divided by total assets. |

**Table (5): Summarizes the definitions of the Control variables**

## 3.4 Empirical Model:

To examine the relation between publishing sustainability reports, adopting GRI standards, and the existence of third-party assurance on integrated reporting disclosure. The researcher uses the following model to test the hypothesis and was stated as follows:

$$\boldsymbol{IRSCORE} = \boldsymbol{\beta_0} + \boldsymbol{\beta_1}\mathbf{SR} + \boldsymbol{\beta_2}\mathbf{GRI} + \boldsymbol{\beta_3}\ \mathbf{ASSUR} + \boldsymbol{\beta_4}\mathbf{LEV} + \boldsymbol{\beta_5}\mathbf{ROE} + \boldsymbol{\beta_6}\boldsymbol{SIZE} + \boldsymbol{\varepsilon_{it}} \quad \Rightarrow$$

**Equation for Model (1)**

| | |
|---|---|
| IRSCORE | **The IR score of a firm.** |
| SR | **Dummy Variable = 1 If a company publishes a standalone sustainability report, 0 otherwise.** |
| GRI | **Dummy Variable = 1 if a company adopted the GRI framework, 0 otherwise.** |

| | |
|---|---|
| **ASSUR** | **Dummy Variable = 1 If a company obtains assurance on a standalone sustainability report, 0 otherwise.** |
| **LEV** | **The leverage of a firm.** |
| **ROE** | **The return on equity of a firm.** |
| **SIZE** | **The size of a firm.** |
| $\varepsilon$ | **Overall error term.** |

**Table (6): Regression Models for assessing the variables affecting the integrated reporting disclosure; (Source: Prepared by the researcher.)**

## 4. DATA ANALYSIS AND RESULTS

This section presents the results of the study as follows: first, the level and disclosure quality of the published reports of the selected companies in the (S&P/EGX-ESG) index, which is presented in terms of descriptive statistics, and the sub-hypotheses are analyzed using correlation and regression analysis.

### 4.1 Descriptive Statistics of the Integrated Reporting Disclosure Index

The level and the disclosure quality of the integrated reporting are further measured in terms of the descriptive statistics for the integrated reporting disclosure scores (IR-SCORE) calculated based on the integrated reporting index adopted in the current study. The results of the Integrated Reporting Disclosure Index Descriptive Statistics are presented in Table (7).

| IRSCORE Descriptive Statistics | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Year** | **N** | **Minimum** | **Maximum** | **Mean** | **Std. Deviation** | **Skewness** | |
| | **Statistic** | **Statistic** | **Statistic** | **Statistic** | **Statistic** | **Statistic** | **Std. Error** |
| **2018** | **19** | **32** | **46** | **36.95** | **3.880** | **.708** | **.524** |
| **2019** | **19** | **32** | **46** | **36.95** | **3.880** | **.708** | **.524** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **2020** | **22** | **33** | **47** | **39.32** | **3.721** | **.340** | **.491** |
| **2021** | **23** | **34** | **49** | **40.30** | **4.050** | **.185** | **.481** |
| **2022** | **23** | **34** | **51** | **42.70** | **4.894** | **-.091** | **.481** |

**Table (7): Integrated Reporting Disclosure Index Descriptive Statistics**

- The researcher used the content analysis method to evaluate the level and the disclosure quality of 106 annual reports of the sampled companies during the five-year study period.
- The mean integrated reporting disclosure scores (IR-SCORE) increased from 36.95 to 42.70 between 2018 to 2022, which shows a gradually increasing in the level and disclosure quality of the integrated reporting of the sampled companies.
- The degree of disclosure in integrated reports according to the IR-SCORE, (ranged from 46% to 73%), with a mean score of 56.5%. This result is consistent with the findings of the studies performed in the Egyptian business environment. For instance, (Melegy & Alain, 2020) with an overall average of (40.2%), (Massoud, 2020) with a mean score of (68.0%). Moreover, (Abogazia, 2022) shows that IR disclosure scores range from (87 to 187 out of 225).
- This result is consistent with the findings of the studies performed in the Egyptian business environment (Abdel-Dayem & Al-Aqili, 2015; Abogazia et al., 2022; Al-Garhi, 2018; Al-Ghandour, 2021; El-Deeb, 2019; Hassan, 2017a; Hussein, 2020; Melegy & Alain, 2020; Shahin et al., 2019).

