The Relationship Between Audit Expectation Gap and Audit Report Readability

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ARTICLE INFO	ABSTRACT
Article type: Research Article **Article History:** Received 31 July 2023 Revised 25 January 2024 Accepted 07 February 2024 Published Online 11 December 2024	The present study assesses the relationship between the audit expectation gap and reports' readability. The study uses information from firms listed on the Tehran Stock Exchange from 2014-2020, using a sample of 128 firms (816 observations). The regression method was employed for testing hypotheses. Based on the text length index, the results indicate a negative and significant association between the audit expectation gap and audit report readability. However, no association was found between the total audit expectation gap and the report readability based on the Fog index. The relationship between the illogical expectations gap and the audit report readability based on the Flesch index was insignificant. The Fog index shows a negative and significant relationship between the illogical expectations gap and audit report readability, and the Flesch index shows a negative and significant relationship between total audit expectations and audit report readability.

1. Introduction

Stakeholders highly rely on the data in the annual reports. Transparency, clarity in annual reports, and comprehensibility, including independent auditor reports and accompanying notes, have increasingly interested auditors, investors, and regulators (Li, 2010). The audit report communicates between users and auditors, showing the auditor's scope (Libby, 1979). From the standpoint of communication theory, the audit report contains messages that the auditor wants to convey to organizations and stakeholders in their capacity as a sender (Suttipun, 2022). According to this theory, an audit report is considered an informational tool for human communication through which the auditor conveys to various stakeholders a neutral opinion on the compatibility of management's statements with the framework under which they were prepared (Suttipun, 2023).

According to the SEC, plain English should be used to guide the compilatio of annual reports, and it issued its first guidelines in 1998 (Loughran & McDonald, 2014b). Simultaneously with this action, disclosure requirements have also increased significantly for reasons such as changes in reporting regulations, new transactions, sophisticated financial instruments, and technological advances, which have reduced the readability of annual reports (Deshmukh & Zhao, 2020). If we define auditing as a monitoring tool, then by improving the timeliness of information and the quality of disclosure, society expects the auditing profession to present reports that raise the reliability and timeliness of reported accounting information. Additionally, the quality of information is also expected to improve (Araj, 2015).

The structure of annual reports is also heavily influenced by managerial incentives or auditing features, such as audit quality, societal expectations of auditors, and competitiveness in the auditing market. These factors, collectively, add another level to the reliability of annual reports (Bloomfield, 2008).

Assessing readability is inherently challenging because of the subject's nature, the target audience, and the producer's objectives. The 1950s saw the start of a multidisciplinary study on the readability of corporate annual reports, and this work continues. In the early studies, criteria such as the flash index (Pashalian & Crissy, 1950; Soper & Dolphin, 1964), Dale Chal Readability Formula (Smith & Smith, 1971), and Fog index (Parker, 1982) were used. In recent auditing studies, the Fog index has been used mainly as a readability metric (Li, 2008; Biddle et al., 2009; Miller, 2010; Lehavy et al., 2011; Lawrence, 2013; Inger et al., 2018).

Bonsall and Miller (2017) used the Fog index to measure readability in disclosing ranking. Loughran and McDonald (2014a) also showed that the Fog index is not a good measure of the readability of financial documents. As an alternative, they argued that the size of the annual reports could be a good measure of the readability of the annual report, as they felt that the file size of the annual reports outperformed the Fog index. Furthermore, compared to the Fog index, the annual report size is easier and easily approved. Readability has a role in the success of the interaction between the auditor and readers of financial statements, as confirmed in earlier research by Still (1972), Razik (1976), and Soper and Dolphin (1964).

By reviewing the research literature, we found out that the following studies have been mainly conducted: examining the relationship between the readability of the annual report and the costs of agency (Luo et al., 2018), readability of annual report, and performance of Indian banks (Jayasree & Shette, 2021), readability of annual reports and financial performance of companies (Eugene Baker & Kare, 1992), the auditor's response to the readability of annual reports (Salehi et al., 2020), and the readability of annual reports and audit fees (Xu et al., 2020). Many other studies also show that the readability of annual reports can affect the quality of the information obtained. For instance, poor readability can result in severe issues with earnings, inadequate revenue, poor analyst prediction quality, a negative reaction from the market to annual reports, and a higher chance of stock price declines (Li, 2008; Lawrence, 2013; Ertugrul et al., 2017; Kim et al., 2017; Kim et al., 2019; Lang & Stice-Lawrence, 2015; Lo et al., 2017; Rennekamp, 2012). Therefore, the link between the readability of the audit report and the discrepancy between audit expectations has not been investigated in prior accounting research on annual report readability. Every civilization in the world has a basic problem with the gap in audit expectations, and the primary cause is the belief held by consumers of financial statements that auditors should be responsible for the audit's goal. The audit's contingent nature, societal ignorance, naivety, irrational expectations, and the evolution of audit responsibilities are the main causes of the expectation gap. These factors also delay the response to shifting expectations, the

company's financial crisis, and accountability requirements (Ebimobowei, 2010). Both defensive and constructive methods can help decrease these causes. Thus, improved interaction between auditors and the general public might aid in reducing the gap. The gap between stakeholders and auditors highlights situations where auditors fail to identify financial statements that do not give an honest and impartial view of the audited company's true financial position (Guiral-Contreras et al., 2007). All these cases lead to mistrust of the auditor's work (Vanstraelen et al., 2012). A gap between auditors and users emerged because the reports were more complex for users to understand and difficult to follow (Porumbacean, 2022).

Deshmukh and Zhao (2020) try to fill the gap by examining the relationship between audit expectations and the readability of the audit report. Another reason for conducting the current research is that the gap between unreasonable audit expectations has been calculated and used for analysis in the forthcoming study, which has not been utilized and tested quantitatively. The audit expectation gap and the unreasonable expectation gap are two distinct concepts. The audit expectation gap is related to the disparity between the varied expectations of individuals and different groups regarding the role and performance of auditors. This gap often stems from a lack of complete understanding of the duties and role of auditors. Various individuals, including investors, managers, and auditors, may have different auditing expectations. On the other hand, the unreasonable expectation gap points to the distance between unrealistic expectations and the actual realities of auditing. This gap arises from unrealistic or illogical expectations of auditing, which may be due to a lack of awareness of the nature of auditing or the actual impact of auditing on financial processes. In summary, the audit expectation gap is associated with differences in the expectations of various stakeholders regarding auditing. In contrast, the unreasonable expectation gap primarily refers to the disparity between unrealistic expectations and the actual realities of auditing.

