



RESEARCH ARTICLE

Board Characteristics, Audit Fees, and Political Connections: An Integration of Resource Dependence and Agency Theories

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Abstract

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Audit risk reduction depends on the pivotal role of effective boards. However, auditors' professional judgment is influenced by political connections, potentially impairing audit quality. The purpose of this study was to examine the impact of board characteristics on audit fees. Specifically, the moderating role of political connections will be examined. This study evaluated a sample of 107 companies listed on the Tehran Stock Exchange (TSE) from 2016 to 2023. To test the research hypotheses, pooled or panel data regression models were employed. Based on the empirical results, increasing board independence and financial expertise are associated with lower audit fees. Although political connections moderated the relationship between board independence and audit fees, they had no significant effect on the relationship between board expertise and audit fees. Political connections also directly affect the relationship between board independence and audit fees by altering corporate governance mechanisms and increasing demand for high-quality independent audits. Strict audit regulations indicated a strong institutional environment, and in such an environment, the impact of political connections on auditing is likely to be reduced. Therefore, political connections cannot have a significant moderating effect on the relationship between board expertise and audit fees. This study integrated board characteristics and political connections in an emerging-market context, thereby advancing the audit literature. Practical insights are provided for regulators, auditors, and corporate governance reformers.

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1. Introduction

This study examines the relationship between corporate governance and audit costs in Iran by integrating agency theory and resource dependence theory. The impact of board characteristics on audit fees for firms listed on the Tehran Stock Exchange is assessed with political connection as a moderator. The literature records wide agency costs that lead to extreme information asymmetry in many emerging markets ([Almarayeh, 2024](#)) between controlling owners and minority shareholders. Thus, the greater a firm's agency costs, the further apart its managers and owners will be ([Jensen and Meckling, 1976](#)). In jurisdictions where majority owners also hold executive positions, this problem is particularly severe because owners can pursue private benefits at the expense of minority shareholders. This leads agency theory to advocate for the use of more closely associated monitoring mechanisms to control such opportunistic behavior. It is, therefore, not surprising that corporate governance frameworks have emerged to mitigate these conflicts and improve accountability ([Daily et al., 2003](#)). [Young \(2000\)](#) demonstrated that skilled boards enhance the reliability and transparency of financial reporting and argued that effective boards reduce the risk of auditors issuing erroneous opinions. By responding to stakeholders' demand for reliable information, the board plays a central governance role in the financial reporting process. [Zaman et al. \(2011\)](#) contend that one of the board's primary functions is to preserve auditor independence and to reduce the risk of incorrect audit opinions. On the other hand, [Carcello et al. \(2002\)](#) similarly find that effective boards better fulfill oversight responsibilities and strengthen audit performance. As a result, the need for a broader audit scope to ensure audit quality may increase, leading to higher audit fees.

However, boards have often been accused of incompetence and lack of engagement, hallmarks of breaches that lead to corporate failures. The challenges have encouraged more exploration of how boards function and greater scrutiny of board composition. Estimates of the influence of political connections on firm-level governance are ambiguous, with some studies finding a negative effect. For example, [Boubakri et al. \(2013\)](#) claimed that politically connected individuals may engage in political pursuits at the expense of shareholders. Moreover, [Guedhami et al. \(2014\)](#) contended that politically connected actors could prioritize political ends over shareholders' interests. As such, political connections can drive corporate decision-making and influence outcomes such as audit quality. To improve governance and financial integrity, it is important to understand how those relationships shape board effectiveness and audit practices. The effects of political connections have been extensively examined in the literature. On one hand, a group of researchers shows that establishing political connections is generally beneficial because it provides various advantages, including direct contracts, government subsidies, tax advantages, bank loans, and regulatory benefits ([Faccio et al., 2006](#)), and easier access to finance ([Khwaja and Mian, 2005](#)). For instance, [Guedhami et al. \(2014\)](#) emphasized that managers may seek higher-quality reporting to reassure foreign investors. They find that politically connected firms hire auditors with more institutional reputation (reflecting investor demand for transparency). Conversely, political connections allow politicized actors to extract rents, which limit efficient firm performance ([Boubakri et al., 2008](#)).

Furthermore, [La Porta et al.'s \(1998\)](#) warnings in the literature include the possibility that politicians on corporate boards may divert resources and engage in earnings management, making foreign investors unwilling to invest. Recent evidence also associates board political connections with lower firm performance ([La Rocca et al., 2022](#); [Shahzad et al., 2021](#)). Since the impact of political connections on audit fees, a measure of audit effort and quality of earnings, shows mixed findings in the literature, this issue needs further investigation. According to [Chaney et al. \(2011\)](#), politically connected firms tend to exhibit lower earnings quality. This study reported that firms obtain political connections through low-earnings-quality political channels ([Chaney et al., 2011](#)). Additionally,

lower earnings quality is found for politically connected firms (Gul, 2006). Thus, political connections might increase audit risk and lead to bigger audit fees in some contexts.

On the contrary, some researchers (e.g., Cheung and Leung, 2024) have found that political connections can reduce audit fees because auditors are less likely to question politically connected clients. Perry et al. (2025) found that political pressure can discredit auditors and prevent them from reviewing information rigorously; this occurs when the political context leads to either low performance or inflated scope and fees for audit effort. Moreover, Political connections may also change the incentives for reporting from accuracy to political ends. This misalignment reduces the reliability of financial statements and diminishes governance and accountability. In addition, political connections threaten the independence of audits as auditors may avoid stricter verification to prevent consequences or the loss of clients (Guedhami et al., 2014). Accordingly, political connections moderate the relationship between board characteristics and audit fees.

In the complex and dynamic environment of Iran's capital market, determining audit fees as one of the primary mechanisms of corporate governance plays a vital role in reducing information asymmetry and conflicts of interest. However, theoretical tensions between Agency Theory (which emphasizes monitoring and control) and Resource Dependence Theory (which focuses on acquiring critical resources from the environment) create ambiguity regarding boards' behavior in auditor selection and audit fee determination. Although the accounting literature has extensively examined the determinants of audit fees, in Iran's capital market, characterized by concentrated ownership structures and the prominent presence of public and state-owned entities, traditional explanations based solely on Agency Theory (e.g., board independence and expertise) are insufficient to explain the complexities governing the pricing of audit services. In situations where firms resort to political connections to secure special privileges, reduce monitoring costs, or access scarce resources, the tension between the board's monitoring and instrumental roles intensifies.

This research is necessary to clarify whether board qualitative characteristics maintain their monitoring function in an environment heavily influenced by political pressure and integrate these interactions, or whether political motives subsume them. Answering this question is of undeniable importance to capital market policymakers and the audit profession, as it aims to enhance corporate governance standards and reduce agency costs, especially in emerging economies where political influence over economic sectors is pronounced. This study offers three key innovations compared to prior research: First, unlike many previous studies in Iran that have examined board characteristics and audit fees solely from an Agency Theory perspective, this paper adopts an integrated approach (combining Agency Theory and Resource Dependence Theory) to provide a more comprehensive explanation of board behaviors. Second, the moderating role of political connections as a contextual variable in the relationship between board characteristics and audit fees represents the main innovation of this study; specifically, it investigates whether corporate political influence neutralizes or reinforces the monitoring incentives of specialized and independent board members. Third, this research provides novel evidence to the limited body of literature on political connections at the national level from an empirical perspective, by focusing on the institutional context of Iran's capital market, given its specific corporate governance features and ownership structure, which can significantly contribute to a better understanding of the interactions between corporate governance and political structures in developing countries.

Thus, this study examines how board independence and board financial expertise relate to audit fees and whether political connections moderate these relationships. Specifically, it investigates the following two research questions:

Research Question 1: What is the nature of the relationship between board independence and audit fees?

Research Question 2: What is the nature of the relationship between board expertise and audit fees?

Research Question 3: How do political connections influence the relationship between board independence and audit fees?

Research Question 4: How do political connections influence the relationship between board expertise and audit fees?

2. Literature review and hypothesis development

The academic literature has paid particular attention to the relationship between corporate governance and audit quality, particularly regarding the implications of board structure on audit fees. Audit fees are often considered a measure of audit quality, with higher fees generally indicating a more comprehensive audit process. DeAngelo (1981) defines audit quality as the likelihood that an auditor may detect and report a violation in the client's accounting system. Similarly, Palmrose (1988) defines audit quality as the level of assurance provided by the auditor to users of financial statements. Almarayeh et al. (2020) suggested that effective corporate governance structures are designed to increase accountability and transparency, ultimately affecting the quality of financial reporting and the audit process. Previous research has highlighted two dominant views on the relationship between corporate governance and audit fees. On the one hand, stronger corporate governance may lead to higher audit fees, as firms may seek broader audit services to mitigate risks associated with weak corporate governance. On the other hand, firms with stronger corporate governance mechanisms may experience lower audit fees because the reduced likelihood of financial misstatements reduces auditors' risk. Numerous studies support the first argument, claiming that effective corporate governance requires a reputable audit firm, additional audit tasks, and, consequently, better audit quality, which in turn leads to higher audit fees (Al-Hajaya, 2019; Lin, 2018).

