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Audit Committee Characteristics and Quality of Financial Information: The Role of the Internal Information Environment and Political Connections

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Abstract: This study explores the relationship between audit committee characteristics and accounting information quality by justifying the role of the internal information environment and political connections under the theocracy state of Iran with syncretic politics. Using panel data of 558 firms from the Tehran Stock Exchange (TSE) for 2011–2016, we rank firms using Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) and entropy method for determination of the weight of evaluating indicators. The firms are positioned into high- to low-level political connections, and two proxies for audit committee characteristics are used: independence of audit committee and financial knowledge. Furthermore, three proxies are used for an internal information environment: earning announcement speed, the accuracy of earning forecasting and lack of financial restatements. Our findings show that there is a significant and positive relationship between the audit committee and financial information quality characteristics in high-level political connections, as well as between financial knowledge and financial information quality. Furthermore, the findings of this study suggest that the application of political economy theories could be appropriate for more inquiry.

Keywords: audit committee characteristics; accounting information quality; internal information environment; political connections; TOPSIS



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1. Introduction

The importance of strong corporate governance to the success of corporate enterprises is in line with the stockholder's views (Paape et al. 2003). This attention could be due to several significant corporate failures, which are related to weak or largely unstructured governance structures (Grandori 1997). Thus, resilient corporate governance should increase the external transparency of companies' activities and increase public confidences (Beisland et al. 2015; Lin and Hwang 2010; Roussey 2000). In this regard, audit committees, an essential part of a robust corporate governance mechanism (Felo et al. 2003; Fulop 2019; Oncioiu et al. 2020), have been known to play vital roles in improving the performance of corporate governance smoothly through producing the quality of financial reporting to help the users to make optimal decisions (Abdullah et al. 2018; Daryaei and Fattahi 2020). For example, one of the critical components of corporate governance recommendations in the UK is that the audit committees must have at least one experienced and financially literate member. Initial proposals were considered on the audit committees since 1992, as it was recommended that all listed firms in the UK stock exchange (as an essential step in raising corporate governance standards) have appropriate audit committees. In a way that the members of the audit committee should be non-executive managers with at least

three members, and at least one of the members must have financial expertise (Al-Absy et al. 2020). Also, the number of sessions should be at least three a year. According to the Ghafran and O'Sullivan (2017), or corporate governance, at least one member must be a financial expert in the audit committees. The audit committee members must have enough skills necessary to deal with various fraud risks and be familiar with procedures related to accounting, auditing, and internal control systems (Lawrence et al. 2004). Skillful audit committee members would indicate the quality of the monitoring over producing quality accounting information (Sultana 2015); our study is one such particular case in the world.

We focus on Iran, one of the unique countries with many political and social changes since 1979. This country is exceptional with political, social, and cultural shifting to theocracy in syncretic politics from one of the Islamic sects called *Shia*. The country experiences the expansion of privatisation by transferring state-owned companies and the development of the capital market. Thus, the audit committee, as part of a robust governance structure, should be a determining factor in the financial reporting process in this state and politics. Companies and shareholders rely on the judgment of the audit committee members for more accurate monitoring areas such as risk, prevention of loss of corporate resources, financial reporting accuracy, and the observation of legal and regulatory requirements. Each member of the audit committee should accurately perform those duties by the charter of the committee's activities and other legal requirements for the performance of the duties. For example, the audit committee's charter approved by the Securities and Exchange Organization contains articles on the independence and expertise of members of the committee. In this regard, in addition to the size, independence and number of meetings of the members of the audit committee, special attention should be paid to the value of the expertise of the audit committee because the financial expertise of the members of the audit committee is essential in protecting the financial reporting process. The financial experts of the audit committee are the best place to evaluate parts of the committee's work that requires technical evaluation and decision making.

The company's information environment is influenced by corporate investment decisions, optional company disclosure decisions, information intermediation coverage decisions, and individual investors' actions in obtaining private information. Each characteristic may be changed according to the company's strategy and, thus, affect the role of profit declarations in informing investors' beliefs and changing them (Fernando et al. 2016). Sultana and Van der Zahn (2013) searched about audit committee composition feature and timeliness of financial reporting as one of the quality characteristics of quality accounting information. Also, the quality of financial information refers to the range in which the company's financial statements present the economic situation and performance honestly and timely.

Economic, social, and political structures, as well as legal-judicial systems, commercial, and tax laws affect the nature and type of relations defined in the economy, customs, culture, and political system, along with capital market pressures, the behaviour of managers, auditors, investors, legislators, and other market contributors by financial reporting (Bushman and Piotrski 2006). Some managers seek to connect with the state to remove financial constraints at the lowest cost (Boubakri et al. 2012). Firms with political affairs share the benefits gained from these relationships with politicians. This type of economic context at the level of a society is called a relationship-based economy (Chaney et al. 2012). The company's enjoyment of political connections can bring benefits such as proper borrowing conditions, lower financial costs, improved opportunities for growth, and reduced occurrence of bankruptcy (Houston et al. 2014).

According to Li and Wang (2016), philanthropy may enable private organisations to obtain more long-term loan debt, especially when they are politically connected with private enterprises in regulated industries. Claessens et al. (2008) found that that Brazilian firms that supported federal deputies experienced higher stock returns than firms that did not. Wong and Hooy (2018) concluded that politically connected firms (PCON) with a more stable (rather than less stable) connection (government-linked companies and board

of directors) might demonstrate a positive relationship with firm performance. However, [Bliss and Gul \(2012\)](#) suggest that lenders may charge PCON firms higher interest rates due to their higher inherent risks. The above literature may suggest that the economic theory of political connection can be an appropriate lens for examining the relationship between audit committee characteristics and accounting information ([Demirgüç-Kunt and Levine 2009](#)).

Creditors, another primary user, are always concern about the borrowers' ability to repay their debt. To reduce the risk of lending losses, they examine the financial information of companies that are applying for a loan. Thus, they need reliable information to determine the loans and debt costs by analysing financial statements. Given that companies have had easier access to financial resources after establishing political connections, it can be argued that the existence of political connections in companies can undermine creditors' decisions.

In a relationship-based economic system, political connections are essential and valuable for companies with these relationships. Firms with more political connections are more likely to reach the sources of capital and other benefits through their connections, which is why they rely heavily on high-quality financial reporting. Access to capital resources in companies with political connections does not depend heavily on reported profit. Because political connections lead to easy access to credit and capital resources from government-owned banks ([Boubakri et al. 2012](#); [Dinc 2005](#); [Khawaja and Main 2005](#)). Accordingly, this study relates legislators and other companies that are constantly working to improve the quality of financial reporting and have put independence and financial expertise of the audit committee at the centre of the current reform.