Specifically, this study aims to examine the impact of the readability of the audit report on the gap between the audit expectations provided by the independent auditor. Assuming that higher audit quality is associated with better readability, we have tried to examine the readability of the audit report if the gap between audit expectations is reduced. The audit expectation gap is one of the relatively long-standing fields in the audit literature.

Examining the relationship between the audit expectation gap and audit reports' readability is particularly important. This investigation allows us to better understand the impacts of stakeholders' expectations and perceptions regarding auditing and audit reports. On the one hand, the audit expectation gap can indicate weaknesses in the financial community's understanding, potentially undermining stakeholders' trust in auditing. On the other hand, the readability of audit reports, as a fundamental factor, can influence stakeholders' ability to comprehend financial information and audit results. Reports with high readability can enhance clarity and transparency for stakeholders regarding various aspects, such as accounting policies, expenses, and risks. Moreover, exploring this relationship contributes to offering solutions for reducing the audit expectation gap and enhancing the readability of audit reports. Understanding the causes of the expectation gap enables auditors to improve their communication and reporting practices. Additionally, improving the readability of audit reports through simple language, comprehensive reporting, and more precise explanations can aid in strengthening stakeholders' understanding of financial information. Consequently, this examination not only assists in improving the audit process, but also builds trust and fosters a broader understanding of financial information. The research then proceeds to articulate theoretical foundations and expound on hypotheses. The research methodology is discussed, detailing the models and definitions of variables. The study's findings are presented, and finally, the discussion, conclusion, and presentation of practical recommendations related to the research results are addressed.

2. Theoretical Foundations and Development Hypotheses

The auditing profession has been plagued by the issue of the gap between the expectations of users of accounting reports, the users of those reports, and questions such as why there is a difference between the expectations of users of accounting information and auditors' understanding of their professional responsibility, or why do users blame auditors as soon as an audit failure occurs? The profession considers this perception of auditors as the distance between audit expectations. The needs of financial statement consumers cannot be satisfied by traditional audit reports because they do not have high

quality and information value (Li, 2008), and these elements led to a discrepancy in audit expectations between the statement's users' expectations and the auditors' understanding of their duties (Bedard et al., 2016). The contrast between the public's and other users' perceptions of auditors' obligations and auditors' own beliefs about such responsibilities is known as the "audit expectations gap (McEnroe et al., 2001).

Given the critical importance of information in guiding financial decision-making, users of financial statements must have access to transparent, comprehensive, and reliable information to inform their decision-making processes (Deshmukh & Zhao, 2020). Various studies have shown an expectation gap between auditors and financial statement users. The audit expectations gap is the difference between the auditors' perception of their professional responsibilities and the expectations of financial statement users from the auditing profession (Salehi et al., 2020). Among the possible causes of the expectation gap, reference can be made to the role of independence, unreasonable expectations, the nature of the audit process, the detection of fraud, and the presumption of continuity. Coram and Wang (2021) found that the major audit matters disclosed in the audit report, by themselves, do not affect the audit expectation gap, and that when the audit report includes a key matter, a strict audit standard is followed. As a result, the expectation gap increases. Saladrigues and Grañó (2014) found that the gap in audit expectations is due to users' irrational expectations of audit, and it should be said that users are confused about auditors' and managers' responsibilities. The study conducted by Xu and Akhter (2019) revealed a negative relationship between the expectation gap in auditing and investor confidence. As the expectation gap in auditing widens, investor trust in auditing decreases. Olojede et al. (2020) indicate the presence of an expectation gap in auditing in Nigeria. This gap is primarily attributed to users' unreasonable expectations, as they lack knowledge of auditors' roles. The study demonstrated that introducing new audit reports had not significantly reduced this gap. Akther and Xu (2020) found that the expectation gap in auditing is negatively associated with stakeholders' trust. The greater the expectation gap in auditing, the lower the stakeholders' trust in it. By improving their communication with users, the auditors reduce the expectation gap in auditing and simultaneously increase stakeholders' trust. Since the most crucial source for users' financial decisions is the independent auditor's financial statements, the users are looking for a report that, in addition to being reliable, is also presented understandably, meaning that it is highly legible (Salehi et al., 2020).

Readability is a crucial component of textual data and has been thoroughly investigated in many academic domains. The value of readability has been studied in various sectors, such as medicine, law, and accounting (Bonsall & Miller, 2017). The text's content can be properly understood only with a high level of readability. Over the past few years, capital markets have increasingly considered the readability issue. The amount of company information published has significantly increased due to changes to the standards for disclosure, drawing the attention of regulators and investors (Luo et al., 2018). Annual reports are, in theory, a vital conduit between the company's outside shareholders and management. Through annual reports, foreign investors and shareholders may evaluate the firm's growth prospects and competencies and learn about the organization's financial situation, financial performance, and cash flow (Luo et al., 2018). In the meantime, users of financial statements expect independent auditors, who are responsible for accrediting financial statements, to submit their audit reports and assess the statements' reliability to be easily understood by them (Luo et al., 2018). The production and dissemination of financial information is accounting's main goal; hence, annual report readability has always been important. Therefore, following Deshmukh and Zhao (2020), we expect that reducing the gap between audit expectations, which can lead to increased audit quality, will improve the readability of the audit report. Previous studies such as Velte (2020), have found that the readability of audit reports varies between audit institutions. Chen and Rainsbury (2022) found that both financial experts and industry specialists on the audit committee have a positive perception of the clarity of critical issues, although the overall clarity of key audit matters is very low.

According to Salehi et al. (2020), there is no connection between audit fees and the gap between audit expectations. Olojede et al. (2020) also studied the gap between audit expectations in Nigeria. It was discovered that the audit report did not close the audit expectations gap. Salehi et al. (2022) discovered that the readability of the audit report is negatively and significantly correlated with the attributes of the auditor, such as tenure, compensation, and expertise. Additionally, they discovered that the readability of the audit report is positively and significantly correlated with the variables of

narcissism, self-confidence, and the auditor's forced change. Xu et al. (2022) found that in areas where financial corruption is more common, firms disclose less readable reports, and uncertainty in annual reports is more common among firms with stronger management.