Therefore, the first hypothesis $(\mathbf{H_1})$ which states that "**There is an increasing trend in the level and quality of disclosure in the annual reports of the Egyptian companies listed on the (S&P/EGX-ESG) index**" is accepted. This conclusion is also confirmed by the gap between the Maximum and Minimum integrated reporting disclosure scores of firms and the standard deviation of mean integrated reporting disclosure scores.

## 4.2 Testing the relation between publishing sustainability reports, adopting GRI standards, and the existence of third-party assurance on integrated reporting disclosure

In this section, the researcher investigates the impact of the sampled companies' current reporting practices on adherence to the international integrated reporting framework's content elements in their annual reports. The researcher carried out a multivariate ordinary least squares (OLS) regression to investigate the correlations suggested in the sub-hypotheses.

### 4.2.1 Correlation Matrix

Table (8) provides the correlation coefficients between the variables included in the Model (1).

| Correlations | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | IRSCORE | SR | GRI | ASSUR | LEV | ROE | SIZE |
| IRSCORE | Correlation | 1.000 | | | | | | |
| | Sig. | | | | | | | |
| SR | Correlation | 0.636 | 1.000 | | | | | |
| | Sig. | (0.000) | | | | | | |
| GRI | Correlation | 0.341 | 0.543 | 1.000 | | | | |
| | Sig. | (0.000) | (0.000) | | | | | |
| ASSUR | Correlation | 0.357 | 0.455 | 0.661 | 1.000 | | | |
| | Sig. | (0.000) | (0.000) | (0.000) | | | | |
| LEV | Correlation | -0.208 | -0.067 | 0.138 | 0.104 | 1.000 | | |
| | Sig. | (0.032) | (0.496) | (0.159) | (0.290) | | | |
| ROE | Correlation | 0.254 | 0.268 | 0.230 | 0.116 | -0.044 | 1.000 | |
| | Sig. | (0.009) | (0.005) | (0.018) | (0.238) | (0.652) | | |
| SIZE | Correlation | -0.133 | -0.220 | 0.051 | 0.136 | 0.653 | 0.005 | 1.000 |
| | Sig. | (0.173) | (0.024) | (0.604) | (0.164) | (0.000) | (0.960) | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | |

**Table (8): Correlation Analysis: correlation coefficients of the Variable affect the integrated reporting disclosure; (Source: Prepared by the researcher.)**

The Pearson correlations, as presented in Table (8), showed a statistically positive significant relationship ($p < 0.01$) between the SR, GRI, and ASSUR variables, with the IRSCORE. Specifically, SR had a correlation coefficient of (0.636) which indicates a strong positive relationship between publishing a stand-alone sustainability report and the extent to which firm disclosures (IRSCORE) comply with the IIRC framework, and GRI had a correlation coefficient of (0.341), with the (IRSCORE) which indicates that the number of the companies that adopt the standards of the GRI is relatively small. and (ASSUR) had a correlation coefficient of (0.357) Which indicates that the number of companies that obtain a third-party assurance on their sustainability reports is relatively small. These results are consistent with the findings of (Kılıç & Kuzey, 2018b). In addition, (IRSCORE) has a negative significant correlation with (LEV) and had a correlation coefficient of (−0.208). Firm size has a correlation coefficient of (−0.133), indicating a weak negative significant relationship with (IRCORE). It can be concluded that the correlations matrix as shown in Table (8) states that there is no multicollinearity since no variable had correlations above (0.80 or 0.90). Thus, none of the variables had strong correlations that would have indicated multicollinearity issues.

