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The Role of Board Independence in Enhancing External Auditor Independence

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Abstract: Legislative regulations have recognized the significance of board independence in enhancing the board's role and strengthening its autonomy, which are among the key features that mitigate conflicts of interest between management and shareholders. External auditing serves as a pivotal element of corporate governance, acting as a monitoring mechanism to reduce information asymmetry and safeguard principal interests by ensuring the accuracy and fairness of financial statements. This, in turn, reassures data users and stakeholders. The study aimed to examine the effect of board independence on enhancing external auditor independence among 72 Jordanian service companies listed on the Amman Stock Exchange from 2017 to 2021, with a study sample of 62 companies. The findings revealed a negative impact of board member independence on external auditor independence, as measured by audit firm size. However, company size positively influenced external auditor independence, while no effect was found for financial leverage or company age. The findings highlight the need for companies to strengthen internal controls and governance practices to enhance external auditor independence. Additionally, they suggest that company size plays a crucial role, while other factors like financial leverage and company age may have limited impact, indicating areas for further exploration in future research.

Keywords: board independence; external auditor independence; audit firm size; company size; financial leverage; company age

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1. Introduction

The pressing need for auditing services arose as a natural consequence of corporate expansion agency theory. This theory entails the delegation of authority by owners to the board of directors to manage the company's affairs, which has introduced several issues, including conflicts of interest in the agency relationship between the principal (shareholders) and the agent (management). These issues are often exacerbated in countries with dispersed ownership structures, leading to reduced oversight benefits (Azzoz et al., 2016). Shareholders increasingly rely on independent external auditors, elected by them, for continuous monitoring. Financial auditing serves as a mechanism to reduce information asymmetry and protect the interests of the principal by ensuring the accuracy and fairness of financial statements, thereby reassuring data users and stakeholders (Bahrawe, 2024). External auditors act as a bridge between a company's management, which possesses internal information, and financial markets, that depend on external financial reports (Suwaidan et al., 2015). According to Christopher et al. (2019), the objective of auditing is to provide

an independent opinion on the audited accounts, as well as to detect and correct errors and prevent fraud. Thus, external auditor independence has been a cornerstone of the auditing profession since its inception. It is crucial for ensuring the credibility of audit reports and building trust among stakeholders such as investors and shareholders in the accuracy and reliability of financial data. The board of directors, as a key internal mechanism of corporate governance, is tasked with implementing various governance practices (Bosse & Phillips, 2016). The board plays a significant role in planning, organizing, monitoring, and supervising all aspects of the company's operations (Bueno et al., 2018). However, the board's effectiveness depends on specific characteristics, such as the independence of its members (Makni et al., 2012; Rijal et al., 2023). Board independence is not merely a principle but a cornerstone for ensuring transparency, accountability, and ethical corporate practices. One of its critical roles is to create an environment that allows the external auditor to operate independently, free from executive management pressures (Soliman & Abdel Salam, 2012). This is achieved through the audit committee, which coordinates among the board, executive management, and external auditors, providing all necessary support during the auditing process. Jordan, as a developing country, faces challenges in protecting investors and implementing effective corporate governance mechanisms compared to developed nations. Weak application of corporate governance rules characterizes Jordanian companies (Azzoz et al., 2016). Additionally, concentrated ownership in Jordanian companies reduces the demand for high-quality external audits (Niskanen et al., 2011). To address these challenges, efforts have been made to raise awareness about corporate governance and promote its best practices. For instance, the Jordan Securities Commission amended certain laws and instructions, including the 2017 Corporate Governance Instructions for Listed Companies (Securities Depository Center, 2024). Previous studies have shown mixed results regarding the impact of board independence on enhancing the independence of external auditors. Some studies found a negative effect, such as Hay et al. (2006) and Orshi et al. (2018). Others found no effect, as indicated by Al Jabr (2011), Makni et al. (2012), Gajevszky (2015), and Kasim et al. (2015). However, the majority of studies, including Beasley and Petroni (2001), Abdullah et al. (2008), Niskanen et al. (2011), Kuang (2011), Soliman and Abdel Salam (2012), Gana and Krichen (2013), Jizi and Nehme (2018), Al Daoud (2020); and Bahrawe (2024) confirmed a positive effect. The above highlights several motivations for conducting the current study, the most significant being that previous studies have not provided conclusive evidence regarding the nature of the relationship between board independence and external auditor independence. What one study considers a positive effect, another views as a negative effect, while a third finds no effect at all. Furthermore, the application environments of these studies vary widely. Some were conducted in developed countries, such as Gajevszky (2015) study in Bucharest, while others were conducted in developing countries, such as Al Farooque et al.'s (2020) study in Thailand. This topic, however, has not received the same attention in Arab environments, particularly in Jordan. This variation could lead to difficulties in generalizing their results. Additionally, the time frames of these studies vary, and no similar study has been conducted in Jordan since corporate governance regulations became mandatory in 2017 up to the time of this study. In light of the above, the research gap lies in the scarcity of accounting literature on the nature and direction of the relationship between board independence and external auditor independence. This study aims to provide empirical evidence from the Jordanian stock exchange on the existence, strength, and direction of the relationship between these research variables. Based on the above, a key research question emerges: What is the impact of board independence on enhancing external auditor independence in companies listed on the Amman Stock Exchange?