Langella et al. (2023) found that most users cannot comprehend accounting information and audit reports due to the complexity of the terminology used in the reports. Some studies, such as Gambetta et al. (2023), found that auditors' use of difficult and complex sentences and phrases can hinder stakeholders' understanding and increase the expectation gap. This, in turn, poses the risk of misinterpretation and threatens the achievement of auditing profession objectives, reflecting on stakeholders' decisions. Luo et al. (2018) also discovered a negative correlation between readability and agency costs in companies with high-quality audits, and they saw reduced agency expenses in firms with more readable annual reports. Cho et al. (2022) discovered that annual reports that are challenging to read are positively related to audit costs and hours, but they found no relationship between the readability of annual reports and hourly fee rates. It seems that the larger the audit expectation gap becomes, the more it may reduce auditors' credibility and cause financial loss for institutions (Budiarto, 2022). The audit expectation gap represents the variance in expectations among diverse stakeholders concerning the role and performance of auditors. This gap frequently results from a lack of thorough knowledge of the roles and duties of auditors, leading to various expectations from individuals, such as investors, managers, and auditors themselves. On the other hand, the readability of audit reports is a critical factor that influences stakeholders' ability to comprehend financial information and audit outcomes. A clear and transparent audit report, characterized by high readability, can potentially reduce the audit expectation gap by providing stakeholders with a more explicit understanding of auditing processes and outcomes. The gap may result from expectations created due to a lack of awareness of the nature of auditing or an ineffective understanding of the impact of auditing on financial processes. In this scenario, a discernible positive or negative relationship between the unreasonable expectation gap and the readability of audit reports is likely to exist. Exploring this relationship can improve stakeholders' understanding of audit reports. If the readability of audit reports increases, this enhancement may be reflected in stakeholders' understanding of the auditing process and financial information. This correlation can enhance trust and understanding of financial information and audit reports. Hence, considering the theoretical foundations and background provided, the research hypotheses are formulated as follows:

H1: There is a significant relationship between the audit expectation gap and report readability.
H2: There is a significant relationship between the illogical expectation gap and audit report readability.

3. Research Methodology
All listed companies from 2014-2020 comprise the statistical population of this study. The systematic elimination approach is used for sampling; the research sample was chosen in accordance with Table 1 once the following requirements were satisfied.

Table 1. Number of Companies in the Statistical Population by Enforcing the Criteria for Sample Selection

Description	Eliminated firms in total periods	Total number of firms
Total listed firms on the Tehran Stock Exchange		445
Eliminating financial intermediaries, financial supply, insurance, and investment firms	88	
Firms with more than six months of transaction halt	112	
Eliminating firms that entered the Stock Exchange during the study period	4	
Eliminating lack of access to information	113	
Statistical population		128

3.1. Data Analysis

A panel data analysis approach is used. Statistical techniques such as descriptive and inferential analysis are utilized to analyze the collected data. Data are presented using the frequency distribution tables. The F-Limer Test, Hausman Test, Test of Normality, and Multivariable Linear Regression Test are employed for inferential hypothesis testing.

3.2. Research Model

The model that follows is employed for testing hypotheses. The study's dependent variable, audit report readability, is measured using three FOG, INDEXT, and FLESCH indicators. Consequently, the following model is tested three times using Fog Indext variables Flesch.

Model (1)

$$readability_{i,t} = a_0 + a_1 AEG_{i,t} + a_2 AEG1_{i,t} + a_3 Age_{i,t} + a_4 loss_{i,t} + a_5 size_{i,t} + a_6 busy_{i,t} + a_7 hhi_{i,t} +$$

$$a_8 bind_{i,t} + a_9 REAM_{i,t} + a_{10} ABDA_{i,t} + a_{11} sgm_{i,t} + a_{12} big1_{i,t} + a_{19} year_{i,t} + a_{20} industry_{i,t} + \varepsilon_{i,t}$$

where

3.2.1. Dependent Variables

Audit report readability (readability) is computed using the following three indices:

FOG Index:

According to the study conducted by Lawrence (2013) and Ajina et al. (2016), the following index is used to determine the readability of financial statement notes; various local academics, including Diani (1990), have validated the validity and reliability of this index for analyzing Persian text readability. The complex words (defined as the number of three or multi-syllabus words) and sentence length (based on words) are the two factors that determine the financial reporting readability index.

Text length index (INDEXT):

The second index for financial reporting readability is text length (indext), which is calculated as follows:

    Text length index = Ln number of text words

    Each generated index was multiplied by -1 to produce direct criteria from the financial reporting readability index, as higher values of the indices indicate lower readability of financial reporting.

Flesch Index:

The Flesch index uses the average sentence length and the total number of syllables in each sample as the two linguistic parameters to measure the text's degree of difficulty or simplicity.

Flesch readability index = average number of words * -1.015 (average words length* 262.835 – 84.6)

3.2.2. Independent Variables

AEG: According to Salehi et al. (2020), the AEG is calculated in Model (2).

    Model (2).

$$\left| ASP \right|_{it} = \beta_0 + \beta_1 profit\ and\ loss_{it} + \beta_2 industry_{it} + \beta_3 change\ board_{it} + \beta_4 inflation_{it} + \beta_5 earning\ persistence_{it}$$

$$+ \beta_6 price\ earnings\ ratio_{it} + \beta_7 the\ liquidity_{it} + \beta_8 debt\ ratio_{it} + \beta_9 dividends\ per\ share_{it} + \beta_{10} capital\ structure_{it}$$

$$+ \beta_{11} capital\ increase_{it} + \beta_{12} forecast\ earnings\ per\ share_{it} + \beta_{13} turnover_{it} + \beta_{14} return\ on\ assets_{it} + \beta_{15} stock\ returns_{it}$$

$$+ \beta_{16} exchange\ rate_{it} + \beta_{17} oil\ price_{it} + \beta_{18} election_{it} + \beta_{19} current\ ratio_{it} + \beta_{21} quick\ ratio_{it} + \varepsilon_{it}$$

AEG2: model (5) is the adjusted form of model (2), which is utilized in the study of Salehi et al. (2020) and is also used to calculate the illogical expectation gap:

    Model (5)

$|ASP|_{it} = \beta_0 + \beta_1 profit\ and\ loss_{it} + \beta_2 industry_{it} + \beta_3 change\ board_{it} + \beta_4 inflation_{it} + \beta_5 earning\ persistence_{it}$

$+\beta_6 price\ earnings\ ratio_{it} + \beta_7 the\ liquidity_{it} + \beta_8 debt\ ratio_{it} + \beta_9 dividends\ per\ share_{it} + \beta_{10} capital\ structure_{it}$

$+\beta_{11} capital\ increase_{it} + \beta_{12} forecast\ earnings\ per\ share_{it} + \beta_{13} turnover_{it} + \beta_{14} return\ on\ assets_{it} + \beta_{15} stock\ returns_{it}$

$+\beta_{16} exchange\ rate_{it} + \beta_{17} oil\ price_{it} + \beta_{18} election_{it} + \beta_{19} current\ ratio_{it} + \beta_{21} quick\ ratio_{it} + \beta_{22} AIS_{it} + \beta_{23} Audit\ indp_{it}$

$+\beta_{24} Audit - HHI_{it} + \beta_{25} big1_{it} + \beta_{26} AQ_{it} + \beta_{27} Atenure_{it} + \beta_{28} achange_{it} + \beta_{29} newst_{it} + \beta_{30} stchange_{it} + \beta_{31} busy_{it} + +\varepsilon_{it}$

where

AIS: Market share is utilized to indicate auditor expertise in the industry during the year this study was published. It displays the importance of the industry to other auditors.

