# Impact of Corporate Governance, Audit Quality and Firm Characteristics on Firm Profitability using Earnings Quality as a Moderating Variable

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#### Abstract

The main aim of this research was to investigate the impact of corporate governance (board characteristics) and audit quality on profitability using earnings quality as a moderator variable. Its observed data consisted of 336 annual data of a sample of 56 companies listed in the Egyptian Stock Exchange during the period 2015-2020. The proxies of corporate governance are board independence, board size and CEO duality. The proxies of audit quality are auditor size (big 4), audit committee size and audit committee independence. The control variables that are considered are financial leverage and firm size. Data analysis method used multiple regression analysis to examine the interrelation between the research variables.

Research results showed that board independence, large board size, large audit committee, audit committee independence and Big 4 audit firms have a positive insignificant impact on the firm' profitability, while financial leverage and CEO duality are found to have a negative relationship with firm' profitability. In addition, the results show that board independence, large board size, large audit committee, audit committee independence, Big 4 audit firms, financial leverage and firm size have a positive impact on the earnings quality, while CEO duality is found to have a negative relationship with earnings quality. The findings indicate that the

audit committee improves audit quality. These findings are similar with the earlier findings, which found that corporate governance and audit quality had a beneficial impact on business profitability through their impact on value relevance and firm value. The value relevance of financial reporting demonstrates its dependability. Effective corporate governance ensures the dependability of financial reporting, reducing the asymmetry of accounting information.

#### Keywords: Corporate Governance; Audit Quality; Firm Profitability; Earnings Quality; Egypt

#### مستخلص البحث

تم إجراء هذا البحث لاختبار تأثير حوكمة الشركات وجودة المراجعه على أداء الشركة باستخدام جودة الأرباح كمتغير وسيط. تم رصد عدد ٣٣٦ بيانات سنوية لعينة مكونة من ٥٦ شركة مدرجة في البورصة المصرية خلال الفترة ٢٠١٥-٢٠٢٠. الهدف من هذا البحث هو تحديد تأثير حوكمة الشركات، وتحديداً استقلالية مجلس الإدارة وحجمه، وازدواجية الرئيس التنفيذي، وحجم لجان المراجعه، واستقلالية لجنة المراجعه وحجمها، على جودة الارباح وربحية الشركات المصرية. كما تم الاخذ في الاعتبار تأثير الرافعة المالية وحجم المسركة على المتغير التابع. تم تحليل البيانات بأستخدام تحليل الانحدار المتعدد لفحص العلاقة المتبادلة بين متغيرات البحث.

نظرًا لأن المحاسبة المالية هي مُدخل ومُخرج لحوكمة الشركات ، فقد تؤدي جودة الأرباح الأعلى إلى آلية حوكمة أكثر فاعلية، وقد تؤدي آلية أكثر فاعلية إلى جودة أعلى للأرباح تظهر هذه الاعتبارات أن حوكمة الشركات وجودة المراجعه مكملان لبعضهما البعضّ. وفقًا للنتائج، ترتبط جودة المراجعه ومعايير حوكمة الشركات بمزيد من إدارة الأرباح، أو جودة الأرباح. ويعتبر المستثمرون الشركات ذات الأرباح العالية أكثر شفافيةً. نتيجة لذلك، قد يكون هناك علاقة بين جودة الأرباح وعدد المديرين المستقلين في مجلس الإدارة. أظهرت نتائج البحث أن استقلالية مجلس الإدارة، وحجم مجلس الإدارة الكبير، ولجان المراجعه ذات الحجم الكبيرة، واستقلالية لجنة المراجعه والاستعانه بأحد شركات المراجعه الأربع الكبري لها تأثير إيجابي كبير على ربحية الشركة، في حين وُجد أن الرافعة المالية وازدواجية الرئيس التنفيذي لديها علاقة سلبية مع الرّبحية. بالإضافة إلى ذلك ، تُظهر النتائج أن استقلالية مجلس الإدارة، وحجم مجلس الإدارة الكبير، ولجنة المراجعه الكبيرة، واستقلالية لجنة المراجعه، والاستعانة بأحد شركات المراجعه الأربع الكبرى، والرافعة المالية وحجم الشركة، لهم تأثير إيجابي على جودة الأرباح، في حين تبين أن ازدواجية الرئيس التنفيذي لها تأثير سلبي العلاقة مع جودة الأرباح. تشير النتائج إلى أن لجنة المراجعه تعمل على تحسين جودة المراجعة وجوده الارباح. تتشابه هذه النتائج مع النتائج الدراسات السابقة، التي وجدت أن حوكمة الشركات وجودة المراجعه كان لهما تأثير ايجابي على ربحية الأعمال من خلال تأثير هما على قيمة الشركة. تضمن الحوكمة الفعالة للشركات نزاهة التقارير المالية والمعلومات المحاسبية. الكلمات المفتاحية: حوكمة الشركات ؛ جودة المراجعة ؛ ربحية الشركة ؛ جودة الأرباح ؛ مصر

## 1. Introduction

An organization's presence of good corporate governance (GCG) and audit quality are absolutely required to ensure internal control and financial reporting procedures, as both can assist in building shareholder confidence and ensuring that all stakeholders are treated equally, and they will provide effective protection to shareholders to recover their investment reasonably, appropriately, and efficiently, and focus on ensuring that management acts for the interest of the organization (Mahrani and Soewarno, 2018).

Earnings quality is one of the factors on which investors base their selections. Management policies influence earnings information provided by management through financial reports, which indicates that management handles information that could be directed for certain reasons (Scott, 1997).

The operations that generate profit or financial advantage are given the highest priority in every commercial organization. As a result, managers go to great lengths to guarantee that the firm's operations are successful (Cudia et al., 2021). Earnings quality is an important aspect of financial reporting. It represents the notion that financial reports should be as relevant to investors and other capital providers in making resource allocation decisions as possible. High-quality financial reports should enhance decisionmaking and, as a result, capital market efficiency (Hamdan, 2020).

Audit quality refers to the attributes of the audit company, the audit team's attributes, corporate governance processes, and the techniques utilized in carrying out audit work that result in perceived satisfaction by various stakeholders. However, determining the level of satisfaction among various stakeholders is primarily dependent on their information needs (Ivungu et al., 2019).

In connection to earnings quality, audit quality is the accuracy of information provided by an auditor to an investor in order for the investor to make more accurate estimates of company worth. Financial reports that do not contain a substantial misrepresentation show a high level of audit quality (Sumiadji and Subiyantoro, 2019). Earnings quality (EQ), according to Srinidhi, Gul, and Tsui (2011), is the ability of current reported earnings to reflect future cash flow and earnings. In this sense, earnings quality refers to how well current reported earnings predict an entity's future performance.

An improvement in net income that is not accompanied by an increase in cash flow from operations is questionable. How investors react to earnings information in the capital market captures their judgments of the quality of earnings. Investors are willing to pay a premium price for "high quality" earnings since they are perceived to be long-term gains. As a result, profits quality is determined by investors' reactions to the information content of accounting earnings. Earnings are separated into cash flows and accruals; excellent quality improves after earnings management procedures are eliminated: the less discretionary the accruals, the better the quality (Hamdan, 2020).

#### 2. <u>Research Statement</u>

The connection between corporate governance, audit quality, and earnings quality is still a hot topic for researchers and analysts to debate and analyze. Based on prior studies that look at earnings quality, there is still a research gap with inconsistent results from the independent factors studied. To improve earnings quality, it is vital to understand the factors that can have an impact on earnings quality. Thus, six independent variables are included in this study, with profitability serving as a moderator variable, while the two variables: financial leverage and company size serving as control factors.

The complexity of this research is addressing the link between board independence, board size, and CEO duality, as

well as Auditor size (big 4), and audit committee characteristics (size and independence) and earnings quality. It investigates the effect of corporate governance and audit quality on earnings quality, with the latter initially considered as a proxy for the formers. That is, the two ideas are depending on one another.

Furthermore, Investor reaction to earnings information from a company will be more long-lasting if it is supported by more accurate and reputable financial statement information as a consequence of quality audits. Investors are expected to place a higher value on organizations that have excellent financial performance while also being audited by high-quality auditors. Thus, corporate governance and audit quality are factors that are expected to amplify the influence of profitability on firm value on the Egyptian stock exchange.

The research's conclusions may be critical for regulators and investors concerned with audit quality and earnings quality, as well as enhancing the quality of financial reporting and corporate profitability. They will also be useful to investors in assessing the influence of corporate governance on earnings quality and firm value.