2. Theoretical Background

Recently, as the audit committee evolves, academic research seeks to understand the usefulness of the characteristics of the audit committee, emphasising whether these characteristics affect audit quality and quality of financial reporting ([Haddad et al. 2021](#); [Harris and Williams 2020](#); [Zulfikar et al. 2020](#)). Many of these investigations have increased due to the emergence of regulatory provisions ([Thansi 2004](#)). One of the critical factors influencing the quality of financial statement and performance is the political process ([Daryaei and Fattahi 2020](#)). We believe that this factor has a significant influence due to the distinctive character of the public sector, especially the government, which is strongly influenced by political circumstances. Political factors can be political intervention in the financial area and the absence of synergy between the political and political institutions to government administration. Various political behaviours that potentially influence the government include withholding critical information from the decision-makers, joining coalitions, spreading rumours, leaking confidential information to the media, and lobbying for or against the interest of specific individuals or for alternative decisions ([Nirwana and Haliah 2018](#)).

2.1. Audit Committee Characteristics

The background to establish of the audit committee back to 1939. After the McCain Robbins fraud case, the US Securities Exchange Commission (SEC) proposed to all listed firms of the New York Stock Exchange (NYSE) to nominate independent auditors as a group of non-executive managers of corporate managers and negotiate with them regarding the conclusion of an audit contract and the determination of the respective remuneration. This proposal was approved by the SEC in 1971. The organisation believed that the existence of an audit committee could be considered the most appropriate means of protecting the interests of investors in public corporations. In 1972, the SEC recommended that all public corporations establish an audit committee ([Vera-Munoz 2005](#)). In 1978, the NYSE required the formation of an audit committee for the public limited liability listed firms in the stock exchange. Following the policy of the NYSE, the US Stock Exchange recommended the establishment of an audit committee to listed firms of the US Stock Exchange but did not require it. Over time, the creation and use of the audit committee in US firms has increased. According to research conducted by 1958, only 14.7 percent of American manufacturing

companies had an audit committee. The size of the audit committee in major US public corporations reached 18.6 percent in 1961 and 91.4 percent in 1977 (Deli and Gillan 2000).

As the audit committee establishment procedure increases in US corporations, the idea of forming it in the UK also grew. The process of accepting the establishment of the audit committee at UK corporations was slower. It should be noted that, according to the International Accounting Standards Board, the audit committee in England was not unknown, but companies did not want to create it. Hence, the formation of this committee in British companies was unlikely. In this regard, and in 1992, the Cadbury Committee recommended that all listed firms in the London Stock Exchange have an audit committee. Adopting this recommendation was optional; hence, the Stock Exchange required all listed firms to disclose the acceptance of this recommendation in the annual report of the general shareholders' meeting so that shareholders would be aware of the status of the audit committee establishment or the reasons for not forming it. With the release of the Cadbury Committee report, the number of audit committees in UK companies has increased dramatically; by 1994, 83.8 percent of London Stock Exchange-listed firms had an audit committee.

In Iran, the board of managers should establish the audit committee and other specialised committees. It is required by the instructions on the internal controls of publishers accepted by the Tehran Stock Exchange and *Iran Fara Bourse* in May 2012. Moreover, they should take measures to ensure the establishment and implementation of appropriate and effective internal controls through the interaction of the committees and the internal audit unit. According to the Article of the Charter of the audit committee of the TSE, the audit committee consists of three to five members, the majority of which are independent and have financial expertise for the selection and appointment of the board of managers. The head of the audit committee should be an independent member of the board of managers or a non-executive board. Also, company executives cannot join the audit committee. According to this instruction, it can be concluded that the audit committee is the authority responsible for receiving internal audit reports and plays a regulatory role in assessing the effectiveness of the organisation's internal control system.

2.2. Financial Expertise

One of the essential tasks of the audit committee is to review financial information and control the behaviour of management in current affairs. It is also considered to be a control mechanism aimed at reducing information asymmetries between the internal and external members of the board of managers. Therefore, in terms of accounting, establishing an audit committee improves the quality and accuracy of financial information and ensures that authorities' responsiveness to reporting and disclosure are monitored and controlled (Takhtayi et al. 2011). The presence of expert members in the accounting or financial area among members of the audit committee increases the likelihood of the disclosure of inaccurate statements in financial statements because these individuals are required to observe the ethic code to maintain their reputation. Therefore, the presence of expert members in the audit committee can lead to more effective monitoring of companies. As a result, we expect a direct relationship between the expertise of the audit committee members in the fields of finance, accounting, auditing, and voluntary moral disclosure (Othman et al. 2014). However, it should be noted that accounting or financial expertise are not necessary for all members of the committee because the committee can use consultants in specialised fields. Nevertheless, committee members should be able to put forward the right questions. Again, it is necessary to have at least one of the members of the accounting or financial management committee specialise in increasing the effectiveness and quality of performance and be aware of all the events and changes in reporting processes and requirements.

2.3. Independence

Some conditions in the reporting environment can make it difficult to assess the quality of information by users directly. The demand for auditing in the reporting process conducted under conditions of conflict of interest, significant economic consequences, the complexity of economic activities, and direct non-direct access can be justified. The conflict of interest between the two producer and user groups is the most crucial justification for an audit. If there is no conflict of interest between the two groups, the demand for audit services will significantly decrease. A conflict of interest makes it compulsory to perform audit services by an individual from both parties. Preferably, one of the essential characteristics of the auditor is his independence.

According to [Haddad et al. \(2021\)](#), every audit committee member is called independent, who has no personal or financial connection with the firm or executive managers. He also believes that the risk of fraud is reduced when the audit committee is independent. The greater the independence of the members of the audit committee, the greater the understanding of the successful implementation of internal audit recommendations. The audit committee is supposed to review and monitor the management response to the recommendations and findings of the internal audit. Similarly, there is a perception that the implementation of internal audit recommendations is more when there is more expertise among members of the audit committee. Moreover, when the committee members have frequent meetings, the four characteristics of the audit committee—namely, independence, membership expertise, number of meetings, and number of members—are recognised as practical attributes of the effectiveness of internal audit ([Alzeban and Sawan 2015](#)).