### 4.2.2 Multiple Regression Results Analysis

| Regression results | | | | | | |
|---|---|---|---|---|---|---|
| VARIABLES | Coef. | St.Err. | t-value | p-value | Sig | VIF |
| SR | .093 | .014 | 6.45 | 0 | *** | 1.69 |
| GRI | -.009 | .022 | -0.42 | .674 | | 2.14 |
| ASSUR | .024 | .024 | 0.99 | .323 | | 1.93 |

| | | | | | | |
|---|---|---|---|---|---|---|
| LEV | −.117 | .042 | −2.80 | .006 | *** | 1.82 |
| ROE | .028 | .044 | 0.65 | .517 | | 1.12 |
| SIZE | .008 | .005 | 1.67 | .098 | * | 1.98 |
| Constant | .408 | .1 | 4.09 | 0 | *** | |
| R−squared | | 0.463 | F−test | | 14.244 | |
| Adjusted R−squared | | 0.434 | Number of obs | | 106 | |
| Prob > F | | 0.000 | | | | |
| *** p< .01, ** p< .05, * p< .1 | | | | | | |

**Table (9): OLS Regression Results; (Source: Prepared by the researcher.)**

Table (9) shows that the model was suitable for interpreting the relationship between dependent and independent variables, and the regression is significant as the value of (Prob > F =0.00) is less than the approved level of significance < (0.05). Moreover, Overall ***$R^2$*** indicated that (**0.463**) of the dependent variable's variation that the independent variables account for collectively. In addition, The VIFs between the dependent variable (IRSCORE) and the independent variables (SR, GRI, and ASSUR) and controlling variables (ROE, LEV, and SIZE) were calculated to test for potential multicollinearity problems. All values were below 10, which is the acceptable level indicated in the literature. The variable (SR) had positive coefficients that were significant at the 1% levels, indicating that publishing a stand-alone sustainability report affects the extent to which firm disclosures (IRSCORE) comply with the IIRC framework. (the p-values for this variable respective coefficient was 0.000). This result is consistent with the findings of (Kılıç & Kuzey, 2018b). Thus, the researcher accepts **the hypothesis ($H_2$) which states that " There is a significant and positive effect of Publishing a separate sustainability report on the Integrated Reporting Disclosure.**". Additionally, the variables (GRI) had a negative coefficient that was not significant, indicating that Adopting the GRI Standards does not affect the extent to which firm disclosures (IRSCORE) comply with the IIRC framework. (the p-values for this variable respective coefficient was $0.674$). Thus, the researcher rejects **the hypothesis ($\mathbf{H_3}$) which states that " There is a significant and positive effect of Adopting the GRI standards on Integrated Reporting Disclosure.".** Moreover, the variables (ASSUR) had a positive coefficient that was not significant, indicating that obtaining a third-party assurance over the sustainability reports does not affect the extent to which firm disclosures (IRSCORE) comply with the IIRC framework. (the p-values for this variable respective coefficient was $0.323$). Thus, the researcher rejects **the hypothesis ($\mathbf{H_4}$) which states that " There is a significant and positive effect of the existence of third-party assurance on Integrated Reporting Disclosure ".** The researcher believes that the insignificant association between the (GRI and ASSUR) and the extent to which firm disclosures (IRSCORE) comply with the IIRC framework could be due to the small numbers of the companies publishing stan-alone sustainability reports of those a smaller number too adopting the GRI standards and obtaining a third-party assurance over their sustainability reports which is evident from the results of measuring the integrated reporting disclosure index of the annual reports of the study companies, which was analyzed using the content analysis method. Additionally, the level of disclosure is certainly impacted by the fact that the preparation of integrated reports is regarded as a non-mandatory practice in the Egyptian stock market.

Finally, LEV had a negative and significant association with (IRSCORE), at the $1\%$ level, the coefficient was ($\mathbf{-0.117}$); the p-value was ($\mathbf{0.006}$). and

Firm size had a positive and significant association with (IRSCORE), at the 10% level, the coefficient was **(0.008)**; the p-value was **(0.098)**.

## Conclusions

The main objective of the current study is to identify and analyze the importance of the quality of disclosure in integrated reports and Evaluate the level and quality of disclosure of integrated reports in the Egyptian business environment considering the guidelines issued by the International Integrated Reporting Council and the GRI Global Report Initiative. The study used the content analysis method to evaluate the level and the disclosure quality of 106 annual reports of the sampled companies during the five-year study period. The results of the study show that the Egyptian companies listed in the (S&P/EGX-ESG) index making progress in the adoption of integrated reports following the international integrated reporting framework. The results show that the mean integrated reporting disclosure scores (IR-SCORE) increased from 37% to 43% between 2018 to 2022, which shows a gradually increasing in the level and disclosure quality of the integrated reporting of the sampled companies.

