The Mediating Effect of Audit Delay on the Relationship between Standard Audit Report and Firm's Access to Finance: Evidence from Egypt

Hebatallah Badawy*

(*) Assistant Professor of Accounting and Auditing - Faculty of Commerce – Alexandria University
Associate Professor of Accounting and Auditing at the Faculty of International Business and Humanities (FIBH) – Egypt Japan University of Science and Technology (E-JUST).
Email: heba782001@yahoo.com – heba.badawy@ejust.edu.eg.

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Abstract

Firms are seeking different sources of finance to run their businesses and acquire more assets to grow and expand. To reach these sources of finance, firms try to convey positive messages to outsiders, related to their earnings quality, operations, and sustainability in the future. One of the most important messages might be in the form of high-quality audits. The objective of this research is to study and investigate how firms' access to finance is affected by standard audit report in Egypt, and whether audit delay (or audit report lag interchangeably) mediates the relationship between standard audit report and firm's access to finance.

To fulfil the research objective and test the research hypotheses, a sample of 246 firm-year observations was selected from non-financial firms listed on the Egyptian Stock Exchange (EGX hereafter) during the period from 2016 to 2019, and regression models were developed. Statistical results indicate that issuing financial statements, accompanied with standard audit report, will reduce capital constraints and lead to greater access to finance. Additionally, empirical evidence revealed that audit report lag mediates the relationship between standard audit report and firms' access to finance.

This research adds empirical evidence to the limited literature of audit quality, information asymmetry and financial constraints in developing countries. It provides valuable insights to financial managers and helps them to understand how capital providers respond to standard audit report content and audit report lag. Finally, this research will help finance seekers to understand the importance of offering timely financial information to access finance.

Keywords: Standard Audit Report, Audit Report Lag, Access to Finance, Non-Financial Firms, Egyptian Stock Exchange.

الأثر الوسيط لتأخير المراجعة على العلاقة بين تقرير المراجعة النمطى وقدرة المنشأة على الحصول على تمويل: دليل من مصر

تسعى الشركات إلى الوصول إلى مصادر التمويل المختلفة حتى تتمكن من إدارة أعمالها واقتناء المزيد من الأصول طويلة الأجل من أجل النمو والتوسع في عملياتها. وحتى تستطيع هذه الشركات الوصول إلى مصادر التمويل المناسبة، تحاول دائماً توصيل رسائل إيجابية تتعلق بجودة أرباحها وعملياتها وقدرتها على الاستمرار في المستقبل إلى الأطراف الخارجية. ومن أهم هذه الرسائل جودة المراجعة. ويهدف هذا البحث إلى دراسة وتحليل واختبار أثر تقرير المراجعة النمطى على مقدرة الشركات على الحصول على تمويل في مصر، وما إذا كان تأخير المراجعة (تأخر إصدار تقرير المراجعة) يتوسط العلاقة بين تقرير المراجعة النمطى ومقدرة الشركة على الحصول على تمويل.

ولتحقيق هدف البحث واختبار فروضه، تم اختيار عينة من ٢٤٦ مشاهدة (شركة-سنة) من الشركات غير المالية المدرجة في البورصة المصرية، وذلك خلال الفترة من ٢٠١٦ إلى ٢٠١٩، وتم تطوير نماذج الانحدار اللازمة. وتشير النتائج الإحصائية إلى أن إصدار القوائم المالية مرفق بها تقرير المراجعة النمطى سيؤدى إلى تخفيض قيود رأس المال التي تواجهها الشركات، مما يؤدي إلى زيادة فرص الحصول على تمويل، وأن تأخر تقرير المراجعة يتوسط العلاقة بين تقرير المراجعة النمطى ومقدرة الشركات على الحصول على التمويل.

يضيف هذا البحث دليلاً تجريبياً إلى البحوث السابقة القليلة، والتي تتناول جودة المراجعة وعدم تماثل المعلومات والقيود المالية التي تواجهها الشركات في الدول النامية. كما يوفر هذا البحث رؤى ذات قيمة للمدراء الماليين ويساعدهم على فهم كيفية استجابة موفري رأس المال لمحتوى تقرير المراجعة النمطى وتأخر إصداره. وأخيراً، سيساعد هذا البحث الشركات والمدراء الذين يبحثون عن فرص لتمويل الأصول طويلة الأجل على فهم أهمية توفير المعلومات المالية في الوقت المناسب للحصول على هذا التمويل.

الكلمات المفتاحية: تقرير المراجعة النمطى، تأخر تقرير المراجعة، الحصول على التمويل، الشركات غير المالية، البورصة المصرية.

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1. Introduction

Firms are seeking different sources of funds to run their businesses and acquire more assets to grow and expand. They are competing fiercely for limited market resources. To reach external capital providers, firms try to convey positive messages to outsiders, related to their quality of earnings, operations, and sustainability in the future. At the same time, external capital providers are seeking information on the firms' results of operations and financial position to evaluate their financial health, take rational investment decisions, and direct their funds to the well-deserved firms. To be useful for decision makers, this information should be relevant and reliable.

Because of the separation between management and ownership, agency costs and conflicts of interest between both parties and consequent information asymmetry problem result. To reduce agency costs and information asymmetry problems, firms are required to issue annual financial reports. These financial reports are published after being audited by an external auditor, who play a very important role in maintaining market stability and creating a relation of trust between managers and stakeholders, especially in a setting with more information asymmetries. Auditing of financial information will increase disclosure quality that in turn will help to reduce asymmetric information problems (Hackenbrack et al., 2014). Auditing will provide assurance/confidence to financial information' users that the information presented by the firm's management is reliable and of a higher quality (information role) and will reduce the agency conflicts between agents and principals (monitoring role) (Imen & Anis, 2021; Shuraki et al., 2021). Accordingly, auditing provides additional information source that facilitates investor decision-making (Ianniello & Galloppo, 2015) through enhancing the credibility and reliability of financial information and reducing information risk in financial statements (Shuraki et al., 2021). It is expected that this high-quality financial information will lead to better financing decisions (Gist & Abdul Wahab, 2021).

The audit process ends up with the issuance of an audit report, which is available to all internal and external parties. The type of audit opinion and

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the timing on which the audit report is issued are two main prerequisites to undertaking empirical investigation on the issue of the information content of audit reports in capital markets (Ianniello & Galloppo, 2015).

Auditing standards classify the types of audit opinion on financial reports as unmodified and modified opinions (Shuraki et al., 2021). Audit reports have a significant effect on firm financing. According to the asymmetric information theory, it is argued that modified audit reports provide indicators regarding the quality of annual reports and issuing such reports suggests the information asymmetry between internal and external users and consequently affect the capital constraints and difficulty that firms face (Salehi et al., 2013).

The objective of this paper is to investigate whether standard audit report (unmodified audit opinion) has a significant impact on the non-financial listed firms' access to finance in Egypt and whether audit delay mediates the relationship between standard audit report and the firm's access to finance. The importance of this research stems from the importance of the topic being examined, which is the firm's access to finance, given the limited resources available in capital markets and the role that standard audit reports play in this regard. This paper has implications for the relatively scant audit report research in emerging markets. Research findings will benefit firms' managers through highlighting the importance of compliance of accounting standards to receive standard unmodified audit reports and avoid audit delay. The findings of this study are of interest to firm managers, capital providers, auditors, standard setters and academics interested in the area of audit reporting and financial constraints and investments.

This paper has some limitations, which stem from its focus on non-financial firms listed on the EGX. Also, the sample used in this research was collected from a period from 2016 to 2019, because before 2016, Egypt suffered from political unrest that affect the operations and financial position of the firms and starting 2020, the whole world suffered from COVID-19 pandemic that has pervasive impact on all firms.

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The rest of the paper is organized as follows: Section 2 provides background on standard audit report, audit delay and access to finance and develops research hypotheses. Section 3 describes the research methodology used in this study. Section 4 presents and analyzes the empirical research findings and results. Section 5 concludes and presents the recommendations and implications for future research.

2. Literature Review and Hypotheses Development

2.1. Auditing role in reducing information asymmetry problem

Firms are seeking external sources of funds to run their businesses, grow in their market and finance their investment opportunities. They present their financial statements to external users to find capital providers. Meanwhile, investors and other potential capital providers need to determine the most appropriate number of firms that seek external funds (Alrashidi et al., 2021) and request relevant and reliable financial information to evaluate the financial position and health of different firms to offer their funds to the well-deserved firms.

However, financial constraints and difficulties hinder the firms' investment capability to invest in appropriate investment projects (Saghafi & ArabMazar, 2010). Mainly, firms face financial constraints when there is a gap between internal and external financing costs (Fazzari et al., 1988). One of the main reasons of this difference is the existence of information asymmetry between internal and external users of financial statements regarding the content of these statements. This information asymmetry problem is created because of the separation between management and ownership and the conflict of interests between both parties (Jensen and Meckling 1976; Mayerz and Majlof, 1984). When information asymmetry problem exists, investors and other capital providers will not have enough information on the firms' future and accordingly will request high rates of return (Mayerz and Majlof, 1984).

Theory of asymmetric information was first introduced by Akerlof in 1970 in his paper titled "The Market for Lemons: Quality Uncertainty and the Market Mechanism", where he discussed the information asymmetry problem in the automobile market context. Akerlof noted that in the

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automobile industry, the seller has more information than the buyer, and this gives him the opportunity to sell products that are lower than the average market quality (Auronen, 2003).

Based on the theory of asymmetric information, information asymmetry problem occurs when one party has more information than the other party (Jasman & Amin, 2017) or in other words, when one firm has more information on itself that is not available to other firms (Gołembska, 2021). Accordingly, market participants will not have equal access to information (Salehi et al., 2013). Consequently, increasing the level of financial transparency will reduce the level of investment inefficiency (Mohammadi, 2014) and information asymmetry problem that exists between internal and external users.

