

Determinants of Audit Fees and the Role of the Board of Directors and Ownership Structure: Evidence from Jordan

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Received: January 30, 2021 Revised: March 21, 2021 Accepted: April 15, 2021

Abstract

This research extends the literature on the effect of board characteristics and ownership structure on audit fees; these factors affect the firm's agency costs and how the auditor assesses various risks, hence the audit efforts and fees. The paper introduces political connections as a determinant of audit fees for the first time in Jordan, where the political connection is prevalent and affects decision making on the Jordanian boards. The sample consists of 109 manufacturing and service firms listed on the Amman Stock Exchange (ASE) over the years 2012–2019. Data is obtained from the ASE and the company's annual reports. Board characteristics are measured by board size, independence, leadership duality, meetings frequency, political connections, and audit committee. Ownership structure was measured by concentration, foreign ownership, and Institutional ownership. The study hypotheses were tested by using Generalized Least Squares regression. The Findings showed that larger boards, politically connected firms, and firms with leadership duality are more likely to pay higher fees. Besides, Firms with greater foreign ownership pay less fees, whereas the rest of the variables are insignificant. Results suggest that political connections play a major role in determining audit fees; this provides a recommendation to policymakers in Jordan to reconsider regulations regarding political connections.

Keywords: Audit Fees, Board of Directors, Ownership Structure, Political Connection

JEL Classification Code: M42, M41, G32, G34

1. Introduction

Low audit fees can result in low audit quality (Ettredge et al., 2007). Nevertheless, higher audit fees cannot guarantee a better audit quality. On the contrary, it can cause the auditor to be financially dependable on the client and subordinate their judgments. Therefore, it is of great importance to be able to determine what amount of fees is considered reasonable. With a service like an audit where the statement users and even the client do not see much of the auditor's work, it is difficult for the client to determine whether audit fees are appropriate or not. As a matter of fact, the seen part

of the audit process is a final report that includes an opinion on the client's financial statements. The development of a model that predicts normal audit fees is necessary, given the importance of the audit to maintain better financial reports and better firm performance (Rahman et al., 2019).

The fundamental premise of this study is that corporate governance will influence the level of audit fees. Governance mechanisms are supposed to monitor management practices, including the financial reporting system. Therefore, governance is expected to affect audit fees in one of these two directions. First, effective governance will enhance internal controls and reduce auditing risks and the risk of material misstatements, hence reducing audit effort and audit fees. Second, effective governance might demand higher audit quality to reduce agency costs and ensure higher monitoring effectiveness, increasing efforts and fees.

In such two directions, empirical studies are divided. For example, Boo and Sharma (2008) and Kashif and Zia ur Rehman (2020) provided evidence to support the first one. Similarly, the second direction was compatible with the results of Carcello et al. (2002) and Abbott et al. (2003). In essence, for three main reasons, it is vital to investigate the

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impact of governance on the level of audit fees in Jordan. First, the audit fee determinants are contextual and are anticipated to vary between countries (Abdullah et al., 2017). Second, several studies have investigated this connection in developed countries, e.g. (Desender et al., 2009; Mitra et al., 2007; Sharma et al., 2020) however, limited studies in developed countries have been undertaken. Third, the Jordanian governance code for listed companies has been revised; thus, it is useful to investigate the impact of the new requirements on the level of audit fees, moreover, the fact that there are problems with the quality of audit evidence and the qualifications of the auditor in Jordan (World Bank, 2004) and problems with the auditor independence makes this investigation more important. Finally, to the best of our knowledge, this is the first research to examine the effect of political connections on audit fees in Jordan where political connections are prevalent. Henceforth, this research is of great importance to decision-makers in Jordan as it attempts to determine what affects audit fees in Jordan.

2. Literature Review and Hypotheses Development

2.1. Characteristics of the Board of Directors

The board of directors' characteristics were used in the literature to clarify the differences in audit fees (Carcello et al., 2002; O'Sullivan, 2000). Effective boards are supposed to be better monitors of operations, internal controls, and financial reporting reliability. This, in turn, will affect the level of audit fees by demanding higher audit quality or by reducing the risk of material misstatements. Therefore, what are the characteristics of an effective board? In the current analysis, the following characteristics will be investigated.

2.1.1. Size of the Board

Larger boards are less prone to be dominated by management; hence they are expected to be better monitors. Moreover, larger boards have directors with more diversified backgrounds (Zahra & Pearce, 1989), such as educational backgrounds and experiences. Therefore, larger boards exercise better monitoring over the financial reporting system (Anderson et al., 2004). Larger boards enhance monitoring capability due to more experiences. To ensure financial reporting reliability, such boards are inclined to pay higher fees. In this vein, several studies reported this positive correlation (Farooq et al., 2018; Hines et al., 2015; Jizi & Nehme, 2018; Karim et al., 2016), while Kuang (2011) reported that board size is negatively and significantly related to audit fees. Consequently, the study predicts the following hypothesis:

H1: There is a significant positive association between audit fees and board size.

2.1.2. Board Independence

It is well known in the literature that the board needs independent directors to perform its monitoring duties, a notion that is supported by empirical evidence (Berger et al., 1997). From the agency theory viewpoint, independent boards are expected to demand high audit quality as a monitoring tool to reduce agency costs and protect shareholders' interests. Moreover, strong boards might use the high-quality audit as an attempt to avoid legal liability and protect their reputation (Abbott et al., 2003; Carcello et al., 2002) or as a signal of their effectiveness and achievements (Zhang & Yu, 2016). Empirically, it was found that independence of the board is positively related to the level of audit fees (Carcello et al., 2002; Farooq et al., 2018; Jizi & Nehme, 2018), While Li and Wang (2006) reported a negative association.