This study employs a quantitative research methodology using data from companies listed on the Amman Stock Exchange. The analysis is conducted through multiple linear regression to examine the impact of board independence on external auditor independence, while controlling for factors such as firm size, leverage, and company age. Moreover, this study contributes to the accounting literature by addressing the gap in Arab contexts, particularly in Jordan, and by providing empirical evidence on the impact of board independence on external auditor independence post-2017 corporate governance reforms. It also offers valuable insights for policymakers, corporate governance experts, and practitioners. Moreover, the findings of this study are particularly relevant to regulators seeking to strengthen corporate governance mechanisms, investors assessing the quality of governance in listed companies, and external auditors aiming to maintain independence. Academics may also find the results valuable for further research.

The remainder of this paper is organized as follows: Section 2 reviews the relevant literature and develops the hypotheses. Section 3 describes the research methodology. Section 4 presents the results and their analysis, while Section 5 concludes with implications, limitations, and recommendations for future research.

2. Conceptual Framework

2.1. Auditor Independence

The concept of auditor independence has been defined in various ways, with one of the most common definitions being DeAngelo's (1981). DeAngelo defines auditor independence as the ability of the external auditor to detect manipulations and errors in the client's accounting system and to report those irregularities in the audit report issued at the conclusion of the audit process. In other words, auditor independence refers to the likelihood that the auditor will disclose the errors and irregularities identified in their report. Arens et al. (2011) describe auditor independence as "the auditor's ability to act with honesty, integrity, and objectivity at all stages of the audit process, without being influenced by any external pressure or engaging in activities that conflict with objectivity and integrity". Other definitions of auditor independence focus on aspects such as error detection and financial report outcomes, based on the belief that greater auditor independence enhances the detection of errors in reported earnings, thereby improving earnings quality and trust in financial statements (Chang et al., 2009). Some definitions emphasize the size of the auditor's workload or effort (Carcello et al., 2002), while others center on the outcomes of the auditing process (Porter & Sherwood, 2023). Despite the lack of consensus on a universal definition of auditor independence, the U.S. Securities and Exchange Commission (SEC) and the International Federation of Accountants (IFAC) have outlined two primary dimensions of independence (International Auditing Assurance Standards Board, 2022):

Mental (or Intellectual) Independence: This refers to "a state of mind that enables the auditor to provide an opinion without being affected by influences that compromise professional judgment, allowing them to act with integrity and exercise objectivity and professional skepticism".

Perceived Independence: This dimension requires auditors to "avoid circumstances or facts that could give the impression to external parties that the auditor's neutrality and independence have been compromised, thus diminishing trust in their objectivity and fairness when issuing opinions on financial statements".

2.2. Measuring Auditor Independence

Although auditor independence is critical, there is no agreed-upon comprehensive framework for defining or measuring it (AlTheebeh & Abu Qobu, 2017). This is due to the diverse needs of stakeholders and the varying contexts in which auditing occurs. The