In addition, the degree of disclosure in integrated reports according to the IR-SCORE, (ranged from 46% to 73%), with a mean score of 56.5%. This result is consistent with the findings of the studies performed in the Egyptian business environment. Moreover, the results show that there is a statistically positive significant relationship between the SR, GRI, and ASSUR variables, with the IRSCORE. And there is a significant and positive effect of Publishing a separate sustainability report on the Integrated Reporting Disclosure. On the other hand, the result shows that there is no significant effect of Adopting the GRI standards or the existence of third-party assurance on Integrated Reporting Disclosure. The researcher believes that the insignificant association between the (GRI and ASSUR) and the extent to which firm disclosures (IRSCORE) comply with the IIRC framework could be due to the small number of companies publishing stand-alone sustainability reports, and a more minor number of these companies adopting the GRI standards and obtaining third-party assurance over their sustainability reports, which is evident from the results of measuring the integrated reporting disclosure. Additionally, the level of disclosure is undoubtedly impacted by the fact that the preparation of integrated reports is regarded as a non-mandatory practice in the Egyptian stock market.

## References

Abdel-Dayem, S. A.-R., & Al-Aqili, L. M. (2015). Evaluating the relationship between the content of disclosure in the integrated reports and the value of the company (an applied study). *Journal of Accounting Research*, *2*(2), 113-180. https://doi.org/10.21608/abj.2015.127458

Abeywardana, N. L. E., Azam, S. M. F., & LT, K. L. (2021). Theoretical Review On Integrated Reporting. *International Journal of Scientific & Technology Research*, *10*(5), 99-111.

Abogazia, A. H., Hashim, H. A., Salleh, Z., & Ettish, A. A. (2022). The moderating effect of external financing on the relationship between integrated reporting and firm value in Egypt. *Journal of Financial Reporting and Accounting*, *ahead-of-print*.

Al-Garhi, F. M. F. I. (2018). The impact of corporate characteristics on the relationship between disclosure levels according to the integrated reports and the company's market value: Applied evidence from the Egyptian stock market. *Accounting Thought*, *22*(1), 605-670. https://doi.org/10.21608/atasu.2018.37867

Al-Ghandour, M. M. (2021). The Impact of Integrated Reports on the Accuracy of Financial

Analysts' Forecasts in Light of the Covid-19 Pandemic: An Empirical Study on Companies Listed in the Egyptian Stock Exchange. *Trade and finance*, *41*(4), 105–164. https://doi.org/10.21608/caf.2021.220995

Barth, M. E., Cahan, S. F., Chen, L., & Venter, E. R. (2017). The economic consequences associated with integrated report quality: Capital market and real effects. *Accounting, Organizations and Society*, *62*, 43–64. https://doi.org/https://doi.org/10.1016/j.aos.2017.08.005

Brown, S., & Hillegeist, S. A. (2003). *Disclosure Quality and Information Asymmetry *. December*.

Camilleri, M. A. (2019). Theoretical insights on integrated reporting: Valuing the financial, social and sustainability disclosures. *Integrated Reporting*, 61–76.

Cooray, T. (2021). *Adoption of integrated reporting in Sri Lanka : coverage and trend*. https://doi.org/10.1108/JFRA-04-2020-0116

Cooray, T., Gunarathne, A. D. N., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? *Sustainability (Switzerland)*, *12*(10). https://doi.org/10.3390/su12104262

Cooray, T., Senaratne, S., Gunarathne, A. D. N., Herath, R., & Samudrage, D. (2020). Does integrated reporting enhance the value relevance of information? Evidence from sri lanka. *Sustainability (Switzerland)*, *12*(19). https://doi.org/10.3390/su12198183

Davide Scaltrito. (2015). Assessing Disclosure Quality: A Methodological Issue. *Journal of Modern Accounting and Auditing*, *11*(9), 466–475. https://doi.org/10.17265/1548-6583/2015.09.004

De Villiers, C., Rinaldi, L., & Unerman, J. (2014). Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*.