2.4. Political Connections

The theory of political connection came into the accounting literature from the study of [Watts and Zimmerman \(1978\)](#). This theory is not only about the attention of accountants and politicians, but is also about development of the accounting profession to have a critical role in supporting the public and information goods. According to this theory, accountants and politics have an impact on each other. This means that political activities and decisions have a direct and indirect effect on economic activity and vice versa. According to [Fisman \(2001\)](#), political connections compared with the company's economic foundations are the main factor determining the company's profitability in East Asian and developing countries. He believes that companies' revenues with political connections are widely influenced by government decisions that focus on their interests. In companies with political connections, access to capital resources does not depend heavily on reported earnings, because political connections lead to easy access to credit and capital resources from government-owned banks ([Ebrahimi et al. 2017](#)).

The signs of corporate political management include members of a government-related board of managers and this type of political institutions or the presence of a significant state-owned or semi-government shareholder (with at least 10% of voting-right shares). Companies tend to have close connections with the government and politicians. Because these relationships have many benefits, such as market access privileges, tax cuts, and more accessible access to credit and government subsidies, indeed, companies with political connections may share the benefits of these connections with politicians. This kind of economic texture at the society level is called a connection-based economy. In connection-based economic systems, the political connection is an essential source of value for companies with these connections ([Lee and Wang 2016](#)). Political connections and penetration not only affect the financial situation of enterprises but also impact managers' motivation on financial reporting and preparing financial statements, ultimately causing significant differences in the quality of financial statements of companies with political connections compared to companies without political connections. Also, companies with widespread political connections with the government will enable the government to make large cash reserves through cheap financing, lower tax payments, and their managers will use more courageous tax policies ([Kim and Zhang 2016](#)).

The primary role of accounting information in financial markets is to provide the necessary information for the optimal allocation of resources. Following the financial scandals of large companies, such as Enron and Worldcom, investors' confidence in the financial reporting system are weakened. As a result, the quality of accounting information becomes essential to investors, managers, legislators, and standards setters.

Felo et al. (2003) showed that the understanding and perception of financial analysts is predictably related to the characteristics of the audit committee. They also showed that the percentage of audit committee members with accounting or financial management expertise positively correlates with the quality of financial reporting. Among other results, there was a positive relationship between the size of the audit committee and the quality of financial reporting. They showed that the requirement for more expertise in the audit committee members is in the interest of investors. The audit committee plays a vital role in ensuring the quality of financial reporting by a company that can help reduce capital costs. In Iran, Bazrafshan et al. (2015) also showed that the adoption of the internal control guidelines improved the reliability and timeliness of financial reporting. The establishment of the audit committee will increase the reliability and timeliness of the financial reports. However, the adoption of the instructions and the establishment of the audit committee did not have a significant effect on the relevance of financial reporting. Finally, they analysed sensitivity on the positive effect of adopting the internal control instructions and establishment of audit committees through a mixed quality of financial reporting.

Hypothesis 1. *There is a significant relationship between the characteristics of the audit committee and the quality of financial information.*

- a. *There is a significant relationship between the independence of the audit committee and the quality of financial information.*
- b. *There is a significant relationship between the financial knowledge of the audit committee members and the quality of financial information.*

The internal information quality refers to the area in which the company's financial statements present the economic situation and performance over a period and are presented in an honest and timely manner. On the other hand, this information plays a vital role in the development and advancement of the goals of societies. The capital market is also based on information. The financial information (as the primary basis of economic decisions) should be transparent, conscious, and comparable. It should be presented in an integrated and transparent way, smoothing the proper functioning of the capital market and attracting investors' confidence. The proper decisions in the capital market depend on the promulgation of information in a timely, relevant, reliable, and understandable manner, which itself requires preconditions, including the existence of a robust internal control system.

Four criteria can measure the quality of internal information at the financial reporting level of companies. Gallemore and Labro (2014) defined these four criteria as (1) the timely announcement of profits by a manager after the end of the fiscal year, the accuracy of management's forecast of profit, the absence of a material weakness in internal controls, and the non-reformation and presentation of financial statements due to accounting mistakes. Three criteria are used for the earning announcement speed, the accuracy of management forecast, and the lack of financial statements presented due to mistakes. Previous research suggests that each of these criteria can help companies realise the qualitative characteristics of information and help improve the financial reporting quality. Each of these criteria is a part of the financial reporting process. The financial reporting quality depends on the quality of each component of the financial reporting process.

Previous research on profit, especially in capital markets, has shown that profit has had valuable information content and has a significant impact on user decision making. However, the effect and information content of the announcement of profits in the capital market is not only a function of the nature of profit, but the timeliness of its presentation

and dissemination plays a vital role in the usefulness of its information and its relevance in decision making. The timely announcement of annual corporate profits can reduce information asymmetry among users and act as a critical factor in evaluation models and investment decisions (Abbaszadeh et al. 2013). According to Gallemore and Labro (2014), the first criterion for measuring the quality level of internal information of companies is the timely announcement of profit. Despite the benefits of timely announcements of profits, managers may delay the announcement of a profit based on motives and reasons. Donelson et al. (2012) argue that one of the most important reasons for delaying the announcement of profits is that managers have terrible news for disclosure, because in this way, they will have more time to design and implement a program to improve their poor performance and prepare themselves to respond to criticism. However, managers should pay more attention to the benefits of timely announcements of profit (loss).

The accuracy of earning forecasting by the manager can also be considered to measure the quality of reporting and the internal environment of a company. To ensure that management has accurate forecasts of profits, the quality of accounting information systems is a precondition (Jennings et al. 2013). King et al. (1990) define management forecasting for profit as voluntary management disclosures that predict the profit before the expected reporting date. In this way, they provide information on the expected benefits to the market. Profits predicted by managers have valuable information content and are an essential criterion in evaluating companies and affecting companies' stock prices. This is a fact that managers have good incentives to predict (Williams 1996). Better investment decisions, due to the reduction of information asymmetry between managers, analysts, and investors, can be a reason for such an incentive. Such forecasts represent one of the critical mechanisms of voluntary disclosure that managers use to stabilise or change market expectations of profit, reduce their concerns about litigation, and increase their reputation through fair reporting (Hirst et al. 2008).

Financial restatements, which means providing last year's financial information again to correct false information or increase comparability, is one of the common phenomena in Iran and other countries. According to the theoretical concepts of financial reporting in Iran, the relevant information affects users' economic decisions in assessing past, present, or future events, or validating or correcting their past evaluations. In other words, the relevant information has either PV or validates the value. When the business unit renews its financial statements, it provides users with the correct information at least one year after receiving the relevant economic decisions. This delay reduces the predictive and validating value of information. Therefore, the attribute of the relevance of the information will be damaged. Theoretical concepts of Iran's financial reporting also state that information must be reliable to be helpful. Reliable information includes the items being free of mistakes and biased tendencies, and honestly represents what it claims to be.