Audit-HHI: Auditor's Concentration: Similar to the previous studies (Eshleman & Lawson, 2017; Huang et al., 2016; Newton et al., 2016; Newtone et al., 2013; Kallapur et al., 2010), this paper has used the index of auditor concentration. Boone et al. (2012) and Kallapur et al. (2010) state that the results of this index can be considered for audit market competition. Choi and Zéghal (1999) conclude that there is a significant negative relationship between concentration and competition in the audit market. This index is used in the industry section of this paper, in accordance with the approach of Schaen and Maijoor (1997).

AQ: Audit quality is defined as discretionary accruals that are computed as follows:

The adjusted Jones's model is used for calculating discretionary accruals. The coefficients are estimated through equation (2):

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_1\left(\frac{1}{Assets_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta Sales_{i,t}}{Assets_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{Assets_{i,t-1}}\right) + \varepsilon_{i,t} \tag{1}$$

Non-discretionary accruals will be computed after the estimate of the coefficients:

$$\frac{NDA_{i,t}}{Assets_{i,t-1}} = \alpha_1\left(\frac{1}{Assets_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{Assets_{i,t-1}}\right) \tag{2}$$

Lastly, the following is the computation of the discretionary accruals:

$$\frac{DA_{i,t}}{Assets_{i,t-1}} = \frac{TA_{i,t}}{Assets_{i,t-1}} - \frac{NDA_{i,t}}{Assets_{i,t-1}} \tag{3}$$

In the above equation, TA represents accruals, Assets denote total assets, Sales refers to income, AR signifies accounts receivable, PPE indicates gross properties, machinery, and instrument, NDA stands for non-discretionary accruals, and DA represents discretionary. In this paper, the following formula is used for calculating accruals, which are referred to as profit and loss:

Accruals = operational cash flow – profit before unpredicted items

Previous studies have used discretionary accruals (DA) to measure earnings and audit quality (Kao et al., 2021). In this paper, DA is used as a proxy for audit quality because it presents a degree of negotiations related to the decisions of the audit setting. Abnormal accruals of performance setting estimate the size of DA.

3.2.3. Control Variables
Clients' concentration (HHI): Caves and Porter (1978) state that employers can utilize their abilities to enhance competition, thereby altering auditors' market share. In other words, Motta (2004) creates competition in the market by threatening auditors to replace them with their peers. Dekeyser et al. (2015) indicate that employer concentration leads to instability and increases competition in the audit market.

The adjusted Jones model is used to calculate discretionary accruals. The coefficients are estimated through equation (2):

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \alpha_1\left(\frac{1}{Assets_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta Sales_{i,t}}{Assets_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{Assets_{i,t-1}}\right) + \varepsilon_{i,t} \tag{1}$$

Non-discretionary accruals will be computed after the estimate of the coefficients:

$$\frac{NDA_{i,t}}{Assets_{i,t-1}} = \alpha_1\left(\frac{1}{Assets_{i,t-1}}\right) + \alpha_2\left(\frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{Assets_{i,t-1}}\right) + \alpha_3\left(\frac{PPE_{i,t}}{Assets_{i,t-1}}\right) \tag{2}$$

Finally, for the calculation of the discretionary accruals, we have:

$$\frac{DA_{i,t}}{Assets_{i,t-1}} = \frac{TA_{i,t}}{Assets_{i,t-1}} - \frac{NDA_{i,t}}{Assets_{i,t-1}} \tag{3}$$

REAM: real earnings management. Abnormal cash flow (EM_CFO), abnormal cost (EM_PROD), and abnormal discretionary costs (EM_DISX) are used for measuring firm sales control, production control, and discretionary cost control. Formula (2) is used for estimating the abnormal cash flow of the firm (EM_CFO), formula (3) is employed for estimating the abnormal production cost of the firm (EM_PROD), and formula (4) is utilized to estimate the abnormal discretionary cost of the firm (EM_DISX) (Cohen, 2010). This paper uses Formula (4) to estimate real earnings management.

$$\frac{CFO_{i,t}}{A_{i,t-1}} = \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{s_{i,t}}{A_{i,t-1}} + \beta_3 \frac{\Delta s_{i,t}}{A_{i,t-1}} + \delta_{i,t} \tag{2}$$

$$\frac{PROD_{i,t}}{A_{i,t-1}} = \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{s_{i,t}}{A_{i,t-1}} + \beta_3 \frac{\Delta s_{i,t}}{A_{i,t-1}} + \beta_4 \frac{\Delta s_{i,t-1}}{A_{i,t-1}} + \delta_{i,t} \tag{3}$$

$$\frac{DISX_{i,t}}{A_{i,t-1}} = \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{s_{i,t-1}}{A_{i,t-1}} + \delta_{i,t} \tag{4}$$

4. Data analysis
4.1. The Results of the F-Limer, Breusch-Pagan, and Hausman Tests

Table 2. The Results of the F-Limer, Breusch-Pagan, and Hausman Tests

Description	F-Limer (time and cross-section)		F-Limer (time)		F-Limer (cross-section)		Breusch-Pagan (time and cross-section)		Breusch-Pagan (time)		Breusch-Pagan (cross-section)		Hausman	
	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.	Statistic	Sig.
Flesh	22.27	0.00	2.2	0.05	52.95	0.00	968	0.00	2.39	0.12	910	0.00	2.77	0.09
FOG	2.67	0.00	0.95	0.44	2.61	0.00	53.19	0.00	0.57	0.44	53.76	0.00	11.19	0.00
indext	4.80	0.00	1.39	0.12	4.80	0.00	176.88	0.00	3.70	0.05	180.59	0.00	20.63	0.03

The F cross-sectional test is supposed to investigate the null hypothesis of pooled cross-sectional effects compared to the alternative hypothesis of fixed cross-sectional effects, as indicated in Table II. The null hypothesis is rejected based on the statistic and associated probability level for the three models (0.00 less than 0.1). The panel model with fixed cross-sectional and time effects is the alternative hypothesis, and the F cross-sectional and time test compares it to the null hypothesis of pooled cross-section and time. The null hypothesis (0.00 smaller than 0.1), regarding the associated statistic and probability level, is rejected for all three models.