## 3. Research Questions and Objectives

# The research aim to empirically answering the following research questions:

**RQ1.** What is association between the board size, degree of independence of the board, CEO duality and the profitability of the Egyptian listed companies?

**RQ2.** What is association between the auditor size (big 4), degree of independence of the audit committee, size of audit committee and the profitability of the Egyptian listed companies?

**RQ3.** What is association between the board size, degree of independence of the board, CEO duality and the level of earnings quality of the Egyptian listed companies?

**RQ4.** What is association between the size of audit firm (big 4), degree of independence of the audit committee and size of audit committee and the level of the level of earnings quality of the Egyptian listed companies?

**RQ5.** What is association between the corporate governance practices, audit quality and the level of profitability using earnings quality as a moderator variable in the Egyptian listed companies?

This research intends to accomplish numerous goals in respect to Egyptian companies, including the following primary fivefold objectives:

- **1.** To investigate the relationship between corporate governance related to board characteristics and profitability.
- **2.** To investigate the relationship between audit quality and profitability.
- **3.** To investigate the relationship between corporate governance related to board characteristics and earnings quality.
- **4.** To investigate the relationship between audit quality and earnings quality.
- **5.** To investigate the effect of corporate governance and audit quality on profitability using earnings quality as a moderator variable.

# 4. <u>Literature Review and Hypotheses Development</u> 4.1 <u>Corporate Governance and Profitability</u>

The amount to which a corporation takes corporate governance seriously determines its financial performance. In theory, GCG practice can improve the company's financial performance, lower the risk of the board making decisions that benefit their own interests, and raise investor confidence in investing capital that will affect the company's performance (Mahrani and Soewarno, 2018). In fact, a good corporate governance framework gives tremendous strength to improve

responsibility and management optimize firm value. Furthermore, owners and stakeholders feel that firm value increases through improved management and may be administered by following to corporate governance rules. According to corporate governance principles, board size must be large enough to eliminate agency concerns, increase board legitimacy, and provide a favorable impression for stakeholders. Similarly, board independence is determined by the number of non-executive directors, which must constitute at least one-third of the board. Likewise, the roles of CEO and Chairman must be distinguished.

According to Boshnak's (2021), board size and independence, audit committee, and meeting frequency all have a significant impact on firm performance. However, according to Man and Wong (2013) and Nasiri and Ramakrishnan (2020), an independent board of commissioners has a considerable impact on firm value. The presence of an independent board of commissioners is a valuable instrument for monitoring firm performance.

According to Lehn et al., (2009), board size is significantly positively connected to company size while having a considerable but negative association with growth potential. Furthermore, the importance of non-executive directors in monitoring the firm's performance cannot be overstated.

Aside from that, the best board composition includes a mix of non-executive members, which may help to alleviate the agency problem and increase the firm's value. Furthermore, the corporate governance rule proposed that the board be balanced with the engagement of independent directors, which can increase financial transparency and business value.

CEO duality gives the CEO more power/control over the board. CEO power increases managers' potential to extract personal benefits at the expense of shareholders and has a negative relationship with business value. If the presence of a dual CEO/chairman exacerbates the possibility for agency problems, the presence of a dual CEO/chairman may reduce earnings quality by increasing the level of earnings management. CEOs may be rewarded for managing their company's earnings. CEOs are typically assessed and compensated based on their company's financial performance (Alves, 2021).

Generally, corporate governance has two effects on business value. To begin with, excellent corporate governance standards ensure that the firm's resources are used in the best interests of the shareholders, which strengthen investor trust and lead to an increase in stock price multiples. Second, excellent corporate governance practices may lower shareholders' monitoring, auditing, and capital costs. Strong corporate governance practices, in particular, must grasp the agency cost between principal-shareholders and agents-managers. As a result, the firm's worth rises (Bhagat and Bolton, 2008). If the monitoring mechanism operates in accordance with normal corporate governance practices, it can control information asymmetry, moral hazards, and earnings manipulation, resulting in increased firm value.

Similarly, real earning management acts as a moderator in the relationship between corporate governance and company value. Firms' performance, however, suffers when managers engage in real earning management due to a weak governance structure.

In the light of the previous arguments, the following hypothesis is produced (corporate governance has its primary role in determining a firm performance):  $H_{01}$ : There is no significant impact of board independence and/or large board size and/or CEO duality on profitability.

## 4.2 Audit Quality and Firm Profitability

A group constituted by the board of commissioners to assist the board of commissioners in carrying out its supervisory functions is known as an audit committee. Their responsibilities include analyzing audited annual and financial reports,

examining the financial reporting process and internal control system, and supervising the audit process (Istianingsih, 2021).

Audit quality, according to Esplin et al. (2018), is a mix of several elements such as audit plan, audit timing, audit staff deployed for audit, audit hours, risk assessment, and accounting, and expertise of external audit (Alves, 2014). Auditors play a significant role in financial reporting since auditing increases the dependability and credibility of financial information. According to DeAngelo (1981), high audit quality increases the likelihood of finding and reporting errors and irregularities in financial reports. The auditing procedure decreases the possibility of management concealing information from shareholders through the confirmation of the company's financial reports. As a result, top quality auditors are required to produce high-quality audit reports.

According to Wang and Huang (2014), audit quality has a significant impact on business value. However, there are few studies that provide a thorough examination of audit quality and corporate value. Investors are expected to place a higher value on companies with higher audit quality than on other companies.

Becker et al., (1998) describe the relevance of auditing in such a way that it eliminates informational gaps between company stakeholders and management. Thus, after reviewing the findings of the preceding studies, one may conclude that audit quality is important for corporate performance. He found that high-quality auditors have greater abilities to spot management problems, and they frequently query management's financial treatment, and upon unsatisfactory clarifications, highquality auditors qualify the audit report's view.

The committee is in charge of an organization's reporting procedure as well as its internal control system. As with the board of directors, as the committee's independence grows, so does its monitoring duty on behalf of shareholders.

In the light of the previous arguments, the following hypothesis is produced (audit quality has its primary role in determining a firm performance):  $H_{02}$ : There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on profitability.

#### 4.3 Corporate Governance and Earnings Quality

Boards of directors are the most important component of corporate governance because they are in charge of overseeing the quality and integrity of the company's financial reporting as well as controlling senior management as authorized by shareholders. The role of a corporation's corporate governance structure in financial reporting is to assure GAAP conformity and the credibility of its financial statements (Lin and Hwang, 2010).

When the International Financial Reporting Standards (IFRS) effect is taken into account, board independence and audit committee independence have the same influence on earnings management, according to Hashed and Almaqtari (2021). However, whereas audit committee size was found to have a negative impact on earning management, board size was found to have a considerable favorable benefit. Importantly, the IFRS were proven to have a positive impact on earnings management. This could be because earning management is evaluated on a scale of performance.

In terms of the relationship between corporate governance and earnings quality, El Sayed Ebaid (2013) investigated the corporate governance mechanisms promoted by an Egyptian corporate governance code and discovered that it was effective in improving investors' perceptions of the quality of earnings.

The audit committee and the board of directors were the corporate governance structures studied in this study. The study found that when the board of directors was strong and/or the audit committee was strong, investors made too many judgments based on earnings quality, and the adoption of corporate governance in Egypt improves the quality of the financial reporting process, affecting investor decisions. The board of directors, which is appointed to work on behalf of the shareholders, oversees the management's operations in order to protect the wealth of the shareholders. The presence of the board of directors may serve as an effective monitoring tool to aid in the production of higher-quality financial reports. The number of non-executive directors or outside directors on the board can be used to determine the board's level of independence.

When a board contains a reasonable amount of non-executive directors, it might be considered more independent than when the board is dominated by inside directors. Several researches have been conducted in an attempt to investigate the association between board independence and earnings quality. According to Jaggi et al. (2009), the earnings quality of Hong Kong corporations with a higher proportion of independent directors on the board is higher.

Teitel and Machuga (2010) discovered that good corporate governance improves the quality of earnings. According to Uwuigbe et al. (2014), the presence of GCG can prevent or reduce earnings management because it acts as an incentive for management as an agent to act as best as possible in the interests of the principal, i.e. stakeholders, and suppress deviant behavior in order to properly account for their duties.

Juan (2012) studied the connection between board size and profits quality using a sample of 90 listed Mexican firms from 2005 to 2009. According to the findings, board size has a beneficial effect on earnings quality. Cristina (2010) confirmed similar findings using a sample of Portuguese enterprises. Sanders and Carpenter (1998) contend that board size affects the efficient flow of information, hence influencing the quality of decisions made. Larger boards are better able to monitor senior management's actions and improve profits quality (Xie et al., 2003).