lack of a standardized measurement framework has led to the development of proxies or indicators for assessing auditor independence, as highlighted by prior studies (DeAngelo, 1981; Abdullah et al., 2008; Gajevszky, 2015; DeFond & Zhang, 2014; and Jizi & Nehme, 2018). Audit fees are considered a reflection of auditor independence (Hoitash et al., 2007) and one of the most prominent indicators of independence, as they represent the auditor's efforts (Soyemi & Olowookere, 2013). High audit fees lead to more effort and time dedicated to the audit process, increasing the likelihood of detecting errors, fraud, and manipulation in the financial statements of the audited company. Sundgren and Svanström (2013) found that lower audit fees result in reduced auditor independence because lower fees compel auditors to allocate fewer resources, such as fewer auditors from their office and shorter audit durations, to the audit process to minimize costs. Additionally, studies by Asthana and Boone (2012), Ettredge et al. (2014), and Abdul-Rahman et al. (2017) found a positive effect of audit fees on enhancing auditor independence. The duration of the auditor's engagement with the audited company is another indicator of external auditor independence, reflecting the period during which the audited company benefits from the auditor's services (Asmara & Situanti, 2018). However, previous studies have reported conflicting results on this matter. From one perspective, the duration of the auditor–client relationship is inversely related to auditor independence because the auditor may prioritize retaining the client, even at the expense of independence (Bedard & Johnstone, 2010). This is due to the development of personal relationships between the auditor and the client's management, negatively impacting independence (Asmara & Situanti, 2018). Conversely, it can also be argued that longer engagement periods are positively associated with independence, as extended durations enhance the auditor's ability to detect errors and improve their expertise in auditing the specific company (Eshleman & Guo, 2014). Board independence is a critical factor in the effectiveness of board oversight, as it minimizes conflicts of interest between management and shareholders. It enables the board to perform its supervisory monitoring functions more effectively (Dimitropoulos & Asteriou, 2010). Board independence refers to the presence of board members who are entirely independent of the company's executive management and have no connections or interests tied to the company. This independence reassures shareholders stakeholders about the credibility of the company's management (Al Farooque et al., 2020). The Jordanian Corporate Governance Code recommends that one-third of the board members be independent. If the calculation results in a fraction, the number is rounded up to the nearest whole number. The importance of board independence lies in the neutrality of board decisions, ensuring balance in strategy formulation, performance evaluation, and risk monitoring. Independent board members improve internal company relations, as well as those between executive management stakeholders (Sharif & Hossain, 2020; Al Harbi, 2018). Independent directors contribute their expertise and unbiased judgment, working in the best interest of stakeholders. Their role positively impacts board effectiveness (Gómez et al., 2017; Fuzi et al., 2016). From an agency theory perspective, independent directors act as representatives of shareholders, motivated to prevent and detect opportunistic behaviors by executive management. These motivations stem from maintaining their reputation, avoiding legal liabilities, and protecting shareholder rights, particularly given the significant financial losses associated with issues in financial reports. Independent directors influence the independence of external auditors by impacting the selection appointment process (Gómez et al., 2017; Assidi, 2020). Numerous studies have examined the impact of independent board members on enhancing auditor independence, particularly the relationship with Big Four auditing firms. Beasley and Petroni (2001) found that having independent directors is a critical mechanism for influencing other board members to engage independent external auditors. Abdullah et al. (2008) concluded that independent directors increase demand for high-quality external

audits to safeguard themselves from litigation risks, maintain their reputations, and protect shareholder interests. In contrast, other studies present conflicting findings. This is the same result reached by the study of Somoye et al. (2020) for a sample of 18 companies listed in Nigeria for the period (2011–2015). The study of Bahrawe (2024) also reached the conclusion that there is a positive impact of board independence on audit quality. For example, Gajevszky (2015) found no correlation between board independence and auditor independence in companies listed on the Bucharest Stock Exchange. Similarly, Makni et al. (2012) found no significant impact of independent board members on selecting Big Four auditors in Tunisian companies. Given these divergent results, this study investigates whether board independence positively affects auditor independence in companies listed on the Amman Stock Exchange. This leads to the formulation of the following hypothesis: Board independence positively influences auditor independence in companies listed on the Amman Stock Exchange.

3. Research Design and Methodology

3.1. Sample Data Collection

In this study, data from 72 companies listed on the Amman Stock Exchange were used. These are large-scale enterprises with a long enough listing period; they constitute an important pillar of the Jordanian economy. The research period is from 2017 to 2021. The data were collected from audited financial statements and annual reports. The data were corrected for errors, then used in quantitative analysis. As for the study sample, companies that met the following conditions were selected: 1. financial reports were regularly available throughout the study period; 2. the company was listed on the Amman Stock Exchange throughout the study period, and it was not merged or suspended from trading during the study period; 3. the company must have disclosed in the auditor's report the auditing process of the company's annual financial reports; and 4. the company must have published its financial reports in Jordanian dinars, its fiscal year must have ended at the end of December of each year throughout the study period.

Based on the methodology used to select the study sample, the number of companies that met the conditions reached 62, equivalent to 86% of the study population.