According to prior research (Salehi et al., 2013; Luypaert & Caneghem, 2014), auditing financial statements is a way to enhance the reliability, faithful representation, credibility and quality of financial information (Zhou & Elder, 2003) and reduce agency problems that result due to the separation between management and ownership and the resulting information asymmetry between informed managers and external stakeholders, because audit reports, which are the output of the audit process, include significant and useful information to its users and help to increase the credibility of financial statements. In addition, audit reports provide signals related to the quality of annual reports. It is worth noting that auditors fulfil their role in financial markets by offering reasonable assurance that the financial statements are free from material misstatements, resulting from errors or fraud, and thereby reducing the level of information asymmetry between capital market participants, and by offering investors with a claim on the auditor in case of audit failure (Luypaert & Caneghem, 2014)

Based on the discussion above, it can be noted that the management-ownership separation results in conflict of interest and information asymmetry between internal and external users of annual financial reports regarding the contents of these reports. Auditors play a very important role in reducing the level of information asymmetry through their audit work and the resulting audit reports. Such audit reports will add to the credibility and reliability of financial information and will give

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outside stakeholders valuable information and signals on the firms' financial status and performance.

2.2. Standard audit reports versus non-standard audit reports

Audit reports play an important role in facilitating investors' decision making through reducing information risk in the financial statements and providing confidence in the information therein. According to the revised International Standard on Auditing (ISA) 700 (IAASB, 2015a) "Forming an Opinion on the Financial Statements", auditors are responsible to form an opinion on the firm's financial statement, and to report clearly whether the financial statements are prepared, in all material respects, according to the applicable financial reporting framework. Based on their audit work, auditors are required to give a clear conclusion on whether he/she has obtained reasonable assurance about whether the financial statements are free from material misstatements, whether due to error or fraud.

If the auditor concludes, after evaluating sufficient and appropriate audit evidence, that the financial statements include material, but not pervasive misstatements, or he is unable to gather the sufficient and appropriate audit evidence, on which to base his opinion and as a result the possible effects of undetected misstatements on the financial misstatements could be material but not pervasive, he shall express a qualified opinion, according to the revised ISA705 "Modifications to the opinion in the Independent Auditor's Report" (IAASB, 2015b). The auditor uses the expression "except for" to present his qualified opinion. This expression refers to several situations, such as noncompliance with accounting standards, or auditor's disagreement in the choice or application of an accounting standard or insufficient disclosure in the annual reports or scope limitation concerning evidence collection (Ianniello & Galloppo, 2015).

According to the ISA 706 "Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report", If the auditor founds it necessary to draw the users' attention to a specific matter presented (not presented) in the financial statements and from his point of view, adding this paragraph will benefit the financial statements' users and

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will enhance their understanding of these statements, he shall include an "Emphasis of Matter" (Other Matter) paragraph in his report after the opinion paragraph (IAASB, 2009; Ianniello & Galloppo, 2015).

Based on the report related auditing standards, auditors may issue an unqualified standard audit report (unmodified audit opinion), unqualified audit opinion with additional paragraph (emphasis of a matter or other paragraph), qualified audit opinion ("except for"), adverse opinion or disclaimer opinion.

2.3. Impact of auditor's report on the firm's access to finance

Prior literature investigated the market's reaction to different audit reports. For the purpose of this paper, the researcher will focus on the non-standard modified audit reports: unqualified opinion with additional (key audit matter or critical audit matter or emphasis of matter) paragraph, qualified opinion, adverse and disclaimer opinions in comparison with standard unmodified audit report, that includes clean audit opinion without any additional paragraphs.

Although prior studies found evidence that unqualified audit opinion with a matter of emphasis paragraph offers more information on the firm, however, this doesn't mean that the effect will be positive all the way. The direction of this effect depends on the information disclosed in the matter of emphasis paragraph. For instance, O'Reilly (2010) designed an experiment to test the investors' reaction to the auditors' report that include a going concern paragraph. Based on 203 responses on the designed experiment, the author found evidence that investors reacted negatively to this type of auditors' report, indicating the information content of the auditors' report and its value to investors in pricing and valuing firms' stocks.

On the other side, and using different research methodology, Czernkowski et al. (2010) examined the market reaction to modified audit opinions of companies listed on Shanghai Stock Exchange. Based on a sample of 3,128 firm year observations during the period from 1999 to 2003, the authors didn't find significant effect of modified audit opinions on Chinese investors' decisions. However, after dividing the sample according to the type of audit opinion, the authors found no significant difference

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between unqualified opinion with explanatory notes and qualified opinion and that qualified opinion with explanatory paragraph and adverse opinions are the most severe audit opinion in their effect on investors.

Consistently, Salehi et al. (2013) found that receiving modified audit reports is considered a negative signal concerning the quality of annual reports and increases the level of information asymmetry between external and internal users, and consequently, this will increase the financial difficulties and constraints that the firms face and will reduce their capability to access external finance.

In USA, Christensen et al. (2014) investigated the impact of adding a key audit matter (KAM) paragraph to the auditor's report on investment decision. Based on a sample of 141 business school graduates from a public university, the authors found evidence that the KAM paragraph has an information effect, and it affects the investors' decision in comparison with the case in which investors receive a standard audit report. When the KAM paragraph is related to the audit of uncertain fair value estimates, non-professional investors are more likely to stop their investment in the company which receive this modified non-standard audit report. Also, the authors concluded that non-investors' reaction to this paragraph is reduced when it is followed by a resolution paragraph that expresses auditor assurance on this issue.

In Italy, Ianniello & Galloppo (2015) investigated the market reaction to different audit opinions. Based on a sample of 97 firm-year observations from 2007 to 2010, the authors concluded that modified audit opinions, in general, have information value for investors. Qualifications in the auditor's report (qualified audit opinion, adverse opinion, and disclaimer of opinion) have a significant negative impact on the firms' stock prices and adding a matter of emphasis paragraph on going concern uncertainty has a positive impact on the distressed firm's stock price.

In Brazil, Carvalho et al. (2019) examined the impact of modified audit opinions (unqualified with emphasis paragraph and qualified opinion) on investors' valuation of firms' stock and their perception of risk. The authors hypothesized that issuing modified audit opinion will negatively

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affect the share prices of non-financial firms and increase the volatility of their earnings on return in the next period. Based on a sample of 231 firms during the period from 2010 to 2017, the authors found that issuing audit reports with modified audit opinion may not have an impact on the firms' market values, however it may affect the investors' perception to risk, measured by volatility of returns. This means that the issuance of an audit report with a modified opinion can increase uncertainties in relation to the firm's economic and financial situation, translating into greater volatility in the return on shares. This may indicate that the emphasis paragraph, although not necessarily indicating problems with the entity, arouses the interest of investors who seek to extract some information to predict the company's possible directions, and then make their decisions. Thus, the modification of opinion – and even the presence of emphasis paragraphs – can make market agents less confident in their decision-making and will have an adverse effect on the disclosing firm although audit reports are expected to create an environment of trust and credibility.

After interviewing 20 interviewees in five internal and external stakeholders groups in Australia; auditors from Big 4, auditors from non-big 4, audit committee chairs and CFOs, investors, financial market regulators and standard setters, Nguyen & Kend (2021) concluded that adding a KAM paragraph to the auditor's report has resulted in better communication and awareness on the key audit matters of audit risk between managers, audit committees and auditors, however, this modification to the audit report is costly and/or time consuming, as it requires more internal control quality checks, more technical reviews and inspections and more discussions around the key risk areas upon which the key audit matter paragraph is presented.

On the other hand, Mihret et al. (2022) discussed the reform that was made on the auditor's report and focused on adding a key audit matter paragraph to the report. The authors found that communicating a key audit matter paragraph to external users will help in enhancing the users' trust in financial statements through increasing their transparency and understandability of financial statements, which in turn would result in higher levels of relevance and credibility of audit reports and improve the

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reputation of the auditing profession. In addition, this reform will help to enhance the transparency of the audit process and will lead to the production of high-quality, useful financial reports that have meaningful communicative value.

Based on the discussion above, it can be noted that the auditor's report, in general has information content and may affect investors' valuation of stock prices and their risk perception. However, it is worth noting that the information value of the auditor's report depends on its content and audit opinion. A standard audit report showing an unqualified audit opinion may be used as a guarantee and an assurance for various stakeholders using financial information. However, a modified audit opinion may represent a piece of adverse information that can affect their confidence and trust in the firm negatively (Moalla, 2018). If the modified audit opinion can affect the investor's valuation and decision, who is a main capital provider for the firm, it is expected that standard audit report will have a positive impact on the firm's access to finance. In other words, it is expected that firms which receive standard unmodified audit reports will find it easier to access external sources of funds.

Accordingly, the first research hypothesis can be formulated in alternative form as follows:

H1: Standard audit report has a significant positive effect on non-financial listed firm's access to finance in Egypt

2.4. Impact of standard audit report on audit delay

Audit delay, or audit report lag (ARL), is defined as "the length of time from the company's fiscal year end to the date of the auditor's report" (Ashton et al., 1987, p. 275). One of the factors that affect the audit delay is the type of audit opinion issued on the financial statements. Prior research studied and analyzed the relationship between audit opinions and reports on one side and audit delay on the other side. For instance, Ashton et al. (1987) found evidence that audit delay is positively associated with the issuance of modified audit opinions. This delay might be because of the amount of auditor client negotiation time needed to discuss the related audit qualifications (Whittred, 1980).

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In the same regard, Chen et al. (2001) tested the association between modified audit opinion (clean opinion with explanatory paragraph, qualified, disclaimer and adverse opinions) and audit delay. Based on a sample of 1,521 firm-year observations from listed firms in China and Taiwan, the authors found a significant positive association between the frequency of receiving modified audit opinions and audit report lag. The authors concluded that the negotiations between the auditor and the client on the appropriateness of accounting methods or practices increase the time taken to issue these opinions.