Based on the previous discussion, the following hypothesis is expected:

H2: There is a positive association between the independence of the board and audit fees.

2.1.3. Leadership Duality

The agency theory prefers the separation of the role of the CEO and the chairman of the board, on the basis that the board is responsible for monitoring the executive management performance. According to Fama and Jensen (1983), duality results in combining decision-making and decision control in the same position, or as Brickley et al. (1988) describe duality as one person grading their homework. Additionally, it raises doubts on how the board can maintain independence while dominated by the CEO. For example, in the case of CEO duality, Goyal and Park (2002) found that it is less likely to dismiss the CEO after a poor performance, and Lee (2009) reported higher CEO performance-based payments. Had the independence of the board been impaired due to CEO duality, it is expected that such boards will not demand higher quality audits. Such boards tend to conceal their weak governance by resorting to lower audit quality. Bliss et al. (2007) reported that Independent boards require higher quality audit only when there is no duality. Lin and Liu (2009) found that audit quality diminishes when firms assign the same person to the two positions. The hypothesis to be empirically tested is as follows:

H3: There is a negative association between leadership duality and audit fees.

2.1.4. Board Meeting Frequency

Several studies recommended that board effectiveness is associated with board meetings' frequency (Conger et al.,

1998; Vafeas, 1999). Higher meetings represent greater diligence and commitment by the board, and such a board is more likely to demonstrate greater monitoring effectiveness, including enhanced monitoring over financial reporting. Moreover, more meetings enable directors to be better informed and more knowledgeable about accounting matters and financial reporting issues and allow them to interact with audit committee members; more specifically, they are expected to discuss audit issues throughout the audit process and ask for more audit coverage. Therefore, a higher quality audit is expected to be requested. Empirically, Carcello et al. (2002) reported that audit fee is positively linked to board diligence. In comparison, Li and Wang (2006) noted an insignificant correlation between audit fees and meeting frequency. The following hypothesis is formulated:

H4: *There is a significant positive relationship between board frequency of meetings and audit fees.*

2.1.5. Political Connections

Politically linked firms have substantial agency issues because financial statements are easier to be manipulated by controlling shareholders since their political ties protect them. For instance, Sudibyo and Jianfu (2016) found that more tax avoidance activities occurred in politically connected firms. The government is less likely to detect false financial statements by those firms, and earning management practices are likely to occur in firms with political connections. Furthermore, according to Leuz and Oberholzer-Gee (2006), such firms have less incentive to enhance financial statement transparency because they rely on bank financing rather than equity financing since the former is easier for these firms to obtain. Hung et al. (2017) contended that there is less burden on politically linked firms to comply with laws and regulations, including receiving deadline extensions.

Firms with such privileges are less inclined to demand higher quality reports to conceal their rent-seeking activities, which are well documented in Jordan (Fakoussa & Kabis-Kechrid, 2020). Also, according to He et al. (2014), political connections themselves require higher secrecy and less transparency. Such firms, not caring about the quality of financial reporting, might pay less fees or pay higher fees to create bonding with the auditor to maintain financial statements' opaqueness. On the other hand, such firms are considered a high inherent risk by external auditors, resulting in more increased efforts and fees (Ariningrum & Diyanty, 2017). Based on the previous discussion, a non-directional hypothesis is formulated:

H5: *There is a significant relationship between political connections and audit fees.*

2.1.6. Audit Committee

The governance code for listed firms in Jordan states that the audit committee is responsible for studying periodic reports before presenting them to the board, the external auditor's plan of work, observations and suggestions, internal controls and related auditing procedures, and internal audit procedures. Therefore, the audit committee is expected to affect the level of audit fees while carrying out its responsibilities by ensuring the existence of reliable information prepared in accordance with applicable reporting requirements and by monitoring auditors to minimize the chances of errors (Abbott et al., 2003). We can argue that an audit committee to achieve its objectives will require higher audit quality and more audit hours, which increases audit fees.

A countervailing argument provides that an audit committee's existence can result in less earnings management (Tran et al., 2020), more reliable reporting systems, and more effective internal controls, which in turn decreases the risk of material misstatements and decreases the level of substantive tests, hence, audit fees. However, this effect can be reduced by the more hours needed by the auditor to meet and with the audit committee and discuss audit matters. Goodwin and Kent (2006) Brisbane, Qld reported that audit partners believe that audit committee existence increases the hours needed more than it decreases the testing level. Moreover, Collier and Gregory (1996) examined cases to test the two arguments, and they reported significant evidence on the first one, while no evidence was found on the second. Empirically, several studies have reported that audit fees are positively associated with audit committees (Goodwin-Stewart & Kent, 2006). At the same time, O'Sullivan (1999) found no significant relationship between the audit committee and audit fees. We proceed with the majority of empirical studies and expect the following:

H6: *There is a significant positive relationship between the existence of an audit committee and audit fees.*

2.2. Ownership Structure

Different ownership structures are anticipated to affect the level of audit fees (Khan et al., 2011; Mitra et al., 2007). Different ownership structures result in different monitoring mechanisms employed by shareholders to watch over operations and control over financial reporting hence different levels of monitoring effectiveness. Therefore, external auditors' efforts will vary depending on how effective internal controls and monitoring mechanisms are. Institutional features of developing markets, such as significant government ownership and more concentrated ownership in the listed firms, lead to differences in monitoring effectiveness by the shareholders.