Furthermore, as represented in Table II, the panel with random effects serves as the alternative hypothesis against which the null hypothesis of the pooled cross-section is compared in the Breusch-Pagan cross-section test. The model exhibits random effects in cross-section to the derived statistic and probability level for each of the three models (0.00 less than 0.1), and the null hypothesis is rejected. The Breusch-Pagan cross-section and time test compare the alternative hypothesis—a panel with random effects in cross-section and time—with the null hypothesis of pooled cross-section and time. A panel with a random cross-section and time effect is verified, and the derived statistic and probability level for each of the three models support the rejection of the null hypothesis (0.00 less than 0.1). The pooled effects hypothesis is rejected in both tests presented in Table II. The Hausman test will establish the final model since the alternative F-Limer test reveals fixed effects, while the Breusch-Pagan test supportsthe alternative hypothesis of random effects.

4.2. Descriptive Statistics of the Model
The association between the total and illogical audit expectation gap and the readability of the auditor's report is evaluated in this study using the multivariate regression model. The models are evaluated using the audit expectation gap, readability of the auditor's report, and control variables.

Table 3. The Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
FELESH	99.937	89.930	169.530	54.921	18.664	0.867	2.732
FOG	21.740	21.687	23.417	21.317	0.2199	2.392	13.444
INDEXT	7.139	7.122	8.268	6.421	0.303	0.312	3.134
ABDA	0.069	0.060	0.378	5.62E-05	0.057	1.657	7.649
AEG2	-0.028	0.386	10.627	-35.255	3.041	-3.833	37.408
AEG	0.190	0.120	1.936	5.80E-05	0.219	3.196	17.698
AGE	39.357	41.000	67.000	11.000	13.397	-0.119	1.800
BIG1	0.282	0.000	1.000	0.000	0.450	0.966	1.934
BLND	0.702	0.800	1.000	0.166	0.176	-0.699	3.555
BUSY	0.795	1.000	1.000	0.000	0.403	-1.466	3.151
HHI	0.228	0.154	1.000	0.019	0.218	2.071	7.531
LOSS	0.079	0.000	1.000	0.000	0.271	3.102	10.628
REAM	-0.009	-0.013	0.585	-0.837	0.174	-0.160	4.631
SGM	1.416	0.000	33.000	0.000	3.391	4.984	35.428
SIZE	14.214	14.102	19.374	10.532	1.3197	0.917	5.352

4.3. Model Estimation Based on FOG Index

As represented in Table IV, no relationship exists between the total audit expectation gap and the audit report readability (FOG Index). Its p-value is 0.981, higher than the 5% significance level. However, a negative and significant relationship exists between the illogical audit expectation gap and audit report readability (FOG Index). Its p-value is 0.000, lower than 5%, and has a negative coefficient of 0.005. That indicated a negative relationship between the illogical audit expectation gap and audit report readability, implying that audit report readability increases along with the decline in the illogical audit expectation gap.

Table 4. Model Results for the Dependent Variable of FOG

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ABDA	0.292	0.091	3.224	0.001
AEG	0.000	0.003	0.102	0.919
AEG2	0.005	0.001	4.518	0.000
AGE	-0.001	0.000	-5.001	0.000
BIG1	0.003	0.009	0.346	0.729
BLND	-0.077	0.009	-8.717	0.000
BUSY	-0.021	0.005	-4.016	0.000
HHI	0.028	0.012	2.421	0.016
LOSS	0.001	0.019	0.023	0.981
REAM	-0.014	0.020	-0.677	0.499
SGM	0.002	0.001	1.256	0.209
SIZE	0.005	0.004	1.234	0.218
C	21.716	0.061	358.109	0.000
R-squared	0.870	Mean dependent var		39.219
Adjusted R-squared	0.851	S.D. dependent var		30.541
S.E. of regression	0.204	Sum squared resid		24.176
F-statistic	3.654	Durbin-Watson stat		1.827
Prob(F-statistic)	0.000			

4.4. Model Estimation Based on the INDEXT Index

Table V shows a significant negative relationship between the total and illogical audit expectation gap and audit report readability (text length index), as indicated by their p-values of 0.000 and 0.002, respectively, which are both below the 5% significance level, with negative coefficients of 0.092 and 0.005. That indicates a negative association between total and illogical audit expectation gap, and audit report readability (text length index), meaning that audit report readability (FOG Index) goes up by declining total and illogical expectation gaps.

Table 5. Model Results of the Dependent Variable of Indext

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ABDA	0.537	0.098	5.465	0.000
AEG	-0.091	0.023	-3.976	0.000
AEG2	0.005	0.002	3.086	0.002
AGE	-0.001	0.000	-1.682	0.093
BIG1	-0.069	0.009	-7.688	0.000
BLND	-0.046	0.030	-1.539	0.124
BUSY	0.004	0.0101	0.389	0.697
HHI	0.050	0.019	2.637	0.008
LOSS	-0.041	0.013	-3.115	0.002
REAM	-0.025	0.023	-1.062	0.288
SGM	0.019	0.002	7.812	0.000
SIZE	0.032	0.008	4.103	0.000
C	6.710	0.112	60.035	0.000
R-squared	0.787	Mean dependent var		10.237
Adjusted R-squared	0.773	S.D. dependent var		11.011
S.E. of regression	0.288	Sum squared resid		48.305
F-statistic	19.527	Durbin-Watson stat		1.914
Prob(F-statistic)	0.000			

4.5. Model Estimation Based on the Flesch Index

As represented in Table VI, there is no relationship between the illogical audit expectation gap and audit report readability (Flesch Index), as indicted by its p-value of 0.393, which is higher than the 5% significance level. However, a significant negative relationship exists between the total audit expectation gap and the audit report readability (Flesch Index). Its p-value is 0.000, lower than 5%, with a negative coefficient of 3.989. That means the audit report readability (Flesch Index) increases along with the decline of the total audit expectation gap. Moreover, since the significance of all three models is 0.000, all models enjoy sufficient relevance based on the above tables.