3.2. Study Variables and the Measurement Methods

- **Dependent Variable:** The dependent variable in this study is auditor independence, measured using the following indicator:
- **Audit Firm Size**: This refers to the external auditor's affiliation with one of the global auditing firms (Big Four). It is a binary variable that takes the value of 1 if the auditor is affiliated with a Big Four firm and 0 otherwise (Soliman & Abdel Salam, 2012; Gajevszky, 2015).
- **Independent Variable:** The independent variable in this study is board independence. Due to the difficulty of verifying all the conditions outlined in the regulations regarding board member independence, the study focuses on non-executive board members. A non-executive board member is defined as one who is not fully engaged in managing the company, is not employed by the company or receiving a salary from it, and does not own 5% or more of the company's shares. Measurement: Board independence is measured as the ratio of independent board members to the total number of board members. This variable is denoted as BIN (Gómez et al., 2017; Assidi, 2020).
- **Control Variables:** Three control variables are included in this study: company age, financial leverage, and company size (Kuang, 2011; Gajevszky, 2015; Kasim et al., 2015; Jizi & Nehme, 2018):

- ✓ **Company Age**: Measured using the natural logarithm of the number of years the company has been listed on the Amman Stock Exchange since its establishment. Denoted as AGE.
- ✓ **Financial Leverage:** Calculated as the book value of total liabilities divided by total assets. Denoted as LEV.
- ✓ **Company Size:** Measured using the natural logarithm of the company's total assets. Denoted as SIZE.

3.3. Statistical Model

Figure 1 below outlines the conceptual framework, providing a structured approach to investigating the relationship between board independence and auditor independence.

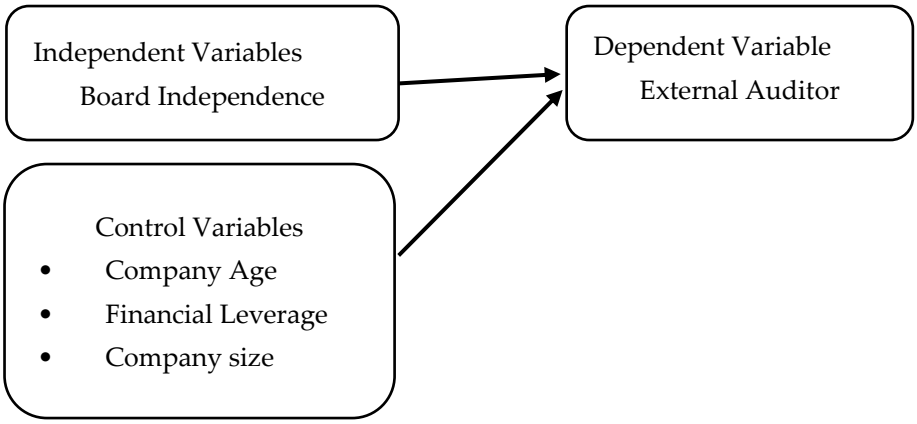


Figure 1. The study model.

Based on Figure 1, which shows the relationships between the independent and dependent variable of the study, the model has been formulated as follows

$$\mathbf{BIG_{it} = \beta 0 + \beta 1\ BIN_{it} + \beta 2\ AGE_{it} + \beta 3\ LEV_{it} + \beta 4\ SIZE_{it} + \varepsilon_{it}} \ldots\ldots\ldots\ldots\ldots\ldots \mathbf{1}$$

BIG_{it}: External Auditor Independence
BIN_{it}: Independence of Board Members A
GE_{it}: Company Age
LEV_{it}: Financial Leverage
$SIZE_{it}$: Company size
β_0: Intercept Value
$\beta_1 - \beta_4$: Regression Coefficients
ε_{it}: Rom Error

4. Data Analysis and Discussion

4.1. Descriptive Statistics

This section of the analysis presents the results of the descriptive statistics conducted on the study data from 2017 to 2021 for the dependent variable and the independent control variables, which include the mean, standard deviation, maximum value, and minimum value. Additionally, the percentages and frequencies for the dummy variables used in the study model will also be presented.

4.1.1. Descriptive Statistics for Audit Firm Size

As shown in Table 1, 119 companies (38%) in the sample are audited by the Big Four firms, while 191 companies (62%) are audited by non-Big4 firms. The preference for non-Big4 firms among service companies listed on the Amman Stock Exchange may be due to high internal control standards or concerns about the high audit fees of the Big4 firms.

Table 1. Descriptive statistics for audit firm size.