According to Simunic (1980), audit fees are determined by the effort needed to conduct the audit and the level of risk premium, which both might increase by the increase of agency conflicts, hence increasing audit fees. Therefore, it is expected that the companies' ownership structures can affect the level of audit fees.

2.2.1. Ownership Concentration

Agency conflicts, from the standpoint of agency theory, arise due to the separation between management and ownership, where managers are expected to maximize their wealth at the expense of shareholders' benefits. One possible solution to this problem is monitoring managers' actions by the board of directors and shareholders. However, small shareholders have less incentive to do so since marginal benefits are less than marginal monitoring costs. Therefore, diffused ownership is expected to result in less monitoring effectiveness on management, lower reliance on internal controls, and higher audit efforts to address higher misstatements risk.

Moreover, separating managerial functions and ownership makes it impractical for owners to access information needed for decision-making. The remoteness of information causes information risk. i.e., the risk that the information relied upon by the users is inaccurate. With greater risk, more audit effort becomes essential. Or as Abdel-Khalik (1993) discussed, the inability to observe the agent's behavior results in the need for better governance mechanisms.

The contrary is expected in the case of large controlling shareholders. It is expected that ownership concentration increases pressure on management (Abdel-Khalik, 1993). According to Mitra et al. (2007), large and sophisticated shareholders are effective monitors over the financial reporting system. In such a case, the need for an audit becomes lower. In fact, agency theory predicts that audit demand will be lower compared to firms with diffused ownership (Khan et al., 2011). In the same vein, Chan et al. (1993) hypothesized that a more extensive audit is needed in case of diverse ownership.

However, another concern appears on the surface in the case of concentrated ownership, which is large shareholders' expropriation of minority shareholders' interests. This leads to higher type 2 agency problems, resulting in auditors asking for higher fees because of higher risks (Claessens et al., 2002).

Mitra et al. (2007) and Chan et al. (1993) reported a negative relationship between audit fees and owners with 5% or more shares. Desender et al. (2013) found a negative association between audit fees and owners with 20% or more shares. A positive association was found by Fan and Wong (2005). Based on the mixed results, the following is expected:

H7: *There is a significant relationship between audit fees and ownership concentration.*

2.2.2. Foreign Ownership

Agency conflicts are expected to increase with foreign ownership (Niemi, 2005). This is due to the geographical separation and unfamiliar cultural and institutional context, which makes information gathering more difficult for these investors. This notion is common in the literature, wherein several studies argue that it is more difficult for foreign investors to gather information compared to local investors (Brennan & Cao, 1997; Buchner et al., 2018).

Foreign owners rely on other monitoring mechanisms to make up for their remoteness and inability to monitor management, such as external audits. This can be done at the general assembly meeting through the shareholders' approval on the external auditor's appointment. It is expected that foreign shareholders will demand higher auditor quality and a more thorough audit process. Hence audit fees are expected to be higher. Zureigat (2011) argued that foreign investors tend to demand a higher quality audit. Moreover, with foreign ownership and the associated agency costs, auditors, due to higher litigation risk, might ask for higher fees as well. Therefore, the following is expected:

H8: *Foreign ownership is positively associated with audit fees.*

2.2.3. Institutional Ownership

Institutional shareholders would have more to lose due to their large shares if things went wrong for the firm. Consequently, they have the incentive to monitor the management to behave in the shareholders' best interest, especially if they intend to hold their investments for a long time (Monks & Minow, 1995). More specifically, institutions have incentives to require better disclosure since it increases stock prices and reduces capital cost/.

Moreover, these shareholders have the power to influence management decisions. For example, Brickley et al. (1988) argued that institutional shareholders are more prone to vote against harmful decisions to shareholders' wealth. Han et al. (2013) discussed that institutional owners can influence the audit committee's decisions with regard to their choice of the auditor and the audit process. It is important to note that even if the institutional investors are passive, they still vote for better firm governance (Crane et al., 2016). Therefore, it could be argued that institutional investors can be regarded as an effective governance tool.

On the one hand, with incentive and power, institutional investors attempt to monitor management, maximize shareholders' wealth, and increase disclosures' quality. They are more likely to pressure the management for high audit quality. On the other hand, institutional investors might pursue to maximize their own interests, not the interests of other shareholders (Cornett et al., 2007), and be less involved

in monitoring management. Moreover, due to their access and control, they might be able to obtain information from the inside. In such a case, institutional investors will be less inclined to demand higher audit quality.

Empirical evidence by Ben Ali and Lesage (2013) and Kane and Velury (2004) reported a positive relationship between audit fees and institutional investors. In comparison, Khan et al. (2011) showed a negative relationship between the two variables. Based on the above discussion, the following non-directional hypotheses is expected:

H9: Institutional ownership significantly affects audit fees.

3. Methodology and Data

The aim of this study is to examine how the external audit fee is impacted by the characteristics of the board of directors and ownership structure. The dependent variable of the study is the natural logarithm of audit fees paid by the selected sample. As such, this study employed an audit fee model developed by Simunic (1980) to investigate these effects by including five proxies, namely the board of directors' size, number of

meetings, independence, political connection member, and leadership duality. This study also examines the effect of the ownership concentration, institutional ownership, and foreign ownership as a proxy for the firm's ownership structure.