2.1. Audit fees

Audit fees are the amounts paid by the client to the audit firm under the contract for the provision of audit services (Carcello et al., 2002). This variable is important from the perspectives of management and shareholders (for the reliability of financial reporting) and audit firms (for revenue maximization and maintaining competitiveness). Empirical evidence indicates that corporate governance mechanisms, including ownership structure and managerial independence, influence audit fees through their effects on agency problems, risk, firm size, and complexity. Nevertheless, the relative importance of these factors has been shown to vary across countries (Ali and Lesage, 2013). The regulatory context and the demand structure for audit services differ markedly in developing countries, leading to direct implications for how audit fees are set (Kamarudin et al., 2022).

2.2. Board independence

Board independence is the absence of material relationships or interests between a board member and the company, which constitutes one dimension of the theoretical aspect of corporate governance (Durisin and Puzone, 2009). In particular, if anyone has an employment relationship with the firm or serves as its executive director, they are not independent (Kosnik, 1987). Since the board of directors is an essential piece of the corporate governance system, profiling its structure and functioning is particularly key (Weisbach and Hermalin, 2003). Board independence is widely seen as one of the cornerstones of effective corporate governance, helping board members fulfill their legal responsibilities (monitoring company management) more effectively and better protect shareholder interests (Bozec and Dia, 2017). In this context, the non-executive directors function more effectively in their supervisory role because of their independent position and objective view towards

management decisions and actions (Kosnik, 1987). While financial market participants and regulators alike focus strongly on board independence, empirical evidence is somewhat mixed (Weisbach and Hermalin, 2003). However, there are still debates amongst regulators and corporate governance code providers, with some pointing out that board independence is still often viewed as a proxy for board effectiveness.

2.3. Board financial expertise

Board expertise refers to the knowledge and experience of the management team, which can have either positive or negative effects on firm performance. This expertise, particularly in the financial domain, is often measured using criteria such as work experience, professional experience, and academic qualifications. Given that the stock exchange market requires financial knowledge and expertise to make investment decisions, a manager with a sufficient understanding of financial literature, investment strategies, and the implications of financing strategies is less likely to exhibit irrational behavior. On the contrary, a manager with a finance background may increase cash-flow investment sensitivity (Gupta et al. 2021). The data linking board members' skills and a firm's operating performance support this intuition, with greater educational attainment and functional knowledge leading to better project selection, better execution, and ultimately better operating performance (Khan et al., 2025). Even though some explanations from the human relations school, like resource dependence theory, argue that what really accounts for firm achievement is not the individual ability of managers nor their knowledge or skills but factors such as product quality and life cycle (Hannan and Freeman, 1977), Human capital theory outlines that managerial knowledge and ability can be important antecedents of organizational performance (Coff, 2002). The board of directors, being the highest body in the firm, is responsible for developing and promoting high-level strategies, making major decisions, and managing overall company operations. The assumption is that members who lack sufficient accounting or financial knowledge are less sensitive to the truthfulness of reports, and that the presence of a member with adequate financial experience makes other members more sensitive and alert (Ghazalat et al., 2017). The results of numerous empirical studies conducted in other countries also indicated that good corporate governance, including board financial expertise, leads to better firm performance (Balatbat et al., 2004).

2.4. Political Connections

Political connections of economic enterprises, considered one of the factors influencing the quality of financial reporting, can be defined at the firm level as relationships between board members and individuals close to centers of power and government (Xiao et al., 2023). According to political economy theory, economics and politics have a reciprocal influence on one another, such that political decisions directly and indirectly affect economic activities (Pabst and Scazzieri, 2023). Evidence suggests that in developing countries, political connections are even more important than a firm's economic fundamentals in determining profitability, because firms with political connections, through easier access to credit and financial resources from state-owned banks, are less dependent on reported earnings for financing (Boubakri et al., 2012). The indicators of such political connections include the presence of board members affiliated with the government or political institutions, a government or semi-government major shareholder, and a higher long-term debt ratio resulting from access to low-cost, long-term resources (Lee and Wang, 2017).

2.5. Independence of the board and audit fees

In accounting research, the relationship between board independence and audit fees is of great importance. To analyze this issue, both the demand-side and supply-side perspectives on audit services should be considered. From a demand perspective, increased board independence aimed at more effective monitoring requires exerting greater pressure to achieve audit objectives. This demand for greater assurance by the board is logical only when the resulting benefits outweigh the audit costs (Carcello et al., 2002). Board independence stems from its members' independence, which is essential for ensuring board effectiveness by maintaining their independence from management. Current non-executive directors focus more on ensuring audit quality and reducing threats to auditor independence. Furthermore, independent board members, due to their higher motivation to preserve professional reputation and reduce legal liability risk, demand higher-quality audits to ensure the accuracy of financial statements. Board independence enhances audit quality and, as a signal of a strong internal control environment, encourages auditors to assess control risks more carefully (Krishnan and Visvanathan, 2009). Beasley (1996) argued that greater oversight by a highly independent board reduces the occurrence of financial statement fraud. Many scholars have highlighted scrutiny regarding independent members' disclosure on boards (Al Farooque et al., 2020; Brickley and James, 1987). Board member independence, a significant monitoring mechanism, is illustrated by Carcello and Neal (2003). Since independent directors are not dependent on management, they claim that these independent directors have more ability to question management when necessary. Uang et al. (2006) argue that independent directors may reduce agency costs, narrow the gap between related parties and independent auditors, and effectively improve reporting quality. In addition, Abbott and Parker (2000) showed that firms characterized by a higher proportion of independent directors use high-quality auditors. Moreover, Carcello et al. (2002) found that non-executive board members are more likely to invest in higher quality to "protect their reputational capital, minimize litigation exposure, and promote shareholders' interests." Similarly, Jizi and Nehme (2018) found that boards with more independence determined their actual audit fees. Kalia et al. (2023) showed that board characteristics (size and independence) are positively related to audit fees. Since outside directors are more motivated to enhance the quality of financial reporting, boards with more non-executive directors may signal greater demand for higher-quality audit services, thereby positively impacting audit fees. The first hypothesis, ensuing from these findings, is the following:

H1: Board independence has a positive effect on audit fees.

2.6. Board of directors' expertise and audit fees

Board members with expertise in finance play a vital role in improving corporate performance. Carcello et al. (2002) emphasized that a board with expert members provides more effective oversight. DeFond et al (2005) also stated that managers who pay attention to financial matters can better monitor the reporting process. Various studies (Bédard et al., 2004) have shown that board members' expertise and experience are directly related to board effectiveness. Carcello et al. (2002) reported a positive correlation between financial expertise and audit fees. Saggese et al. (2023) also found that board human capital policies and regulations can affect audit quality and financial reporting. Consequently, the expertise of board members in auditing and finance increases audit quality and its fees. Based on this evidence, the second hypothesis of the study is formulated as follows:

H2: Board expertise has a positive effect on audit fees.

2.7. The relationship between Political connection, audit fees, and board independence, based on Resource Dependence and Agency Theories

To explicate this subject, two theoretical frameworks, Agency Theory and Resource Dependence Theory, have been employed in an integrated manner. Agency Theory, which is predicated on the separation of ownership from control ([Jensen and Meckling, 1976](#)), posits that managers may prioritize their personal interests over those of shareholders. Consequently, firms should strengthen their corporate governance mechanisms. In this regard, board independence is an essential monitoring mechanism that helps minimize managerial opportunism ([Haniffa and Cooke, 2002](#); [Buniamin et al., 2011](#)). Agency Theory suggests that audit fees reflect the costs of monitoring managers when shareholders are exposed to risk after entrusting management with decision-making ([Ashbaugh and Warfield, 2003](#)).

In contrast, according to Resource Dependence Theory ([Pfeffer and Salancik, 1978](#)), the board of directors acts as a mediator between the firm and external resources and, ultimately, better governance reduces dependence on the macro environment by improving firm performance. According to this theory, the firm is viewed as a bundle of resources and capabilities ([Barney, 1991](#)). Political connections are considered a form of distinct capital that reduces uncertainty and facilitates access to government benefits, making them an effective resource for the firm in this context ([Pfeffer and Salancik, 1978](#)).