Variable	Frequency	Percentage
BIG4 (1)	119	38%
Other (0)	191	62%
Total	310	100%

4.1.2. Descriptive Statistics for Study Variables

The results presented in Table 2 indicate the following:

- ✓ **Board Independence:** The mean percentage of independent board members for the period (2017–2021) was 42.62%, with a standard deviation of 25.66%. The maximum value was 100%, indicating that many companies adhered to corporate governance rules requiring at least one-third of board members to be independent. However, the minimum value of 0.000% is notable, suggesting that some companies lack independent board members entirely.
- ✓ **Company Age:** The mean company age was 19.85 years, with a standard deviation of 9.94 years. The oldest company was 43 years old, while the youngest was 7 years old, reflecting the relatively recent establishment of some service companies in Jordan.
- ✓ **Financial Leverage**: The mean financial leverage was 26.95%, with a standard deviation of 22.60%. The maximum value was 95.90%, and the minimum was 0.164%, showing significant variation in companies' debt levels.
- ✓ **Company Size:** The mean total assets were 97,476,912 JOD, with a standard deviation of 225,192,173 JOD. The maximum total assets were 1,440,221,599 JOD, and the minimum was 870,329 JOD, indicating substantial differences in company sizes within the sample.

Table 2. Descriptive statistics for the study variables.

Variable	Mean	S D	Max	Min
Board Independence	42.62%	25.66%	100%	0.000%
Company Age	19.85	9.94	43	7
Financial Leverage	26.95	22.60	95.90	0.164
Company Size	97,476,912	225,192,173	1,440,221,599	870,329

4.2. Hypothesis Testing

After verifying the suitability of the data for the study models describing the study variables, the model was subjected to multiple linear regression analysis. The results are presented in Table 3 below.

Based on the results of the multiple linear regression analysis, the following observations can be made regarding the impact of board independence on enhancing external auditor independence: The study model used to test the relationship between the independent variable (board independence) and the control variables in relation to external auditor independence, measured by (audit firm size), shows a statistically significant effect at the 1% significance level. The calculated F value was (33.83). Comparing these values indicates that the computed value exceeds the critical value, thus supporting the hypothesis and rejecting the null hypothesis, which is confirmed by the significance level of (0.000), less than the 0.01 threshold (α).

Table 3. Results of multiple linear regression analysis.

Variables	Sig	T	β
BIN	0.004 ***	−2.90	−0.39
AGE	0.314	1.01	0.005
LEV	0.253	1.14	0.003
LOG_SIZE	0.090 *	1.70	0.118
R Square		32.51	
F_statistic		33.83	
Sig (F_statistic)		0.000 ***	

Significance levels: *** $p < 0.01$, * $p < 0.10$.

The results indicate that 32.51% of the variation in enhancing external auditor independence, measured by audit firm size, can be explained by the combined variation in the variables. This suggests the presence of other factors influencing auditor independence that were not addressed in the current study.

There is a negative impact of board member independence on enhancing external auditor independence, measured by audit firm size, in the companies sampled. The t-value was −2.90 with a significance level of 0.004. Accordingly, we reject the hypothesis stating that board independence positively impacts external auditor independence in companies listed on the Amman Stock Exchange.

This finding aligns with supervision theory, which posits that an increase in executive members on the board is more beneficial, as they are more familiar with the company's operations and exhibit greater loyalty than independent members. It can also be interpreted from the perspective of agency theory that having independent board members strengthens internal oversight and control over the company, thus reducing the level of manipulation and fraud, potentially lowering the demand for external auditor independence. This result is consistent with the findings of researchers such as Hay et al. (2006), Orshi et al. (2018). Conversely, it contradicts the results of studies by Beasley and Petroni (2001), Niskanen et al. (2011), Kuang (2011), Soliman and Abdel Salam (2012), Gana and Krichen (2013), and Jizi and Nehme (2018), who found a positive effect. Similarly, it conflicts with the results of Makni et al. (2012), Kasim et al. (2015), and Al Jabr (2011), who concluded that board independence does not significantly affect external audit quality.

Regarding the control variables, the results indicated the following:

There is a positive effect with statistical significance at the 10% level for firm size in enhancing external auditor independence, with a t-value of 1.70 and a significance level of 0.09. This can be interpreted as external auditors expecting to conduct more audit work as the size of the audited firm increases, ensuring that appropriate compliance procedures and sufficient testing are performed. Additionally, larger firms tend to disclose more information than smaller firms, such as voluntarily reporting certain events and financial data or issuing their financial statements earlier. This finding aligns with studies by Jizi and Nehme (2018), while it contradicts the findings of Makni et al. (2012), who concluded that there was no significant effect.