According to Nugroho and Eko (2011), a board of directors is the number of persons chosen by a business's shareholders to hold a very high position in the firm along with its responsibilities, which include creating rules for corporate operations.

From an agency standpoint, the board's ability to act as an effective oversight of management in financial reporting is dependent on its independence from management. As a result, it is considered that board independence (as measured by the proportion of outside or independent directors on the board) increases effective governance and financial reporting quality (Lin and Hwang, 2010). Klein (2002) came to the conclusion that independent directors can control the reporting of anomalous accruals in financial statements. In practice, an independent audit committee comprised of the independent member is another stakeholder who can ensure financial stability.

Another important element influencing earnings quality is CEO duality, or the existence of a single individual holding both the offices of president and chairman of the board. If a single person wields too much authority, this individual may create a situation in which there is a power concentration, which may lead to the CEO or owner causing harm to the company's stakeholders (Lin and Hwang, 2010).

According to agency theory, duality increases the CEO's control over the board, reducing the independence between the board and management that is required to check managerial entrenchment (Alves, 2021), which can result in lower profits quality. Boards dominated by independent directors are supposed to assist protect shareholders from CEOs' self-serving behavior by monitoring CEOs and providing incentives for them to operate in the best interests of the shareholders. As a result, organizations with greater independent director dominance should have higher earnings quality. To improve accountability and power balance, the amended Securities and Exchange

Commission (SEC) corporate governance regulation mandates separation of the president and chairman of the board.

This necessitates the implementation of internal controls to counteract threats, particularly in the pursuit of the organization's objectives. As a result, as a facet of organizational governance, CEO duality is likely to be favorably connected with the firm's earnings quality (Cudia et al., 2021).

Independent board directors are less influenced by the CEO and hence better able to carry out their governance tasks. Independent directors are expected to be less susceptible to managerial pressure. Because such directors are subordinate to and so dependent on the CEO, insider-dominated boards are thought to be less likely than those with a large number of outside directors to override management decisions that endanger shareholders' interests. In reality, independent boards are more inclined to oversee the CEO/chairman, whose capacity to impose expenses on them diminishes as their independence increases. As a result, organizations with greater outside director dominance should have higher earnings quality (Alves, 2021).

In the light of the previous arguments, the following hypothesis is produced (corporate governance has its primary role in determining earnings quality):

 $H_{03}$ : There is no significant impact of board independence and/or large board size and/or CEO duality on earnings quality.

## 4.4 Audit Quality and Earnings Quality

The agency issues connected with the separation of ownership and control, as well as knowledge asymmetry between management and absentee owners, drives the need for external audit. External auditors are responsible for ensuring that the financial statements are fairly prepared in accordance with GAAP and that they accurately reflect the entity's economic position and operating results. As a result, the external auditor's verification increases the credibility of the company's financial

statements. Furthermore, auditing standards require external auditors to discuss and communicate with the audit committee on the quality, not merely the acceptability, of accounting principles used by the client company. As a result, a quality audit is expected to limit opportunistic earnings management as well as lessen the likelihood of major misstatements or omissions in financial reports (Lin and Hwang, 2010). In Taiwan, Wang et al. (2016) found that audit committee work production is favorably correlated with both information transparency and profits quality. In Brazil, Baioco and Almeida (2015) describe a similar pattern in terms of the impact of audit committees on earnings relevance.

According to Asthana (2014), audit quality influences investors' perceptions of earnings quality and firm value. The purpose of this research is to look at audit delay as a measure of audit quality. The prolonged audit delay indicates that the audit was of low quality. The delay in auditing will affect the timing of yearly accounting disclosures, which could create negative market reactions. Investors will be skeptical if the audit is delayed, especially if the reported earnings quality is low.

In comparison to non-big audit firms, Geiger and Rama (2006) argued that big audit firms produce a high-quality report with fewer errors. According to Reyad (2013), audit quality varies among public accounting companies. In comparison to non-big 4, the Big 4 public accounting firms are thought to have greater audit quality. The following are the reasons for this: having more clients, being able to sustain public accounting firms' reputations, having more potential resources that can be used for recruitment, training, and technology, and being able to withstand losses. As a result, Big 4 public accounting firm auditors will be better equipped to detect and disclose serious misstatements, as well as correct any material errors before the audit report is published.

Becker et al. (1998) investigate the relationship between audit quality and earnings management, using audit quality as an inverse

proxy for earnings quality. They compared the absolute value of discretionary accruals for major and non-big audit clients, and discovered that non-big audit clients have higher discretionary accruals. This means that poor audit quality is linked to increased earnings management, i.e. low earnings quality.

According to Eshleman and Guo (2014), the size of public accounting firms, specifically the big 4 and non-big 4, were the key markers of audit quality in a preliminary literature assessment of studies on audit quality. According to Krishnan et al., (2003), corporations audited by the Big 4 public accounting firms have superior financial report quality than non-Big 4 enterprises. Quality auditing processes can help agencies avoid problems caused by management's opportunistic behavior when it comes to corporate accruals. The financial statements audited by Big 4 have a stronger link between accruals and returns in the company, implying that the market gives a higher quality of financial statement information valuation.

According to DeAngelo (1981), large audit firms have significant financial independence, which permits them to constrain management in malevolent accounting techniques. As a result, large audit firms result in improved audit and financial reporting quality.

When it comes to managing the financial reporting process, a larger audit committee means more resources and abilities to draw on. According to Yang and Krishnan (2003), the size of the audit committee has a negative relationship with earnings management. According to Yandg and Krishnan (2005), major audit firms have higher incentives to defend their reputation due to their larger customer base, in addition to having more resources and skills to uncover earnings management.

Carcello and Neal (2000) and Mahmood et al., (2017) concluded that independent members of the Audit Committee are effective in ensuring the quality of financial statements. An independent audit committee ensures better quality of the company's reported revenue by providing more effective monitoring of the financial reporting process and limiting

opportunistic revenue management. Abbott et al., (2004) document that the degree of independence of the audit committee has a negative relationship with yield management. According to Abbott et al. (2003), an improved proportion of non-executive directors on the audit committee has increased financial reporting oversight and reduced the likelihood of unreliable financial reporting. Therefore, the audit committee, which is controlled by non-executive directors, promotes excessively high-quality financial reporting and enhances the objectivity of the audit committee.

Independent audit committees, according to Meca and Ballesta (2009), are an effective instrument for minimizing earnings management. The relationship between the audit committee and the quality of financial statements in Malaysia was investigated by Wan-Hussin and Haji-Abdullah (2009). They discovered that having a large audit committee is linked to higher financial reporting quality. Rainsbury et al. (2009) investigated the association between audit committee quality and financial reporting quality.

According to Lin, Li, and Yang (2006), the audit committee plays a crucial role in guaranteeing the quality of the company's financial reporting. They looked at how size, independence, financial knowledge, activity, stock ownership, and earnings management all interrelated. They don't find any evidence of a link between committee characteristics and earnings quality.

Hamdan, et al. (2013) used two models to quantify earnings quality, earnings persistence, and the decrease of discretionary accruals of quality to study the association between audit committee characteristics and earnings quality in industrial enterprises registered in ASE. The size of the audit committee, degree of independence of the audit committee, financial experience of audit committee members, number of meetings of the audit committee, ownership of stocks by audit committee members, and the function of the overall characteristics of audit committees on earnings quality were used as independent variables in this study, while the size of audit firms, firm size,

financial leverage, and the ratio of stocks owned by audit committee members were used as dependent variables. The findings of this study revealed that the audit committee's collective features had an impact on earnings quality.

In the light of the previous arguments, the following hypothesis is produced (audit quality has its primary role in determining earnings quality):

H<sub>04</sub>: There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on earnings quality.

### 4.5 Firm Profitability and Earnings Quality

Firm Earnings Quality (EQ) is a crucial determinant of minimizing information asymmetry and hence promoting financial market development. Earnings quality can be defined as a company's potential profitability or the likelihood of achieving predicted profit growth in the future. The difference between forecasted profits and profit in the financial stats is due to the distortion of the declared profit of the firm arising from the conflict of interest between the manager and the business owners, as well as accounting constraints in the business such as errors in the forecasting process and estimation of future value, or the use of inappropriate accounting methods.

The EQ is a trustworthy depiction of projected and stated earnings, and the issued profits will aid users in making wise economic judgments (Dang, 2020).