Following the literature and because of its high explanatory power, the model controls for several independent variables. Corporate characteristics affect audit fees, including firm size measured by total assets, audit firm size, and firm age. It also controls firm risk measured by financial leverage and firm profitability measured by the return on assets ratio. Besides the firm complexity variables, two proxies were included in our model. Such proxies are the receivable and inventory to total assets ratio and the number of subsidiaries (Simunic, 1980). Table 1 presents the definition of variables. Eventually, the following regression equation was used to demonstrate the board of directors' effect on the audit fees.

$$LAF = \beta_0 + \beta_1 CSize_{it} + \beta_2 SUB_{it} + \beta_3 REINV_{it} + \beta_4 LEV_{it} + \beta_5 ROA_{it} + \beta_6 AGE_{it} + \beta_7 BIG4_{it} + \beta_8 ACE_{it} + \beta_9 BSIZE_{it} + \beta_{10} BIND_{it} + \beta_{11} LDULITY_{it} + \beta_{12} MTING_{it} + \beta_{13} POL_{it} + \beta_{14} OWIN_{it} + \beta_{15} OWF_{it} + \beta_{16} OWC + \varepsilon_{it} \quad (1)$$

Table 1: Variable Definitions

Variable Name	Variable Symbols	Variable Definition
Ln Audit fees	LAF	Natural logarithm of the number of total audit fees
Client Size	CSIZE	Natural logarithm of the company's total assets
Complexity 1	SUB	Number of subsidiaries of the firm
Complexity 2	REINV	Company's receivables and inventory to total assets ratio
Leverage	LEV	The ratio of the total debt of the firm to total equity
Profitability	ROA	Return on assets ratio of firm
Firm Age	AGE	The period between the listing date of the firm on the Amman stock exchange and the date of observation
Audit firm	BIG4	Coded 1 if the firm is audited by one of the Big Four audit firms, and 0 otherwise
Board Size	BSIZE	Total number of directors on the board
Board Independence	BIND	The ratio of total independent directors to total directors
Leadership Duality	LDULITY	Coded 1 if the CEO and chairman are the same individuals, and 0 otherwise
Number of Meeting	MTING	The frequency of meeting in a particular year
Political Connection	POL	coded 1 if the firm has a politically connected member, and 0 otherwise
Audit Committee Existence	ACE	coded 1 if the firm has an audit committee, and 0 otherwise
Ownership Concentration	OWC	The percentage of shares held by the largest shareholder with more than 5%
Institutional Ownership	OWIN	The percentage of shares held by the institutional largest shareholder with more than 5%
Foreign Ownership	OWF	The percentage of shares held by foreign investors with more than 5%

The panel data sets were extracted from the financial statement of the Amman stock exchange companies of which data for the given period were available. The study covered the period from 2012 to 2019. The total number of companies is 109 companies, forming a balanced panel dataset. As a result, the sample contains (56) industrial companies and (53) service companies, with a total number of 872 observations. This study included only the non-financial companies and excluded the financial and banking sector due to the disclosure requirement and their different operating characteristics.

Generalized Least Squares (GLS) regression was used to test the study hypothesis by using the panel data sets; moreover, it is necessary to choose whether to use fixed effect or random effect in estimating the Generalized Least Squares (GLS) regression. Given the Hausman test results, the test's P-value is 0.0000 for a chi-square value of 82.01, indicating that fixed effect is the optimal choice.

Table 2 provides descriptive statistics for the study variables. The study found that the average audit fee was JD16,576, and the highest audit fee was JD 152,904 and JD1,000 was the lowest.

The result shows that the average board size is 8.11 members, and the minimum and the maximum number of

the directors on the board are 3 and 16, respectively, which indicates that some Jordanian companies do not abide by the Jordanian corporate governance code. It shows that the average percentage of independent directors is 0.44, and the average number of board meetings is 7.33 (minimum of 0 meetings, maximum of 28).

The result shows that the average percentage of shares owned by institutional shareholders is 0.40. In contrast, 0.125 is owned by foreign shareholders and 0.625 owned by the largest shareholder with more than 5%, indicating that the sample has a high degree of ownership concentration. The mean of Leverage is 0.352, and the mean REINV ratio is 0.239. The descriptive analysis found that 45% percent of our sample firms have a politically connected member in its board, and 74% percent of the study sample have audit committees. Only 21% of the sample have a leadership duality, and the Big4 (auditors) audits about 0.38 percent of the sample firms.

Table 3 presents the Pearson correlation matrix between the study variables. Among all the predictors, the dependent variable (audit fees) has a statistically significant correlation with all the study variables except REINV and OWC. The correlations among audit fees and the independent variables are consistent with the research's suggested model.

Table 2: Descriptive Statistics

	Mean	Median	Minimum	Maximum	SD
LAF	9.331272	9.21034	6.907755	11.93757	0.7615611
CSIZE	17.02131	16.95692	12.88612	21.3103	1.419464
SUB	1.46445	1	0	14	2.245776
REINV	0.2387238	0.2027266	0	0.9226374	0.196654
LEV	0.3518223	0.305085	0.0002	2.27528	0.2513216
ROA	1.371719	2.3295	-21.817	18.663	7.895895
AGE	17.59289	16	0	43	11.08357
BIG4	0.3761468	0	0	1	0.4846956
BSIZE	8.116972	8	3	16	2.310578
BIND	0.441158	0.43	0	1	0.2176777
LDULITY	0.2178899	0	0	1	0.4130491
MTING	7.330275	6	0	28	2.802508
POL	0.4529817	0	0	1	0.49807
ACE	0.7477064	1	0	1	0.4345781
OWC	0.6254741	0.65	0	1	0.2329215
OWIN	0.4047316	0.392915	0	1	0.2968938
OWF	0.1250053	0	0	0.998	0.2244128