El-Deeb, M. S. (2019). The Impact of Integrated Reporting on Firm Value and Performance:Evidence from Egypt. *Alexandria Journal of Accounting Research*, *3*(2), 1–50. https://doi.org/10.21608/aljalexu.2019.56831

El sabagh, A. A. (2022). Impact of the Level of Disclosure in Integrated Business Reports on the Market Value of the Company - an Applied Study on Companies listed on the Egyptian Stock Exchange. *Alexandria Journal of Accounting Research*, *6*(1), 137–170. https://doi.org/10.21608/aljalexu.2022.225020

Farvaque, E., Refait-Alexandre, C., & Saïdane, D. (2011). Corporate disclosure: a review of its (direct and indirect) benefits and costs. *International Economics*, *128*, 5–31.

Fasan, M. (2013). Annual reports, sustainability reports and integrated reports: trends in corporate disclosure. *Integrated Reporting: Concepts and Cases That Redefine Corporate Accountability*, 41–57.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited." *Organization Science*, *15*(3), 364–369.

Frias- Aceituno, J. V, Rodríguez- Ariza, L., & Garcia- Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, *23*(1), 56–72.

Gibbins, M., Richardson, A., & Waterhouse, J. (1990). *and Processes Research Reports The Management of Corporate Financial Disclosure : Opportunism ,*. *28*(1), 121–143.

Gray, S. J., & Skogsvik *, K. (2004). Voluntary disclosures of quoted pharmaceutical companies in Sweden and the UK: the development over the period 1984–98. *European Accounting Review*, *13*(4), 787–805. https://doi.org/10.1080/0963818042000216884

Haji, A. A., & Anifowose, M. (2016). Audit committee and integrated reporting practice: does internal assurance matter? *Managerial Auditing Journal*.

Haji, A. A., & Anifowose, M. (2016). The trend of integrated reporting practice in South Africa: ceremonial or substantive? *Sustainability Accounting, Management and Policy Journal*.

Hassan, M. H. M. (2017). An experimental study of the readiness of the Egyptian capital market to switch to the mandatory application of integrated reporting. *Accounting Thought*, *21*(7), 442–519. https://doi.org/10.21608/atasu.2017.41759

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1–3), 405–440.

Herath, R., & Gunarathne, N. (2016). *Assessing the gap between integrated reporting and current integrated corporate reporting practice: a proposed checklist*.

Hodge, K., Subramaniam, N., & Stewart, J. (2009). Assurance of sustainability reports: Impact on report users' confidence and perceptions of information credibility. *Australian Accounting Review*, *19*(3), 178–194.

Hussein, A. A. A. (2020). The economic consequences of the quality level of disclosure according to the integrated reports: Early empirical evidence from the Egyptian stock market. *Accounting Thought*, *24*(1), 1–67. https://doi.org/10.21608/atasu.2020.78466

IIRC. (2013). *International integrated reporting framework*.

IIRC. (2021). < IR > Framework. *Jo*, *January*, 58. https://integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf

James, M. L. (2015). The benefits of sustainability and integrated reporting: An investigation of accounting majors' perceptions. *J. Legal Ethical & Regul. Isses*, *18*, 1.

Jensen, J. C., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach. *Business Strategy and the Environment*, *21*(5), 299–316.

Khatlisi, M. (2022). *The value relevance of integrated reporting in South Africa and the United Kingdom*.

Kılıç, M., & Kuzey, C. (2018a). Determinants of forward-looking disclosures in integrated reporting. *Managerial Auditing Journal*, *33*(1), 115–144. https://doi.org/10.1108/MAJ-12-2016-1498

Kılıç, M., & Kuzey, C. (2018b). Assessing current company reports according to the IIRC integrated reporting framework. *Meditari Accountancy Research*, *26*(2), 305–333. https://doi.org/10.1108/MEDAR-04-2017-0138

Latif, M., Arshad, S., Fatima, M., & Farooq, S. (2011). Market efficiency, market anomalies, causes, evidences, and some behavioral aspects of market anomalies. *Research Journal of Finance and Accounting*, *2*(9), 1–13.