The integration of these two theories in the formulation of the third hypothesis proceeds as follows: political connections serve as a nexus between the firm's external environment and the effectiveness of internal control mechanisms. In Iran's economic context, characterized by an extensive government role, concentrated ownership structures, institutional uncertainties, frequent regulatory changes, and financing constraints, political connections can play a determinative role in shaping corporate circumstances. In such an environment, board independence alone may not exert a direct and uniform impact on audit fees; rather, this effect is contingent upon the firm's network of political relationships. More precisely, when assessing risk and the quality of internal monitoring, the auditor evaluates board independence in light of the firm's political connections. Agency Theory further cautions that political connections can escalate the financial burden of political activities and diminish profitability by engendering information asymmetry and hidden costs ([Pang and Wang, 2021](#)). Drawing upon the foregoing discussion, the third hypothesis is articulated as follows:

H3: The Political connections moderate the relationship between audit fees and board independence.

2.8. The relationship between Political connection, audit fee, and board expertise, based on Resource Dependence and Agency Theories

Two theoretical approaches, Agency Theory and Resource Dependence Theory, have been employed to support this hypothesis. As a theoretical approach, Agency Theory is based on the recognition of an ongoing separation between ownership and control ([Jensen and Meckling 1976](#)), which holds that managers have interests other than those of shareholders. Therefore, it is important to improve the corporate governance mechanisms to align interests ([Almarayeh, 2024](#)). In this context, board members' knowledge is recognized as one of the foundational determinants of monitoring. [Baker et al. \(2020\)](#) highlighted that boards with high levels of technical and managerial competence exercise stronger oversight of managerial behavior, thereby increasing accountability within the firm. Furthermore, [Khatib et al. \(2021\)](#) conducted an extensive study confirming that board diversity includes board members educated in non-Western developed nations (NWDS), bringing renewed perspectives and insights to boards. According to Agency Theory, audit fees are a proxy of

monitoring expenses, and independent auditors help organizations overcome asymmetric information problems (Ashbaugh and Warfield, 2003).

In parallel with Agency Theory, Resource Dependence Theory (Pfeffer and Salancik, 1978) emphasizes that firms need mechanisms to minimize environmental uncertainty and gain access to external resources. From this perspective, the firm is conceptualized as a collection of resources and capabilities (Barney, 1991). Political connections serve as strategic resources, functioning as intangible assets for accessing government benefits and support, thereby producing a sustained competitive advantage. Ben-Amar et al. (2017) claim that board composition is an invaluable resource for creating value and helps ensure sustainable competitive advantage by increasing access to knowledgeable external resources and strategic guidance.

The combination of these two theories within the framework of the fourth hypothesis implies that board expertise, as an internal control mechanism, cannot independently and uniformly affect audit fees; rather, this effect is moderated by political connections. In other words, political connections act as a bridge between the external environment and the effectiveness of internal mechanisms. This issue is of particular importance in the Iranian economy, which is characterized by pervasive government presence, concentrated ownership, institutional instability, frequent legal changes, and financial constraints. In such a context, when assessing risk and operational complexity, the auditor evaluates board expertise not in isolation, but in interaction with the firm's political relationships. Agency Theory also cautions that political connections may impose hidden costs and influence firm performance (Shahzad et al., 2021). Therefore, it is expected that the effectiveness of board expertise in determining audit fees is contingent on the firm's level of political connections, which moderates the relationship between board expertise and audit fees. Drawing upon the foregoing discussion, the fourth hypothesis is articulated as follows:

H4: Political connections moderate the relationship between audit fees and board expertise.

3. Research methodology

To empirically test the research hypotheses, linear regression models were estimated using EViews 9 and Stata 17. The initial population comprised all firms listed on the Tehran Stock Exchange (TSE) from 2016 to 2023. A systematic screening process was applied to ensure sample homogeneity and data reliability. Specifically, firms were required to have been listed on the TSE before the start of the sample period, maintain a fiscal year ending on March 20 to ensure intertemporal and cross-sectional comparability, and not operate in financial intermediary sectors (including insurance, banking, brokerage, and investment firms), as these entities are subject to distinct regulatory and reporting frameworks. Furthermore, all necessary annual financial data for computing the study variables had to be available, and firms that changed their fiscal year during the sample period were excluded to preserve temporal consistency. The final sample, satisfying all selection criteria, consisted of 107 firm-year observations from firms listed on the Tehran Stock Exchange.

3.1. Hypothesis testing models

This study seeks to examine the relationship between board characteristics and audit fees and assess the moderating role of board political connections. The hypotheses were tested following the methodology of Almarayeh (2024). The following four models were developed to test the research

hypotheses.

Model (1) for examining hypothesis one: Board independence has a significant effect on audit fees.

$$\begin{aligned} \ln AF_{i,t} = & \alpha_0 + \alpha_1 \text{Bind}_{i,t} + \alpha_2 \text{AudCh}_{i,t} + \alpha_3 \text{AudSize}_{i,t} + \alpha_4 \text{Current}_{i,t} + \alpha_5 \text{Inv}_{i,t} + \alpha_6 \text{Lev}_{i,t} \\ & + \alpha_7 \text{Loss}_{i,t} + \alpha_8 \text{Roa}_{i,t} + \alpha_9 \text{Size}_{i,t} + \alpha_{10} \text{Year fixed effect}_{i,t} + \epsilon_{i,t} \end{aligned}$$

Model (2) for examining hypothesis two: Board expertise has a significant impact on audit compensation.

$$\begin{aligned} \ln AF_{i,t} = & \alpha_0 + \alpha_1 \text{Bexp}_{i,t} + \alpha_2 \text{AudCh}_{i,t} + \alpha_3 \text{AudSize}_{i,t} + \alpha_4 \text{Current}_{i,t} + \alpha_5 \text{Inv}_{i,t} + \alpha_6 \text{Lev}_{i,t} \\ & + \alpha_7 \text{Loss}_{i,t} + \alpha_8 \text{Roa}_{i,t} + \alpha_9 \text{Size}_{i,t} + \alpha_{10} \text{Year fixed effect}_{i,t} + \epsilon_{i,t} \end{aligned}$$

Model (3) for examining hypothesis three: The Political connections moderate the relationship between audit fees and board independence.

$$\begin{aligned} \ln AF_{i,t} = & \alpha_0 + \alpha_1 \text{Bind}_{i,t} + \alpha_2 \text{Polcon}_{i,t} + \alpha_3 \text{Bind} * \text{Polcon}_{i,t} + \alpha_4 \text{AudCh}_{i,t} + \alpha_5 \text{AudSize}_{i,t} \\ & + \alpha_6 \text{Current}_{i,t} + \alpha_7 \text{Inv}_{i,t} + \alpha_8 \text{Lev}_{i,t} + \alpha_9 \text{Loss}_{i,t} + \alpha_{10} \text{Roa}_{i,t} + \alpha_{11} \text{Size}_{i,t} \\ & + \alpha_{12} \text{Year fixed effect}_{i,t} + \epsilon_{i,t} \end{aligned}$$

Model (4) for examining hypothesis four: The Political connections moderate the relationship between audit fees and board expertise.

$$\begin{aligned} \ln AF_{i,t} = & \alpha_0 + \alpha_1 \text{Bexp}_{i,t} + \alpha_2 \text{Polcon}_{i,t} + \alpha_3 \text{Bexp} * \text{Polcon}_{i,t} + \alpha_4 \text{AudCh}_{i,t} + \alpha_5 \text{AudSize}_{i,t} \\ & + \alpha_6 \text{Current}_{i,t} + \alpha_7 \text{Inv}_{i,t} + \alpha_8 \text{Lev}_{i,t} + \alpha_9 \text{Loss}_{i,t} + \alpha_{10} \text{Roa}_{i,t} + \alpha_{11} \text{Size}_{i,t} \\ & + \alpha_{12} \text{Year fixed effect}_{i,t} + \epsilon_{i,t} \end{aligned}$$

3.2. Research variables measurement

3.2.1. Dependent variable

Audit fee (LnAf): In this study, the dependent variable is the natural logarithm of the audit fee (Hoitash et al., 2007). Information regarding the audit fee was extracted from the notes accompanying the financial statements of the administrative and general expenses section and the specified other expenses.

3.2.2. Independent variables

A) *Board independence (Bind)*: equal to the ratio of non-executive directors to the total number of board members of the company (Sanan et al., 2021).

B) *Board expertise (Bexp)*: is calculated by dividing the number of members with financial experience (Specifically, accounting, financial management, economics, and Auditing) and expertise by the total number of board members. Financial expertise refers to academic education in accounting or related fields and work experience in finance (Jeanjean and Stolowy, 2009).