There is no effect of leverage on enhancing external auditor independence, with a t-value of 1.14 and a significance level of 0.253. This may be explained by the fact that companies with significant reliance on debt in their economic activities tend to face increased creditor oversight due to concerns that the board may transfer wealth from debt holders to shareholders.

There is also no effect of firm age on enhancing external auditor independence, as indicated by a t-value of 1.01 and a significance level of 0.314. This could be attributed to

the higher expertise available to implement corporate governance mechanisms in older firms, leading to a lower demand for high-quality auditing.

These findings reflect the complexity of the relationship between these variables and their influence on external auditor independence, consistent with literature on corporate governance and auditing practices.

5. Conclusions

External audits serve the public by increasing the credibility of financial reports. However, this function can only be fulfilled if audit quality is sufficiently high, which requires auditor independence. Independence is a cornerstone of the audit profession, however, auditors are permanently suspected of not acting independently. In the aftermath of financial crises and accounting scandals, regulators have tightened measures to strengthen auditor independence. Jordan is classified as a developing country, where the level of investor protection and the effectiveness of corporate governance mechanisms provided by companies to market participants differ from those in developed countries. Jordanian companies are characterized by ownership concentration, which may contribute to a reduced demand for high-quality external auditing. Efforts have been ongoing to raise awareness about the concept of governance and promote best practices for corporate governance. The Securities Commission has amended several regulations, laws, and instructions, including requirements for independent members on boards of directors and the separation of the chairman's role from any executive position in the company. Accordingly, this study aims to shed light on the extent to which board independence enhances external auditor independence. The study, through descriptive analysis of the variables, found that most companies in the sample adhere to corporate governance rules related to board independence. However, some companies are non-compliant, indicating a lack of independent members on their boards. Thirty-eight percent of service companies are audited by the Big Four auditing firms (BIG4). Hypothesis testing revealed a negative impact of board independence on enhancing external auditor independence, measured by audit firm size, with results indicating that board independence affects external auditor independence by -37%. Additionally, there was a positive effect at the 10% significance level for firm size on external auditor independence, while no effects were found for leverage or firm age. Based on the results obtained from both the theoretical framework and statistical analysis, the current study recommends that companies should adopt several strategies to reduce potential risks, such as strengthening their internal control systems to enhance transparency and accountability. Further research should explore other aspects of board characteristics, such as board size, professional certifications of board members, financial expertise, and board member compensation, to examine their potential to enhance external auditor independence. The study's practical implications highlight the importance of strengthening corporate governance practices, particularly board independence, to enhance external auditor independence. Companies should also focus on internal control systems and transparency to mitigate risks. Additionally, large firms may benefit from robust auditing practices due to their greater disclosure requirements, while further research could explore board characteristics like size, expertise, and financial incentives to provide deeper insights.

The study's findings emphasized the importance of strengthening corporate governance practices, particularly board independence, to enhance external auditor independence. While the results showed that board independence negatively affects auditor independence in the Jordanian context, they also underlined the need for robust internal control systems and greater transparency to mitigate risks. Theoretically, this study enriched the literature on governance practices in developing economies, shedding light on

the unique challenges of ownership concentration and regulatory frameworks. Given the study's limitations, future research should explore other board characteristics and include diverse sectors and comparative analyses to further investigate the dynamics of governance and auditor independence.

6. Limitations Future Research

Each study has limitations ranging from its comprehensiveness to the ability to generalize its results. The most important limitations of this study are: The study was limited to studying and analyzing the financial data and annual board of directors reports of companies listed on the Amman Stock Exchange, consisting of service companies. The financial and industrial sectors were excluded due to the different nature of their businesses, activities, and accounting structure. Therefore, the results of this study cannot be generalized to these sectors. The study period was also limited to the period from 2017 to 2021. This is due to the approval of the Board of Commissioners of the Securities Commission of the Governance Instructions for Listed Joint Stock Companies for the year 2017, which came into effect on 5/22/2017. These instructions are intended to obligate companies to implement corporate governance rules, while the previous instructions issued by the Commission in 2009 were not binding but for guidance only. The researchers believe that these limitations can provide prospects for future studies.

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References

Abdullah, W. Z., Ismail, I., & Jamaluddin, N. (2008). The impact of board composition, ownership, CEO duality on audit quality: The Malaysian evidence. *Malaysian Accounting Review*, *7*, 17–28.