Table 3: Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
LAF	1.0000																
CSIZE	0.7680*	1.0000															
SUB	0.5283*	0.3838*	1.0000														
REINV	-0.0015	-0.0476	-0.0003	1.0000													
LEV	0.2301*	0.2365*	0.1236*	0.1782*	1.0000												
ROA	0.1612*	0.3058*	0.0817*	-0.0424	-0.3600*	1.0000											
AGE	0.1546*	0.1434*	-0.0144	0.0640	0.1728*	0.0036	1.0000										
BIG4	0.4899*	0.3931*	0.1420*	-0.569	0.0506	0.0599	0.3335*	1.0000									
BSIZE	0.3133*	0.3785*	0.0663	-0.1761*	-0.0750*	0.0922*	0.1820*	0.2928*	1.0000								
BIND	-0.0671*	-0.1287*	-0.0452	0.0688*	0.0573	-0.1175*	0.1263*	-0.0758*	0.2064*	1.0000							
LDULITY	-0.1055*	-0.0384	-0.0832*	0.1040*	-0.0606	0.1094*	-0.0814*	-0.1690*	-0.0183	-0.0942*	1.0000						
MTING	0.0781*	0.1580*	-0.0820*	-0.0893*	0.0875*	0.0204	-0.0424	0.1130*	0.0329	0.0472	0.0250	1.0000					
POL	0.1906*	0.1657*	-0.0970*	-0.0806*	0.0584	0.0308	0.2568*	0.1922*	0.3530*	0.2623*	-0.0506	0.1699*	1.0000				
ACE	0.0872*	0.0411	0.0484	0.0320	0.0194	0.0310	-0.0090	-0.0014	-0.0883*	0.1098*	-0.0312	0.0044	0.0671*	1.0000			
OWC	0.0402	0.0373	-0.1193*	-0.1031*	-0.0741*	0.1140*	-0.0830*	0.1382*	0.2158*	-0.4432*	0.0310	0.0214	-0.1121*	0.0568	1.0000		
OWIN	0.3400*	0.2761*	0.0499	-0.0726*	0.0207	0.0694*	0.1264*	0.4242*	0.0819*	-0.2488*	-0.1085*	0.0730*	0.1387*	0.0178	0.4822*	1.0000	
OWF	0.3246*	0.2571*	0.1792*	0.0046	-0.0066	-0.0057	0.0062	0.3215*	0.0024	-0.2427*	-0.0532	-0.0389	-0.0560	0.0340	0.2731*	0.4578*	1.0000

*Indicates significance at 1% or less.

4. Results

The outcome shows a significant direct association between board size and external audit fees, consonant with the first hypothesis. This result supports Carcello et al. (2002) argument that firms with bigger boards, more diligent, and more independent members demand higher audit quality, hence higher audit fees. Moreover, large boards are less likely to be dominated by management, thus, more likely to fend for the stakeholders' interests. They are expected to strive for better monitoring by demanding more audit work and quality. This finding is consistent with other scholars' results (Jizi & Nehme, 2018; Karim et al., 2016).

Board independence was found to be insignificant; this in contrast with the expectation that independent boards demand a higher quality audit. Although the independent auditor's main responsibility is to monitor management, independence in itself is inadequate to enhance monitoring. Information acquisition costs theory (Raheja, 2005) suggests that a robust information environment is

necessary for independent auditors to be effective, which is not the case in Jordan. A study by Zhang and Yu (2016) found that independent boards are not significant to audit fees in a weak information environment; however, they demand higher fees in a strong information environment. The insignificant relation is in line with the work of Johl et al. (2012).

The regression result indicates that companies with leadership duality paid significantly higher fees than the others. A potential reason for this outcome is that firms with dual leadership need higher quality audits to impugn the common belief that CEO duality impedes the board's effectiveness. The result can also be driven by the supply side, in other words, leadership duality might negatively affect the board monitoring ability and increases the risks of material misstatements, leading to greater audit effort and fees. This result is consistent with the works of Bliss et al. (2007) and Jizi and Nehme (2018).

Further, the analysis shows a non-significant association between audit fees and board meeting frequency. In other words, the board's meeting frequency does not improve

Table 4: Results of GLS Regression Analysis

	Coef.	Std. Err.	t	P > t
CSIZE	0.1497488	0.0316661	4.73	0.000
SUB	0.0726861	0.0166408	4.37	0.000
REINV	0.3040473	0.0943422	3.22	0.001
LEV	0.1334917	0.0814846	1.64	0.102
ROA	-0.0020561	0.0016435	-1.25	0.211
AGE	0.0131915	0.0042282	3.12	0.002
BIG4	0.1433514	0.0381041	3.76	0.000
BSIZE	0.0336789	0.0102775	3.28	0.001
BIND	0.0040503	0.0691189	0.06	0.953
DULITY	0.0692429	0.0400669	1.73	0.084
MTING	-0.0039827	0.0048378	-0.82	0.411
POL	0.0630287	0.0295046	2.14	0.033
ACE	0.0016835	0.0328661	0.05	0.959
OWC	0.2349825	0.1292319	1.82	0.069
OWIN	-0.1085857	0.0850536	-1.28	0.202
OWF	-0.3951305	0.1259556	-3.14	0.002
_cons	5.928686	0.5234461	11.33	0.000
Year dummy	Yes			
# of firms	109			
# of observations	872			
R-Sq (0.5189)				

the quality of the audit, and boards might be holding meetings only to comply with governance regulations. However, members of the board might not be raising and discussing audit issues or, more specifically, audit fees. This finding is consistent with Li and Wang (2006) and Goodwin-Stewart and Kent (2006).