3.2.3. Moderating variable

Board political connection (Polcon): Political connections are the independent variable of the present study. The government's influence and ownership in companies have been used in many previous studies (Sari and Anugerah, 2011; Dinç, 2005) to measure political connections. According

to the study by [Nguyen et al. \(2022\)](#), there is no complete disclosure of political work experience (government positions) of board members and CEOs in the Iranian study environment. In 2022, the minimum ownership percentage was set at 50 percent as a guideline for establishing political connections, having substantial influence, and implementing the business unit's financial policies. As a result, if the percentage of ownership by government, quasi-governmental, and government-affiliated entities in the company is at least 50 percent, political connections are assigned a value of 1; otherwise, 0 ([Uddin, 2016](#)).

3.2.4. Control variables

A set of control variables has been incorporated into the research model to ensure that the observed relationship between independent variables and the dependent variable is adequately explained and the effects of other factors influencing audit fees are eliminated. Larger firms typically have more complex operations, a higher volume of transactions, and a more extensive organizational structure. These complexities increase auditors' workload; consequently, firm size (Size) affects audit fees. A high level of debt in a firm's capital structure increases its financial risk. An increase in financial risk can lead to higher audit risk, as the likelihood of bankruptcy or liquidity problems intensifies. To cover this additional risk, auditors demand higher fees; thus, financial leverage (Lev) also influences audit fees. Return on assets serves as a measure of firm profitability. High profitability may indicate that the audit is beneficial for the firm (due to value added) or, conversely, may signal potential risks in income recognition (e.g., earnings management) that require greater auditor attention. Therefore, return on assets (ROA) affects audit fees. Loss-making firms often face greater challenges regarding going concern and earnings quality. These circumstances can increase audit risk, as auditors must exercise more care in examining the going concern assumption and the reasons for losses. Hence, the loss variable (Loss) can be a determinant of audit fees. When a firm changes its auditor, the new auditor may encounter challenges such as incomplete access to the previous auditor's records or the need for a deeper understanding of the firm's operations and accounts. These factors can lead to an increased workload and, consequently, higher fees in the first period of engagement with the new auditor. The current ratio is a measure of a firm's short-term liquidity, indicating the firm's ability to meet its short-term financial obligations using current resources. A high current ratio reflects a favorable liquidity position and the firm's capacity to pay short-term debts. This favorable condition reduces the risk of bankruptcy or immediate financial distress. Since auditors are responsible for assessing a firm's financial risks, a reduction in risk due to strong liquidity can decrease the workload required to evaluate those risks, thereby reducing audit fees. On the other hand, a current ratio that is either very high or very low may indicate complexities in managing current assets and liabilities. In both cases, the complexities associated with this ratio can affect the auditor's workload and fees. The current ratio (Current) in the control model helps isolate the effect of the firm's short-term liquidity position on auditors' fee-setting decisions, thereby providing a more precise analysis of the relationship between board independence and audit fees. Control variables used in this study include:

Firm size (Size), equal to the natural logarithm of assets;

Current ratio (Current), equal to current assets divided by current liabilities;

Financial leverage (Lev) is equal to total debt divided by total assets.

Return on assets (ROA) is the ratio of net income to assets, and

Inventory intensity (Inv) is the ratio of total inventory of materials and goods to total assets.

Year fixed effects are year control variables.

Three dummy variables are also used: the *loss variable (Loss)*, which takes the value 1 if the company incurs a loss and 0 otherwise; the *audit firm size variable (AudSize)*, which takes the value 1 if the auditing organization performs the audit and 0 otherwise. and the *Auditor Change variable*

(*AudCh*), which takes the value of one if the company changes its auditor in the year under review, and zero otherwise.

4. Findings

4.1. Descriptive statistics

Table 1 presents the descriptive statistics for the key variables under study.

Table 1. Descriptive statistics of quantitative variables

Variable title	Mean	Median	max	min	Std. Dev	Obs
Audit fee	7.715	7.668	10.805	5.634	0.839	854
Independence of the Board of Directors	0.648	0.600	1.000	0.000	0.186	854
Board of Directors' Expertise	0.264	0.263	0.600	0.000	0.126	854
Current ratio	1.831	1.456	27.095	0.161	1.688	854
Inventory intensity ratio	0.233	0.228	0.560	0.032	0.116	854
Financial leverage	0.578	0.538	14.588	0.027	0.722	854
Return on Assets	0.155	0.136	0.523	-0.100	0.132	854
Firm size	15.237	15.035	21.362	11.406	1.543	854

Table 2. Descriptive statistics of the dummy variables

Variable title	Mean	Median	max	min	Std. Dev	Obs
Political Connection	0.516	1.000	1.000	0.000	0.500	854
Auditor Change	0.250	0.000	1.000	0.000	0.433	854
Audit Firm Size	0.148	0.000	1.000	0.000	0.356	854
Loss	0.103	0.000	1.000	0.000	0.304	854

Tables 1 and 2 present descriptive statistics of quantitative and dummy variables of the study, including mean, median, maximum, minimum, standard deviation, and number of observations (854 firm-year observations). According to the findings, the mean Audit Fee is 7.715, close to its median (7.668), indicating a relatively symmetric distribution. Board Independence has a mean of 0.648, indicating that more than ~60% of board members are independent on average (a value higher than 0.5 indicates that only independents remain). For Board Expertise, the mean is 0.264, meaning that about one in every four board members has relevant expertise. Dummy variables (Political Connection (mean = 0.516), Auditor Change (mean = 0.250), Audit Firm Size (mean = 0.148), and Loss (mean = 0.103) show proportions of these events taking place in the sample set Inventory Intensity Ratio (mean = 0.233) and Return on Assets a balanced environment for firms or at least imply such an environment, thus high-degree of firm concentration is avoided. At the same time, Financial Leverage denotes firms' average debt, with a mean of 0.578 and a maximum of 14.588, indicating that existing companies have almost no equity, thereby creating an excessive burden on all stakeholders. Firm Size has a mean of 15.237 and a standard deviation of 1.543, indicating decent sample differences. According to [De Vaus \(2002\)](#), there is a borderline chance that the data may be normal when the total number of observations exceeds 100 (a general, rough guideline for normality).

4.2. Correlation coefficients of research variables

To determine the type and strength of the relationships between the research variables, including the dependent variable, independent variables, moderator, and control variables, Pearson correlation coefficients were calculated. The results of these calculations are presented in Table 3. The Pearson correlation coefficient ranges from -1 to +1, where positive values indicate a direct relationship and negative values indicate an inverse relationship between the variables.

Table 3. Pearson correlation coefficients of research variables

Variables	LnAf	Bind	Bexp	Polcon	AudCh	AudSize	Current	Inv	Lev	Loss	Roa	Size
LnAf	1.000											
Bind	-0.191	1.000										
Bexp	0.079	-0.052	1.000									
Polcon	0.109	-0.177	0.114	1.000								
AudCh	-0.171	0.025	-0.033	-0.078	1.000							
AudSize	0.298	-0.229	0.005	0.167	-0.234	1.000						
Current	-0.010	0.139	-0.047	-0.194	0.035	-0.124	1.000					
Inv	0.024	-0.084	0.079	0.109	0.040	-0.095	-0.036	1.000				
Lev	0.039	-0.141	0.032	0.068	-0.053	0.137	-0.205	0.050	1.000			
Loss	0.008	-0.151	0.007	-0.018	-0.000	0.128	-0.171	-0.096	0.256	1.000		
Roa	0.068	0.082	0.056	-0.015	0.006	-0.084	0.288	0.053	-0.179	-0.314	1.000	
Size	0.556	-0.174	0.126	0.057	-0.177	0.353	-0.080	-0.106	0.014	0.040	0.119	1.000

Table 3 presents the Pearson correlation matrix among the research variables. These coefficients measure the direction and strength of the linear relationship between each pair of variables. The results show that the correlation coefficient between Firm Size and Audit Fee is the highest (0.556), indicating a relatively strong positive correlation. Furthermore, Audit Firm Size has a positive and very significant connection (0.298) with audit fees. In respect of other variables, Board Independence has a negative correlation (-0.191) with audit fees, and Auditor Change likewise has a negative correlation (-0.171) with audit fees. The other correlation coefficients among the explanatory variables are modest, typically below 0.30. Importantly, all correlation coefficients between variables are below 0.70 (or 0.7). This indicates no serious multicollinearity among the model's predictor variables. Therefore, all variables can be used simultaneously in the regression analysis without concerns about multicollinearity.