The information feature relies upon the features of honest expression, content on shape preference, objectivity, precautionary, and completeness. When the information is presented due to the incorrect reconstruction, it implicitly means that the information of the previous period has been free of errors. Repeating the presentation of financial statements in different periods also strengthens the thought that information is not free of biased tendencies. Therefore, one of the negative consequences of financial restatement is its negative effect on relying on financial statements. On the other hand, the figures in the financial statements, especially the profit figure, have financial consequences. These figures are the basis for distributing profits to shareholders, calculating managers' remuneration, and paying taxes. Also, financial statement information can be influential in the decisions made by investors and creditors. Accounting records are also used in many types of research and evaluations. Hence, the misrepresentation of accounting information could lead to an unfair shift in the interests of the beneficiaries. Accordingly, non-reforming financial statements can be considered one of the most important criteria for assessing internal information quality.

Hypothesis 2. *The internal information environment affects the relationship between the characteristics of the audit committee and the quality of financial information.*

- a. *The earning announcement speed affects the relationship between the independence of the audit committee and the quality of financial information.*
- b. *The accuracy of earning forecasting by the management affects the relationship between the audit committee and the quality of financial information.*
- c. *The lack of financial restatements affects the relationship between the independence of the audit committee and the quality of financial information.*
- d. *The earning announcement speed affects the relationship between the financial knowledge of the members of the audit committee and the quality of financial information.*
- e. *The accuracy of earning forecasting by the management affects the relationship between the financial knowledge of the members of the audit committee and the quality of financial information.*
- f. *The lack of financial restatements affects the relationship between the financial knowledge of members of the audit committee and the quality of financial information.*

3. The Empirical Model and Variables

To test the hypotheses, we use the following empirical model:

$$PV_{it} = a_0 + \beta_1 INDEP_{it} + \beta_2 FINANCE_{it} + \beta_3 EAS_{it} + \beta_4 INDEP \times EAS_{it} + \beta_5 FINANCE \times EAS_{it} + \beta_6 MFA_{it} + \beta_7 INDEP \times MFA_{it} + \beta_8 FINANCE \times MFA_{it} + \beta_9 NER_{it} + \beta_{10} INDEP \times NER_{it} + \beta_{11} FINANCE \times NER_{it} + \beta_{12} AGE_{it} + \beta_{13} CAPITAL_{it} + \beta_{14} MTB_{it} + \beta_{15} SALESGR_{it} + \beta_{16} SIZE_{it} + \beta_{17} LEV_{it} + \beta_{18} TOBIN'SQ_{it} + \mu_i$$

where PV = Predictive value, INDEP = Number of the independent members of the audit committee)/(Total number of the members of the audit committee, FINANCE = Financial knowledge of audit committee, EAS = Earnings Announcement Speed, MFA = Management Forecast Accuracy, NER = The lack of financial restatements due to errors, AGE = Firm age as the time between its going public and the present time, CAPITAL = Gross property, plant and equipment to total assets, MTB = Market to book value, SALESGR = The one-year per cent change in sales from in year t – 1 to year t. SIZE = Natural logarithm of total asset, LEV = Long term liability to total assets and TOBIN'SQ = Market value plus liability divided by total assets.

3.1. Dependent Variable

The predictive value (PV) variable is considered to be an indicator for evaluating the quality of financial information as a dependent variable of research. The error terms of the forecast models according to the following regression models are used to calculate the PV variable, according to Barua et al. (2006). After estimating the following regression models, the predictive error estimate values obtained from the following relationships are balanced based on the Shannon Entropy method, and the difference in their sum of one is considered as a measure of PV.

$$\frac{NetIncome_{t+1}}{TA_t} = \gamma_0 + \gamma_1 \frac{NetIncome_t}{TA_{t-1}} + \varepsilon_t$$

$$\frac{Earnings_{t+1}}{TA_t} = \delta_0 + \delta_1 \frac{CFO_t}{TA_{t-1}} + \delta_2 \frac{TACC_t}{TA_{t-1}} + \varepsilon_t$$

$$\frac{CFO_{t+1}}{TA_t} = \lambda_0 + \lambda_1 \frac{Earnings_t}{TA_{t-1}} + \varepsilon_t$$

$$\frac{CFO_{t+1}}{TA_t} = \omega_0 + \omega_1 \frac{CFO_t}{TA_{t-1}} + \omega_2 \frac{TACC_t}{TA_{t-1}} + \varepsilon_t$$

EBIT is net profit before deduction of interest and taxes. *TA* is total assets, Revenue equal to total revenue (sales). *CFO* stands for operating cash flow. *OACC* is operating accruals (operating profit and operating cash flows plus amortisation expense). *T* is a component of the annual period, and ε is error terms.

3.2. Independent Variables

Two independent variables of the audit committee are the financial knowledge of the members of the audit committee and the independence of the audit committee (*INDEP*). The audit committee should be independent of the economic unit to be effective. To maintain independence, members of the audit committee should be selected from non-executive managers. An independent member (by clause 1 of Article 1 of the Audit Committee charter) has been defined as a member without any direct or indirect relationship or interest that affects its independent decision. Therefore, this variable is calculated from the following equation.

$$INDEP = (\text{Number of the independent members of the audit committee}) \div (\text{Total number of the members of the audit committee})$$

Financial knowledge of audit committee (*Finance*): The expertise of the audit committee does not mean that all members of the committee should be members of the formal accountancy community, following the charter of the Stock Exchange audit committee, but it is sufficient to have an education or experience in accounting and financial management. Financial expertise plays a vital role in the effectiveness of the audit committee. According to Clause 6 of Article 1 of the Charter of the audit committee, the financial expertise of the members can be defined in terms of a university degree or a domestic or international professional qualification in finance. These degrees include accounting, auditing, financial management, economics, other management disciplines with financial or economic orientation to analyse the faces and financial statements, and internal control over financial reporting. So, this variable is calculated from the following equation.

$$Finance = (\text{Number of the members of the audit committee with accounting and financial expertise}) \div (\text{total number of the members of the audit committee}).$$

3.3. Moderator Variable

The moderator variable is one with an effect on the relationship between the independent variable and dependent variable. That is, the presence of the third variable (moderator variable) changes the expected principal relationship between the independent variable and the dependent variable. The internal information environment variable is considered the moderator variable of the research.