Lee, K. W., & Yeo, G. H. H. (2016). The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, *47*(4), 1221–1250. https://doi.org/10.1007/s11156-015-0536-y

Lueg, K., Lueg, R., Andersen, K., & Dancianu, V. (2016). Integrated reporting with CSR practices: A pragmatic constructivist case study in a Danish cultural setting. *Corporate Communications: An International Journal*, *21*(1), 20–35.

Massoud, S. M. M. (2020). Determinants of disclosure of integrated business reports and its impact on the cost of capital An applied study on companies listed on the Egyptian Stock Exchange. *Journal of Accounting Research*, *7*(1), 573–624. https://doi.org/10.21608/abj.2020.125739

Melegy, M. A. H., & Alain, A. M. M. (2020). Measuring the effect of disclosure quality of integrated business reporting on the predictive power of accounting information and firm value. *Management Science Letters*, *10*(6), 1377–1388. https://doi.org/10.5267/j.msl.2019.11.019

Mervelskemper, L., & Streit, D. (2017). Enhancing market valuation of ESG performance: is integrated reporting keeping its promise? *Business Strategy and the Environment*, *26*(4), 536–549.

Moroney, R., Windsor, C., & Aw, Y. T. (2012). Evidence of assurance enhancing the quality of voluntary environmental disclosures: an empirical analysis. *Accounting & Finance*, *52*(3), 903–939.

Pushpakumara, W. D. H., Atan, A. P. D. H., Khatibi, P. D. A., Azam, D. S. M. F., &

Tham, D. J. (2018). Contribution of Green Orientation for the Organizational Performance: a Review of Stakeholder Relationships and Ecological Modernization Perspectives on Sustainability. *International Journal of Business and Management Review*, *6*(9), 56–72.

Rivera-Arrubla, Y. A., Zorio-Grima, A., & García-Benau, M. A. (2017). Integrated reports: disclosure level and explanatory factors. *Social Responsibility Journal*.

Schiopoiu Burlea, A., & Popa, I. (2013). Legitimacy Theory. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of Corporate Social Responsibility* (pp. 1579–1584). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_471

Shahin, A. A., Meheey, R. A. Al, & Abdelrahman, M. A. (2019). An analytical study of the extent to which the Egyptian Sustainability Index companies adhere to the framework of the International Council for Integrated Reporting and its role in rationalizing investor decisions. *Scientific Journal of Financial and Administrative Studies and Research*, *3*(1), 173–212. https://doi.org/10.21608/masf.2019.68695

Singhvi, S. S., & Desai, H. B. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review*, *46*(1), 129–138. http://www.jstor.org/stable/243894

Songini, L., Pistoni, A., Bavagnoli, F., & Minutiello, V. (2020). *Integrated Reporting Quality: An Analysis of Key Determinants*. *34*, 175–196. https://doi.org/10.1108/s1479-351220200000034010

Stent, W., & Dowler, T. (2015). Early assessments of the gap between integrated reporting and current corporate reporting. *Meditari Accountancy Research*, *23*(1), 92–117.

Velte, P., & Stawinoga, M. (2017). Integrated reporting: The current state of empirical research, limitations and future research implications. *Journal of Management Control*, *28*(3), 275–320. https://doi.org/10.1007/s00187-016-0235-4

Veltri, S., & Silvestri, A. (2020). The value relevance of corporate financial and nonfinancial information provided by the integrated report: A systematic review. *Business Strategy and the Environment*, *29*(8), 3038–3054. https://doi.org/10.1002/bse.2556

Verrecchia, R. E. (2001). Essays on disclosure. *Journal of Accounting and Economics*, *32*(1–3), 97–180.

Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: an agency theory perspective. *Corporate Social Responsibility and Environmental Management*, *27*(2), 1152–1163. https://doi.org/10.1002/csr.1879

Zhou, S., Simnett, R., & Green, W. (2017). *Does Integrated Reporting Matter to the Capital Market ? 53*(1). https://doi.org/10.1111/abac.12104