EQ, according to Penman and Zhang (2002), is the ability to foresee a company's future earnings. Investors and other stakeholders in the capital market frequently rely on financial statement information to assess the firm's future cash flow and forecast projected returns (Francis et al., 2004). As a result, the profit shown on the financial statements is a good quality profit that may be used to better estimate future cash flow.

Latif et al., (2017) conducted a research on the link between CG and firm value in Pakistan between 2003-2014. The results

demonstrate that CG enhances EQ and FV. Furthermore, EQ has a positive impact on FV.

Corporate governance improves the quality of earnings and the value of the company. Managers' opportunistic behavior toward reported earnings has an impact on the firm's worth (Rodriguez-Ariza et al., 2016). Earning quality and the firm's value are ensured by strong corporate governance policies. Furthermore, the implementation of required GAAP/IFRS improves the quality of earnings. Corporate governance improves the quality of earnings and the value of the company. Managers' opportunistic behavior toward reported earnings has an impact on the firm's worth (Rodriguez-Ariza et al., 2016). Earning quality and the firm's value are ensured by strong corporate governance policies. The implementation of GAAP/IFRS enhances the quality of earnings (Sundvik, 2019) and ensures the measurement and identification of accounting transactions (Isidro et al., 2020). Furthermore, earning quality has a role in moderating the relationship between corporate governance and the value of a company. In reality, managers regularly manipulate a company's results through real-time earnings management in order to portray a positive short-term performance. As a result, corporate governance is critical for guaranteeing that the earning quality of organizations' is maintained and that they are protected against earning manipulation (Dechow et al., 1996).

Sloan (1996) and Huang et al., (2009) found a strong link between high earning quality and firm performance, arguing that lowering earning quality reduces firm value. They also stated that lower accrual quality reflects higher earning quality.

Habib and Jiang (2015) hypothesized that the presence of earning quality improves the relationship between corporate governance and firm value in three ways: by assisting in the evaluation of good and bad projects, reducing manager misappropriation, and reducing information asymmetry between managers and investors. Similarly, earning quality acts as a

mediating variable in the impact of corporate governance on company value (Kang and Kim, 2011).

In the light of the previous arguments, the following hypothesis is produced

H<sub>05</sub>: There is no significant impact of corporate governance and audit quality using earnings quality as a moderator variable on profitability.

### 5. <u>Research Methodology</u>

This research delves deeper into the relationship between corporate governance traits and audit quality and earnings quality and business profitability in Egypt. The population of this research is based on the non-financial companies registered on the Egyptian Stock Exchange market, the sample used include 56 company with observation years ranging from 2015 to 2020.

The study population consists of all listed industrial companies that are not in the financial sector because they are subject to a different set of corporate governance guidelines due to their particular financial character. Financial and secondary data were acquired from financial statements and a public annual report revealed by firms about their corporate governance procedures and audit committees that company's use. The data set includes 56 companies and 336 observations.

## 5.1 <u>Research Variables and Regression Model</u>

The statistical relationship between corporate governance mechanisms, audit quality and firm profitability in existence of earnings quality as a moderating variable was tested using the following *five multiple regression models*:

**1. Corporate governance mechanisms: is measured by** summing up the three variables, i.e., board size, board independence and Big4 audit firms.

**2.** Audit quality: is measured by summing up the three variables, i.e., Big 4 audit firms, audit committee independence and audit committee size.

## 5.1.1 <u>First regression model, adopted to investigate the</u> <u>impact of corporate governance mechanisms related to</u> <u>board characteristics on profitability.</u>

H<sub>01</sub>: There is no significant impact of board independence and/or large board size and/or CEO duality on profitability.

To test the first hypothesis, the following model was stated;

 $\begin{aligned} \textit{Profitability} &= (\textit{Corporate Governance, Financial Leverage, Firm Size}) \\ \textit{ROE}_{it} &= \beta_0 + \beta_1 \textit{BI}_{it} + \beta_2 \textit{BS}_{it} + \beta_3 \textit{CEO}_{it} + \beta_4 \textit{LEV}_{it} + \beta_5 \textit{FS}_{it} + \varepsilon_{it} \end{aligned}$ 

#### Where:

 $\beta_0$  = denotes a constant of the regression model.

**Independent variables** =  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = denotes regression coefficient of Corporate Governance (CG): Board Independence (BI), Board Size (BS) and CEO duality (CEOD).

 $\beta_4$  and  $\beta_5$  = denotes regression coefficient of control variables firm characteristics: Financial Leverage (LEV) and Firm Size (FS).

**Dependent variable** = Profitability (Financial Performance): Return on Equity (ROE).

It = Firm i in period t.

 $\epsilon$ it = Standard error term.

5.1.2 <u>Second regression model, adopted to investigate the</u> <u>impact of audit quality on profitability.</u>

H<sub>02</sub>: There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on profitability.

To test the second hypothesis, the following model was stated;

**Profitability** = (Audit Quality, Financial Leverage, Firm Size) ROE<sub>it</sub> =  $\beta_0 + \beta_1$  BIG4<sub>it</sub> +  $\beta_2$  ACS<sub>it</sub> +  $\beta_3$  ACI<sub>it</sub> +  $\beta_4$  LEV<sub>it</sub> +  $\beta_5$  FS<sub>it</sub> +  $\varepsilon_{it}$ 

#### Where:

 $\beta_0$  = denotes a constant of the regression model.

**Independent variables** =  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = denotes regression coefficient of Audit Quality (AQ): Auditor type (Big 4), Audit Committee Size (ACS) and Audit Committee Independence (ACI).

 $\beta_4$  and  $\beta_5$  = denotes regression coefficient of control variables firm characteristics: Financial Leverage (LEV) and Firm Size (FS).

**Dependent variable** = Profitability (Financial Performance): Return on Equity (ROE).

It = Firm i in period t.

 $\epsilon$ it = Standard error term.

5.1.3 <u>Third regression model</u>, adopted to investigate the impact of corporate governance mechanisms related to board characteristics on earnings quality.

H<sub>03</sub>: There is no significant impact of board independence and/or large board size and/or CEO duality on earnings quality.

To test the third hypothesis, the following model was stated;

Earnings Quality = (Corporate Governance, Financial Leverage, Firm Size)

 $EQ_{it} = \beta_0 + \beta_1 BI_{it} + \beta_2 BS_{it} + \beta_3 CEO_{it} + \beta_4 LEV_{it} + \beta_5 FS_{it} + \varepsilon_{it}$ Where:

 $\beta_0$  = denotes a constant of the regression model.

**Independent variables** =  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = denotes regression coefficient of Corporate Governance (CG): Board Independence (BI), Board Size (BS) and CEO duality (CEOD).

 $\beta_4$  and  $\beta_5$  = denotes regression coefficient of control variables firm characteristics: Financial Leverage (LEV) and Firm Size (FS).

**Dependent variable =** Earnings Quality (EQ).

 $\mathbf{It} = \text{Firm i in period t.}$ 

 $\epsilon$ it = Standard error term.

5.1.4 <u>Fourth regression model, adopted to investigate the</u> <u>impact of audit quality on earnings quality.</u>

H<sub>04</sub>: There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on earnings quality.

To test the fourth hypothesis, the following model was stated;

Earnings Quality = (Audit Quality, Financial Leverage, Firm Size)

 $EQ_{it} = \beta_0 + \beta_1 BIG4_{it} + \beta_2 ACS_{it} + \beta_3 ACI_{it} + \beta_4 LEV_{it} + \beta_5 FS_{it} + \varepsilon_{it}$ Where:

 $\beta_0$  = denotes a constant of the regression model.

**Independent variables** =  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = denotes regression coefficient of Audit Quality (AQ): Auditor type (Big 4), Audit Committee Size (ACS) and Audit Committee Independence (ACI).

 $\beta_4$  and  $\beta_5$  = denotes regression coefficient of control variables firm characteristics: Financial Leverage (LEV) and Firm Size (FS).

**Dependent variable =** Earnings Quality (EQ).

 $\mathbf{It} = Firm i in period t.$ 

 $\varepsilon$ **it** = Standard error term.

5.1.5 <u>Fifth regression model, adopted to investigate the</u> <u>significant impact of corporate governance mechanisms and</u> <u>audit quality on profitability using earnings quality as a</u> <u>moderator variable.</u>

 $H_{05}$ : There is no significant impact of corporate governance and audit quality using earnings quality as a moderator variable on profitability.