Our analysis indicates a positive and significant coefficient between audit fees and the existence of political connections on the board. In other words, the firms that have political connections pay higher fees than their non-connected peers. This can be attributed to the higher risks assumed by auditors, resulting in higher efforts and fees, or to the politically connected firms' attempts to create bonding with the auditor to shirk the discovery of dubious activities. This in accordance with the findings of Ariningrum and Diyanty (2017) and Nurjanah and Sudaryati (2019).

A non-significant relationship has been identified between audit fees and the presence of the audit committee. Interestingly, the audit committee, the party responsible for external and internal audits, has no impact on audit fees. A possible explanation is that the audit committee's mere existence does not guarantee its effectiveness, whereas attention and consideration should be given to the committee's characteristics. The committee might be established to ensure compliance with governance regulations.

A positive and significant correlation between audit fees and ownership concentration is found in the analysis. Higher rates are charged by firms with concentrated ownership. These findings support the expropriation argument that when firms are owned by controlling shareholders, the possibility of expropriating small shareholders increases, which is considered risky by external auditors resulting in higher fees. Another potential reason is that firms with concentrated ownership demand higher quality audits and pay higher fees to ensure their financial statements' integrity to other stakeholders. These results are in line with Fan and Wong (2005).

A positive non-significant correlation between institutional ownership and audit fees was found. This conclusion confirms the claim that institutional owners, with their controlling position, trying to maintain their interests, are expected to deal with management privately. Therefore, they are not playing their monitoring role effectively as projected by agency theory. Moreover, due to their ability to access information, institutional investors are less worried about financial statements and audit quality. The result is consistent with O'Sullivan (1999), who reported an insignificant relation between institutional ownership and audit quality.

A significant negative correlation between foreign ownership and audit fees means that firms with a higher percentage of foreign ownership pay less fees. Rather than audit demand, this result might be driven by the audit supply, due to their independence from management and their greater incentives to monitor management to protect

their interests. Foreign investors exercise better monitoring over management and contribute positively to governance practices. Moreover, foreign ownership is associated with lower levels of opportunistic behavior (Anderson et al., 2004). Additionally, foreign investors are drawn to firms with low levels of information asymmetry. (Fan & Wong, 2002). As a result, auditing firms with higher foreign ownership resulted in lower audit risks, efforts, and fees.

Overall, the findings on the control variables are primarily in line with the literature. For firms with more total assets, higher leverage, and more receivables and inventory, audit fees are considerably higher; the results support the risk-based perspective of audit services. Big 4 auditors generally receive higher fees than other audit firms.

5. Conclusion

This research was carried out to analyze the effect of several governance variables on the level of audit fees paid by 109 companies listed on the ASE for the duration (2012–2019). The study also investigated the board's characteristics along with the structure of ownership. Consequently, major factors in deciding audit fees are the size of the board, duality, and political connections. In comparison, the independence of the board, the number of meetings, and the presence of the audit committee were insignificant. With regard to the ownership structure, the concentration of ownership and foreign ownership significantly affect audit fees, but institutional ownership has no significant impact. Furthermore, it was found that political connections were positively and substantially linked to audit fees. Future research might focus on the boards' political connections in Jordan to determine whether these connections demand higher quality auditing or try to create bonds with the auditor, knowing that practices like cronyism are common in Jordan.

References

- Abbott, L. J., Parker, S., Peters, G. F., & Raghunandan, K. (2003). The association between audit committee characteristics and audit fees. *Auditing: A Journal of Practice & Theory*, 22(2), 17–32. <https://doi.org/10.2308/aud.2003.22.2.17>
- Abdel-Khalik, A. R. (1993). Why do private companies demand auditing? A case for organizational loss of control. *Journal of Accounting, Auditing & Finance*, 8(1), 31–52. <https://doi.org/10.1177/0148558X9300800103>
- Abdullah, A.M., Naser, K., & Al-Enazi, N. (2017). An empirical investigation of factors affecting audit fees: evidence from Kuwait. *International Advances in Economic Research*, 23(3), 333–347. <https://doi.org/10.1007/s11294-017-9649-5>
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, 37(3), 315–342. <https://doi.org/10.1016/j.jacceco.2004.01.004>