Table 6. Model Results of the Dependent Variable of Flesch

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ABDA	16.784	6.816	2.462	0.014
AEG2	0.051	0.059	0.855	0.392
AEG	-3.989	0.914	-4.363	0.000
AGE	-0.055	0.014	-3.807	0.000
BIG1	-4.956	0.704	-7.034	0.000
BLND	-4.304	1.472	-2.923	0.003
BUSY	2.599	0.822	3.161	0.001
HHI	-4.593	1.229	-3.736	0.000
LOSS	-2.291	1.289	-1.777	0.076
REAM	-1.683	0.605	-2.780	0.005
SGM	-0.273	0.103	-2.645	0.008
SIZE	0.818	0.393	2.083	0.037
C	88.140	5.917	14.894	0.000
R-squared	0.856	Mean dependent var		134.736
Adjusted R-squared	0.838	S.D. dependent var		144.527
S.E. of regression	16.390	Sum squared resid		156092.1
F-statistic	8.974	Durbin-Watson stat		1.871
Prob (F-statistic)	0.000			

Hausman test was used to check the endogeneity test; the results are presented in Table VII:

Table 7. Test of Endogeneity Based on the Hausman Test

Statistics	Prob
11.51	0.48

Based on the statistics and the corresponding probability level, the null hypothesis of the test that the model is exogenous is not rejected, so there is no need to define an instrumental variable in the model.

5. Conclusion and Discussion

Public trust keeps the auditing profession alive, and uncertainty caused by misunderstandings of auditors' work may diminish the value of the auditing profession (Limperg, 1985). By examining the history of accounting scandals, we find out that the expectation gap has been a persistant long-established issue, raising questions about the existence of auditors, as they have not been able to act independently and meet society's expectations (Budiarto, 2022). Auditors' role is shifting to address the audit expectation gap. This study evaluates the connection between the audit expectation gap and the report readability. In other words, the present study indicates whether the decline of the audit expectation gap can improve audit report readability. Readability determines the amount of ease of reading and text comprehension. We call a text readable when the reader can easily read and understand it. Emphasizing readability means estimating the possibility of a reader's success in reading or comprehending a text. The readability of audit reports can aid users in comprehending financial statements and assist investors and users in making more informed judgments. Audit report readability increases the transaction volume. Moreover, it affects investors' decisions, as an independent audit report enhances the credibility ofthe presented financial statements and determines its reliability. Hence, the low readability of audit reports hinders the investor's understanding of financial reports.

Generally, addressing their readability is essential, given the reforms implemented in audit reports. By improving the readability of audit reports, stakeholders can better comprehend the audit findings, enhancing the report's utility. In general, enhancing the readability of audit reports can contribute to better decision-making by stakeholders and, ultimately, benefit both the auditing profession and its stakeholders (Saleh & Abou Elela, 2023). Therefore, the present study evaluates the relationship between the audit expectation gap and audit report readability. Financial statement users expect independent auditors to give credit to financial statements and deliver their reports understandably. The results of hypothesis testing show a significant negative relationship between the audit expectation gap and audit report readability, which means the less the audit expectation gap, the more the readability of the audit report. The present study results align with the study conducted by Deshmukh and Zhao (2020). They claimed a significant positive relationship between annual report readability and auditors' expertise since auditors' industry expertise is among sensible expectations from an auditor. Auditors' industry expertise would lead to a decline in the audit expectation gap. The results of the present study are in accordance with Deshmukh and Zhao's (2020) study. The research results are also consistent with the study by Gambetta et al. (2023), which concluded that auditors' using difficult and complex sentences and phrases can hinder stakeholders' understanding and increase the expectation gap. In light of the research findings, the following practical recommendations are proposed:

Given the research findings, to reduce the audit expectation gap and enhance the readability of audit reports, it is recommended that auditors use simple and comprehensible language in their reports. Presenting information in a way that is understandable for stakeholders and emphasizing key points and the impacts of the audit can improve the readability of audit reports and, consequently, help narrow the audit expectation gap.

Increasing stakeholders' awareness of the roles and responsibilities of auditors can lead to a reduction in the audit expectation gap and a better understanding of audit reports. Therefore, it is suggested that auditors organize workshops and training courses to enhance public awareness. Accordingly, stakeholders can become more familiar with the nature and results of audits, fostering more realistic expectations from audit reports.

Future research can delve into a more detailed examination of the factors influencing the non-rational expectation gap and identify the role of each factor in either increasing or decreasing this gap. These factors may encompass audit information, reporting processes, and how auditors engage with stakeholders.

References

Ajina, A., Laouiti, M., & Msolli, B. (2016). Guiding through the fog: Does annual report readability reveal earnings management? *Research in International Business and Finance*, *38*, 509-516. https://doi.org/10.1016/j.ribaf.2016.07.021

Akther, T., & Xu, F. (2020). Existence of the audit expectation gap and its impact on stakeholders' confidence: The moderating role of the financial reporting council. *International Journal of Financial Studies*, *8*(1), 4. https://doi.org/10.3390/ijfs8010004

Araj, F. G. (2015). Responding to fraud risk. *The Institute of Internal Auditors Research Foundation (IIARF)*.

Bedard, J., Coram, P., Espahbodi, R., & Mock, T. J. (2016). Does recent academic research support changes to audit reporting standards? *Accounting Horizons*, *30*(2), 255–275

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of accounting and economics*, *48*(2-3), 112-131. https://doi.org/10.1016/j.jacceco.2009.09.00

Bloomfield, R. (2008). Discussion of annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics*, *45*(2-3), 248-252. https://doi.org/10.1016/j.jacceco.2008.04.002

Bonsall, S. B., & Miller, B. P. (2017). The impact of narrative disclosure readability on bond ratings and the cost of debt. *Review of Accounting Studies*, 22, 608-643. https://doi.org/10.1007/s11142-017-9388-0

Boone, J. P. I., Khurana, K.,& Raman, K. K. (2012). Audit market concentration and auditor tolerance for earnings management. *Contemporary Accounting Research*, *29*(4), 1171-1203. https://doi.org/10.1111/j.1911-3846.2011.01144.x

Budiarto, A. Y. (2022). Audit expectation gap debates: To what extent audit expectation gap defence auditors?. *Business Economic, Communication, and Social Sciences Journal (BECOSS)*, *4*(1), 47-57. https://doi.org/10.21512/becossjournal.v4i1.7790

Caves, R. E., & Porter, M. E. (1978). Market structure, oligopoly, and stability of market shares. *The Journal of Industrial Economics*, 26, 289-313. https://doi.org/10.2307/2098076

Chen, F., & Rainsbury, L. (2022). Impacts of financial and industry expertise of the audit committee on the readability of key audit matters: New Zealand evidence. https://dx.doi.org/10.2139/ssrn.4730420

Cho, M., Kwon, S. Y., & Krishnan, G. V. (2021). Audit fee lowballing: Determinants, recovery, and future audit quality. *Journal of Accounting and Public Policy.* https://doi.org/10.1016/j.jaccpubpol. 2020.106787.