<u>To test the fifth hypothesis, the following model was</u> <u>stated;</u>

Firm Performance = (Corporate Governance, Audit Quality, <u>Earnings Quality</u>, Financial Leverage, Firm Size) ROE<sub>it</sub> =  $\beta_0 + \beta_1$  Bl<sub>it</sub> \* EQ +  $\beta_2$  BS<sub>it</sub> \* EQ +  $\beta_3$  CEO<sub>it</sub> \* EQ +  $\beta_4$  BIG4<sub>it</sub> \* EQ +  $\beta_5$  ACS<sub>it</sub> \* EQ +  $\beta_6$  ACI<sub>it</sub> \* EQ +  $\beta_7$  LEV<sub>it</sub> \* EQ +  $\beta_8$  FS<sub>it</sub> \* EQ +  $\varepsilon_{it}$ 

#### Where:

 $\beta_0$  = denotes a constant of the regression model.

**Independent variables** =  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = denotes regression coefficient of Corporate Governance (CG): Board Independence (BI), Board Size (BS) and CEO duality (CEOD).

 $\beta_4$ ,  $\beta_5$  and  $\beta_6$  = denotes regression coefficient of Audit Quality (AQ): Auditor type (Big 4), Audit Committee Size (ACS) and Audit Committee Independence (ACI).

 $\beta_7$  and  $\beta_8$  = denotes regression coefficient of control variables firm characteristics: Financial Leverage (LEV) and Firm Size (FS).

**Dependent variable =** Profitability: Return on Equity (ROE).

**Earnings Quality** (EQ) = Used as a moderator in the fifth regression model.

It = Firm i in period t.

 $\epsilon it =$  Standard error term.

## 5.2 Research Conceptual Framework

In figure (1), the researcher presents the research variables and hypotheses to show the relationships between them. The left side shows the independent variables: *First*, corporate governance mechanisms represented by the board of director's characteristics (namely, board independence and board size and CEO duality), which indicated in the code corporate governance in Egypt and the related literature. *Second*, audit quality represented by auditor size (big 4), audit committee size and independence. The right side shows the dependent variable: profitability of the firm profitability.

Earnings quality in this study acted as the moderator variable. Financial leverage and firm size was added as control variables.



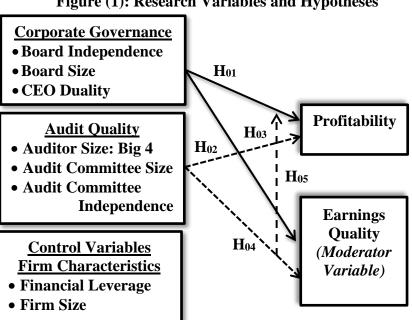


Figure (1): Research Variables and Hypotheses

The definition and measurement of dependent, independent and control variables used in the five regression models are shown in table (1).

	dent, Independent and Co	
Variables	Definition	Ratio
Earnings	Earnings quality is the	A ratio of net cash from
Quality (EQ)	ability of a company to	operating activities to net
	maintain the same amount it	income is used to
	can consume over a period	determine the quality of
	of time.	earnings.
		EQ = Net cash flow from
		operation / net income
		before interest & tax.
Profitability	Profitability refers to a	The ratio of net income
Return on	company's ability to earn	to average total equity is
Equity	money while demonstrating	used to calculate ROE.
(ROE)	its performance.	
	The return on equity metric	
	demonstrates how the	
	corporation converts	
	shareholder equity into	
	revenue.	
Board	The number of non-	BI is the fraction of
Independence	executive, external directors	independent directors
( <b>BI</b> )	currently serving on the	equal to the number of
	board is closely related to	independent members
	the board's independence.	divided by the total
		number of board
		members.
Board Size	The total number of directors	The number of board
( <b>BS</b> )	present on the board is	members is denoted by
	referred to as the board size.	BS, which is equal to the
		total number of board
		members.
<b>CEO Duality</b>	When the same person	CEO Duality is measured
(CEOD)	serves as both the CEO and	as a dummy variable,
	the chairwoman of a	with 1 indicating CEO
	corporation's board of	duality and 0 indicating
	directors, this is referred to	no CEO duality.
	as CEO duality.	
Auditor Type	The Big Four network firms	BIG4 is used as a dummy
(BIG4)	– KPMG, EY, PwC, and	variable to assess audit
	Deloitte.	quality; 1 if audited by
		one of the Big 4 audit

# Table (1): Definition and Measurement of Research Dependent, Independent and Control Variables

		firms, 0 otherwise.
Audit Committee Size (ACS)	Most audit committees have three to four members and are usually chaired by somebody who has worked as a CFO, external auditor, or CEO.	ACS is measured by the number of members of audit committee that appointed by board of directors.
Audit Committee Independence (ACI)	A board-level committee of a public sector organization comprised of at least a majority of independent members charged with providing supervision of management practices in critical governance areas. When there is no social or professional contact with management, ACI occurs.	Audit committee that comprised entirely non- executive members is given (1), but, in the absence of such unanimity, then (0).
Financial Leverage (LEV) Firm Size	Leverage is a metric used to assess a company's ability to rely on creditors to fund corporate assets.	Financial leverage is a measure of a company's debt-to-equity ratio when raising funds for operations. Total assets at the end of
(FS)	determined by the size of its income, total assets, and total equity.	year t, expressed as a natural logarithm.

### 6. Statistical Results and Analysis

For the context of this research, the dependent variable is measured using absolute values. This is to achieve better results than when using data that has both positive and negative indicators. According to the results of the tests, the data for this study passed the classical assumption for normality test, autocorrelation test, heteroskedasticity test, and multicolonierity test. We can observe from the correlation analysis results that there is no multicollinearity among the variables.

#### 6.1 <u>Pearson Correlation</u>

Table (2) shows the Pearson correlation coefficient between the dependent variable and the independent variable used in the research regression model. In correlation analysis, variable values that are converted to binary values are still represented by the original values of the measurements. Table (2) depicts the correlation matrix between earnings quality, which is assessed by a ratio of net cash from operating operations to net income, and corporate governance and audit quality characteristics.

The findings show a positive relationship between firm profitability and big board size and board independence, large audit committee size and audit committee independence, employing one of the Big 4 audit firms, and the logarithm of total assets.

The findings also show a negative relationship between corporate performance and CEO duality, board independence, and financial leverage.

The largest pairwise correlation among variables is 22.7 percent between profitability and CEO duality and 22 percent between profitability and board size, respectively, and the rest variables are less than this.

The results of the association between earnings quality and other research variables demonstrate a positive link between earnings quality and profitability, the logarithm of total assets, Big 4 audit firms, audit committee size and independence, and board size and independence. The findings indicate a negative relationship between earnings quality and both financial leverage and CEO dualism.

The largest pairwise correlation among variables is 73 percent and 58 percent for earnings quality and leverage, respectively, and the rest variables are smaller than this.

	-	LEV	ROE	FS	BIG 4	ACS	ACI	BI	BS	CEOD	EQ
Leverage	Pearson Correlation	1	118	.397**	.106	079	087	.007	177*	108	073
	Sig. (2- tailed)		.138	.000	.183	.245	.125	.933	.025	.175	.358
	N	336	336	336	336	336	336	336	336	336	336
Profitability	Pearson Correlation	118	1	.056	.141	.152	.173	.163*	.220**	227**	.045
ROE	Sig. (2- tailed)	.138		.480	.075	.065	.057	.039	.005	.004	.572
	N	336	336	336	336	336	336	336	336	336	336
Log of Total Assets	Pearson Correlation	.397**	.056	1	.060	.049	.036	.188*	.029	119	.043
	Sig. (2- tailed)	.000	.480		.453	.250	.785	.017	.714	.133	.591
	N	336	336	336	336	336	336	336	336	336	336
Audit quality Big 4	Pearson Correlation	.106	.141	.060	1	.029	.069	306**	193*	085	.037
	Sig. (2- tailed)	.183	.075	.453		.350	.450	.000	.014	.284	.643
	Ν	336	336	336	336	336	336	336	336	336	336
Audit quality Audit Committee	Pearson Correlation	079	.152	.049	.029	1	.056	.288*	.039	119	.048
Size	Sig. (2- tailed)	.245	.065	.250	.350		.794	.087	.794	.133	.689
	Ν	336	336	336	336	336	336	336	336	336	336
Audit quality Audit	Pearson Correlation	087	.173	.036	.069	.056	1	.183	.026	.039	.058
Committee Independence	Sig. (2- tailed)	.125	.057	.785	.450	.794		.077	.975	.650	.754
	N	336	336	336	336	336	336	336	336	336	336
Board Independence	Pearson Correlation	.007	.163*	.188*	306**	.183	.288*	1	.414**	.098	.035
	Sig. (2- tailed)	.933	.039	.017	.000	.077	.087		.000	.216	.657
	N	336	336	336	336	336	336	336	336	336	336
Board Size	Pearson Correlation	177*	.220**	.029	193*	.026	.039	.414**	1	.190*	.012
	Sig. (2- tailed)	.025	.005	.714	.014	.975	.794	.000		.016	.885
	N	336	336	336	336	336	336	336	336	336	336
CEO Duality	Pearson Correlation	108	227**	119	085	.039	119	.098	.190*	1	021
	Sig. (2- tailed)	.175	.004	.133	.284	.650	.133	.216	.016		.791
	N	336	336	336	336	336	336	336	336	336	336
Earnings Quality	Pearson Correlation	073	.045	.043	.037	.048	.058	.035	.012	021	1
	Sig. (2- tailed)	.358	.572	.591	.643	.689	.754	.657	.885	.791	
	N	336	336	336	336	336	336	336	336	336	336
**. Correlatio	n is signifi	cant at	the 0.0	1 level	(2-taile	d)		L			