4.3. Reliability test

Before estimating the model parameters, the reliability of the variables was examined using the Levine, Lin, and Chu test. The quantitative results of the reliability test of the research variables are presented in Table 4.

Table 4. Levine, Lin, and Chu Test

Description	Variable Indicator	Levine, Lin, and Chu	Sig. level
Audit fee	LnAf	-23.691	0.000
Independence of the Board of Directors	Bind	-9.948	0.000
Board of Directors' Expertise	Bexp	-6.211	0.000
Political Connection	Polcon	-2.058	0.019
Auditor Change	AudCh	-19.483	0.000
Audit Firm Size	AudSize	-16.496	0.000
Current ratio	Current	-24.317	0.000
Inventory intensity ratio	Inv	-20.354	0.000
Financial leverage	Lev	-23.826	0.000
Loss	Loss	-3.515	0.000
Return on Assets	Roa	-18.170	0.000
Firm size	Size	-18.590	0.000

As shown, the research variables are reliable at the 95% confidence level. The parameters can be estimated without worrying about being incorrect.

4.4. Endogeneity Test

The relationship between the independence of the Board of Directors, the Board of Directors' expertise, and audit fees may be endogenous. The endogeneity test was used to inform robustness checks with instrumental variables (IV) to address concerns about reverse causality. In other words, the accounting comparability variable in regression models should be exogenous. Generally, in the econometric literature, an endogenous variable is strongly correlated (collinear) with the remaining components of the model. Therefore, in this study, the Durbin-Wu-Hausman test was used to examine the exogeneity and the absence of reverse causality. In this method, the model is first fitted using two-stage least squares (TSLS). Then, the exogeneity of the accounting comparability variable is examined by using the control and independent variables as instruments. The null hypothesis in this test is that the variable is exogenous, and the alternative hypothesis is that the variable is endogenous. If the significance level obtained for a variable is greater than 5%, there is no evidence of endogeneity, and the null hypothesis of exogeneity is not rejected. The results of this test are presented in Table 5. The significance level obtained for the comparability variable is less than 5%, so the accounting comparability variable is endogenous.

Table 5. Endogeneity test

Variables	Model number	Significance level
Bind	Model (1)	0.033
Bind	Model (2)	0.042
Bexp	Model (3)	0.000
Bexp	Model (4)	0.002

4.5. Hypothesis Test

Given that the data used in this research are panel (firm-year) and can be either pooled or panel, the Limmer F-test is used to select between the pooled and panel data methods for model estimation. To examine the Limpert F-test, if the probability of the F-statistic is greater than 0.05, the pooled data method should be used. Otherwise, the panel data method should be selected. If the panel data method is accepted, then the Hausman test should be conducted to choose between the random effects and fixed effects models. The Hausman test assesses whether the estimated regression error is related to the model's independent variables. If such a relationship exists, the fixed-effects model will be used; if it does not, the random-effects model will be used. In the Hausman test, if the p-value of the Chi-square statistic is greater than 0.05, the random-effects model should be used. Otherwise, the fixed effects model should be chosen. The results of the Limer F-test and the Hausman test are presented in Table 6.

Table 6. Results of the F-limer and Hausman test

Model	Limer F-test			Hausman test		
	Test statistic Result	Probability	Result	Test statistic Result	Probability	Result
First	6.565	0.000	a table	38.213	0.000	fixed effects
Second	6.757	0.000	a table	41.405	0.000	fixed effects
Third	6.544	0.000	a table	41.032	0.000	fixed effects
Fourth	7.380	0.000	a table	29.783	0.001	fixed effects

As observed, the significance level of the Limer F-test for the models is less than 0.05. Therefore, the panel data method has been accepted. Additionally, based on the significance level of the Hausman test, which is also less than 0.05, the fixed-effects model is accepted.

4.6. The existence of variance heterogeneity Test

To perform the test for heterogeneity of variance, the Modified Wald test was used. The results are presented in Table 7. The Modified Wald test is used to test for heteroscedasticity of variance in linear regression models and examines the dependence of the variance of the residual terms on the values of the explanatory variables. In examining heteroscedasticity of variance, statistical tests and the null and alternative hypotheses are defined as follows:

H_0 : The variance of the errors does not depend on the values of the independent variables.

H_1 : The variance of the errors does depend on the values of the independent variables.

This means that the null hypothesis states that the data are homoscedastic, and the alternative hypothesis seeks to confirm the presence of heteroscedasticity. Now, if the software output Prob > 0.05, we can reject the null hypothesis and conclude that there is no variance heteroscedasticity in the data; conversely, if Prob < 0.05, we can reject the null hypothesis and conclude that there is variance heteroscedasticity in the data.

Table 7. Modified Wald test results

Model number	chi2	Significance level
Model (1)	1.221	0.273
Model (2)	1.432	0.241
Model (3)	1.256	0.269
Model (4)	1.413	0.235

The results of the Modified Wald test indicate the absence of variance heterogeneity in the research models.

4.7. Results of hypothesis tests

In the present study, the Durbin-Watson test was used to assess autocorrelation in the employed model; if the Durbin-Watson statistic lies between 1.5 and 2.5, the independence of the model error term can be accepted. In addition, the Wooldridge test was used to detect the autocorrelation of the model. Moreover, the Fisher test was used to examine the overall significance of the employed model. Additionally, the VIFs are all less than 10, indicating no multicollinearity (Table 8).

According to Model (1) in the table above, the F-statistic is 12.636, with a significance level of 0.000, indicating that the overall regression model is statistically significant. The adjusted R-squared value is 0.644, indicating that approximately 64% of the variation in the dependent variable is explained by the independent and control variables. Furthermore, the VIF statistic is less than 10 for all variables, indicating no multicollinearity. Given that the Wooldridge statistic is greater than 5%, the assumption of independence of the model's error terms can be accepted. The value of the model's Durbin-Watson statistic is within the specified range, so the assumption of no autocorrelation in the model's error term is acceptable. The t-statistic for the first hypothesis that board independence has a significant effect on audit fees is -1.974. Therefore, the first hypothesis was not rejected at the 5% error level.

According to Model (2) in the table above, the F-statistic is 12.730 with a significance level of 0.000, indicating that the overall regression model is statistically significant. The adjusted R-squared value is

0.645, indicating that approximately 64% of the variation in the dependent variable is explained by the independent and control variables. Furthermore, the VIF statistic is less than 10 for all variables, indicating no multicollinearity. Given that the Wooldridge statistic is greater than 5%, the assumption of independence of the model's error terms can be accepted. The value of the model's Durbin-Watson statistic is within the specified range, so the assumption of no autocorrelation in the model's error term is acceptable. The t-statistic for the second hypothesis, that board expertise has a significant effect on audit fees, is -2.057. Therefore, the second hypothesis was not rejected at the 5% error level.

Table 8. Regression results for hypotheses 1 and 2

Variable	Model 1				Model 2			
	Coefficient	T -Value	Sig.	Vif	Coefficient	T -Value	Sig.	Vif
Bind	-0.309	-2.392	0.017	1.122	*	*	*	*
Bexp	*	*	*	*	-0.437	-2.057	0.040	1.408
AudCh	-0.073	-1.894	0.058	1.067	-0.069	-1.817	0.069	1.106
AudSize	0.221	0.906	0.365	1.047	0.219	0.899	0.369	1.043
Current	0.034	1.866	0.062	1.948	0.033	1.869	0.062	1.939
Inv	0.424	1.645	0.100	1.347	0.448	1.745	0.081	1.300
Lev	0.046	1.354	0.176	2.330	0.055	2.004	0.045	2.157
Loss	0.226	2.647	0.008	1.308	0.209	2.493	0.012	1.307
Roa	0.354	1.768	0.077	1.218	0.370	1.853	0.064	1.349
Size	0.399	12.749	0.000	1.225	0.403	12.976	0.000	1.372
C(constant)	1.512	2.959	0.003	NA	1.404	2.814	0.005	NA
Year fixed effect	Controlled				Controlled			
R-squared	0.699				0.700			
Adjusted R-squared	0.644				0.645			
Durbin -Watson	2.032				2.024			
Wooldridge statistic	1.503				1.634			
Prob (Wooldridge statistic)	0.239				0.231			
F-statistic	12.636				12.730			
prob (F-statistic)	0.000				0.000			