- Ariningrum, I., & Diyanty, V. (2017). The impact of political connections and the effectiveness of the board of commissioner and audit committees on audit fees. *Australasian Accounting, Business and Finance Journal*, 11(4), 53–70. <http://dx.doi.org/10.14453/aabfj.v11i4.5>
- Ben Ali, C., & Lesage, C. (2013). Financial auditors facing agency conflicts: An audit fees determinants study in France. *Comptabilite Controle Audit*, 19(1), 59–89. <https://www.cairn.info/revue-comptabilite-controle-audit-2013-1-page-59.htm>
- Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *The Journal of Finance*, 52(4), 1411–1438. <https://doi.org/10.1111/j.1540-6261.1997.tb01115>
- Bliss, M. A., Muniandy, B., & Majid, A. (2007). CEO duality, audit committee effectiveness, and audit risks. *Managerial Auditing Journal*, 22(7), 716–728. <https://doi.org/10.1108/02686900710772609>
- Boo, E. F., & Sharma, D. (2008). Effect of regulatory oversight on the association between internal governance characteristics and audit fees. *Accounting & Finance*, 48(1), 51–71. <https://doi.org/10.1111/j.1467-629X.2007.00229.x>
- Brennan, M. J., & Cao, H. H. (1997). International portfolio investment flows. *The Journal of Finance*, 52(5), 1851–1880. <https://doi.org/10.1111/j.1540-6261.1997.tb02744.x>
- Brickley, J. A., Lease, R. C., & Smith Jr, C. W. (1988). Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics*, 20, 267–291. [https://doi.org/10.1016/0304-405X\(88\)90047-5](https://doi.org/10.1016/0304-405X(88)90047-5)
- Buchner, A., Espenlaub, S., Khurshed, A., & Mohamed, A. (2018). Cross-border venture capital investments: The impact of foreignness on returns. *Journal of International Business Studies*, 49(5), 575–604. <https://doi.org/10.1057/s41267-017-0116-6>
- Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley Jr, R. A. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), 365–384. <https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>
- Chan, P., Ezzamel, M., & Gwilliam, D. (1993). Determinants of audit fees for quoted UK companies. *Journal of Business Finance & Accounting*, 20(6), 765–786. <https://doi.org/10.1111/j.1468-5957.1993.tb00292>
- Claessens, S., Djankov, S., Fan, J. P., & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57(6), 2741–2771. <https://doi.org/10.1111/1540-6261.00511>
- Collier, P., & Gregory, A. (1996). Audit committee effectiveness and the audit fee. *European Accounting Review*, 5(2), 177–198. <https://doi.org/10.1080/09638189600000012>
- Conger, J. A., Finegold, D., & Lawler, E. E. (1998). Appraising boardroom performance. *Harvard Business Review*, 76, 136–164. <https://hbr.org/1998/01/appraising-boardroom-performance>
- Cornett, M. M., Marcus, A. J., Saunders, A., & Tehranian, H. (2007). The impact of institutional ownership on corporate operating performance. *Journal of Banking & Finance*, 31(6), 1771–1794. <https://doi.org/10.1016/j.jbankfin.2006.08.006>
- Crane, A. D., Michenaud, S., & Weston, J. P. (2016). The effect of institutional ownership on payout policy: Evidence from index thresholds. *The Review of Financial Studies*, 29(6), 1377–1408. <https://doi.org/10.1093/rfs/hhw012>
- Desender, K. A., Aguilera, R., Crespi-Cladera, R., & Garcia-Cestona, M. (2013). Board characteristics and audit fees: Why ownership structure matters. *Strategic Management Journal*, 34(7), 823–842. <https://doi.org/10.1002/smj.2046>
- Ettredge, M. L., Scholz, S., & Li, C. (2007). Audit fees and auditor dismissals in the Sarbanes-Oxley era. *Accounting Horizons*, 21(4), 371–386. <https://doi.org/10.2308/acch.2007.21.4.371>
- Fakoussa, D., & Kabis-Kechrid, L. L. (2020). Socio-Economic Challenges and the Impact of Regional Dynamics on Jordan Employment, Social Cohesion, and International Cooperation-Policy Briefs from the Region and Europe.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Fan, J. P., & Wong, T. J. (2005). Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research*, 43(1), 35–72. <https://doi.org/10.1111/j.1475-679x.2004.00162.x>
- Farooq, M. U., Kazim, I., Usman, M., & Latif, I. (2018). Corporate governance and audit fees: Evidence from a developing country. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 12(1), 94–110.
- Goodwin-Stewart, J., & Kent, P. (2006). Relation between external audit fees, audit committee characteristics, and internal audit. *Accounting & Finance*, 46(3), 387–404. <https://doi.org/10.1111/j.1467-629X.2006.00174>
- Goyal, V. K., & Park, C. W. (2002). Board leadership structure and CEO turnover. *Journal of Corporate Finance*, 8(1), 49–66. [https://doi.org/10.1016/S0929-1199\(01\)00028-1](https://doi.org/10.1016/S0929-1199(01)00028-1)
- Han, S., Kang, T., & Rees, L. (2013). The association between institutional ownership and audit properties. *Asia-Pacific Journal of Accounting & Economics*, 20(2), 199–222. <https://doi.org/10.1080/16081625.2012.748449>
- Hines, C. S., Masli, A., Mauldin, E. G., & Peters, G. F. (2015). Board risk committees and audit pricing. *Auditing: A Journal of Practice & Theory*, 34(4), 59–84. <https://doi.org/10.2308/ajpt-51035>
- Hung, C. H. D., Jiang, Y., Liu, F. H., Tu, H., & Wang, S. (2017). Bank political connections and performance in China. *Journal of Financial Stability*, 32, 57–69. <https://doi.org/10.1016/j.jfs.2017.09.003>
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329. <https://www.jstor.org/stable/1818789>
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022>
- Jizi, M., & Nehme, R. (2018). Board monitoring and audit fees: the moderating role of CEO/chair dual roles. *Managerial Auditing Journal*, 33(2), 217. <https://doi.org/10.1108/MAJ-10-2016-1464>