 Table (2): Pearson Correlations Coefficients

\*\*. Correlation is significant at the 0.01 level (2-tailed).
\*. Correlation is significant at the 0.05 level (2-tailed).

# 6.2 <u>Results of Regression Analysis</u>

# 6.2.1 First Hypothesis

The first multiple regression analysis was conducted in order to examine the impact of corporate governance on firm profitability. Table (3) and (4) show the summary of multiple regression results and variables coefficients.

H<sub>01</sub>: There is no significant impact of board independence and/or large board size and/or CEO duality on profitability.

Table (3): Model Summary: Results of the Regression Model (1)

Model	R	Adjusted	Std. Error of the
	Square	R Square	Estimate
1	.292	.183	17.57392%

a. Predictors: (Constant), CEO Duality, Board Size, Board Independence

			dardized ïcients	Standardized Coefficients		
	Model	В	Std. Error	Beta	t	Sig.
1	(Constant)	5.235	14.743		.257	.698
	Leverage	063	.054	048	954	.087
	Log of Total Assets	.566	2.367	.028	.369	.042
	<b>Board Independence</b>	.413	.487	.064	.708	.037
	Board Size	.573	.287	.145	1.678	.078
	<b>CEO Duality</b>	-6.224	3.257	147	-1.745	.029

#### Table (4): Model (1) - Variables Coefficients<sup>a</sup>

a. Dependent Variable: Profitability

## <u>Based on the preceding tables (3) and (4), it is</u> <u>concluded that:</u>

- With an adjusted R-squared value of 0.183, the overall Pooled model is insignificant, implying that the insignificant independent variables and controlling factors (financial leverage and company size) explain only 18.3 percent of the variation in the ROE. This indicates that the outcome is a poor match.
- The R<sup>2</sup> value in this model is 0.292, meaning that the research model can explain only 29.2 percent of the dependent variable. This is because the dependent variable, corporate profitability, is explained by a number of other factors or variables not included in the research model.
- Board independence, large board size and firm size have a positive impact on the firm' profitability, while financial leverage and CEO duality are found to have a negative relationship with firm' profitability.
- The overall equation for forecasting the *ROE* is:

 $ROE_{it} = 5.235 + .413 BI_{it} + .573 BS_{it} - 6.224 CEO_{it} - .063 LEV_{it} + .566 FS_{it}$ 

- The results of the regression analysis in table (4) show that the model is statistically insignificant in elaborating the relationship between corporate governance practices (board characteristics) and profitability, with a P-value less than 0.05, implying that the first hypothesis predicting a positive insignificant association between corporate governance and profitability is accepted.
- The impact of GCG mechanisms on profitability is positive but insignificant. According to the findings of this research, the presence of a large number of commissioners in a firm can provide effective supervision of management in an effort to improve corporate performance. The board of commissioners' position in a firm is more important in executing the monitoring function of the board of directors' policy execution.
- The employment of an independent commissioner can help to reduce agency conflicts between the board of directors and the shareholders. An independent board of commissioners can perform its tasks to oversee the performance of the board of

directors, ensuring that the results produced are in the best interests of shareholders.

 Boards dominated by independent members are arguably in a better position to monitor and control managers; an independent board will encourage management to focus on the firm's longterm performance rather than pursuing short-term decisions with a quick return in the stock market (Alves, 2014).

## 6.2.2 Second Hypothesis

The second multiple regression analysis was conducted in order to examine the impact of audit quality on firm profitability. Table (°) and (6) show the summary of multiple regression results and variables coefficients.

 $H_{02}$ : There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on profitability.

 Table (5): Model Summary: Results of the Regression Model (2)

		Adjusted R	Std. Error of the
Model	R Square	Square	Estimate
2	.463	.270	19.17871%

a. Predictors: (Constant), Audit Type (Big 4), Audit Committee Size, Audit Committee Independence

			ndardized ficients	Standardized Coefficients		
	Model	В	Std. Error	Beta	t	Sig.
2	(Constant)	5.375	27.713		.158	.487
	Leverage	053	.085	059	987	.025
	Log of Total Assets	.766	2.257	.057	.148	.048
	Audit Type (Big 4)	4.232	3.785	097	325	.034
	Audit Committee Size	4.334	2.357	.227	.715	.028
	Audit Committee Independence	3.585	1.748	.191	.369	.017

Table (6): Model (2) - Variables Coefficients<sup>a</sup>

a. Dependent Variable: Profitability

# <u>Based on the preceding tables (5) and (6), it is</u> <u>concluded that:</u>

- **1.** With an adjusted R-squared value of 0.270, the overall Pooled model is insignificant, implying that the insignificant independent variables and controlling factors (financial leverage and company size) explain only 27 percent of the variation in the ROE. This indicates that the outcome is a poor match.
- **2.** The  $R^2$  value in this model is 0.463, meaning that the research model can explain 46.3 percent of the dependent variable. This is because the dependent variable, corporate profitability, is explained by a number of other factors or variables not included in the research model.
- **3.** All the explanatory audit quality variables and the controlling variables have significant impact on financial performance except financial leverage has insignificant impact on ROE.
- **4.** Large audit committee, audit committee independence and Big 4 audit firms have a positive impact on the firm' profitability, while financial leverage is found to have a negative relationship with firm' profitability.

### 5. The overall equation for forecasting the *ROE* is:

ROE<sub>it</sub> = 5.375 + 4.232 BIG4<sub>it</sub> + 4.334 ACS<sub>it</sub> + 3.585 ACI<sub>it</sub> - .053 LEV<sub>it</sub> + .766 FS<sub>it</sub>

- 6. The results of the regression analysis in table (6) show that the model is statistically significant in elaborating the relationship between corporate governance practices, audit committee characteristics, and profitability, with a P-value less than 0.05, implying that the second hypothesis predicting a positive insignificant association between audit quality and profitability is accepted.
- **7.** According to the research's findings, audit quality is positively and significantly connected with business performance, implying that audit quality ensures transparency, which is a fundamental source of stockholder confidence.

8. Because they strengthen control over management actions, independent auditors play an important role in company monitoring (Bell et al., 2013). Companies with a significant audit quality practices are thought to boost corporate profitability; if the level of profitability is high, qualifying profits can be generated.

## 6.2.3 Third Hypothesis

The third multiple regression analysis was conducted in order to examine the impact of corporate governance on earnings quality. Tables (7) and (8) show the summary of multiple regression results and variables coefficients.

H<sub>03</sub>: There is no significant impact of board independence and/or large board size and/or CEO duality on earnings quality.

#### Table (7): Model Summary: Results of the Regression Model (3)

Madal	D.C.	Adjusted R	Std. Error of the
Model	R Square	Square	Estimate
3	.409	.334	3.36789

a. Predictors: (Constant), CEO Duality, Board Size, Board Independence

		dardized ficients	Standardized Coefficients		
Model		Std. Error	Beta B	t	Sig.
3 (Constant)	3.228	4.860		.452	.652
Leverage	.021	.015	.068	.759	.449
Log of Total Assets	.075	.517	011	.126	.040
<b>Board Independence</b>	.056	.112	.040	.440	.030
Board Size	.035	.076	.030	.337	.036
CEO Duality	173	.601	022	270	.087

### Table (8): Model (3) – Variables Coefficients<sup>a</sup>

a. Dependent Variable: Earnings quality

# <u>Based on the preceding tables (7) and (8), it is</u> <u>concluded that:</u>

- 1. With an adjusted R-squared value of 0.334, the overall Pooled model is insignificant, implying that the insignificant independent variables and controlling variables (financial leverage and company size) explain 33.4 percent of the change in the EQ. This indicates that the outcome is a poor match.
- 2. The  $R^2$  value in this model is 0.409, indicating that 41 percent of the research model can account for the dependent variable. This is owing to the fact that the dependent variable, earnings quality, is still explained by numerous other characteristics or variables outside the research framework.
- **3.** All the explanatory variables and the controlling variables have significant impact on earnings quality except CEO duality has insignificant impact on earnings quality.
- **4.** Board independence, large board size, financial leverage and firm size have a positive impact on the earnings quality, while CEO duality is found to have a negative relationship with earnings quality.