Abdul-Rahman, O. A., Benjamin, A. O., & Olayinka, O. H. (2017). Effect of audit fees on audit quality: Evidence from cement manufacturing companies in Nigeria. *European Journal of Accounting, Auditing Finance Research*, *5*, 6–17.

Al Daoud, K. A. (2020). An investigation into the effect of audit firm size, auditor tenure, institutional ownership, board characteristics on auditor independence. *International Journal of Management Practice*, *13*, 462–477. [CrossRef]

Al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership, financial performance: Emerging trends from Thailand. *Pacific Accounting Review*, *32*, 54–81. [CrossRef]

Al Harbi, A. (2018). *An assessment of the impact of corporate governance practices on the values of firms in the United Kingdom Kingdom of Saudi Arabia: A comparative study using the ethical process thinking model (EPTM)* [Master's thesis, University of Hull].

Al Jabr, Y. (2011). The role of non-executive members of the board of directors in auditor choice: Evidence from Saudi Arabia. *Journal of King Saud University-Business Administration*, *22*, 19–28.

AlTheebeh, Z. A., & Abu Qobu, H. Y. (2017). Some Influential Elements in Improving Effectiveness of External Audit in Jordanian Audit Offices Field Study from the Point of View of External Auditors. *Accounting Finance Research*, *6*, 31–41. [CrossRef]

Arens, A., Elder, R., Beasley, M., Best, P., Shailer, G., & Fielder, B. (2011). *Auditing, Assurance Services Ethics in Australia* (8th ed.). Pearson Australia.

Asmara, R. Y., & Situanti, R. (2018). The effect of audit tenure firm size on financial reporting delays. *International Journal of Economics Business Administration*, *6*, 115–126.

Assidi, S. (2020). The effect of voluntary disclosures corporate governance on firm value: A study of listed firms in France. *International Journal of Disclosure Governance*, *17*, 168–179. [CrossRef]

Asthana, S., & Boone, J. (2012). Abnormal audit fee audit quality. *Auditing: A Journal of Practice and Theory*, *31*, 1–22. [CrossRef]

Azzoz, M., Abdel, A. E. -R., & Khamees, B. (2016). The impact of corporate governance characteristics on earnings quality earnings management: Evidence from Jordan. *Jordan Journal of Business Administration*, *12*, 187–207. [CrossRef]

Bahrawe, S. (2024). Effect of the Board of Directors Size, Independence, Frequency of Board Meetings on Audit Fees: Evidence From GCC Market. *Revista De Gestão Social E Ambiental*, *18*, e07286. [CrossRef]

Beasley, M., & Petroni, K. (2001). Board independence audit-firm type. *Auditing: A Journal of Practice Theory*, *20*, 97–114. [CrossRef]

Bedard, J., & Johnstone, K. (2010). Audit partner tenure audit planning pricing. *Auditing: A Journal of Practice and Theory*, *29*, 45–70. [CrossRef]

Bosse, D. A., & Phillips, R. A. (2016). Agency theory bounded self-interest. *Academy of Management Review*, *41*, 276–297. [CrossRef]

Bueno, G., Marcon, R., Pruner-da-Silva, A. L., & Ribeirete, F. (2018). The role of the board in voluntary disclosure. *The International Journal of Business in Society*, *18*, 886–910. [CrossRef]

Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley, R. A., Jr. (2002). Board characteristics audit fees. *Contemporary Accounting Research*, *19*, 365–384.

Chang, X., Dasgupta, S., & Hilary, G. (2009). The effect of auditor quality on financing decisions. *The Accounting Review*, *84*, 1085–1117. [CrossRef]

Christopher, D. A., Orshi, T. S., & Ekundayo, O. O. (2019). Audit client characteristics audit fees of listed pharmaceutical firms in Nigeria. *Journal of Advanced Research in Business Management Studies*, *14*, 1–15.

DeAngelo, L. E. (1981). Auditor size audit quality. *Journal of Accounting Economics*, *3*, 183–199. [CrossRef]

DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting Economics*, *58*, 275–326. [CrossRef]

Dimitropoulos, P., & Asteriou, D. (2010). The effect of board composition on the informativeness quality of annual earnings: Empirical evidence from Greece. *Research in International Business Finance*, *24*, 190–205. [CrossRef]

Eshleman, J. D., & Guo, P. (2014). Abnormal audit fees and audit quality: The importance of considering managerial incentives in tests of earnings management. *Auditing: A Journal of Practice and Theory*, *33*(1), 117–138. [CrossRef]

Ettredge, M., Fuerherm, E. E., & Li, C. (2014). Fee pressure audit quality. *Accounting, Organizations Society*, *39*, 247–263. [CrossRef]

Fuzi, S. F. S., Halim, S. A. A., & Julizaerma, M. K. (2016). Board independence firm performance. *Procedia Economics Finance*, *37*, 460–465. [CrossRef]

Gajevszky, A. (2015). Audit quality corporate governance: Evidence from the Bucharest Stock Exchange. *Journal of Economic and Social Development*, *2*, 1–11.