Consistently, Haw et al. (2003) investigated the impact of audit qualification and earnings surprises on the timeliness of annual earnings releases. Based on a sample of 2,256 firm year observations of Chinese listed firms during the period from 1995 to 1999, the authors found evidence that modified audit opinions (unqualified opinion with explanatory paragraph, qualified, disclaimer and adverse opinions) are negatively associated with the timeliness of annual earnings releases.

Confirming prior results, Khoufi & Khoufi (2018) focused on the determinants of audit delay and found evidence that audit qualifications increase audit delay, based on a sample of 50 French firms listed on Paris Stock Exchange during the period from 2010 to 2014.

In Egypt, according to Companies Law No. 159 of 1981 and Capital Market Law No. 95 of 1992, and article (46) of EGX rules of listing and delisting securities issued by the Financial Regulatory Authority (FRA), all listed firms on the EGX are required to publish their annual financial reports with a maximum of three months from the fiscal year end (www.fra.gov.edu). It is expected that standard audit report (unmodified audit opinion) issued by non-financial listed firms will be associated with lower audit report lag (higher audit timeliness), because modifications in audit opinion will involve more client-auditor negotiations time to resolve the differences in opinions between the client and the auditor concerning the appropriateness of accounting methods or practices (Chen et al., 2001).

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Accordingly, the second research hypothesis (H2) is formulated in an alternative form as follows:

H2: Standard audit report has a significant negative effect on audit report lag for non-financial listed firms in Egypt

2.5. Impact of audit delay on firm's access to finance

Because the timeliness of financial statements increases its value and because they can't be issued before the audit process is complete, all adjustments to financial statements are made and the financial statements are finalized, it is expected that audit report lag will have a significant effect on the timeliness of annual financial statement information (Lambert et al., 2013). Audit report lag is viewed negatively by the market, as it reduces the relevance of information contained in the annual financial reports (Whitworth & Lambert, 2014). According to Asthana (2014), an excessive audit delay might result from serious differences between the auditor and the client concerning accounting practices or calculation of accounting numbers and this may be s negative signal to the market, representing poor earnings quality. This negative signal might create skepticism among investors regarding the quality of earnings disclosed and may affect their firm valuation and investment and resource allocation decisions negatively.

Although audit delay is a measure of audit effort and might be an indicator of high perceived audit quality (Dao et al., 2021), however, auditors might exert more efforts and spend more time negotiating with their clients on different accounting issues in order to reach an agreement and the auditor is satisfied with the level of disclosure quality (Asthana, 2014). As a result, it is expected that audit delay might be an indicator of poor disclosure quality, and this will affect investors' and capital providers' firm valuation and investment decisions inversely. In addition, it is expected that audit delay will increase the information gap between managers and outside stakeholders and will prevent capital providers from evaluating firms' financial performance and position fairly. As a result, it is expected that firms that receive their audit reports late will find it difficult to raise external funds.

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Accordingly, the third research hypothesis (H3) is formulated in an alternative form as follows:

H3: Audit report lag has a significant negative effect non-financial listed firm's access to finance in Egypt

2.6. The mediating role of audit delay on the relationship between standard report and access to finance

Based on prior research (Whittred, 1980; Ashton et al., 1987; Chen et al., 2001), it can be noted that standard audit report is a main determinant of audit report lag. Issuing modified audit reports, whether these reports include unqualified with additional or explanatory paragraph, qualified, adverse or disclaimer opinions, will delay the audit process and consequently, the issuance of the auditor's report. This delay might result from the time needed to negotiate different accounting issues and adjustments between the managers and the auditors and qualifications in the audit report.

Meanwhile, it is inferred that audit delay might give a negative signal to market participants concerning the disclosure quality and will increase investors' skepticism regarding the quality of financial disclosures (Asthana, 2014). Audit delay will increase the information asymmetry between managers and potential capital providers, and as a result, it will be difficult for capital providers to evaluate the firm's financial performance and position fairly and so firms will face capital constraints and will find it difficult to access external sources of funds.

In the same context, according to Carvalho, et al. (2019), the content of the audit report is important to transmit reliability and security to investors and it is expected that the issuance of modified reports will have a significant effect on investors' perception of risk. Modified reports will increase the uncertainties towards the future of the firm and the investors' related investment decision. The issuance of standard audit report will expedite the audit process and issuance of audit report and audited financial statements and will give a positive signal to capital providers and help them in their investment and resource allocation decisions, and consequently, will make it easier for firms to find external capital providers and access finance (Salehi et al., 2013).

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Accordingly, the fourth research hypothesis (H4) can be formulated in alternative form as follows:

H4: Audit report lag mediates the relationship between standard audit report and non-financial listed firm's access to finance in Egypt

3. Research Design and Methodology

3.1. Population and Sample Selection

The research population involves all non-financial firms listed on the EGX, as banks and financial firms have their unique characteristics and different operations, which might require special audit efforts (Ezat, 2015). The researcher relied on hand-collected data from financial statements of 78 non-financial publicly traded companies over a period of 4 years from 2016 to 2019 to reach the final sample. As shown in Table (1), the researcher relied on a sample of 246 firm-year observations after excluding missing data and outliers.

Table (1) Sample Selection Process

Industry	
Number of firms registered on the EGX	220
Less: financial firms	40
Total number of non-financial firms	180
Total number of firm-year observations 2016-2019	720
Less: observations of firms with missing data and outliers	474
Final Sample	**246**

Table (2) presents the distribution of firm-year observations across sectors. Three sectors (Real Estate, Food and Beverages, and Construction) represent a large portion of the total sample (62.6%).

Table (2) Firm-Year Observations by Sector

Sector	Firm-year observations	Valid Percentage
Basic Resources	4	1.6
Chemicals	14	5.7
Construction	44	17.9
Food and Beverages	53	21.5
Healthcare	25	10.2
Industrial	14	5.7
Personal	10	4.1
Real estate	57	23.2
Retail	3	1.2
Travel	22	8.9
Total	**246**	**100.0**

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3.2.   Measurement of Variables and Models Development

This paper involves one dependent variable, one independent variable and one mediating variable. **The dependent variable** is the **access to finance (*ACCESS*)**, which is the firm's ability to access external funds (Alrashidi et al., 2021), which indicates the availability of supply of reasonable quality of financial services at reasonable costs (Claessens, 2006). Access to finance (*ACCESS*) is measured by Kaplan-Zingales (KZ index) (measure for capital constraints) developed by Baker et al. (2003) as follows:

- **Access to Finance (*ACCESS*):**

  KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

  Where:
  - CF_{it}/A_{it-1} is cash flow over lagged assets;
  - DIV_{it}/A_{it-1} is cash dividends over lagged assets;
  - C_{it}/A_{it-1} is cash balances over lagged assets;
  - LEV_{it} is leverage and
  - Q_{it} is the market value of equity (closing price times shares outstanding plus assets minus the book value of equity over assets).

This index measures the capital constraints facing a firm requesting external funds. This index is measured using different accounting measures, which are cash flows, dividends and cash holding over lagged assets, leverage, and market value of the firm. Higher value of this index indicates that the firm faces financial constraints and will find it difficult to access finance. Two other measures will be used to measure the access to finance in the sensitivity analyses section (Cheng et al., 2013; Alrashidi et al., 2021). These measures are derived from KZ index, as follows:

- **Weighted Access to Finance (*WEIGHTED_ACCESS*):**

  KZE_{it} = $\{(1/5)*(-1.002CF_{it}/A_{i(t\_1)})\}$ − $\{(1/5)*(39.368DIV_{it}/A_{i(t\_1)})\}$ − $\{(1/5)*(1.315C_{it}/A_{(it\_1)})\}$ + $\{(1/5)*3.139LEV_{i(t)}\}$ + $\{(1/5)*0.283Q_{i(t)}\}$.

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- **Four Variable Access to Finance (*FOUR-VARIABLE ACCESS*):**

KZ_{it} (four-variable) $= -\ 1.002\ CF_{it}/A_{i(t\_1)} - 39.368\ DIV_{it}/A_{i(t\_1)} - 1.315\ C_{it}/A_{(it\_1)} + 3.139 LEV_{i(t)}$

Where:

- $CF_{it}/A_{i(t\_1)}$ is cash flow over lagged assets;

- $DIV_{it}/A_{i(t\_1)}$ is cash dividends over lagged assets;

- $C_{it}/A_{(it\_1)}$ is cash balances over lagged assets; and

- $LEV_{i(t)}$ is leverage.

The **independent variable** is **Standard Audit Report** (*STANDARD_REPORT*), which is measured as a dummy variable (Huang et al., 2016; He et al., 2017; He et al., 2021; Chang et al., 2021) that takes the value (1) in case the audit report issued to the firm in the previous year was a standard audit report (unmodified) and (0) otherwise.

The **mediating variable** is audit delay, or audit report lag (*REPORT_LAG*), and is measured by the natural logarithm of the number of days between the financial statement date and the audit report date of the previous year (Asthana, 2014). Another measure for audit delay will be used in the sensitivity analyses section, which is a dummy variable that takes the value (1) in case the audit report lag is greater than the median of audit report lag of the sample (63.5 days) and (0) otherwise (Prawitt, et al. 2009).

The study involves two **control variables**. The first one is firm profitability (*PROFIT*), which is measured as a dummy variable (Knechel & Sharma, 2012) that takes the value (1) in case the firm was making profits in the previous year and (0) otherwise. It is expected that firms that make profits in the previous year will find it easier to access finance than those that were making losses. This expectation might be because profits may be a reliable indicator of firm's financial health and from the investors' point of view, profits represent an evidence of firm's future benefits and performance (Sriram, 2008). The other control variable is firm size (*SIZE*), which is measured by the natural logarithm of the firm's total assets in the previous year. It is expected that larger firms will find it easier to raise external finance (Frank & Goyal, 2009) and will convey a positive

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signal to external capital providers and their assets will provide these firms with a support or guarantee against financial failure.