Table 9. Regression results for hypotheses 3 and 4

Variable	Model 3				Model 4			
	Coefficient	T -Value	Sig.	Vif	Coefficient	T -Value	Sig.	Vif
Bind	-0.498	-2.344	0.0194	1.907	*	*	*	*
Bexp	*	*	*	*	-0.663	-2.571	0.010	3.140
Polcon	-0.486	-2.260	0.0241	6.469	-0.188	-1.160	0.246	2.409
Bind*Polcon	0.599	2.023	0.0435	6.780	*	*	*	*
Bexp*Polcon	*	*	*	*	0.241	0.786	0.431	3.355
AudCh	-0.071	-1.845	0.0655	1.099	-0.058	-1.318	0.188	1.418
AudSize	0.243	0.998	0.3184	1.059	0.270	0.964	0.335	1.069
Current	0.035	1.933	0.0537	1.990	0.034	1.871	0.062	1.950
Inv	0.398	1.547	0.1223	1.489	0.715	2.535	0.011	1.683
Lev	0.047	1.382	0.1674	2.531	0.038	1.115	0.265	2.640
Loss	0.227	2.652	0.0082	1.421	0.133	1.100	0.271	1.611
Roa	0.360	1.797	0.0727	1.345	0.330	1.543	0.123	1.713
Size	0.395	12.533	0.0000	1.350	0.415	12.944	0.000	1.491
C(constant)	1.796	3.382	0.0008	NA	1.229	2.330	0.020	NA
Year fixed effect	Controlled				Controlled			
R-squared	0.702				0.735			
Adjusted R-squared	0.646				0.667			
Durbin -Watson	2.037				2.174			
Wooldridge statistic	1.691				1.768			
Prob (Wooldridge statistic)	0.204				0.187			
F-statistic	12.528				10.693			
prob (F-statistic)	0.000				0.000			

According to the findings in Model (3) in Table 9, the F-statistic is 12.528, with a significance level of 0.000, indicating that the overall regression model is statistically significant. The adjusted R-squared value is 0.646, indicating that approximately 64% of the variation in the dependent variable is explained by the independent and control variables. Furthermore, the VIF statistic is less than 10 for all variables, indicating no multicollinearity. Given that the Wooldridge statistic is greater than 5%, the independence of the model's error term can be accepted. The value of the model's Durbin-Watson statistic is within the specified range, so the assumption of no autocorrelation in the model's error term is acceptable. The t-statistic for hypothesis three, which states that political connections have a significant effect on the relationship between board independence and audit fees, is 2.023. Therefore, hypothesis three is not rejected at the 5% error level.

Also, referring to Model (4) in Table 9, the F-statistic is 10.693, with a significance level of 0.000, indicating that the overall regression model is statistically significant. The T-statistic for the fourth hypothesis, which states that political connections have a significant effect on the relationship between board expertise and audit fees, is 0.786. Therefore, hypothesis four is rejected at the 5% error level.

5. Discussion and conclusion

From a supply-side perspective, auditors believe that increasing board independence signals a high-control environment and conditions, leading to a lower assessment of control risk based on the results of testing the first hypothesis and in line with [Bozec and Dia \(2017\)](#) research. This reduces the use of audit procedures and audit fees. Therefore, a negative relationship is predicted between board independence and audit fees. Contrary to the research of [Abbott and Parker \(2000\)](#) and drawing on the agency theory perspective, it can be argued that an independent board, by reducing agency costs, provides greater assurance to shareholders and other stakeholders that their interests are prioritized. This assurance reduces the inherent and control risks that the auditor assesses during the audit process. According to the audit services pricing model ([Simunic, 1980](#)), audit fees are a direct function of the level of audit risk. Thus, the reduction in risk resulting from high board independence logically leads to lower audit fees. Furthermore, according to research by [Carcello et al. \(2002\)](#) and [Abbott et al. \(2004\)](#), from a substitution perspective, the presence of non-executive directors (increased board independence) has not reduced the need for auditing, due to the board's rigorous oversight.

According to the research of [Kalelkar and Khan \(2016\)](#), considering the results of testing the second hypothesis, some accounting researchers, like [Hay et al. \(2006\)](#), [Simon and Francis \(1988\)](#), and [Simunic \(1980\)](#), believe that audit fees are a function of business risk and auditor risk. Empirical evidence also indicates that auditors consider business risk and audit risk when assessing management characteristics. According to a study by [Kalelkar and Khan \(2016\)](#) examining the relationship between managers' financial knowledge and audit pricing in the U.S. capital market, auditors demand lower fees when dealing with managers with financial expertise. This research shows that when auditors become aware that company managers have financial knowledge and experience, they assess audit risk more favorably and, as a result, charge lower fees to their clients. The mechanism of this relationship is as follows: the presence of managers with financial expertise reduces inaccurate financial reporting and, consequently, lowers audit risk, thereby decreasing audit fees. In other words, the findings of this study indicate a negative relationship between managers' financial knowledge and audit fees. Moreover, consistent with our research, [Kalelkar and Khan \(2016\)](#) ultimately concluded that companies whose managers have financial knowledge pay lower audit fees.

Regarding the third hypothesis, it has been stated that given the state structure of the Iranian economy and the prominent role of the government as a shareholder in many companies, state ownership is considered an indicator of the presence of political connections on the board of directors

These political connections lead to greater control over the activities of companies with government shareholders and government agencies, and auditors, aware of this, plan a broader scope of work to protect the interests of shareholders. Consequently, audit risk increases, and auditors demand higher fees (Choi et al., 2024). On the other hand, the demand-based view of audit services indicates a significant relationship between board independence and audit fees (Hay et al., 2008). According to this view, the combination of the board's professional and legal responsibilities and the company's ownership structure, together with the need to interact directly with the internal environment, affects audit fees (O'Sullivan, 2000; Carcello et al., 2002; Fan and Wong, 2005). However, this relationship is affected in companies where the board's political connections are prominent. In other words, the presence of political connections has a direct and significant effect on the relationship between board independence and audit fees, because these connections affect corporate governance mechanisms and increase the demand for independent auditing. Therefore, the political connections of the board, as a moderating variable, affect the relationship between board independence and audit fees, indicating the key role of government ownership structure and political connections of the board in increasing the demand for higher quality audits and, consequently, increasing audit fees.

According to the results of the fourth hypothesis and based on legitimacy theory, companies can use independent, high-quality auditing methods to maintain their social legitimacy, regardless of the board's political connections. Furthermore, the effect of board expertise on the monitoring structure and quality of corporate governance is fundamental and internal to the organization. It is not necessarily influenced by external factors such as political connections. Under such circumstances, board expertise alone determines audit fees, and political connections do not play a moderating role. Moreover, the auditing profession operates based on the principles of independence and professional standards. According to Defond and Zhang (2014), audit fees are not a function of political considerations but primarily of inherent business risk, operational complexity, and the quality of internal controls. Even in the presence of board members with political connections, if the audit is conducted in accordance with professional standards, political connections may have little effect on the relationship between board expertise and audit fees. The findings of this study showed that the fourth hypothesis, which proposed a moderating role for political connections in the relationship between board expertise and audit fees, was rejected in the sample studied.

Nevertheless, the correlation between board independence and audit fees is considerably moderated by political relationships. The two board features in question differ in nature and in how they exert their impact. For successful risk mitigation and monitoring, board independence, defined as the capacity to make decisions independently of management, is crucial (Fama and Jensen, 1983; Beasley, 1996). A board's independence can be severely compromised in Iran's institutional setting due to the prevalence of political connections and the significant government presence. Board members' technical knowledge and abilities, particularly in financial and accounting matters, enable a more precise evaluation of reporting risks, more effective qualitative supervision of management performance, and a better grasp of operational complexity (Simunic, 1980). Political connections, while they may influence some operational or strategic decisions, do not alter the essence of the board's technical knowledge and specialized skills.

To improve auditors' efficiency, it is suggested that their fees be adjusted based on their level of expertise and financial knowledge relative to board members. Companies are also recommended to employ experts, experienced individuals with appropriate financial knowledge, and improve the performance of their boards. Given the board's key role in the company and the financial reporting process, its financial knowledge shapes its attitude towards auditing. A board with strong financial knowledge is likely to demand greater rigor in the audit process. Therefore, audit firms should consider board members' financial knowledge when planning and performing audits. Future research should examine how board political connections affect the relationship between product market competition and audit fees, as well as the relationship between economic policy uncertainty and audit fees.