### 5. The overall equation for forecasting the *EQ* is:

 $EQ_{it} = 3.228 + .056 BI_{it} + .035 BS_{it} - .173 CEO_{it} + .021 LEV_{it} + .075 FS_{it}$ 

- 6. Table (8) shows that the model is statistically insignificant in elaborating the relationship between corporate governance practices and earnings quality, with a P-value of zero (5%). As a result, the results imply that the third hypothesis predicting a positive insignificant association between corporate governance and earnings quality is accepted.
- 7. When opposed to smaller companies, large corporations are more likely to be observed by the general public since their decisions have a considerably greater effect on the overall public. As a result, large corporations are more careful in their financial reporting (Herlambang and Darsono, 2015). Larger organizations, in comparison to smaller businesses, have more effective internal control systems, which aid in the provision of

reliable financial data. The outcomes are compared to each other. In comparison to smaller enterprises, larger companies have better teams of internal auditors who are far more qualified and competent, according to Alzoubi (2015). They went on to say that larger companies have a higher chance of hiring the Big 4 accounting firms as external auditors. Larger companies also have greater resources to invest in the most cutting-edge technology in the financial data processing process.

- 8. The research's findings reveal that the GCG mechanism has a considerable favorable impact on earnings quality. This implies that a large number of independent boards of commissioners will provide more oversight to management, allowing it to better run the company. According to agency theory, independent commissioners are more alert to agency problems since they are solely responsible for evaluating management's performance and behavior. Because such supervision becomes an incentive for management as an agent to operate as effectively as possible in the benefit of the principle (stakeholders) and suppress aberrant behavior in order to account for its obligation, it can undoubtedly prevent or decrease profits management action.
- **9.** The findings imply that when there are more independent directors on the board, the CEO's monitoring role is greater than when there are fewer independent directors. As a result, independent directors on boards are likely to seek improved earnings quality in order to offset potential agency issues and protect shareholders and their reputations from the CEO duality's misuse of power.
- **10.** The size of the board, and thus the percentage of independent directors on the board, will have a significant impact on the board's ability to observe the firm's managers. External stakeholders would expect that independent outside board members monitor financial reporting and internal transactions with sufficient external scrutiny and in accordance with a set of expectations. As a result, independent outside directors perform a critical oversight and monitoring function in corporate

governance as management monitors. By limiting managerial self-interest, independent directors on the board can improve profits quality. As a result, boards with more independent directors are more likely to do more monitoring and, as a result, are more likely to demand higher earnings quality. As a result, we believe that board independence will increase the quality of earnings by reducing earnings management.

- 11. Earnings quality is affected by leverage. This occurs because the lower the company's leverage, the higher the quality of the earnings earned. Credit agreements are less likely to be broken by companies with good profits quality. Because high leveraged enterprises utilize more discretionary accruals to avoid covenant violations, their earnings quality is weaker (Becker et al. 1998, Krishnan 2003, Siregar et al., 2012, & Yasar, 2013).
- 12. Firm size might also have an impact on the quality of earnings. The bigger a firm is, the more concerned it is with improving its financial performance, which means it is less likely to adopt earnings management. The size of a company has a substantial impact on the quality of its earnings. This is because as a company grows in size, it will have an impact on business continuity in terms of improving the company's finances, avoiding financial statement manipulation tactics. According to signal theory, the company's earnings can be utilized as a positive signal for interested parties, particularly investors, to make decisions. The number of total firm assets can be used to determine a company's size, and a large corporation can provide high qualifying earnings. Large companies, according to investors, have a high level of operational consistency, thus they feel the company may produce substantial profits.

### 6.2.4 Fourth Hypothesis

The fourth multiple regression analysis was conducted in order to examine the impact of audit quality on earnings quality. Tables (9) and (10) show the summary of multiple regression results and variables coefficients.

H<sub>04</sub>: There is no significant impact of audit type (Big 4) and/or large audit committee size and/or audit committee independence on earnings quality.

Table (9): Model Summary: Results of the Regression Model (4)

	R	Adjusted R	Std. Error of the
Model	Square	Square	Estimate
4	.553	.321	1.58795

b. Predictors: (Constant), Audit Type (Big 4), Audit Committee Size, Audit Committee Independence

		Unstandardized Coefficients		Standardized Coefficients		
	Model		Std. Error	Beta B	t	Sig.
4	(Constant)	3.298	5.578		.258	.648
	Leverage	.024	.012	.045	.785	.448
	Log of Total Assets	.074	.512	024	.456	.025
	Audit quality (Big 4)	.311	.480	.031	.361	.036
	Audit Committee Size	5.234	2.789	.578	.254	.098
	Audit Committee Independence	3.875	1.357	.187	.378	.029

a. Dependent Variable: Earnings quality

# <u>Based on the preceding tables (9) and (10), it is</u> <u>concluded that:</u>

- **1.**With an adjusted R-squared value of 0.321, the overall Pooled model is insignificant, implying that the significant independent variables and controlling variables (financial leverage and company size) explain 32.1 percent of the change in the EQ. This indicates that the outcome is a poor match.
- **2.** The  $R^2$  value in this model is 0.553, indicating that 55.3 percent of the research model can account for the dependent variable. This is owing to the fact that the dependent variable, earnings quality, is still explained by numerous other characteristics or variables outside the research framework.

- **3.**All the explanatory variables and the controlling variables have significant impact on earnings quality except audit committee size and financial leverage has insignificant impact on earnings quality.
- **4.**Large audit committee, audit committee independence, Big 4 audit firms, financial leverage and firm size have a positive impact on the earnings quality.
- 5. The overall equation for forecasting the *EQ* is:

 $EQ_{it} = 3.298 + .311 BIG4_{it} + 5.234 ACS_{it} + 3.875 ACI_{it} + .024 LEV_{it} + .074 FS_{it}$ 

- **6.** Table (10) shows that the model is statistically significant in elaborating the relationship between corporate governance practices, audit committee characteristics, and earnings quality, with a P-value of zero (5%). As a result, the results imply that the fourth hypothesis predicting a positive insignificant association between audit quality and earnings quality is accepted.
- 7. The outcomes are compared to each other. In comparison to smaller enterprises, larger companies have better teams of internal auditors who are far more qualified and competent, according to Alzoubi (2015). They went on to say that larger companies have a higher chance of hiring the Big 4 accounting firms as external auditors. Larger companies also have greater resources to invest in the most cutting-edge technology in the financial data processing process.
- 8. The existence of an audit committee is vital for the protection of shareholders' interests. The quality of financial reporting will greatly increase if the audit committee fulfills its responsibility of monitoring management actions in the preparation of financial reporting. As a result, the existence of an audit committee will have a favorable impact on the quality of earnings.
- **9.** Audit quality can help you improve the quality of company earnings. Managers in Big 4 Public Accounting Firms tend to avoid earnings management practices because the Big 4 Public Accounting Firms, which are well-known to the public, are more cautious and uphold independence, raising the manager's

concern that manipulated reporting will be detected and uncovered, resulting in the company's name being ruined. Furthermore, public accountants' reputation as independent external auditors can help to improve the earnings quality case and improve the reliability of accounting data in financial statements. Highly qualified auditors can discover suspicious accounting practices, and if they are discovered, the auditor will provide their opinions in the audit report.