Independent Variable   **Mediating Variable variable**   **Dependent**
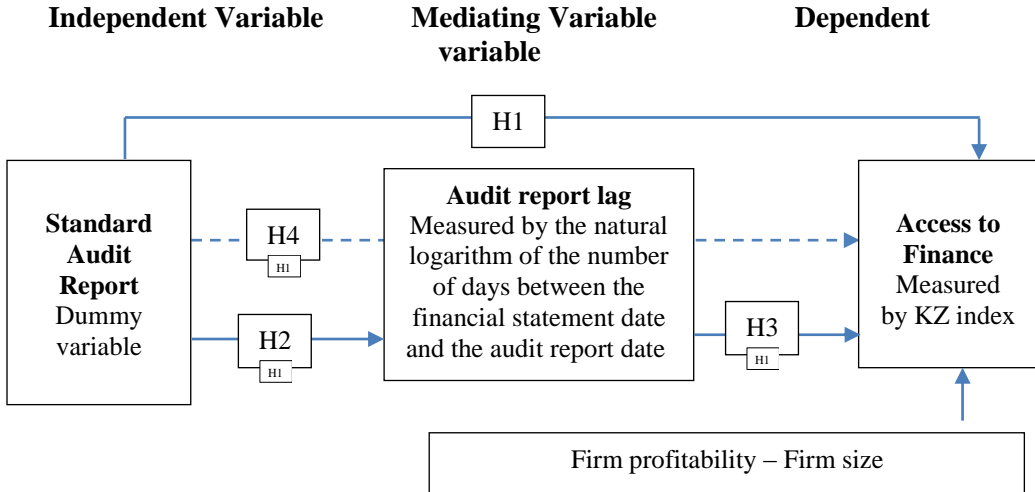
Control Variables
Figure (1)
Research Model

Regression Models:

Model 1: **The effect of standard audit report on access to finance**
$$ACCESS_{it} = \beta_0 + \beta_1 STANDARD\_REPORT_{it-1} + \varepsilon$$

Model 2: **The effect of standard audit report on audit report lag**
$$REPORT\_LAG_{it} = \beta_0 + \beta_1 STANDARD\_REPORT_{it} + \varepsilon$$

Model 3: **The effect of audit report lag on access to finance**
$$ACCESS_{it} = \beta_0 + \beta_1 REPORT\_LAG_{it-1} + \varepsilon$$

Model 4: **The effect of standard audit report and audit report lag on access to finance**
$$ACCESS_{it} = \beta_0 + \beta_1 STANDARD\_REPORT_{it-1} + \beta_2 REPORT\_LAG_{it-1} + \varepsilon$$

Model 5: **Extended Model (other analysis)**

$$ACCESS_{it} = \beta_0 + \beta_1 STANDARD\_REPORT_{it-1} + \beta_2 REPORT\_LAG_{it-1} + \beta_3 PROFIT_{it-1} + \beta_4 SIZE_{it-1} + \varepsilon$$

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4. Empirical Results

4.1. Descriptive Statistics

Table (3) shows the descriptive statistics of the research sample, which involves 246 firm-year observations. Regarding the dependent variable (*ACCESS*), Table (3) shows that the mean is 0.7814 and the standard deviation is 1.80978. The maximum of *ACCESS* is -4.08 and the minimum is 5.44, indicating variations between the firms' ability to access finance in the research sample. The independent variable *STANDARD_REPORT* is a dummy variable that takes the value (1) or (0). Table (3) shows that the mean of this variable is 0.6098 and the standard deviation is 0.48880, which means that around 61% of the sample received a standard unmodified audit report (150 firm-year observations), and 39% of the sample receives non-standard modified audit reports, which might involve key audit matters paragraph or qualifications in the previous year. Regarding the moderating variable *REPORT_LAG*, which is measured by the natural logarithm of the number of days that elapse between the financial statement date and audit report date, Table (3) indicates that the mean of audit report lag is 4.1601 and standard deviation is 0.31753, with a minimum of 2.77 and maximum of 5.59. As for the two control variables, *PROFIT*, which is measured as a dummy variable that takes the value (1) in case the firm is making profits in the previous year, (0) otherwise, 80.89% of the firms of the sample were making profits in the previous year; and the average *SIZE* is 20.0811 and its standard deviation is 1.52498.

Table (3) Descriptive Statistics

	Mean	Std. Deviation	Minimum	Maximum	N
ACCESS	0.7814	1.80978	-4.08	5.44	246
STANDARD_REPORT	0.6098	0.48880	0.00	1.00	246
REPORT_LAG	4.1601	0.31753	2.77	5.59	246
PROFIT	0.8089	0.39394	0.00	1.00	246
SIZE	20.0811	1.52498	15.95	23.55	246

4.2. Pearson Correlations

Table (4) presents the Pearson correlations between the research variables. Confirming the researcher's expectations, Pearson correlations matrix shows that *STANDARD_REPORT* is negatively and significantly associated with *ACCESS* at 5% significance level (Pearson correlation = -0.146), which indicates that capital providers react positively to firms which received a standard unmodified audit report in the previous year. Consistently, Pearson correlation matrix shows that *REPORT_LAG* is positively and significantly related to *ACCESS* at 1% significance level (Pearson correlation = 0.200), indicating that audit delay will increase the information asymmetry level between managers and capital providers and that firms that issue their audited financial statements late will face financial constraints. Also, Table (4) shows a negative and significant relationship between *REPORT_LAG* and *STANDARD REPORT* at 1% significance level (Pearson correlation = -0.236). Accordingly, Pearson correlation provides preliminary evidence regarding the relationship between standard audit report and audit report lag on one side and access to finance on the other side.

Table (4) Pearson Correlations (N = 246)

		ACCESS	*STANDARD_ REPORT*	*REPORT_LAG*	*PROFIT*	*LEVERAGE*
ACCESS	Pearson correlation	1				
	Sig. (2-tailed)					
STANDARD_R EPORT	Pearson correlation	-0.146	1			
	Sig. (2-tailed)	**0.022**				
REPORT_LAG	Pearson correlation	0.200	-0.236	1		
	Sig. (2-tailed)	**0.002**	**0.000**			
PROFIT	Pearson correlation	-0.335	0.056	-0.186	1	
	Sig. (2-tailed)	**0.000**	**0.379**	**0.003**		
SIZE	Pearson correlation	0.049	-0.046	0.044	0.160	1
	Sig. (2-tailed)	**0.446**	0.469	**0.491**	**0.012**	

4.3. Hypotheses Testing

To test the first research hypothesis (H1), which predicts that *STANDARD_REPORT* has a positive and significant effect on firms' access to finance, the author ran the first simple regression model (Model 1) using

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SPSS v25 on the research sample (246 firm-year observations). The regression results in Table (5) indicate that firms presenting financial statements accompanied with a *STANDARD_REPORT* will contribute towards finding sources of funds easily (Adj. R^2 = 1.7%). Durbin Watson statistic (1.726) is between 1.5 and 2.5, indicating the absence of auto correlation problem (Salehi et al., 2013).

Table (5) Impact of Standard Audit Report and Audit Report Lag on Access to Finance

	Model 1		
	Standardized Beta	**Coefficient (t-value)**	***p*-value**
Constant		6.068	**0.000**
STANDARD_REPORT	-0.146	-2.306	**0.022**[**]
R^2		0.021	
Adj.R^2		0.017	
Std. error		1.79405	
Durbin-Watson		1.726	
F-value		5.316	
Sig. F		**0.022**[**]	
N		246	

** indicates *p*-value<0.05

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

Where:

- CF_{it}/A_{it-1} is cash flow over lagged assets;
- DIV_{it}/A_{it-1} is cash dividends over lagged assets;
- C_{it}/A_{it-1} is cash balances over lagged assets;
- LEV_{it} is leverage and
- Q_{it} is the market value of equity (price times shares outstanding plus assets minus the book value of equity over assets. The price is determined after three months from the audit report date.

Consistent with prior research (Salehi et al., 2013; Christensen et al., 2014; Carvalho et al., 2019), Table (5) showed that the coefficient of *STANDARD_REPORT* is negative and significant (at 5% significance level). This means that standard audit report is negatively correlated with firm's capital constraints and accordingly positively associated to firm's access to finance. This result indicates that standard audit report represents a positive signal to external stakeholders in general and capital providers, in particular,

concerning the quality of financial disclosure and its reliability and credibility. Receiving a standard audit report will help firms to find capital providers easily (t-value = -2.306, p-value = 0.022). Capital holders are more willing to offer their capital to firms with standard audit reports issued on their financial statements than those with non-standard (modified) audit reports. **Based on this result, H1 which expects a positive and significant effect of standard audit report on access to finance is supported.**

To test the second research hypothesis (H2), which investigates the impact of standard audit report on audit report lag, the author ran the second simple regression model (Model 2) and found in Table (6) that *STANDARD_REPORT* may interpret 5.2% from the changes in *REPORT_LAG*. Again, Durbin Watson statistic (1.972) is between 1.5 and 2.5, which means no auto correlation problem.

Table (6) indicates that *STANDARD_REPORT* has a negative and significant impact on *REPORT_LAG* (t-value = -3.793, p-value = 0.000), indicating that standard audit report doesn't need a lot of time from the auditor's side to be issued and will make the audit process easier. This will be reflected on issuing audit reports earlier, in comparison to that related to non-standard modified audit reports.