References

1. Abbott, L. J. and Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing: A Journal of Practice & Theory*, 19(2), pp. 47-66. <https://doi.org/10.2308/aud.2000.19.2.47>
2. Abbott, L. J., Parker, S. and Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A journal of practice & theory*, 23(1), pp. 69-87. <https://doi.org/10.2308/aud.2004.23.1.69>
3. Al Farooque, O., Buachoom, W. and Sun, L. (2020). Board, audit committee, ownership and financial performance—emerging trends from Thailand. *Pacific Accounting Review*, 32(1), pp. 54-81. <https://doi.org/10.1108/PAR-10-2018-0079>
4. Al-Hajaya, K. (2019). The impact of audit committee effectiveness on audit quality: Evidence from the Middle East. *International Review of Management and Marketing*, 9(5), pp. 1-8. <https://doi.org/10.32479/irmm.8341>
5. Ali, C. B. and Lesage, C. (2013). Audit pricing and nature of controlling shareholders: Evidence from France. *China Journal of Accounting Research*, 6(1), pp. 21-34. <https://doi.org/10.1016/j.cjar.2012.08.002>
6. Almarayeh, T. (2024). Audit committees' independence and earnings management in developing countries: evidence from MENA countries. *Journal of Financial Reporting and Accounting*. ahead-of-print. <https://doi.org/10.1108/JFRA-11-2023-0652>
7. Almarayeh, T. S., Aibar-Guzmán, B. and Abdullatif, M. (2020). Does audit quality influence earnings management in emerging markets? Evidence from Jordan. *Revista de Contabilidad*, 23(1), pp. 64-74.
8. Ashbaugh, H. and Warfield, T. D. (2003). Audits as a corporate governance mechanism: Evidence from the German market. *Journal of International Accounting Research*, 2(1), pp. 1-21. <https://doi.org/10.2308/jiar.2003.2.1.1>
9. Baker, H. K., Pandey, N., Kumar, S. and Halder, A. (2020). A bibliometric analysis of board diversity: Current status, development, and future research directions. *Journal of Business Research*, 108, pp. 232-246. <https://doi.org/10.1016/j.jbusres.2019.11.025>
10. Balatbat, M. C., Taylor, S. L. and Walter, T. S. (2004). Corporate governance, insider ownership and operating performance of Australian initial public offerings. *Accounting & Finance*, 44(3),

- pp. 299-328. <https://doi.org/10.1111/j.1467-629x.2004.00114.x>
11. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), pp. 99-120. <https://doi.org/10.1177/014920639101700108>
 12. Be'dard, J., Chtourou, S. M. and Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory*, 23(2), pp. 13-35. <https://doi.org/10.2308/aud.2004.23.2.13>
 13. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review*, 71(4), pp. 443-465. <https://ssrn.com/abstract=2647>
 14. Ben-Amar, W., Chang, M. and McIlkenny, P. (2017). Board gender diversity and corporate response to sustainability initiatives: Evidence from the carbon disclosure project. *Journal of Business Ethics*, 142(2), pp. 369-383. <https://doi.org/10.1007/s10551-015-2759-1>
 15. Boubakri, N., Cosset, J. C. and Saffar, W. (2008). Political connections of newly privatized firms. *Journal of Corporate Finance*, 14(5), pp. 654-673. <https://doi.org/10.1016/j.jcorpfin.2008.08.003>
 16. Boubakri, N., El Ghouli, S. and Saffar, W. (2013). Cash holdings of politically connected firms. *Journal of Multinational Financial Management*, 23(4), pp. 338-355. <https://doi.org/10.1016/j.mulfin.2013.06.002>
 17. Boubakri, N., Guedhami, O., Mishra, D. and Saffar, W. (2012). Political connections and the cost of equity capital. *Journal of Corporate Finance*, 18(3), pp. 541-559. <https://doi.org/10.1016/j.jcorpfin.2012.02.005>
 18. Bozec, R. and Dia, M. (2017). Monitoring function of the board and audit fees: contingent upon ownership concentration. *International Journal of Accounting & Information Management*, 25(1), pp. 70-90. <https://doi.org/10.1108/IJAIM-05-2016-0054>
 19. Brickley, J. A. and James, C. M. (1987). The takeover market, corporate board composition, and ownership structure: The case of banking. *The Journal of Law and Economics*, 30(1), pp. 161-180. <https://www.jstor.org/stable/725396>
 20. Buniamin, S., Alrazi, B., Johari, N. H. and Rahman, N. R. A. (2011). Corporate governance practices and environmental reporting of companies in Malaysia: Finding possibilities of double thumbs up. *Jurnal Pengurusan*, 32(2011), pp. 55-71. <https://www.researchgate.net/publication/274458534>
 21. Carcello, J. V. and Neal, T. L. (2003). Audit committee characteristics and auditor dismissals following "new" going-concern reports. *The Accounting Review*, 78(1), pp. 95-117. <https://doi.org/10.2308/accr.2003.78.1.95>
 22. Carcello, J. V., Hermanson, D. R., Neal, T. L. and Riley Jr, R. A. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), pp. 365-384. <https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>
 23. Chaney, P. K., Faccio, M. and Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics*, 51(1-2), pp. 58-76. <https://doi.org/10.1016/j.jacceco.2010.07.003>
 24. Cheung, P. Y. and Leung, T. Y. (2024). Do political connections help or harm family firms? An audit pricing perspective. *The Chinese Economy*, 57(5), pp. 395-414. <https://doi.org/10.1080/10971475.2024.2321706>
 25. Choi, H., Karim, K. and Zhang, Y. (2024). Earnings management risk and audit pricing: Evidence from big bath accounting. *Journal of Business Finance & Accounting*, 51(7-8), pp. 1789-1827. <https://doi.org/10.1111/jbfa.12764>
 26. Coff, R. W. (2002). Human capital, shared expertise, and the likelihood of impasse in corporate

- acquisitions. *Journal of Management*, 28(1), pp. 107-128. <https://doi.org/10.1177/014920630202800107>
27. Daily, C. M., Dalton, D. R. and Cannella Jr, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), pp. 371-382. <https://doi.org/10.2307/30040727>
 28. De Angelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), pp. 183-199. [https://doi.org/10.1016/0165-4101\(81\)90002-1](https://doi.org/10.1016/0165-4101(81)90002-1)
 29. De Vaus, D. A. (2002). *Surveys in social research* (5th ed.). London: Routledge, London, U.K. <https://parsmodir.com/wp-content/uploads/2020/05/devaus.pdf>
 30. DeFond, M. and Zhang, J. (2014). A review of archival auditing research. *Journal of accounting and economics*, 58(2-3), pp. 275-326. <https://doi.org/10.1016/j.jacceco.2014.09.002>
 31. DeFond, M. L., Hann, R. N. and Hu, X. (2005). Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research*, 43(2), pp. 153-193. <https://doi.org/10.1111/j.1475-679x.2005.00166.x>
 32. Dinç, I. S. (2005). Politicians and banks: Political influences on government-owned banks in emerging markets. *Journal of Financial Economics*, 77(2), pp. 453-479. <https://doi.org/10.1016/j.jfineco.2004.06.011>
 33. Durisin, B. and Puzone, F. (2009). Maturation of corporate governance research, 1993–2007: An assessment. *Corporate Governance: An International Review*, 17(3), pp. 266-291. <https://doi.org/10.1111/j.1467-8683.2009.00739.x>
 34. Faccio, M., Masulis, R. W. and McConnell, J. J. (2006). Political connections and corporate bailouts. *The Journal of Finance*, 61(6), pp. 2597-2635. <https://doi.org/10.1111/j.1540-6261.2006.01000.x>
 35. Fama, E. F. and Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), pp. 301-325. <https://www.jstor.org/stable/725104>
 36. Fan, J. P. and 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), pp. 35-72. <https://doi.org/10.1111/j.1475-679x.2004.00162.x>
 37. Ghazalat, A. N. M., Islam, Md. A., Noor, I. B. M. and Abu Haija, A. A. (2017). Does the competency attributes of board members' enhance the monitoring of earnings management? Evidence from a developing country. *Corporate Board: Role, Duties and Composition*, 13(1-1), pp. 100-108. <http://dx.doi.org/10.22495/cbv13i1clart4>
 38. Guedhami, O., Pittman, J. A. and Saffar, W. (2014). Auditor choice in politically connected firms. *Journal of Accounting Research*, 52(1), pp. 107-162. <https://doi.org/10.1111/1475-679X.12032>
 39. Gul, F. A. (2006). Auditors' response to political connections and cronyism in Malaysia. *Journal of Accounting Research*, 44(5), pp. 931-963. <https://doi.org/10.1111/j.1475-679X.2006.00220.x>
 40. Gupta, G., Mahakud, J. and Verma, V. (2021). CEO's education and investment–cash flow sensitivity: An empirical investigation. *Review of Behavioral Finance*, 13(5), pp. 555-577. <https://doi.org/10.1108/IJMF-01-2020-0020>
 41. Haniffa, R. M. and Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), pp. 317-349. <https://doi.org/10.1111/1467-6281.00112>
 42. Hannan, M. T., and Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology*, 82(5), pp. 929-964. <https://doi.org/10.1086/226424>
 43. Hay, D. C., Knechel, W. R. and Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research*, 23(1), pp. 141-191. <https://doi.org/10.1506/4XR4-KT5V-E8CN-91GX>