The following three indicators are defined as the operational metrics of this internal information environment variable.

(1) Earning Announcement Speed (*EAS*):

$$EAS_{it} = - \left(\frac{\text{Number of days between the fiscal year – end and income announcement date}}{365} \right)$$

(2) Management Forecast Accuracy (*MFA*):

$$MFA_{it} = - \left| \frac{REPS_{it} - FEPS_{it}}{FEPS_{it}} \right|$$

MFA: Management Forecast Accuracy; *REPS*: Real Earning per Share; *FEPS*: Forecasted Earnings per Share; *i*: Company Component; *t*: Time Period component.

(3) The lack of financial restatements due to errors (*NER*): a binary variable; if the financial statements are presented this year through issues other than the tax, takes the value of one and zero otherwise.

The variable of political impact is a binary variable, one for firms with broad political connections and zero otherwise. To distinguish these firms, political cost variables are used according to Faccio et al. (2006):

- (1) Number of employees: The more employees there are, the more connection with the Ministry of Labor and Social Affairs will be.
- (2) Income Tax: The higher the tax on income, the greater the firm connection with the Ministry of Economic Affairs and Finance.
- (3) Total Export Sales: The larger the total sales of exports, the greater the connection with the Commerce Department.
- (4) Stock market value: The higher the stock market value—the more substantial the firm connection with the Stock Exchange—a subset of the Ministry of Economic Affairs and Finance—will be.
- (5) The book value of assets: The higher the book value of assets, the greater the connection with the Ministry of Economic Affairs and Finance.
- (6) Insurance payment: The greater the insurance of the employer’s share and the unemployment, the greater the connection with the Ministry of Labor and Welfare.

Companies with extensive political connections and low-level political companies are determined through the Technique for Order-Preference by Similarity to Ideal Solution (TOPSIS) and Shannon entropy weighing.

4. Econometrics Results

Table 1 presents the summary statistics of the variables. Furthermore, correlation analysis is documented in Tables 2 and 3.

Table 1. Descriptive statistics.

| Variable | High–Level Political Connections of the Firms | | | | Low–Level Political Connections of the Firms | | | | | |
|-------------------------|---|-------------------|---------------------|----------------|--|-------------------|---------------------|----------------|--|--|
| | Mean | Median | Max | Min | Mean | Median | Max | Min | | |
| PV | 0.867 | 0.9 | 0.981 | 0.477 | 0.878 | 0.897 | 0.983 | 0.484 | | |
| Indep | 0.488 | 0.333 | 1 | 0.2 | 0.496 | 0.333 | 1 | 0.333 | | |
| Finance | 0.800 | 0.667 | 1.000 | 0.2 | 0.777 | 0.667 | 1.000 | 0.333 | | |
| EAS | −0.309 | −0.279 | −0.0767 | −0.66 | −0.289 | −0.273 | −0.082 | −0.699 | | |
| MFA | −0.436 | −0.283 | −0.004 | −2.324 | −0.452 | −0.297 | −0.004 | −2.804 | | |
| NER | 0.451 | 0.000 | 1.000 | 0 | 0.504 | 1 | 1 | 0 | | |
| Age | 2.849 | 2.890 | 3.892 | 1.792 | 2.831 | 2.833 | 3.892 | 2.079 | | |
| Capital | 0.227 | 0.193 | 0.801 | 0.004 | 0.225 | 0.178 | 0.794 | 0.004 | | |
| MTB | 2.371 | 2.052 | 8.569 | 0.412 | 2.277 | 1.977 | 8.1867 | 0.2767 | | |
| SalesGr | 0.197 | 0.177 | 1.184 | −0.494 | 0.187 | 0.164 | 0.951 | −0.466 | | |
| Size (total asset/Rial) | 1,565,145,645,800 | 1,287,856,082,270 | 207,261,003,206,194 | 42,722,860,985 | 1,449,152,472,863 | 1,229,956,599,830 | 198,537,675,687,932 | 31,334,952,351 | | |
| LEV | 0.063 | 0.036 | 0.405 | 0.000 | 0.07 | 0.042 | 0.292 | 0 | | |
| Tobin’s Q | 1.649 | 1.468 | 4.202 | 0.772 | 1.631 | 1.433 | 4.653 | 0.673 | | |
| | | Observations: 286 | | | | | Observations: 272 | | | |

To assess whether there is a difference between industrial sectors based on explanatory and control variables, parametric and nonparametric analyses were performed using the one-way analysis of variance test (ANOVA) and Kruskal–Wallis test, respectively. The findings (reported in Table 4) indicate a systematic variation across the twenty-three industrial sectors in conjunction with all the above-discussed variables.

The study employed panel data fixed effects regression for the 93 selected firms for 2011–2016. Several techniques were utilised to test our measures of PV, and given that the data are in a panel, we must first determine whether the fixed-effects or random-effects model is appropriate.

Table 2. Correlation coefficients of high-level political connections.

| | PV | Indep | Finance | EAS | MFA | NER | Age | Capital | MTB | Sales Gr | Size | LEV | Tobin's Q |
|-----------|---------------|--------|--------------|--------|--------------|---------------|--------|---------|--------|----------|--------|-------|-----------|
| PV | 1 | | | | | | | | | | | | |
| Indep | 0.198 | 1 | | | | | | | | | | | |
| Finance | 0.236 | 0.012 | 1 | | | | | | | | | | |
| EAS | 0.12 | −0.015 | −0.032 | 1 | | | | | | | | | |
| MFA | 0.136 | 0.037 | 0.022 | 0.157 | 1 | | | | | | | | |
| NER | −0.142 | −0.079 | −0.018 | −0.053 | 0.047 | 1 | | | | | | | |
| Age | −0.111 | 0.003 | 0.113 | −0.04 | 0.029 | −0.008 | 1 | | | | | | |
| Capital | −0.094 | −0.011 | 0.027 | 0.123 | 0.032 | 0.209 | −0.09 | 1 | | | | | |
| MTB | 0.038 | −0.114 | −0.072 | −0.032 | 0.071 | 0.107 | 0.007 | 0.072 | 1 | | | | |
| SalesGr | 0.07 | 0.1 | −0.002 | −0.121 | 0.045 | 0.018 | −0.037 | −0.048 | 0.07 | 1 | | | |
| Size | 0.055 | 0.015 | 0.065 | −0.213 | −0.039 | −0.092 | −0.076 | 0.085 | −0.084 | 0.002 | 1 | | |
| LEV | −0.155 | −0.003 | −0.126 | 0.079 | −0.036 | −0.029 | 0.033 | 0.307 | 0.142 | −0.054 | −0.117 | 1 | |
| Tobin's Q | −0.225 | −0.103 | −0.149 | −0.033 | 0.033 | 0.076 | −0.123 | 0.115 | 0.718 | 0.05 | −0.121 | 0.096 | 1 |

Note: The bold-faced values indicate statistical significance at the 5% level.