Table (6) Impact of Standard Audit Report on Audit Report Lag

	Model 2		
	Standardized Beta	**Coefficient (t-value)**	**p-value**
Constant		134.792	0.000
STANDARD_REPORT	-0.236	-3.793	**0.000*****
R^2		0.056	
Adj.R^2		0.052	
Std. error		0.30919	
Durbin-Watson		1.972	
F-value		14.389	
Sig. F		**0.000*****	
N		246	

*** indicates p-value<0.01

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

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This result is consistent with prior research (Whittred, 1980; Chen et al., 2001; Haw et al., 2003; Nguyen & Kend, 2021), which found that modified audit opinions require more inspections, more technical reviews and quality control checks and more time for client-auditor negotiations on audit qualifications to solve the disagreement on accounting methods or practices or calculation of accounting numbers. As a result, regression results showed that non-standard audit reports, whether those reports that include key audit matter paragraphs (clean opinion) or qualifications (qualified audit opinion) will require more efforts and time from the auditors and consequently will be reflected on more audit report lag.

Based on this result, the second research hypothesis (H2), which expects that standard audit report will have a significant and negative impact on audit report lag is supported.

To test the third research hypothesis (H3), which predicts a negative and significant impact of *REPORT_LAG* on the firms' *ACCESS* to finance, the author ran the third simple regression model (Model 3) on the same research sample.

As presented in Table (7), the regression results indicate that *REPORT_LAG* reduces the level of transparency and increases the level of information asymmetry and this will make it difficult for the firms, which delayed in presenting their audited financial statements, to find capital providers. Also, it is clear from the regression results in Table (7) that audit report lag may interpret 3.6% from the firms' access to finance and that *REPORT_LAG* will increase the firms' inability to access finance (t-value = 3.196, *p*-value = 0.002) and reduce its *ACCESS* to finance.

Table (7) Impact of Audit Report Lag on Access to Finance

	Model 3		
	Standardized Beta	**Coefficient (t-value)**	***p*-value**
Constant		-2.662	0.008
REPORT_LAG	0.200	3.196	**0.002**[***]
R^2		0.040	
Adj.R^2		0.036	
Std. error		1.77669	
Durbin-Watson		1.734	
F-value		10.212	
Sig. F		**0.002**[***]	
N		246	

*** indicates *p*-value<0.01

Variables definitions:

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

Where:

- CF_{it}/A_{it-1} is cash flow over lagged assets;
- DIV_{it}/A_{it-1} is cash dividends over lagged assets;
- C_{it}/A_{it-1} is cash balances over lagged assets;
- LEV_{it} is leverage and
- Q_{it} is the market value of equity (price times shares outstanding plus assets minus the book value of equity over assets. The price is determined after three months from the audit report date).

This result is consistent with the findings of Whitworth & Lambert (2014) study which concluded that audit delay is a negative signal to the market and will contribute towards reducing the relevance and value of accounting information. In addition, the regression results in table (7) confirmed the results of Asthana (2014) study that provided empirical evidence that excessive or abnormal audit delay may create skepticism among investors about the quality of earnings announced and this will be reflected negatively on their valuation of the disclosed earnings quality.

Based on this result, the third research hypothesis (H3) which expects a negative and significant impact of audit report lag on access to finance is supported.

Finally, to test the mediating effect of audit report lag on the relationship between standard audit report and access to finance (H4), the author relied on Sobel test to calculate Sobel statistic (Abu-Bader & Jones, 2021). Sobel test is a method used to test the significance of a

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mediating effect on the relationship between the independent variable (*STANDARD_REPORT*) and the dependent variable (*ACCESS*) with the help of the moderating variable (*REPORT_LAG*). As shown in Table (8), Sobel test statistic is -1.76436 and *p*-value is 0.078, which means that *REPORT_LAG* is a mediator (10% significance level). The negative sign in the Sobel test statistic indicates that *REPORT_LAG* acts like a suppressor variable and reduces the positive impact of *STANDARD_REPORT* on the firms' *ACCESS* to finance.

Table (8) Sobel Test Result

Input:		Test statistic:	Std. Error:	p-value:
a -0.541	Sobel test:	-1.76436257	0.30723957	0.07767096
b 1.002	Aroian test:	-1.69923158	0.31901596	0.08927556
s_a 0.234	Goodman test:	-1.83760703	0.29499343	0.06612033
s_b 0.367	Reset all	Calculate		

To provide additional supporting evidence on the mediating effect of *REPORT_LAG*, the author ran the fourth regression model (Model 4), which test the impact of *STANDARD_REPORT* and *REPORT_LAG* on *ACCESS* to finance and compared the beta coefficient of *STANDARD_REPORT* in Model (1) in case standard audit report is the only predictor of access to finance, with that in Model (4) in case audit report lag is added to the regression model.

As presented in Table (9), beta coefficient of *STANDARD_REPORT* in Model (1) = -0.146 (*p*-value = 0.022) and in Model (4) = -0.105 (*p*-value = 0.105) and the *STANDARD_REPORT* turned to be insignificant in Table (9). Consistent with the researcher's expectation, the decrease in beta coefficient and *p*-value, indicates that *REPORT_LAG* mediates the relationship between *STANDARD_REPORT* and *ACCESS* to finance. It can be inferred that issuing standard (modified) audit report will expedite (delay) the completion of the audit process and this will be reflected positively (negatively) on the firm's ability to access external capital providers.

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Based on these two supporting results, the fourth research hypothesis (H4) which expects that audit report lag mediates the relationship between standard audit report and access to finance is supported.

Table (9) Mediating Effect of Audit Report Lag

	Model 4			
	Standardized Beta	Coefficient (t-value)	*p*-value	VIF
		-2.006	0.046	
STANDARD_REPORT	-0.105	-1.625	0.105	1.059
REPORT_LAG	0.176	2.732	**0.007**[***]	1.059
R^2		0.050		
Adj.R^2		0.043		
Std. error		1.77074		
Durbin-Watson		1.761		
F-value		6.461		
Sig. F		**0.002**[***]		
N		246		

*** indicates *p*-value<0.01

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

4.4.   Other Analyses

In this section, the researcher conducted other analyses to answer two questions. *The first question* deals with the validity of the main research model (Model 4), which include the independent and mediating variables and the assumptions upon which this model is constructed. *The second question* is concerned with the robustness of research hypotheses results, assuming the validity of the constructed model and its assumptions.

4.4.1.   Adding Control Variables

To answer the first question and provide supporting evidence on the validity of the research model and its assumptions, the researcher added two control variables: *PROFIT* and *SIZE* to the previous regression model (Model 4). It is expected that when adding these control variables, the

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regression results will persist. According to Table (10), the Adj.R^2 increased from 4.3% to 13.6%, indicating that *STANDARD_REPORT*, *REPORT_LAG*, *PROFIT* and *SIZE* can interpret 13.6% from the changes in the firms' ability to access finance. Also, Durbin Watson statistic (1.812) indicates the absence of auto correlation problem, and the Variance Inflation Factor (VIF) statistic is below 10, which indicates the absence of multicollinearity problem (Knechel & Sharma, 2012; Ezat, 2015).

Table (10) indicates that *REPORT_LAG* has a positive and significant effect on the firms' *ACCESS* to finance at 10% significance level (t-value = 1.824, *p*-value = 0.069). Consistent with prior research and the results shown above in the previous section, delaying audit reports will decrease the transparency level and increase the level of information asymmetry and this will reduce the firms' ability to access external sources of funds.

Table (10) Extended Model

	Model 5			
	Standardized Beta	**Coefficient (t-value)**	***p*-value**	**VIF**
		-1.304	0.193	
STANDARD_REPORT	-0.097	-1.582	0.115	1.061
REPORT_LAG	0.114	1.824	**0.069**[*]	1.098
PROFIT	-0.323	-5.269	**0.000**[***]	1.068
SIZE	0.091	1.510	0.132	1.034
R^2		0.150		
Adj.R^2		0.136		
Std. error		1.68258		
Durbin-Watson		1.812		
F-value		10.611		
Sig. F		**0.000**[***]		
N		246		

*** indicates *p*-value<0.01
* indicates *p*-value<0.1

Variables definitions:
STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.
REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.
PROFIT: Dummy variable that takes the value (1) in case the firm made profits in the previous year, (0) otherwise.
SIZE: Natural logarithm of total assets of the previous year
ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

In accordance with the researcher's expectations, *REPORT_LAG* mediates the relationship between *STANDARD_REPORT* and *ACCESS* to finance and this is confirmed from the insignificant effect (t-value = -1.582, *p*-value = 0.115) of *STANDARD_REPORT* on *ACCESS* to finance in Model (5).

Concerning the impact of *PROFIT* on *ACCESS* to finance, Table (10) shows that *PROFIT* has a significant positive effect on *ACCESS* to finance (t-value = -5.629, *p*-value = 0.000), indicating that profitability reduces the firms' difficulty to access finance. As loss is an indicator of financial risk (Moalla, 2017), this result confirmed the researcher's expectation that profitable firms are having good financial health and will find it easier to find external sources of funds, in comparison with firms that made losses in the previous year. In other words, it will be easier for profitable firms to seek capital holders and access finance. However, *SIZE*, is shown to have an insignificant positive effect on firms' *ACCESS* to finance (t-value = 1.510, *p*-value = 0.132).

Based on the above findings, the researcher confirmed the validity of the research model and the assumptions upon which this model is constructed.

4.4.2.   *Sensitivity Analyses*

To answer the second question and check the robustness of the results, the researcher made several sensitivity analyses. The researcher used two alternative measures of *ACCESS* to finance, which are derived from KZ index, and an alternative measure of *REPORT_LAG*. Finally, the researcher tested the research hypotheses using SPSS-AMOS-26 (Path analysis).

4.4.2.1   *Using weighted Access index to measure access to finance*

To test the robustness of research results, the researcher used a weighted access index (*WEIGHTED_ACCESS*) to measure *ACCESS* to finance. The weighted measure is derived from the KZ index, where every accounting variable used in the index is assigned the same weight as the other (1/5) (Cheng et al., 2013). After using this alternative measure, the researcher confirmed the results reached in the main analyses.