Choi, M. S., & Zéghal, D. (1999). The effect of accounting firm mergers on international markets for accounting services. *Journal of International Accounting, Auditing and Taxation*, *8*(1), 1-22. https://doi.org/10.1016/S1061-9518(99)00002-6

Cohen, W. M. (2010). Fifty years of empirical studies of innovative activity and performance. *Handbook of the Economics of Innovation*, *1*, 129-213. https://doi.org/10.1016/S0169-7218(10)01004-X

Coram, P. J., & Wang, L. (2021). The effect of disclosing key audit matters and accounting standard precision on the audit expectation gap. *International Journal of Auditing*, *25*(2), 270-282. https://doi.org/10.1111/ijau.12203

Dekeyser, S., Gaeremynck, A., & Willekens, M. (2015). Determinants of audit market instability: Supplier collusion and audit leader's reputation damage. In *Mid-Year Auditing conference* Miami, USA. 52-64.

Deshmukh, A., & Zhao, X. (2020). Audit quality and readability of the annual reports. *International Journal of Strategic Decision Sciences (IJSDS)*, *11*(1), 76-90. https://doi.org/10.4018/ijsds.2020010105

Diani, M. (1990). The network structure of the Italian ecology movement. *Social Science Information, 29*(1), 5-31. https://doi.org/10.1177/053901890029001001

Ebimobowei, A. (2010). An evaluation of audit expectation gap: Issues and challenges. *International Journal of Economic development research and investment*, *1*(2), 129-141. http://icidr.org.ng/index.php/Ijedri/article/view/729

Ertugrul, M., Lei, J., Qiu, J., & Wan, C. (2017). Annual report readability, tone ambiguity, and the cost of borrowing. *Journal of Financial and Quantitative Analysis*, *52*(2), 811-836. https://doi.org/10.1017/S0022109017000187

Eshleman, J. D., & Lawson, B. P. (2017). Audit market structure and audit pricing. *Accounting Horizons*, *31*(1), 57-81. https://doi.org/10.2308/acch-51603

Eugene Baker III, H., & Kare, D. D. (1992). Relationship between annual report readability and corporate financial performance. *Management Research News*, *15*(1), 1-4. https://doi.org/10.1108/eb028188

Gambetta, N., Sierra- García, L., García- Benau, M. A., & Novejarque- Civera, J. (2023). The informative value of key audit matters in the audit report: Understanding the impact of the audit firm and KAM type. *Australian Accounting Review*, *33*(2), 114-134. https://doi.org/10.1111/auar.12396

Guiral-Contreras, A., Gonzalo-Angulo, J. A., & Rodgers, W. (2007). Information content and recency effect of the audit report in loan rating decisions. *Accounting and Finance*, *47*(2), 285–304. https://doi.org/10.1111/j.1467-629X.2006.00208.x

Habib, A., & Bhuiyan, M. B. U. (2011). Audit firm industry specialization and the audit report lag. *Journal of International Accounting, Auditing and Taxation*, *20*(1), 32-44. https://doi.org/10.1016/j.intaccaudtax.2010.12.004

Huang, T. C., Chang, H., & Chiou, J. R. (2016). Audit market concentration, audit fees, and audit quality: Evidence from China. *Auditing: A Journal of Practice & Theory*, *35*(2), 121-145. https://doi.org/10.2308/ajpt-51299

Inger, K. K., Meckfessel, M. D., Zhou, M., & Fan, W. (2018). An examination of the impact of tax avoidance on the readability of tax footnotes. *The Journal of the American Taxation Association, 40*(1), 1-29. https://doi.org/10.2308/atax-51812

Jayasree, M., & Shette, R. (2021). Readability of annual reports and operating performance of Indian banking companies. *IIM Kozhikode Society & Management Review*, *10*(1), 20-30. https://doi.org/10.1177/2277975220941946

Kallapur, S., Sankaraguruswamy, S., & Zang, Y. (2010). Audit market competition and audit quality. *Indian School of Business Gachibowli, Hyderabad*, 500032, 1-55. https://www.independentdirectorsdatabank.in/pdf/partners/isb/Audit_Market_Concentration_and_Audit_Quality.pdf

Kao, M., Shiue, F. M., & Tseng, J. C. H. (2021). Voluntary audit committees, auditor selection and audit quality: Evidence from Taiwan. *Managerial Auditing Journal*, *36*(4), 616-642. https://doi.org/10.1108/MAJ-04-2020-2632

Kim, C., Wang, K., & Zhang, L. (2019). Readability of 10- K reports and stock price crash risk. *Contemporary Accounting Research*, *36*(2), 1184-1216. https://doi.org/10.1111/1911-3846.12452

Kim, J., Kim, Y., & Zhou, J. (2017). 'Languages and earnings management'. *Journal of Accounting and Economics*, *63*(2-3), 288-306. https://doi.org/10.1016/j.jacceco.2017.04.001

Lang, M., & Stice-Lawrence, L. (2015). Textual analysis and international financial reporting: Large sample evidence. *Journal of Accounting and Economics*, *60*(2-3), 110-135. https://doi.org/10.1016/j.jacceco.2015.09.002

Langella, C., Anessi- Pessina, E., Botica Redmayne, N., & Sicilia, M. (2023). Financial reporting transparency, citizens' understanding, and public participation: A survey experiment study. *Public Administration*, *101*(2), 584-603. https://doi.org/10.1111/padm.12804

Lawrence, A. (2013). Individual investors and financial disclosure. *Journal of Accounting and Economics*, *56*(1), 130-147. https://doi.org/10.1016/j.jacceco.2013.05.001

Lehavy, R., Li, F., & Merkley, K. (2011). The effect of annual report readability on analyst following and the properties of their earnings forecasts. *The Accounting Review*, *86*(3), 1087-1115. https://doi.org/10.2308/accr.00000043

Libby, R. (1979). Bankers' and auditors' perceptions of the message communicated by the audit report. *Journal of Accounting Research*, *17*(1), 99–122. http://dx.doi.org/10.2308/acch-50138

Li, F. (2008). Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics, 45*(2-3), 221-247. https://doi.org/10.1016/j.jacceco.2008.02.003

Li, F. (2010). Textual analysis of corporate disclosures: A survey of the literature. *Journal of Accounting Literature*, *29*(1), 143-143. https://ssrn.com/abstract=1756926

Limperg, T. (1985). *The social responsibility of the auditor*. Amsterdam.