Table 3. Correlation coefficients of low-level political connections.

| | PV | Indep | Finance | EAS | MFA | NER | Age | Capital | MTB | Sales Gr | Size | LEV | Tobin's Q |
|-----------|--------|--------|---------------|--------|---------------|--------|--------|---------|--------|----------|--------|--------|-----------|
| PV | 1 | | | | | | | | | | | | |
| Indep | 0.156 | 1 | | | | | | | | | | | |
| Finance | 0.336 | −0.018 | 1 | | | | | | | | | | |
| EAS | 0.119 | 0.039 | 0.007 | 1 | | | | | | | | | |
| MFA | 0.268 | 0.091 | 0.064 | 0.066 | 1 | | | | | | | | |
| NER | 0.018 | 0.005 | 0.035 | 0.038 | 0.141 | 1 | | | | | | | |
| Age | 0.179 | 0.083 | 0.162 | −0.029 | 0.137 | 0.064 | 1 | | | | | | |
| Capital | −0.205 | 0.03 | −0.022 | 0.137 | 0.013 | 0.12 | −0.116 | 1 | | | | | |
| MTB | −0.065 | −0.058 | −0.061 | 0.014 | 0.014 | 0.009 | 0.051 | −0.094 | 1 | | | | |
| SalesGr | −0.251 | −0.034 | −0.141 | −0.032 | −0.023 | 0.019 | −0.177 | 0.017 | 0.206 | 1 | | | |
| Size | 0.025 | −0.075 | 0.004 | −0.053 | 0.048 | 0.028 | 0.129 | 0.005 | −0.006 | 0.047 | 1 | | |
| LEV | 0.338 | 0.267 | 0.074 | 0.119 | 0.172 | −0.009 | 0.174 | 0.029 | −0.081 | −0.188 | 0.018 | 1 | |
| Tobin's Q | −0.28 | −0.093 | −0.178 | −0.112 | 0.013 | 0.04 | −0.027 | −0.01 | 0.654 | 0.346 | −0.071 | −0.237 | 1 |

Note: The bold-faced values indicate statistical significance at the 5% level.

Table 4. ANOVA and Kruskal–Wallis of variables across the Twenty-three industrial sectors.

| Variables | ANOVA (F) | Kruskal–Wallis (χ^2) |
|-----------|-------------|-----------------------------|
| PV | 11.00121 ** | 145.68069 ** |
| Indep | 9.358721 ** | 193.4420 ** |
| Finance | 5.984521 ** | 122.7913 ** |
| EAS | 8.130131 ** | 167.5490 ** |
| MFA | 6.125245 ** | 101.2312 ** |
| NER | 24.09111 ** | 532.6979 ** |
| Age | 11.30221 ** | 279.3613 ** |
| Capital | 3.357649 ** | 46.59412 * |
| MTB | 28.85644 ** | 445.0136 ** |
| SalesGr | 13.60679 ** | 314.0784 ** |
| Size | 6.734128 ** | 118.4420 ** |
| LEV | 3.127954 ** | 323.1121 ** |
| Tobin's Q | 5.521541 ** | 121.4679 ** |

** $p < 0.001$. * $p < 0.01$.

The general fixed-effects model may be written as follows:

$$Y_{it} = \alpha_i + X'_{it}\beta + \mu_{it}$$

where $I = 1, N$ firms, $t = 1 \dots T$ periods with k regressors in x_{it} and u_{it} is a normal error term, and y_{it} is FF. The constant α_i represent unobservable individual country-specific effects that differ between countries and are time-invariant. In a random-effects model, however, the constant is a random outcome variable that has a cross-section-specific error component which is uncorrelated with the errors of the regressor variables. Thus, $\alpha_i = \alpha + \varepsilon_i$ and ε_i has a zero-conditional mean. The Hausman specification test enables us to differentiate between random and fixed effects models by testing for correlation between the x variables and the individual random effects ε_i . It is a test of strict heterogeneity. If there is no correlation, random effects should be used, but if the correlation exists, fixed effects should be used (McKnight and Weir 2009). For example, in model 1, with PV as the dependent variable, the Hausman test gave a χ^2 of 112.18 ($p = 0.000$), so we reject the null hypothesis of no correlation and accept the fixed-effects model.

Table 5 shows the estimation results for models (1-1, 1-2) using panel data regression between the INDEP and PV. We first discuss the results of the high-level political connections (first and two columns). The coefficient on INDEP is positive and significant (0.071; t -statistic= 2.53). The coefficient on FINANCE is positive and significant (0.132; t -statistic = 4.12). The coefficient on MTB is positive and significant (0.025; t -statistic = 3.571/0.022; t -statistic = 3.66). The coefficient on SIZE is positive and significant (0.081; t -statistic = 3.37/0.073; t -statistic = 3.17). The coefficient on LEV is negative significant (−0.368; t -statistic = −3.53/−0.344; t -statistic = −3.37) and Tobin's Q is negative and significant (−0.041; t -statistic= −2.41/−0.032; t -statistic = −2.00). Also, results for models (2-1, 2-2 and 2-3) using panel data regression the moderating role of EAS, MFA and NER on relationship between INDEP and PV shows they impact on them (0.236; t -statistic = 2.18/0.079; t -statistic = 2.25 and 0.073; t -statistic = 2.28). In the following, results for models (2-4, 2-5 and 2-6) show that the moderating role of EAS, MFA, and NER on the relationship between FINANCE and PV is positive and significant.

Table 6 shows the estimation results for models (1-1, 1-2) using panel data regression between FINANCE and PV. We first discuss the results of the low-level political connections (first and two columns). The coefficient of FINANCE is positive and significant (0.092; t -statistic = 3.40). The coefficient on AGE is positive and significant (0.099; t -statistic = 3.535/0.088; t -statistic = 3.25). The coefficient on CAPITAL is negative and significant (−0.198; t -statistic = −4.60/−0.179; t -statistic = −4.26). Tobin's Q is negative and significant (−0.033; t -statistic = −3.30/−0.029; t -statistic = −3.62).