Gana, M. R., & Krichen, A. L. (2013). Board characteristics external audit quality: Complementary or substitute mechanisms? The Belgium case. *International Journal of Management Sciences Business Research*, *2*, 68–74.

Gómez, J. I. M., Cortés, D. L., & Betancourt, G. G. (2017). Effect of the board of directors on firm performance. *International Journal of Economic Research*, *14*, 349–361.

Hay, D. C., Knechel, R., & Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply dem attributes. *Contemporary Accounting Research*, *23*, 141–191. [CrossRef]

Hoitash, R., Markelevich, A., & Barragato, C. (2007). Auditor fees audit quality. *Managerial Auditing Journal*, *22*, 761–786. [CrossRef]

International Auditing Assurance Standards Board. (2022). *Hbook of international quality management, auditing, review, other assurance, related services pronouncements, part one*. International Auditing Assurance Standards Board.

Jizi, M., & Nehme, R. (2018). Board monitoring audit fees: The moderating role of CEO/chair dual roles. *Managerial Auditing Journal*, *33*, 217–243. [CrossRef]

Kasim, N., Hashim, N., Bahiyah, S., & Sharifah, A. (2015). The impact of corporate governance mechanisms on audit quality of Shari'ah compliant companies. *International Journal of Economics Research (IJER)*, *12*, 2077–2091.

Kuang, X. (2011, January 8–9). Board characteristics higher audit quality: Evidence from Chinese listed companies. In *International Conference on Management Science Industrial Engineering (MSIE)* (pp. 348–352). IEEE.

Makni, I., Kolsi, M. C., & Affes, H. (2012). The impact of corporate governance mechanisms on audit quality: Evidence from Tunisia. *The IUP Journal of Corporate Governance*, *11*, 48–70.

Niskanen, M., Karjalainen, J., & Steijvers, T. (2011). Audit quality: The role of board structure in family firms. *SSRN Electronic Journal*. [CrossRef]

Orshi, T. S., Ekundayo, O. O., & Samuel, J. (2018). Corporate governance audit fees of listed pharmaceutical firms in Nigeria. *Accounting Taxation Review*, *2*, 14–26.

Porter, C., & Sherwood, M. (2023). The effect of increases in board independence on financial reporting quality. *Accounting Research Journal*, *36*, 109–128. [CrossRef]

Rijal, S., Bakri, A. A., & Arjang. (2023). Effect of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through intellectual capital: Study on service companies. *The ES Accountiong and Finance*, *1*, 95–103. [CrossRef]

Securities Depository Center. (2024). Available online: www.sdc.com.jo (accessed on 10 November 2024).

Sharif, M. J., & Hossain, M. I. (2020). The effect of corporate governance practice on firms' profitability in the manufacturing industry of Bangladesh. *Buft Journal of Business Economics*, *1*, 101–120.

Soliman, M., & Abdel Salam, M. (2012). Corporate governance practices audit quality: An empirical study of the listed companies in Egypt. *World Academy of Science, Engineering Technology*, *71*, 1292–1297. [CrossRef]

Somoye, R. O. A., Akisanya, A. O., & Makinde, K. O. (2020). The Impact of Corporate Governance on Auditors' Independence of Some Selected Quoted Companies in Nigeria. *The Pacific Journal of Science Technology*, *21*, 224–234.

Soyemi, K. A., & Olowookere, J. K. (2013). Determinants of external audit fees: Evidence from the banking sector in Nigeria. *Research Journal of Finance Accounting*, *4*, 50–58.

Sundgren, S., & Svanström, T. (2013). Audit Office Size, Audit Quality Audit Pricing: Evidence from Small-Medium-Sized Enterprises. *Accounting Business Research*, *41*, 31–55. [CrossRef]

Suwaidan, M., Abed, S., & Melham, S. (2015). Audit fees agency costs: An empirical examination of companies listed on the Amman Stock Exchange. *Jordan Journal of Business Administration*, *11*, 215–226.

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