Lo, K., Ramos, F., & Rogo, R. (2017). Earnings management and annual report readability. *Journal of Accounting and Economics*, *63*(1), 1-25. https://doi.org/10.1016/j.jacceco.2016.09.002

Loughran,T., & McDonald, B. (2014a). Measuring readability in financial disclosures. *The Journal of Finance, 69*(4), 1643-1671. https://doi.org/10.1111/jofi.12162

Loughran, T., & McDonald, B. (2014b). Regulation and financial disclosure: The impact of plain English. *Journal of Regulatory Economics*, *45*, 94-113. https://doi.org/10.1007/s11149-013-9236-5

Luo, J. H., Li, X., & Chen, H. (2018). Annual report readability and corporate agency costs. *China Journal of Accounting Research*, *11*(30), 187-212. https://doi.org/10.1016/j.cjar.2018.04.001

McEnroe, J. E., & Martens, S. C. (2001). Auditors' and Investors' Perceptions of the "Expectation Gap". *Accounting Horizons, 15*(4), 345–58. http://dx.doi.org/10.2308/acch.2001.15.4.345

Miller, B. P. (2010). The effects of reporting complexity on small and large investor trading. *The Accounting Review*, *85*(6), 2107-2143. https://doi.org/10.2308/accr.00000001

Motta, M. (2004). *Competition policy: Theory and practice*. Cambridge University Press.

Newton, N. J., Persellin, J. S., Wang, D., & Wilkins, M. S. (2016). Internal control opinion shopping and audit market competition. *The Accounting Review*, *91*(2), 603-623. https://doi.org/10.2308/accr-51149

Newton, N. J., Wang, D., & Wilkins, M. S. (2013). Does a lack of choice lead to lower quality? Evidence from auditor competition and client restatements. *Auditing: A Journal of Practice & Theory*, *32*(3), 31-67. https://doi.org/10.2308/ajpt-50461

Olojede, P., Erin, O., Asiriuwa, O., & Usman, M. (2020). Audit expectation gap: An empirical analysis. *Future Business Journal*, *6*(1), 1-12. http://dx.doi.org/10.1186/s43093-020-00016-x

Parker, L. D. (1982). Corporate annual reporting: A mass communication perspective. *Accounting and Business Research*, *12*(48), 279-286. https://doi.org/10.1080/00014788.1982.9728820

Pashalian, S., & Crissy, W. J. (1950). How readable are corporate annual reports? *Journal of Applied Psychology*, *34*(4), 244. https://doi.org/10.1037/h0061918PMID:15436380

Porumbacean, T. C. (2022). Empirical research on European companies and factors influencing key audit matters disclosure. In *Provocările contabilităţii în viziunea tinerilor cercetători* (pp. 72-79). https://doi.org/10.5281/zenodo.6700589

Rennekamp, K. (2012). Processing fluency and investors' reactions to disclosure readability. *Journal of accounting research*, *50*(5), 1319-1354. https://doi.org/10.1111/j.1475-679X.2012.00460.x

Razik, T. A. (1969). A study of American newspaper readability. Journal of Communication, 19(4), 317-324. http://dx.doi.org/10.1111/j.1460-2466.1969.tb00854.x.

Saladrigues, R., & Grañó, M. (2014). Audit expectation gap: Fraud detection and other factors. *European Accounting and Management Review*, *1*(1), 120–142. http://dx.doi.org/10.26595/eamr.2014.1.1.6

Salehi, M., Dalwai, T., & Arianpoor, A. (2022). The impact of narcissism, self-confidence and auditor's characteristics on audit report readability. *Arab Gulf Journal of Scientific Research*, *41*(2), 202-223. http://dx.doi.org/10.1108/AGJSR-08-2022-0152

Salehi, M., Jahanbin, F., & Adibian, M. S. (2020). The relationship between audit components and audit expectation gap in listed companies on the Tehran stock exchange. *Journal of Financial Reporting and Accounting, 18*(1), 199-222. https://doi.org/10.1108/JFRA-12-2018-0115

Saleh, S. A., & Abou Elela, O. M. F. (2023). The effect of the audit committee members' gender diversity on the relationship between the auditor's narcissism and the audit report readability: Evidence from firms listed on the Egyptian stock exchange. *Alexandria Journal of Accounting Research*, *7*(3), 31-88. https://doi.org/10.21608/aljalexu.2023.320480

Schaen, M., & Maijoor, S. (1997). The structure of the Belgian audit market: The effects of clients' concentration and capital market activity. *International Journal of Auditing*, *1*(2), 151-162. https://doi.org/10.1111/1099-1123.00019

Smith, J. E., & Smith, N. P. (1971). Readability: A measure of the performance of the communication function of financial reporting. *The Accounting Review*, *46*(3), 552-561.

Soper, F. J., & Dolphin, R. (1964). Readability and corporate annual reports. *The Accounting Review, 39*(2), 358. https://doi.org/10.1080/23322039.2023.2296230

Still, M. D. (1972). The readability of chairmen's statements. *Accounting and Business Research*, *3*(9), 36-39. https://doi.org/10.1080/00014788.1972.9728995

Suttipun, M. (2022). External auditor and KAMs reporting in alternative capital market of Thailand. *Meditari Accountancy Research*, *30*(1), 74–93. https://doi.org/10.1108/MEDAR-04-2020-0850

Vanstraelen, A., Schelleman, C., Meuwissen, R., & Hofmann, I. (2012). The audit reporting debate: Seemingly intractable problems and feasible solutions. *European Accounting Review*, *21*(2), 193-215. https://doi.org/10.1080/09638180.2012.687506

Velte, P. (2020). Associations between the financial and industry expertise of audit committee members and key audit matters within related audit reports. *Journal of Applied Accounting Research*, *21*(1), 185–200. https://doi.org/10.1108/JAAR-10-2018-0163

Xu, F., & Akther, T. (2019). A partial least-squares structural equation modeling approach to investigate the audit expectation gap and its impact on investor confidence: perspectives from a developing country. *Sustainability*, *11*(20), 5798. https://doi.org/10.3390/su11205798

Xu, H., Dao, M., Wu, J., & Sun, H. (2022). Political corruption and annual report readability: Evidence from the United States. *Accounting and Business Research*, *52*(2), 166–200. https://doi.org/10.1080/00014788.2020.1815516

Xu, Q., Fernando, G., Tam, K., & Zhang, W. (2020). Financial report readability and audit fees: A simultaneous equation approach. *Managerial Auditing Journal*, *35*(3), 345-372. https://doi.org/10.1108/MAJ-02-2019-2177