44. Hay, D., Knechel, W. R., and Ling, H. (2008). Evidence on the impact of internal control and corporate governance on audit fees. *International Journal of Auditing*, 12(1), pp. 9-24. <https://doi.org/10.1111/j.1099-1123.2008.00367.x>
45. Hoitash, R., Markelevich, A. and Barragato, C. A. (2007). Auditor fees and audit quality. *Managerial Auditing Journal*, 22(8), pp. 761-786. <https://doi.org/10.1108/02686900710819634>
46. Jeanjean, T. and Stolowy, H. (2009). Determinants of board members' financial expertise—Empirical evidence from France. *The International Journal of Accounting*, 44(4), pp. 378-402. <https://doi.org/10.1016/j.intacc.2009.09.002>
47. Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), pp. 305–360.
48. Jizi, M. and Nehme, R. (2018). Board monitoring and audit fees: the moderating role of CEO/chair dual roles. *Managerial Auditing Journal*, 33(2), pp. 217-243. <https://doi.org/10.1108/MAJ-10-2016-1464>
49. Kalelkar, R. and Khan, S. (2016). CEO financial background and audit pricing. *Accounting Horizons*, 30(3), pp. 325-339. <https://doi.org/10.2308/acch-51442>
50. Kalia, D., Basu, D. and Kundu, S. (2023). Board characteristics and demand for audit quality: a meta-analysis. *Asian Review of Accounting*, 31(1), pp. 153-175. <https://doi.org/10.1108/ARA-05-2022-0121>
51. Kamarudin, K. A., Wan Ismail, W. A. and Jahan, M. A. (2022). The effect of mandatory audit firm rotation and the auditing and reporting standards on the auditor competition and audit fees relationship: Evidence from emerging markets. *International Journal of Auditing*, 26(3), pp. 415-438. <https://doi.org/10.1111/ijau.12276>
52. Khan, I., Saha, A. K., Kamal, Y. and Islam, M. S. (2025). Do ownership structure and board composition matter in firm performance? Regulatory influence in developing economy. *International Journal of Disclosure and Governance*, 22(1), pp. 263-283. <https://doi.org/10.1057/s41310-024-00257-0>
53. Khatib, S. F., Abdullah, D. F., Elamer, A. A. and Abueid, R. (2021). Nudging toward diversity in the boardroom: A systematic literature review of board diversity of financial institutions. *Business Strategy and the Environment*, 30(2), pp. 985-1002. <https://doi.org/10.1002/bse.2665>
54. Khwaja, A. I. and Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), pp. 1371-1411. <https://doi.org/10.1162/003355305775097524>
55. Kosnik, R. D. (1987). Greenmail: A study of board performance in corporate governance. *Administrative Science Quarterly*, 32(2), pp. 163-185. <https://doi.org/10.2307/2393124>
56. Krishnan, G. V. and Visvanathan, G. (2009). Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and the level of audit fees. *Contemporary Accounting Research*, 26(4), pp. 1081- 1115. <https://doi.org/10.2139/ssrn.866884>
57. La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), pp. 1113-1155. <https://doi.org/10.1086/250042>
58. La Rocca, M., Fasano, F., Cappa, F. and Neha, N. (2022). The relationship between political connections and firm performance: An empirical analysis in Europe. *Finance Research Letters*, 49(1), A. 103157. <https://doi.org/10.1016/j.frl.2022.103157>
59. Lee, W. and Wang, L. (2017). Do political connections affect stock price crash risk? Firm-level evidence from China. *Review of Quantitative Finance and Accounting*, 48(3), pp. 643-676. <https://doi.org/10.1007/s11156-016-0563-3>
60. Lin, Y. C. (2018). The consequences of audit committee quality. *Managerial Auditing Journal*,

- 33(2), pp. 192-216. <https://doi.org/10.1108/MAJ-03-2016-1350>
61. Nguyen, B., Do, H. and Le, C. (2022). How much state ownership do hybrid firms need for better performance?. *Small Business Economics*, 59(3), pp. 845-871. <https://doi.org/10.1007/s11187-021-00556-8>
 62. O'sullivan, N. (2000). The impact of board composition and ownership on audit quality: Evidence from large UK companies. *The British Accounting Review*, 32(4), pp. 397-414. <https://doi.org/10.1006/bare.2000.0139>
 63. Pabst, A. and Scazzieri, R. (2023). *The Constitution of Political Economy: Polity, Society and the Commonwealth*. Cambridge: Cambridge University Press, Cambridge, England. <https://doi.org/10.1017/9781108923231>
 64. Palmrose, Z. V. (1988). 1987 Competitive manuscript co-winner: an analysis of auditor litigation and audit service quality. *Accounting Review*, 63(1), pp. 55-73.
 65. Pang, C. and Wang, Y. (2021). Political connections, legal environments and firm performance around the world. *International Journal of Finance & Economics*, 26(3), pp. 4393-4409. <https://doi.org/10.1002/ijfe.2021>
 66. Perry, Y. K. Z., Adrian, C. and Truong, C. (2025). Politically connected audit committee and audit risk: Evidence from a quasi-experiment. *Accounting & Finance*, 65(2), pp. 1428-1467. <https://doi.org/10.1111/acfi.13373>
 67. Pfeffer, J. and Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row, New York.
 68. Saggese, S., Sarto, F., Romano, R. and Viganò, R. (2023). Implications of directors' education for audit fees: does the audit committee matter? *Managerial Auditing Journal*, 38(6), pp. 901-926. <https://doi.org/10.1108/MAJ-05-2022-3544>
 69. Sanan, N. K., Jaisinghani, D. and Yadav, S. (2021). Corporate governance, firm performance, and business group affiliation: evidence from India. *Management Decision*, 59(8), pp. 1863-1876. <https://doi.org/10.1108/MD-03-2019-0376>
 70. Sari, R. N. and Anugerah, R. (2011). The effect of political influence and corporate transparency on firm performance: empirical evidence from Indonesian listed companies. *Journal of Modern Accounting and Auditing*, 7(8), pp. 773-783. <http://www.davidpublisher.org/index.php/Home/Article/index?id=2441>
 71. Shahzad, F., Saeed, A., Asim, G. A., Qureshi, F., Rehman, I. U. and Qureshi, S. (2021). Political connections and firm performance: further evidence using a generalised quantile regression approach. *IIMB Management Review*, 33(3), pp. 205-213. <https://doi.org/10.1016/j.iimb.2021.08.005>
 72. Simon, D. T. and Francis, J. R. (1988). The effects of auditor change on audit fees: Tests of price cutting and price recovery. *Accounting Review*, 63(2), pp. 255-269. <https://www.jstor.org/stable/248104>
 73. Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18(1), pp. 161-190. <https://doi.org/10.2307/2490397>
 74. Uang, J. Y., Citron, D. B., Sudarsanam, S. and Taffler, R. J. (2006). Management going-concern disclosures: Impact of corporate governance and auditor reputation. *European Financial Management*, 12(5), pp. 789-816. <https://doi.org/10.1111/j.1468-036X.2006.00277.x>
 75. Uddin, M. H. (2016). Effect of government share ownership on corporate risk taking: Case of the United Arab Emirates. *Research in International Business and Finance*, 36, pp. 322-339. <http://dx.doi.org/doi:10.1016/j.ribaf.2015.09.033>
 76. Weisbach, M.S. and Hermalin, B.E. (2003). Boards of directors as an endogenously determined institution: a survey of the economic literature. *Economic Policy Review*, 9(1), pp. 7-26.

- <https://doi.org/10.2139/ssrn.233111>
77. Xiao, F., Chan, A. L. C. and Chen, V. Y. (2023). Board political connections and tradeoff between market and nonmarket advantages: evidence from corporate financial information disclosure. *Journal of Business Research*, 164, 113949. <https://doi.org/10.1016/j.jbusres.2023.113949>
78. Young, S. (2000). The increasing use of non-executive directors: its impact on UK board structure and governance arrangements. *Journal of Business Finance & Accounting*, 27(9-10), pp. 1311-1342. <https://doi.org/10.1111/1468-5957.00358>
79. Zaman, M., Hudaib, M. and Haniffa, R. (2011). Corporate governance quality, audit fees and non-audit services fees. *Journal of Business Finance & Accounting*, 38(1-2), pp. 165-197. <https://doi.org/10.1111/j.1468-5957.2010.02224.x>