Table 5. Regression results for the high-level political connections.

| | 1-1 | 1-2 | 2-1 | 2-2 | 2-3 | 2-4 | 2-5 | 2-6 |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| C | −1.018 * (0.530) | −0.833 (0.516) | −1.17 ** (0.533) | −0.936 * (0.526) | −1.008 * (0.527) | −0.709 (0.508) | −0.777 (0.510) | −0.513 (0.514) |
| Indep | 0.071 *** (0.026) | | 0.137 *** (0.040) | 0.11 *** (0.031) | 0.05 * (0.027) | | | |
| Finance | | 0.132 *** (0.032) | | | | 0.206 *** (0.037) | 0.128 *** (0.031) | 0.083 ** (0.034) |
| EAS | | | −0.066 (0.095) | | | −0.169* (0.102) | | |
| Indep*EAS | | | 0.236 ** (0.108) | | | | | |
| Finance*EAS | | | | | | 0.325 *** (0.092) | | |
| MFA | | | | −0.025 (0.021) | | | 0.011 (0.012) | |
| Indep*MFA | | | | 0.079 ** (0.035) | | | | |
| Finance*MFA | | | | | | | 0.057 ** (0.023) | |
| NER | | | | | −0.035 * (0.020) | | | −0.083 *** (0.028) |
| Indep*NER | | | | | 0.073 ** (0.032) | | | |
| Finance*NER | | | | | | | | 0.104 *** (0.031) |
| Age | −0.127 (0.077) | −0.149 ** (0.075) | −0.151 * (0.078) | −0.083 (0.079) | −0.141 * (0.078) | −0.113 (0.074) | −0.146 ** (0.073) | −0.136 * (0.074) |
| Capital | −0.125 (0.082) | −0.099 (0.079) | −0.134 (0.082) | −0.118 (0.082) | −0.119 (0.083) | −0.075 (0.078) | −0.092 (0.079) | −0.047 (0.080) |
| MTB | 0.025 *** (0.007) | 0.022 *** (0.006) | 0.022 *** (0.007) | 0.024 *** (0.007) | 0.025 *** (0.006) | 0.016 ** (0.007) | 0.021 *** (0.006) | 0.024 *** (0.006) |
| SalesGr | 0.018 (0.017) | 0.022 (0.016) | 0.012 (0.017) | 0.018 (0.017) | 0.009 (0.016) | 0.019 (0.016) | 0.02 (0.016) | 0.016 (0.016) |
| Size | 0.081 *** (0.024) | 0.073 *** (0.023) | 0.088 *** (0.024) | 0.073 *** (0.024) | 0.082 *** (0.024) | 0.064 *** (0.023) | 0.072 *** (0.023) | 0.062 ** (0.023) |
| LEV | −0.368 *** (0.104) | −0.344 *** (0.102) | −0.358 *** (0.103) | −0.374 *** (0.103) | −0.378 *** (0.103) | −0.269 *** (0.101) | −0.321 *** (0.101) | −0.356 *** (0.099) |
| Tobin's Q | −0.041 ** (0.017) | −0.032 * (0.016) | −0.037 ** (0.017) | −0.035 ** (0.017) | −0.039 ** (0.016) | −0.023 (0.016) | −0.032 * (0.016) | −0.035 ** (0.016) |
| R² | 0.624 | 0.642 | 0.634 | 0.635 | 0.634 | 0.665 | 0.654 | 0.662 |
| Adjusted R² | 0.424 | 0.451 | 0.433 | 0.435 | 0.433 | 0.481 | 0.464 | 0.477 |
| F-statistic | 3.119 *** | 3.366 *** | 3.154 *** | 3.176 *** | 3.159 *** | 3.616 *** | 3.447 *** | 3.569 *** |

Note. * Sig. at 0.10, ** Sig. at 0.05, *** Sig. at 0.01.

Also, results for models (2-1, 2-2 and 2-3) using panel data regression the moderating role of EAS and NER on the relationship between INDEP and PV shows earning announce speed cannot impact on them. However, the moderating role of MFA on the relationship between INDEP and PV is approved (−0.101; *t*-statistic = −3.36). In the following, results for models (2-4, 2-5 and 2-6) show that the moderating role of EAS, MFA on the relationship between FINANCE and PV is negative and significant (−0.148; *t*-statistic = −2.55/−0.017; *t*-statistic = −2.12). However, NER cannot impact them.

According to the test results in the hypotheses, there is a relationship between auditor's committee independence and the financial information quality in firms with a high level of political connection. Thus, it can be stated that auditor's committee independence is considered as a determining factor in the financial reporting process. Considering the results of current research, it can be mentioned that the auditor's committee independence has had an impact on both: increase of the financial reporting committee and the increase of the financial statement's reputation. On the other hand, the low level of political connec-

tions of firms is insignificant. Therefore, it can be stated that low-level political connections of firms' auditor's committee independence do not impact financial information quality.

Table 6. Regression results for the low-level political connections.