As presented in Table (11), *STANDARD_REPORT* has a significant negative effect on the firm's capital constraints and so a positive significant

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effect on the firm's *ACCESS* to finance (t-value = -2.306, *p*-value = 0.022) at 5% significance level, while *REPORT_LAG* has a positive significant impact on the firm's financial constraints, and so a negative significant impact on firm's *ACCESS* to finance (t-value = 3.196, *p*-value = 0.002).

This result confirmed prior studies' results and shows that issuing standard unmodified audit report will convey a positive message to the market and external capital providers regarding the quality of financial disclosure. In the same context, audit delay will reduce the transparency level and increase the level of information asymmetry between internal and external parties, and this will undermine the value of financial information and will increase information risk in financial statements. Audit delay is a negative signal and will have a negative effect on the firm's ability to access finance. Audit report lag will increase financial constraints facing the firms to access finance. **Accordingly, the first (H1) and third (H3) research hypotheses are supported.**

Table (11) Impact of Standard Report and Audit Report Lag on Access to Finance (Using Weighted Access Index)

	Model 1			Model 3		
	Standardized Beta	Coefficient (t-value)	*p*-value	Standardized Beta	Coefficient (t-value)	*p*-value
Constant		6.068	0.000		-2.662	0.008
STANDARD_REPORT	-0.146	-2.306	**0.022****			
REPORT_LAG				0.200	3.196	**0.002*****
R^2		0.021			0.040	
Adj.R^2		0.017			0.036	
Std. error		0.35881			0.35534	
Durbin-Watson		1.726			1.734	
F-value		5.316			10.212	
Sig. F		**0.022****			**0.002*****	
N		246			246	

*** indicates *p*-value<0.01
** indicates *p*-value<0.05

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

WEIGHTED_ACCESS: KZE_{it} = $\{(1/5)*(-1.002CF_{it}/A_{i(t\_1)})\}$ − $\{(1/5)*(39.368DIV_{it}/A_{i(t\_1)})\}$ − $\{(1/5)*(1.315C_{it}/A_{(it\_1)})\}$ + $\{(1/5)*3.139LEV_{i(t)}\}$ + $\{(1/5)*0.283Q_{i(t)}\}$.

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After running models (4) and (5), the researcher confirmed the results in the main analyses. As presented in Table (12), *REPORT_LAG* is mediating the relationship between *STANDARD_REPORT* and *ACCESS* to finance, as beta coefficient of *STANDARD-REPORT* decreased from -0.146 to -0.105 after adding the *REPORT_LAG* variable to the main model and turned to be insignificant (*p*-value = 0.105).

After adding the control variables *PROFIT* and *SIZE* to the analysis (Table 12), the researcher confirmed the main results and found supporting evidence that *REPORT_LAG* still have a negative and significant impact on firm's *ACCESS* to finance and the effect of *PROFIT* on firm's *ACCESS* is still positive and significant, supporting the finding that *PROFIT* will give a positive message to external capital providers and encourage them to offer funds to profitable firms. Accordingly, profitable firms will face lower capital constraints (t-value = -5.269, *p*-value = 0.000). Again, the *SIZE* of non-financial firms listed on EGX will not affect capital providers' decision concerning capital granting and resource allocation decisions (t-value = 1.510, *p*-value = 0.132).

Accordingly, it can be concluded that after using Weighted Access Index, to measure the firm's access to finance, **the fourth research hypothesis (H4) is supported.**

Table (12) Mediating Effect of Audit Report Lag and Extended Model Regression Results (Using Weighted Access Index)

	Model 4				Model 5			
	Standardized Beta	Coefficient (t-value)	*p*-value	VIF	Standardized Beta	Coefficient (t-value)	*p*-value	VIF
Constant		-2.006	0.046			-1.304	0.193	
STANDARD_REPORT	-0.105	-1.625	0.105	1.059	-0.097	-1.582	0.115	1.061
REPORT_LAG	0.176	2.732	**0.007*****	1.059	0.114	1.824	**0.069***	1.098
PROFIT					-0.323	-5.269	**0.000*****	1.068
SIZE					0.091	1.510	0.132	1.034
R^2		0.050				0.150		
Adj.R^2		0.043				0.136		
Std. error		0.35415				0.33652		
Durbin-Watson		1.761				1.720		
F-value		6.461				10.611		
Sig. F		**0.002*****				**0.000*****		
N		246				246		

*** indicates *p*-value<0.01

* indicates *p*-value<0.1

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

PROFIT: Dummy variable that takes the value (1) in case the firm made profits in the previous year, (0) otherwise.

SIZE: Natural logarithm of total assets of the previous year

WEIGHTED_ACCESS: $KZE_{it} = \{(1/5)*(-1.002CF_{it}/A_{i(t\_1)})\} - \{(1/5)*(39.368DIV_{it}/A_{i(t\_1)})\} - \{(1/5)*(1.315C_{it}/A_{(it\_1)})\} + \{(1/5)*3.139LEV_{i(t)}\} + \{(1/5)*0.283Q_{i(t)}\}$.

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4.4.2.2. *Using Four-variable Access index to measure access to finance*

The researcher used the four-variable access index (*FOUR-VARIABLE ACCESS*) as an alternative measure for access to finance. This index removed the variable related to the firm's market value to calculate the firm's access to finance (financial constraints) (Salehi et al. 2013).

Table (13) confirmed the main and previous sensitivity analysis results and found that *STANDARD_REPORT* reduces the firm's financial constraints that it faces, and this indicates that standard report has a positive information content and is valuable from the capital provider's point of view (t-value = -2.264, *p*-value).

In addition, Table (13) adds supporting evidence concerning the negative effect of *REPORT_LAG* on the firm's ability to access external funds. Audit delay reduces the level of transparency, increases information asymmetry problem, and increases the capital constraints and obstacles that firms face (t-value = 2.999, *p*-value = 0.003). **Accordingly, the first (H1) and third (H3) research hypotheses are supported.**

Table (13) Impact of Standard Report and Audit Report Lag on Access to Finance (Using Four Variable Access Index)

	Model 1			Model 3		
	Standardized Beta	**Coefficient (t-value)**	***p*-value**	**Standardized Beta**	**Coefficient (t-value)**	***p*-value**
Constant		3.866	0.000		-2.733	0.007
STANDARD_REPORT	-0.143	-2.264	**0.024**[**]			
REPORT_LAG				0.189	2.999	**0.003**[***]
R^2		0.021			0.036	
Adj.R^2		0.017			0.032	
Std. error		1.75264			1.73919	
Durbin-Watson		1.817			1.830	
F-value		5.127			8.993	
Sig. F		**0.024**[**]			**0.003**[***]	
N		246			246	

*** indicates *p*-value<0.01
** indicates *p*-value<0.05

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.

FOUR-VARIABLE ACCESS: KZ_{it} (four-variable) $= -1.002\ CF_{it}/A_{i(t\_1)} - 39.368\ DIV_{it}/A_{i(t\_1)} - 1.315\ C_{it}/A_{(it\_1)} + 3.139 LEV_{i(t)}$

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Again, the researcher ran models (4) and (5) and confirmed the results in the main analysis and previous sensitivity analysis. As shown in Table (14), *REPORT_LAG* is mediating the relationship between *STANDARD_REPORT* and *ACCESS* to finance, as beta coefficient of *STANDARD-REPORT* decreased after adding the *REPORT_LAG* variable to the main model and turned to be insignificant (beta coefficient = -0.105, *p*-value = 0.105).

After adding *PROFIT* and *SIZE* to the analysis, the researcher confirmed the main results and found supporting evidence that *REPORT_LAG* has a negative and significant impact on firm's *ACCESS* to finance (t-value = 1.757, *p*-value = 0.080) and *PROFIT* is found to give positive message to external capital providers and encourage them to offer funds to profitable firms. Accordingly, profitable firms will face lower capital constraints (t-value = -4.406, *p*-value = 0.000). Again, the *SIZE* of non-financial firms listed on EGX will not affect capital providers' decision concerning capital granting and resource allocation decisions (t-value = 0.976, *p*-value = 0.330). Accordingly, it can be concluded that after using Four Variable Access Index, to measure the firm's access to finance, **the fourth research hypothesis (H4) is supported.**

Table (14) Mediating Effect of Audit Report Lag and Extended Model Regression Results (Using Four Variable Access Index)

	Model 4				Model 5			
	Standardized Beta	Coefficient (t-value)	*p*-value	VIF	Standardized Beta	Coefficient (t-value)	*p*-value	VIF
Constant		-2.073	0.039			-1.173	0.242	
STANDARD_REPORT	-0.105	-1.625	0.105	1.059	-0.099	-1.586	0.114	1.061
REPORT_LAG	0.164	2.540	**0.012****	1.059	0.111	1.757	**0.080***	1.098
PROFIT					-0.276	-4.406	**0.000*****	1.068
SIZE					0.060	0.976	0.330	1.034
R^2		0.046				0.117		
Adj.R^2		0.038				0.103		
Std. error		1.73337				1.67426		
Durbin-Watson		1.848				1.804		
F-value		5.847				7.999		
Sig. F		**0.003*****				**0.000*****		
N		246				246		

*** indicates *p*-value<0.01   ** indicates *p*-value<0.05   * indicates *p*-value<0.1

Variables definitions:
STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.
REPORT_LAG: Natural logarithm of the number of days that elapse between the financial statement date and the audit report date in the previous year.
PROFIT: Dummy variable that takes the value (1) in case the firm made profits in the previous year, (0) otherwise.
SIZE: Natural logarithm of total assets of the previous year
FOUR-VARIABLE ACCESS: KZ_{it} (four-variable) = $-1.002\ CF_{it}/A_{i(t\_1)} - 39.368\ DIV_{it}/A_{i(t\_1)} - 1.315\ C_{it}/A_{(it\_1)} + 3.139 LEV_{i(t)}$

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4.4.2.3. Using an alternative measure for audit report lag

In this sensitivity analysis, the researcher used an alternative measure of audit report lag to check the robustness of research results and provide additional supporting and corroborating evidence. The researcher measured audit report lag as a dummy variable that takes the value (1) in case the audit report lag of the firm in the previous year is lower than the sample median (63.5 days) (*REPORT_LAG(D)*); (0) otherwise. The researcher ran the regression models related to audit report lag, which are models (2), (3), (4) and (5). Table (15) confirmed the results of the main and previous sensitivity analyses and adds corroborating evidence on the negative impact of *STANDARD_REPORT* on *REPORT_LAG(D)*, thereby **supporting the second research hypothesis (H2)**.