- **10.** The audit committee is in responsible of a company's financial reporting procedure. The audit committee's success is demonstrated by their attendance at board of directors meetings and providing feedback to management. It is thought that the functioning of an audit committee in a corporation will reduce the likelihood of manipulating reported profitability. The audit committee is in charge of a company's financial reporting procedure. The audit committee's success is demonstrated by their attendance at board of directors meetings and providing feedback to management. It is thought that the functioning of an audit committee's success is demonstrated by their attendance at board of directors meetings and providing feedback to management. It is thought that the functioning of an audit committee in a corporation will reduce the likelihood of manipulating reported profitability.
- **11.** The findings indicate that the audit committee improves audit quality.
- **12.** The findings reveal that large audit companies perform better than small audit firms in terms of auditing and also tend to be more effective in post-audit services.
- **13.** Earnings quality is affected by leverage. This occurs because the lower the company's leverage, the higher the quality of the earnings earned. Credit agreements are less likely to be broken by companies with good profits quality.
- 14. Larger firms tend to have superior earnings quality for a variety of reasons, including cheaper equity capital costs, public information availability, fewer information asymmetry, and higher earnings predictability. In addition, major organizations can afford to be a Big 4 audit customer, whereas small firms cannot. Whereas larger firms are more likely to have greater earnings quality and to be a Big 4 audit customer. The natural logarithm of the firm's total assets is used to calculate size

(Becker et al., 1998, Krishnan 2003, Jeong & Rho 2004, & Yasar, 2013).

**15.** The audit committee is in charge of overseeing financial reports, external audits, and the internal control system. The existence of an audit committee is supposed to diminish management's opportunistic attitude toward profit management by monitoring financial reports and supervising external audits. It is also projected to minimize profit management activities, which will have an impact on profits quality.

## 6.2.5 Fifth Hypothesis

The fifth multiple regression analysis was conducted in order to examine the impact of corporate governance and audit quality on firm profitability using earnings quality as a moderator variable in this model. Tables (11) and (12) show the summary of multiple regression results and variables coefficients.

 $H_{05}$ : There is no significant impact of corporate governance and audit quality using earnings quality as a moderator variable on profitability.

Table (11): Model Summary: Results of the Regression Model (5)

Mode l	R	R Square	Adjusted R Square	Std. Error of the Estimate
5	.882ª	.777	.467	19.56231%

a. Predictors: (Constant), auditquality\_earnings\_quality, CEOduality\_earnings\_quality,Board\_indpend\_earnings\_qualit y, Boardsize\_earnings\_quality

	Unstandardized Coefficients		Standa rdized Coeffic ients		
Model	В	Std. Error	Beta	t	Sig.
5 (Constant)	17.418	24.819		.702	.484
Board_indpend_earnings_ quality	.164	.149	.125	1.102	.022
Boardsize_earnings_quality	.031	.040	089	.774	.040
CEOduality_earnings_quality	2.207	1.212	.157	1.821	.031
Audittype Big 4_earnings_quality	1.505	.924	154	1.628	.010
Auditcommitte size_earnings_quality	2.556	.947	.124	1.368	.020
Auditcommitteindependence_ earnings_quality	1.755	.914	.179	1.158	.040
Leverage	079	.075	091	-1.045	.298
Log of Total Assets	.396	2.632	013	.150	.050

Table (12): Model (5) – Variables Coefficients<sup>a</sup>

a. Dependent Variable: Profitability

# Based on the preceding tables (11) and (12), it is concluded that:

- 1. With an adjusted R-squared value of 0.467, the overall Pooled model is significant, implying that the significant independent variables and controlling factors (financial leverage and company size) explain the change in the ROE by 46.7 percent when EQ is included as a moderator variable. This indicates that the outcome is a good match.
- 2. The  $R^2$  value in this model is 0.777, indicating that 77.7 percent of the research model can account for the dependent variable. This is because there are many other elements or variables outside the study model that explain the dependent variable, firm profitability with earnings quality as a moderator.

- **3.** All the explanatory variables and the controlling variables have significant impact on ROE except financial leverage has insignificant impact on earnings quality.
- **4.** Board independence, large board size, large audit committee, audit committee independence, Big 4 audit firms, financial leverage and firm size have a positive significant impact on the ROE, while financial leverage is found to have a negative relationship with ROE using earnings quality as a moderator variable.
- **5.** Using earnings quality as a moderator improves the relationship between board size and firm profitability (ROE).
- 6. The overall equation for forecasting the *ROE* is:

# $\begin{array}{l} ROE_{it} = \ 17.418 + .164 \ BI_{it} * EQ + .031 \ BS_{it} * EQ + 2.207 \ CEO_{it} * EQ + \\ 1.505 \ BIG4_{it} * EQ + 2.556 \ ACS_{it} * EQ + 1.755 \ ACI_{it} * EQ - .079 \ LEV_{it} * \\ EQ + .396 \ FS_{it} * EQ \end{array}$

- 7. The findings are similar with the earlier findings, which found that corporate governance and audit quality had a beneficial impact on business profitability through their impact on value relevance and firm value. The value relevance of financial reporting demonstrates its dependability. Good company governance ensures the dependability of financial reporting, reducing the asymmetry of accounting information. The result of reduced knowledge asymmetry is an increase in the firm's value across the board.
- 8. The earning quality of a corporation is the earnings component of a type of liability results that has sustainable and predictable profits. The company's long-term goal is to improve the quality of earnings. The quality of earnings, in particular, can be seen in earnings utilized as a basis for making a financial report choice. Earnings are a metric that can be used to assess a company's operational performance. Earnings are used by creditors and investors to evaluate management performance, measure earnings power, and forecast future earnings.
- **9.** The company's main goal is to improve the quality of corporate earnings so that corporate governance is one of the key elements in improving economic efficiency, which includes a

series of relationships between company management, board of commissioners, independent commissioners, audit committees, shareholders, and other stakeholders. Corporate governance also provides a structure that aids in the determination of a company's objectives, as well as a means of deciding performance monitoring tools (Deni et al., 2004).

- **10.** Earnings quality is a profit that appropriately shows the profitability of a company. Earnings of high quality will lead to more informed investing decisions (Istianingsih, 2021). A firm's profits quality is related to the quality of management's decision-making process, which influences company performance. Wasan and Mulchandani (2019) investigated the impact of earnings quality on firm performance and discovered that earnings quality has a significant impact on firm performance.
- **11.** A higher quality audit enhances the likelihood of uncovering problematic accounting methods, limiting exaggerated earnings, and revealing misreporting (Francis 2004).
- **12.** As a result of the assurance of excellent audit quality, accruals are more likely to capture performance rather than opportunism. Higher audit quality can alleviate concerns about unexpected accruals (however quantified) being motivated by opportunism. The impression of lesser information risk is projected to translate into a tangible benefit for organizations with high-quality audits in the form of a lower cost of equity capital due to earnings quality.
- **13.** The results of this research indicate that there is a positive and substantial relationship between the GCG mechanism and earnings quality, as well as a positive and significant relationship between earnings quality and financial performance. This study also demonstrates that earnings quality can mitigate the influence of the GCG mechanism and audit quality on financial performance.
- **14.** Earnings quality improves as it approaches or exceeds the aim of the initial plan. Whereas it falls because profit is not in line with actual profit, the information gained from the profit report

becomes skewed, and as a result, its impact misleads creditors and investors in making decisions.

### **Conclusion**

The objective of this research is to determine the impact of corporate governance (specifically: board independence, size, CEO duality, auditor size, audit committee independence and audit committee size) on the earning quality and firm profitability of Egyptian firms.

Because financial accounting is both an input and an output of corporate governance, higher earnings quality may lead to a more effective governance mechanism, and a more effective mechanism may lead to higher earnings quality. These considerations show that corporate governance and earnings quality are complementary.

GCG is being implemented primarily to address agency issues, such as information asymmetry. The transparency of the company's management towards stakeholders can help to lessen this information imbalance. Transparency is one of the GCG principles that must be followed. As a result, information asymmetry can be addressed by using GCG to construct a monitoring system. When the monitoring function is effective, it has a direct impact on the quality of earnings reported by management.

Investors always look at the earnings number since it is a catchy number. As a result, as the quality of reported results improves, investor confidence in the company's management grows. This trust will boost the company's value in the eyes of investors. As a result, the implementation of GCG can be considered as having a direct impact on the value of this company, as well as on the quality of earnings presented by management.

Higher audit quality and corporate governance standards are linked to more earnings management, or low earnings quality, according to the findings.

Investors consider companies with higher earnings quality as being more transparent. As a result, there could be a substitution effect between the quality of earnings and the number of independent directors on the board. There is probably less need for monitoring and independent director participation if the company

is more open. Where there is less transparency, however, governance mechanisms such as independent outside director representation on the board are implemented in order to improve the earnings quality.

Management's efforts to increase profits are based on increasing the company's operational activities as a result of their efforts to improve earnings quality. Increased corporate operational activity is an effort undertaken by management for personal gain in order to receive higher rewards from the company's profits.

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