| | 1-1 | 1-2 | 2-1 | 2-2 | 2-3 | 2-4 | 2-5 | 2-6 |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| C | 1.079 *** (0.400) | 1.301 *** (0.380) | 0.999 ** (0.406) | 1.251 *** (0.387) | 1.117 *** (0.406) | 1.345 *** (0.369) | 1.332 *** (0.373) | 1.342 *** (0.385) |
| Indep | 0.012 (0.025) | | 0.055 (0.044) | −0.037 (0.027) | 0.033 (0.029) | | | |
| Finance | | 0.092 *** (0.027) | | | | 0.056 * (0.030) | 0.086 *** (0.027) | 0.094 *** (0.027) |
| EAS | | | 0.106 (0.091) | | | 0.245 *** (0.075) | | |
| Indep*EAS | | | 0.143 (0.125) | | | | | |
| Finance*EAS | | | | | | −0.148 ** (0.058) | | |
| MFA | | | | 0.058 *** (0.014) | | | 0.023 ** (0.010) | |
| Indep*MFA | | | | −0.101 *** (0.030) | | | | |
| Finance*MFA | | | | | | | −0.017 ** (0.008) | |
| NER | | | | | 0.026 (0.020) | | | 0.01 (0.012) |
| Indep*NER | | | | | −0.044 (0.033) | | | |
| Finance*NER | | | | | | | | 0.014 (0.010) |
| Age | 0.099 *** (0.028) | 0.088 *** (0.027) | 0.101 *** (0.028) | 0.093 *** (0.027) | 0.104 *** (0.028) | 0.096 *** (0.027) | 0.085 *** (0.027) | 0.089 *** (0.027) |
| Capital | −0.198 *** (0.043) | −0.179 *** (0.042) | −0.169 *** (0.044) | −0.167 *** (0.042) | −0.199 *** (0.043) | −0.132 *** (0.043) | −0.139 *** (0.043) | −0.183 *** (0.042) |
| MTB | 0.006 (0.004) | 0.005 (0.004) | 0.006 (0.004) | 0.006 (0.005) | 0.006 (0.004) | 0.003 (0.004) | 0.006 (0.005) | 0.006 (0.005) |
| SalesGr | −0.019 (0.016) | −0.016 (0.016) | −0.021 (0.016) | −0.017 (0.016) | −0.019 (0.016) | −0.015 (0.016) | −0.016 (0.015) | −0.017 (0.016) |
| Size | −0.015 (0.015) | −0.024 (0.014) | −0.011 (0.015) | −0.019 (0.014) | −0.017 (0.015) | −0.025* (0.014) | −0.025 * (0.014) | −0.026 * (0.014) |
| LEV | 0.151 * (0.088) | 0.135 (0.085) | 0.116 (0.088) | 0.112 (0.085) | 0.141 (0.088) | 0.042 (0.087) | 0.07 (0.087) | 0.132 (0.085) |
| Tobin's Q | −0.033 *** (0.010) | −0.029 *** (0.008) | −0.032 *** (0.010) | −0.031 *** (0.010) | −0.033 *** (0.010) | −0.019 * (0.009) | −0.028 *** (0.009) | −0.029 *** (0.009) |
| R² | 0.654 | 0.675 | 0.668 | 0.685 | 0.658 | 0.696 | 0.692 | 0.679 |
| Adjusted R² | 0.455 | 0.488 | 0.471 | 0.498 | 0.455 | 0.516 | 0.509 | 0.489 |
| F-statistic | 3.286 *** | 3.611 *** | 3.388 *** | 3.665 *** | 3.237 *** | 3.865 *** | 3.789 *** | 3.566 *** |

Note. * Sig. at 0.10, ** Sig. at 0.05, *** Sig. at 0.01.

5. Robustness Check

Regression analysis is a form of predictive modelling technique which investigates the relationship between a dependent and independent variable. Linear regression is one of the most accessible statistical models in machine learning. Understanding its algorithm is a crucial part of data science. It is used to show the linear relationship between a dependent variable and one or more independent variables. If our data points do not fit a linear regression (a straight line through all data points), it might be ideal for polynomial regression. Polynomial regression, like linear regression, uses the relationship between the variables x and y to find the best way to draw a line through the data points.

To answer these questions and determine the mean-squared error (MSE), we explore the relationship between financial knowledge of the audit committee (Finance) as an

essential and critical factor in association with the audit committee and quality of financial information in Python and Jupiter notebooks. The regression analysis consists of a set of machine learning methods. Results showed a coefficient of determination $R^2 = 0.5888$ and a mean square error of 10^{-3} . It is an approximately powerful tool for predicting the factors associated with the quality of financial information. A standard algorithm was used to investigate the possible nonlinear relationship between dependent and independent variables. The results showed that there was no nonlinear relationship between them. This confirms the accuracy of the tests used in the present study.

6. Conclusions

The research shows a significant and positive relationship between the financial knowledge of auditing committee members and the financial information quality in low-level political connections. In other words, the existence of members with financial knowledge in the audit committee increases the quality of financial reporting. In addition, results show that the internal information environment in firms with low-level political connection improves the relationship between audit committee characteristics and the financial reporting quality. In other words, the internal information environment modifies the positive relationship between audit committee (with different proxies) and financial information quality. Thus, it can be mentioned that the internal information environment leads to the validity and transparency of financial statement in companies with low-level political connection. In opposite, the internal information environment does not have a positive impact on the relationship between audit committee characteristics and financial statement quality in firms with low political connection. It can be mentioned that the internal information environment does not improve the financial reporting quality. The results in the study are consistent with those reported by [Abbaszadeh et al. \(2013\)](#), [Alzeban and Sawan \(2015\)](#), and [Haddad et al. \(2021\)](#).

The connections between companies and politicians are due to their multiple mutual needs. Companies are willing to establish relations with politicians because the market fails to meet the demands of business units, and they can be exempt from political costs and have access to state economic and information resources. On the other hand, political parties need to be supported by companies for the government to achieve political, economic, social, and cultural purposes ([Bliss and Gul 2012](#); [Ariningrum and Diyanty 2017](#)).

As previously discussed, financial statements prepared by an entity are affected by a variety of factors in addition to accounting standards. One of the essential and significant factors of influence is the political influence of managers and owners of economic enterprises in political circles and their relations with the centres of political power. Relationships and political influence affect not only the financial position of firms, but also the motivations of managers concerning financial reporting and the preparation of financial statements ([Chaney et al. 2012](#); [Houston et al. 2014](#); and [Ebrahimi et al. 2017](#)). This is expected to ultimately lead to significant differences in the quality of the statements of companies with political affiliations compared to companies without political affiliations. This issue has also appeared in the findings of the present study.

We further have examined whether a significant difference can be found between panel data regression and using machine learning with training data, and, moreover, whether there is a nonlinear relationship between the independent and dependent variables. The results show that there is no nonlinear relationship between them. Furthermore, the machine learning method is an approximately powerful tool for predicting the factors associated with the quality of financial information. This research is expected to contribute comprehensively to expand the theoretical foundations and increase audience knowledge of the audit committee characteristics and quality of financial information. It is also expected that the results of the study will: (1) determine the audit committee characteristics and quality of financial information in Iran during the research period; (2) document the role of the internal information environment and political connections in moderating information quality; (3) potentially prevent the inappropriate role of government in unsuitable

policymaking. Furthermore, the findings of this study suggest that the application of political economy theories could be appropriate for more inquiry.

The following limitations appear throughout this study:

- (1) Non-availability of some characteristics of the audit committee members and relevant institutions.
- (2) Undisclosed factors by the firms, which affect their performance.
- (3) Limitations of the panel data regression and machine learning techniques such as picking samples at random as a train and testing and validation of data.

The study makes the following avenues for future research:

- (1) Investigate the effect of internal auditing on information quality.
- (2) Rank internal corporate governance mechanism among other variables affecting the information quality.
- (3) Study the effect of international sanctions as the external factor of political economy on the relationship between audit committee characteristics and quality of information.

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