**Table (15) Impact of Standard Audit Report on Audit Report Lag
(Alternative Measure for Audit Report Lag)**

	Model 2		
	Standardized Beta	**Coefficient (t-value)**	***p*-value**
Constant		12.962	0.000
STANDARD_REPORT	-0.233	-3.748	**0.000*****
R^2		0.054	
Adj.R^2		0.051	
Std. error		0.48819	
Durbin-Watson		2.076	
F-value		14.049	
Sig. F		**0.000*****	
N		246	

*** indicates *p*-value<0.01

Variables definitions:

STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.

REPORT_LAG(D): Dummy variable that takes the value (1) in case the number of days between financial statement date and audit report date in the previous year is greater than the sample median (63.5 days), (0) otherwise.

As shown in Table (16), the coefficient of *REPORT_LAG(D)* is positive and significant (t-value = 3.322, *p*-value = 0.001), which confirms the main analysis results concerning the positive and significant effect of *REPORT_LAG(D)* on firm's capital constraints and so its negative and

significant effect on the firm's *ACCESS* to finance. **Thereby supporting the third research hypothesis (H3).**

Table (16) Impact of Audit Report Lag on Access to Finance (Alternative measure of Report Lag)

	Model 3		
	Standardized Beta	**Coefficient (t-value)**	***p*-value**
Constant		2.536	0.012
REPORT_LAG(D)	0.208	3.322	**0.001**[***]
R^2		0.043	
Adj.R^2		0.039	
Std. error		1.77382	
Durbin-Watson		2.125	
F-value		11.035	
Sig. F		**0.001**[***]	
N		246	

*** indicates *p*-value<0.01

Variable definitions:

REPORT_LAG(D): Dummy variable that takes the value (1) in case the number of days between financial statement date and audit report date in the previous year is greater than the sample median (63.5 days), (0) otherwise

ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

After running models (4) and (5), the researcher confirmed the results in the main analyses and previous sensitivity analyses. As presented in Table (17), *REPORT_LAG(D)* is mediating the relationship between *STANDARD_REPORT* and *ACCESS* to finance, as beta coefficient of *STANDARD-REPORT* decreased after adding the *REPORT_LAG* variable and turned to be insignificant (beta coefficient = -0.103, *p*-value = 0.110).

After adding *PROFIT* and *SIZE* to the analysis, the researcher confirmed the main results and found supporting evidence that *REPORT_LAG(D)* has a negative and significant impact on firm's *ACCESS* to finance (t-value = 2.217, *p*-value = 0.028) at 5% significance level. In addition, the *PROFIT* is found to give a positive message to external capital providers and encourage them to offer funds to profitable firms. Accordingly, profitable firms will face lower capital constraints (t-value = -5.367, *p*-value = 0.000). Again, the *SIZE* of non-financial firms listed on EGX will not affect capital providers' decision concerning capital granting (t-value = 1.443, *p*-value = 0.150).

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Based on the discussion above, **the fourth research hypothesis (H4) is supported.**

Table (17) Mediating Effect of Audit Report Lag and Extended Model Regression Results (Alternative Measure of Audit Report Lag)

	Model 4				Model 5			
	Standardized Beta	Coefficient (t-value)	*p*-value	VIF	Standardized Beta	Coefficient (t-value)	*p*-value	VIF
Constant		2.908	0.004			-0.039	0.969	
STANDARD_REPORT	-0.103	-1.606	0.110	1.058	-0.092	-1.506	0.133	1.060
REPORT_LAG (D)	0.184	2.866	**0.005*****	1.058	0.137	2.217	**0.028****	1.082
PROFIT					-0.326	-5.367	**0.000*****	1.051
SIZE					0.087	1.443	0.150	1.037
R^2		0.053				0.155		
Adj.R^2		0.046				0.141		
Std. error		1.76810				1.67714		
Durbin-Watson		2.125				2.032		
F-value		6.843				11.071		
Sig. F		**0.001*****				**0.000*****		
N		246				246		

*** indicates *p*-value<0.01
** indicates *p*-value<0.05

Variables definitions:
STANDARD_REPORT: Dummy variable that takes the value (1) in case the audit report issued in the previous year is standard and (0) otherwise.
REPORT_LAG(D): Dummy variable that takes the value (1) in case the number of days between financial statement date and audit report date in the previous year is greater than the sample median (63.5 days), (0) otherwise
PROFIT: Dummy variable that takes the value (1) in case the firm made profits in the previous year, (0) otherwise.
SIZE: Natural logarithm of total assets of the previous year.
ACCESS: KZ index = -1.002 CF_{it}/A_{it-1} -39.368 DIV_{it}/A_{it-1} - 1.315 C_{it}/A_{it-1} + 3.139 LEV_{it} + 0.283 Q_{it}

4.4.2.4. *Robustness Check Using SPSS-AMOS-26 (Path analysis)*

In this section, the researcher used SPSS-AMOS-26 to run a path analysis and provide additional evidence on the impact of standard audit report on firms' access to finance and the mediating effect of audit report lag. According to Figure (2), *STANDARD_REPORT* has a negative impact on firm's financial constraints (Estimate = -0.54, Standard error = 0.24), and accordingly, the *STANDARD_REPORT* will help firms in finding external capital provider easier.
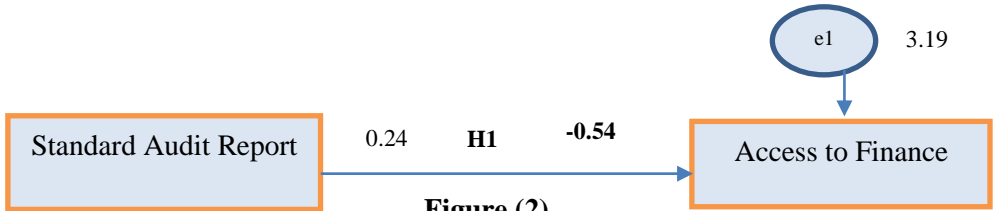
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Figure (2)
Effect of Standard Audit Report on Access to Finance

Table (18) confirmed the regression result presented in the main and sensitivity analyses and showed that *STANDARD_REPORT* has a significant negative effect on firm's capital constraints and so a significant positive effect on the firm's access to finance (Estimate = -0.541, *p* = 0.021). **Accordingly, H1 is supported.**

Table (18) Effect of Standard Audit Report on Access to Finance (Path Analysis)

Relationship (regression weight)	Estimate	S.E.	C.R.	*p*	path
STANDARD_REPORT → ACCESS	-0.541	0.234	-2.310	**0.021**[**]	1

** indicates *p* <0.05

To test the next three research hypotheses using path analysis, the researcher adds the audit report lag to the model (as shown in Figure 3)
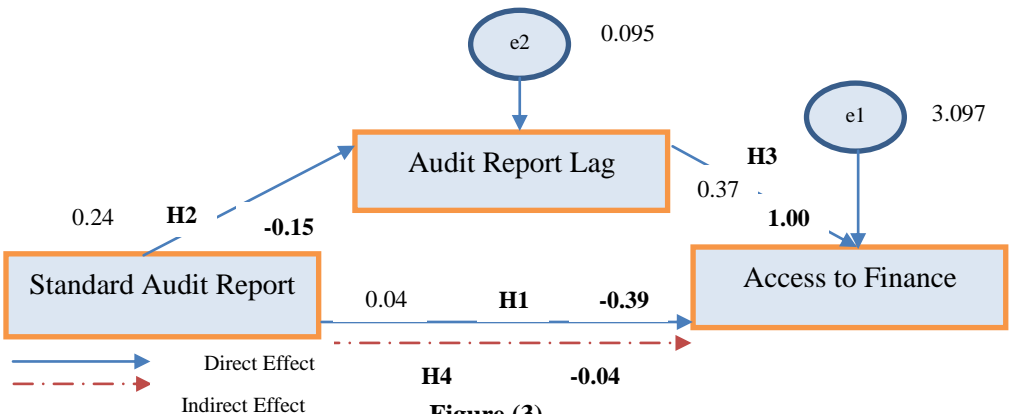

Figure (3)
Effect of Standard Audit Report and Audit Report Lag on Access to Finance

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As presented in Table (19), after adding the *REPORT_LAG* to the model, the effect of *STANDARD_REPORT* turned to be insignificant ($p = 0.103$). This indicates that audit delay mediates the relationship between standard audit report and access to finance. In addition, Table (19) confirmed the main and sensitivity research results and provided additional evidence on the negative impact of *STANDARD_REPORT* on *REPORT_LAG* ($p = 0.000$) and the negative impact of *REPORT_LAG* on firm's access to finance ($p = 0.006$).

Table (19) Effect of Standard Audit Report and Audit Report Lag on Access to Finance (Path Analysis)

Relationship (regression weight)	Estimate	Standardized Estimate	S.E.	C.R.	p	path
STANDARD_REPORT → *ACCESS*	-0.387	-0.105	0.237	-1.632	0.103	1
STANDARD_REPORT → *REPORT_LAG*	-0.153	-0.236	0.040	-3.801	**0.000*****	2
REPORT_LAG → *ACCESS*	1.002	0.176	0.365	2.743	**0.006*****	3

*** indicates $p<0.01$

Table (20) showed the direct and indirect effects of *STANDARD_REPORT* on *ACCESS* to finance. It adds supporting evidence that the total effect of *STANDARD_REPORT* on *ACCESS* to finance is negative and significant, which means that issuing a standard audit report will have a negative effect on the firm's capital constraints (Sig. = 0.032), however the direct effect of *STANDARD_REPORT* is insignificant (Sig. = 0.094). The indirect effect of *STANDARD_REPORT* (through the effect of *REPORT_LAG*) is significant (Sig. = 0.001). This result provides additional evidence on the mediating effect of *REPORT_LAG* on the relationship between *STANDARD_REPORT* and *ACCESS* to finance.