- Johl, S., Subramaniam, N., & Zain, M. M. (2012). Audit committee and CEO ethnicity and audit fees: some Malaysian evidence. *The International Journal of Accounting*, 47(3), 302–332. <https://doi.org/10.1016/j.intacc.2012.07.002>
- Kane, G. D., & Velury, U. (2004). The role of institutional ownership in the market for auditing services: an empirical investigation. *Journal of Business Research*, 57(9), 976–983. [https://doi.org/10.1016/S0148-2963\(02\)00499-X](https://doi.org/10.1016/S0148-2963(02)00499-X)
- Karim, K., Robin, A., & Suh, S. (2016). Board structure and audit committee monitoring: Effects of audit committee monitoring incentives and board entrenchment on audit fees. *Journal of Accounting, Auditing & Finance*, 31(2), 249–276. <https://doi.org/10.1177/0148558X15583412>
- Kashif, M., & Zia ur Rehman, D. (2020). The board size and board composition impact on financial performance: An evidence from the Pakistani and Chinese listed banking sector. *The Journal of Asian Finance, Economics, and Business*, 7(4), 81–95. <https://doi.org/10.13106/jafeb.2020.vol7.no4.81>
- Khan, A. R., Hossain, D. M., & Siddiqui, J. (2011). Corporate ownership concentration and audit fees: The case of an emerging economy. *Advances in Accounting*, 27(1), 125–131. https://www.academia.edu/24618831/Corporate_ownership_concentration_and_audit_fees_The_case_of_an_emerging_economy
- Kuang, X. (2011). *Board characteristics and higher audit quality—Evidence from Chinese listed companies. Paper presented at the MSIE 2011*, Harbin, China, 8–11 Jan 2011 (pp. 348–352). <https://doi.org/10.1109/MSIE.2011.5707733>
- Lee, J. (2009). Executive performance-based remuneration, performance change, and board structures. *The International Journal of Accounting*, 44(2), 138–162. <https://doi.org/10.1016/j.intacc.2009.03.002>
- Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics*, 81(2), 411–439. <https://doi.org/10.1016/j.jfineco.2005.06.006>
- Li, B., & Wang, P. (2006). Board characteristics and ratios of audit fee to asset. *China Accounting Review*, 1(2), 105–118. <https://doi.org/10.1016/j.cjar.2012.10.001>
- Lin, Z. J., & Liu, M. (2009). The impact of corporate governance on auditor choice: Evidence from China. *Journal of International Accounting, Auditing, and Taxation*, 18(1), 44–59. <https://doi.org/10.1016/j.intaccudtax.2008.12.005>
- Mitra, S., Hossain, M., & Deis, D. R. (2007). The empirical relationship between ownership characteristics and audit fees. *Review of Quantitative Finance and Accounting*, 28(3), 257–285. <https://doi.org/10.1007/s11156-006-0014-7>
- Monks, R., & Minow, N. (1995). *Corporate governance*. Cambridge, MA: Blackwell Publishers.
- Niemi, L. (2005). Audit effort and fees under concentrated client ownership: Evidence from four international audit firms. *The International Journal of Accounting*, 40(4), 303–323. <https://doi.org/10.1016/j.intacc.2005.09.006>
- Nurjanah, F., & Sudaryati, E. (2019). The effect of political connection and effectiveness of audit committee on audit fee. *The Indonesian Accounting Review*, 9(2), 227–234. <https://doi.org/10.14414/tiar.v9i2.1848>
- O’Sullivan, N. (1999). Board characteristics and audit pricing post-Cadbury: A research note. *European Accounting Review*, 8(2), 253–263. <https://doi.org/10.1080/096381899336023>
- Raheja, C. G. (2005). Determinants of board size and composition: A theory of corporate boards. *Journal of Financial and Quantitative Analysis*, 4(8), 283–306. <https://doi.org/10.1017/S0022109000002313>
- Rahman, M. M., Meah, M. R., & Chaudhory, N. U. (2019). The impact of audit characteristics on firm performance: an empirical study from an emerging economy. *The Journal of Asian Finance, Economics, and Business*, 6(1), 59–69. <https://doi.org/cite/10.13106/jafeb.2019.vol6.no1.59>
- Sharma, D. S., Ananthanarayanan, U., & Litt, B. (2020). CEO compensation, corporate governance, and audit fees: Evidence from New Zealand. *International Journal of Auditing*, 5(1), 117–141. <https://doi.org/10.1111/ijau.12211>
- Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18(1), 161–190. <https://doi.org/10.2307/2490397>
- Sudibyo, Y. A., & Jianfu, S. (2016). Political connections, state-owned enterprises, and tax avoidance: An evidence from Indonesia. *Corporate Ownership and Control*, 13(3), 1–6. <https://doi.org/10.22495/cocv13i3c2p2>
- Tran, Q. T., Lam, T. T., & Luu, C. D. (2020). Corporate governance and earnings management: A study of Vietnamese listed banks. *The Journal of Asian Finance, Economics, and Business*, 7(12), 389–395. <https://doi.org/10.13106/jafeb.2020.vol7.no12.389>
- Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), 113–142. [https://doi.org/10.1016/S0304-405X\(99\)00018-5](https://doi.org/10.1016/S0304-405X(99)00018-5)
- World Bank. (2004). *Report on the observance of standards and codes (ROSC): Accounting and auditing: Jordan (English)*. Washington, DC: The World Bank. <http://documents.worldbank.org/curated/en/323971468272977829/Report-on-the-observance-of-standards-and-codes-ROSC-accounting-and-auditing-Jorda>
- Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15(2), 291–334. <https://doi.org/10.1177/014920638901500208>
- Zhang, J. Z., & Yu, Y. (2016). Does board independence affect audit fees? Evidence from recent regulatory reforms. *European Accounting Review*, 25(4), 793–814. <https://doi.org/10.1080/09638180.2015.1117007>
- Zureigat, Q. M. (2011). The effect of ownership structure on audit quality: Evidence from Jordan. *International Journal of Business and Social Science*, 2(10), 38–46. http://www.ijbssnet.com/journals/Vol.%202_No._10%3B_June_2011/6.pdf