Table (20) Direct and Indirect Effects of Standard Audit Report on Access to Finance (Path Analysis)

Effect	Direct effect	Indirect effect	Total effect	Ratio of Indirect to Total effect
STANDARD_REPORT → ACCESS	-0.105	-0.041	-0.146	28%
Sig.	0.094	**0.001*****	**0.032****	
STANDARD_REPORT → REPORT_LAG	-0.236		-0.236	
Sig.	**0.002*****		**0.002*****	
REPORT_LAG → ACCESS	0.176		0.176	
Sig.	**0.002*****		**0.002*****	

*** indicates sig. <0.01
** indicates sig. <0.05

The ratio of indirect to total effects (shown in Table 20) indicates that there is partial mediation of *REPORT_LAG* on the relationship between *STANDARD_REPORT* and *ACCESS* to finance. **Based on the results of path analysis, the second, third and fourth research hypotheses are supported.**

In the extended model, the researcher added the two control variables to the model, which are *PROFIT* and *SIZE* (as shown in Figure 4), and consistent with the main research findings, Table (21) shows that *STANDARD_REPORT* has a significant negative impact on audit *REPORT_LAG* ($p = 0.000$) (**supporting H2**) and *REPORT_LAG* has a positive impact on the firm's financial constraints and so a negative impact on the firm's *ACCESS* to finance ($p = 0.061$) (**supporting H3**) and *STANDARD_REPORT* has no significant effect on firm's *ACCESS* to finance ($p = 0.110$) and *REPORT_LAG* mediates the relationship between *STANDARD_REPORT* and firm's *ACCESS* to finance (**supporting H4**). *PROFIT* was shown to affect the firm's capital constraints negatively and so its *ACCESS* to finance positively ($p = 0.000$) and *SIZE* has no significant effect on the firm's *ACCESS* to finance ($p = 0.112$).
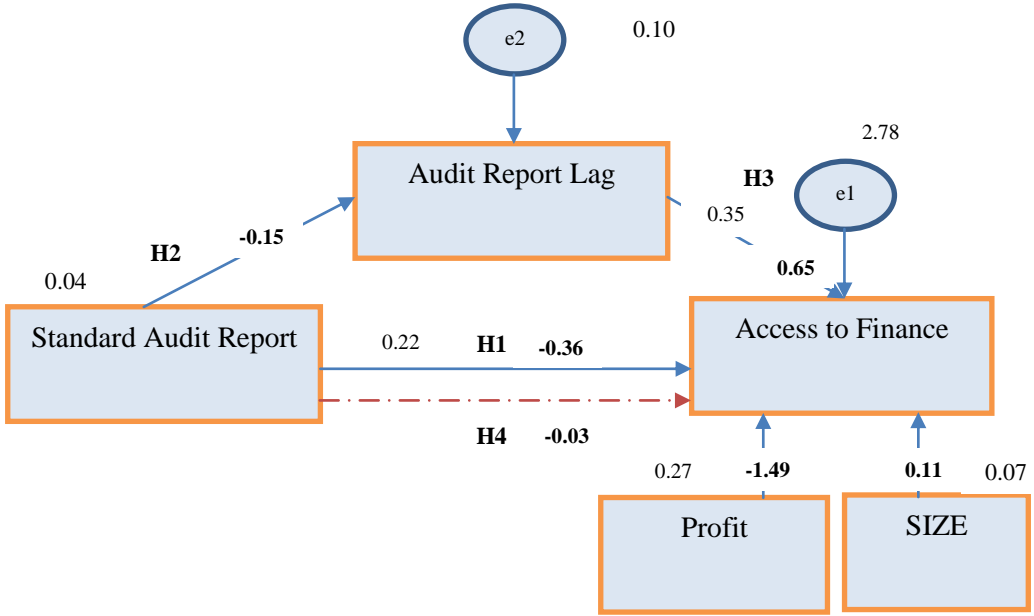
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Figure (4)
Extended Model

Table (21) Extended Model (Path Analysis)

Relationship	Estimate	Standardized Estimate	S.E.	C.R.	p	path
STANDARD_REPORT → ACCESS	-0.358	-0.097	0.224	-1.596	0.110	1
STANDARD_REPORT → REPORT_LAG	-0.153	-0.236	0.040	-3.801	**0.000*****	2
REPORT_LAG → ACCESS	0.647	0.114	0.346	1.873	**0.061***	3
PROFIT → ACCESS	-1.485	-0.325	0.271	-5.489	**0.000*****	4
SIZE → ACCESS	0.108	0.092	0.070	1.548	0.122	5

*** indicates $p < 0.01$
* indicates $p < 0.1$

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Table (22) confirmed the partial mediating effect of *REPORT_LAG* on the relationship between *STANDARD_REPORT* and *ACCESS* to finance.

Table (22) Direct and Indirect Effects of Standard Audit Report on Access to Finance (Path Analysis)

Effect	Direct effect	Indirect effect	Total effect	Ratio of Indirect to Total effect	Decision
STANDARD_REPORT →ACCESS	-0.097	-0.027	-0.124	22%	Partial mediation
Sig.	0.119	**0.026****	**0.048****		
STANDARD_REPORT →REPORT_LAG	-0.236		-0.236		
Sig.	**0.002*****		**0.002*****		
REPORT_LAG → ACCESS	1.114		1.114		
Sig.	**0.042****		**0.042****		
PROFIT → ACCESS	-0.325		-0.325		
Sig.	**0.002*****		**0.002*****		
SIZE → ACCESS	0.092		0.092		
Sig.	0.193		0.193		

*** indicates sig. <0.01
** indicates sig. <0.05

Based on the main and other analyses, the researcher found evidence that standard audit report has a positive and significant impact on non-financial listed firms' access to finance in Egypt and that audit delay mediates the relationship between standard audit report and firms' access to finance. Table (23) summarizes the research hypotheses results.

Table (23) Summary of Research Hypotheses and Results

	Hypothesis	Expected	Result	Decision
H1	*Standard audit report has a significant positive effect on non-financial listed firm's access to finance in Egypt*	Positive and significant	Positive and significant	Supported
H2	*Standard audit report has a significant negative effect on audit report lag for non-financial listed firms in Egypt*	Negative and significant	Negative and significant	Supported
H3	*Audit report lag has a significant negative effect non-financial listed*	Negative and significant	Negative and significant	Supported

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	Hypothesis	Expected	Result	Decision
	firm's access to finance in Egypt			
H4	*Audit report lag mediates the relationship between standard audit report and non-financial listed firm's access to finance in Egypt*	Mediator	Mediator	Supported

5. Conclusions, Recommendations, and Implications for Future Research

The objective of this paper is to study and investigate the impact of standard (unmodified) audit report on the non-financial listed firms' access to finance in Egypt and whether audit delay (audit report lag) mediates the relationship between standard audit report and access to finance.

This paper addresses the following research questions: Does standard audit report have a positive and significant impact on non-financial listed firm's access to finance in Egypt? Does standard audit report reduce audit delay? Does audit delay affect the non-financial listed firm's access to finance in Egypt? Does audit delay mediates the relationship between standard audit report and non-financial listed firm's access to finance in Egypt?

To fulfil the research objective and answer its questions, a sample of 246 firm-year observations was collected from the non-financial firms listed on the EGX during the period from 2016 to 2019 and five regression models were developed.

Main regression results provided evidence that firms that receive standard (unmodified) audit reports will find it easier to access external finance and this indicate that standard audit report presents a positive signal to the market concerning the quality of financial disclosure and reduces the level of information asymmetry between managers and other stakeholders. In addition, regression results showed that issuing standard audit reports will reduce audit delay, as modifications in the audit report require negotiations between the auditor and the client and this need more time and consequently will delay the issuance of financial statements and related audit report. Also, regression results showed that audit delay will have a negative effect on capital holders' resource allocation and investment decisions, as delaying

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the issuance of audit report is a negative signal to the market and might be an indicator of poor earnings quality, in addition to its role in increasing the information asymmetry between managers and capital providers. Finally, the main analysis provided empirical evidence on the mediating effect of audit delay on the relationship between standard audit report and firm's access to finance. Results suggest that the main findings are robust to two alternative measures of access to finance and an alternative measure to audit delay.

The researcher suggests that firm managers pay more attention to the role that modified audit reports and audit delay play in reducing the level of transparency and increasing the information risk in financial statements. It is important to know that delaying audit report may deprive them from finding suitable sources of funds for their investment opportunities. Also, the researcher recommends the accounting departments in public departments to hold scientific conferences to concentrate on the importance of audit reports and audit delay in financing decisions and arrange some sessions to discuss their role in resource allocation decisions.

Based on the research findings, **several future research avenues** are open. *First*, it would be interesting if future research explores the effect of different audit opinion on the capital constraints that firms face, while using different moderating variables, such as auditor industry expertise and auditor tenure. *Second*, future research may replicate this research while adding more control variables that improve the Adj. R^2 of the regression model. *Third*, it would be interesting if future research prepares a comparative study on the effect of audit related variables on the non-financial firms' access to finance in other developing countries. *Finally*, future researchers may conduct more research to investigate the moderating role of information technology advancements, using big data analytics, in the relationship between audit report and audit delay on one side and the firm's access to finance on the other side, especially that the use of IT advancements may expedite the auditor's procedures and are expected to reduce audit delay.

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