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Audit committee characteristics and firm performance in Jordan: The moderating effect of board of directors' ownership

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ABSTRACT

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The study examines whether audit committee (AC) characteristics influence firm performance, and whether this relationship is moderated by board of director's (BOD) ownership. The sample is listed manufacturing firms in Jordan. AC characteristics, as an indicator of corporate governance mechanism, include its size, meeting frequency, independence, and experience. Firm performance is proxied by return on assets (ROA). Thirty firms are included in the sample. Data are collected from 2015 to 2021 for a total of 210 observations. The first model indicates that AC meetings and independence positively and significantly influence firm performance. On the other hand, AC size is not a significant predictor of firm performance. The second model shows that the interaction effects (AC size, AC independence, and AC experience) are significant and positive on firm performance. The results provide insights on how to improve AC effectiveness so as to improve the performance of listed manufacturing firms in Jordan. They also suggest the significance of BOD ownership in enhancing internal corporate governance mechanisms, particularly the AC. Jordanian policy makers must therefore ensure the effectiveness of these mechanisms, especially AC, through relevant regulations and recommendations.

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1. Introduction

Since the start of the century, the finance and business world has witnessed many failures, financial scandals, and global financial crises. To a large degree, those scandals and crises can be attributed to several factors, most importantly and directly poor corporate governance and illegal and incorrect audit practices. In response to these scandals and crises, regulators around the world have introduced new legislations to ensure more control over business organizations and their decisions, in addition to promoting disclosure and transparency. An important legislation is the Sarbanes-Oxley Act, issued in mid-2002. It is a set of standards that cover the ideas of disclosure, transparency, justice, equality, and shareholders' rights (Tamimi & Al-Qaisi, 2012). The enactment of new regulations considering the scandals have re-sparked interest in the audit committee (AC) (Bhasin, 2012). For the past 30 years, AC has emerged as the most common form of corporate governance mechanism. Professional and regulatory bodies across the world have accepted, and even extended, the roles of the AC (Abdullatif, 2006). In 2001, for example, the Basel Committee recommended firms to form ACs to resolve challenges that may be encountered by the board of directors (BOD) and for which a fitting control system is not operational. AC is at the core of the corporate governance system because it assists the BOD to fulfil its fiduciary duty towards shareholders. Scholars generally agree that the AC is aware of the critical issues affecting financial statements and financial performance. AC members should be independent so that it can enhance audit effectiveness and efficiency. According to Okpala (2012) and Datta (2000), an effective AC can improve the soundness of financial reports and corporate governance, in addition to lowering bankruptcy

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risks. Accounting standards offer a high degree of flexibility, and as such they permit earnings management, income smoothing, creative accounting, and manipulation. Corporate governance can mitigate these (Ortega & Grant, 2003) and increase confidence in financial reporting and audit procedures, which has previously been damaged by the scandals and collapse of major corporations (Obeidat et al., 2021; Almomani et al., 2020).

In Jordan, a number of laws have been issued relating to corporate governance. These laws underline the significance of AC as part of the internal control system (Oqab, 2012). Moreover, since 1998, firms are required to establish an AC and file their annual reports with the Jordan Securities Commission (Abdullatif, 2006). The Jordanian code of corporate governance recommends the AC to have at least three directors, some of whom are non-executive (Hamdan et al., 2013).

This section has discussed the research background and problem. The next section reviews past studies and develops the hypotheses. Section three presents the methodology and section four discussion of the main findings. Conclusion, implications, limitations, and recommendations are presented in section five.

2. Literature Review and Hypotheses Development

The agency theory maintains that the divergent interests of managers and shareholders drive the former to act against the interests of the latter, especially if they demonstrate opportunistic behavior (Jensen & Meckling, 1976). Managers are likely to engage in such practices when monitoring tools and effective market regulations are lacking (Al-Matari et al., 2012). Therefore, governance mechanisms, for instance AC, can mitigate these (RamCharan, 1998; Ainuddin & Abdullah, 2001). Empirical evidence on AC characteristics and firm performance is mixed (Zabri et al., 2016). This study attempts to clarify this relationship.

The main responsibility of the AC, according to Jordan's Corporate Governance Code (2017), is "to review the effectiveness of the internal auditor" and "make recommendations on the selection, appointment, reappointment and removal of the head of the Internal Audit Function" (p. 13). Accordingly, this study examines AC characteristics as a corporate governance mechanism to mitigate earnings management. These characteristics include size, independence, experience, and meeting frequency. Consistent with the agency theory, the first hypothesis is as follows:

H₁: *AC characteristics positively influence the performance of listed manufacturing firms in Jordan.*

2.1 AC size and Firm Performance:

To be effective, the size of AC must be such that it includes members of various professional education and experience and be provided with sufficient resources that allow them to deal with often complex accounting and financial issues (Xie et al., 2003). As AC increases in size, it is more likely to detect and mitigate issues emerging during the financial reporting process (Yermack, 1996; Bedard et al., 2004), a primary responsibility of the AC. An AC constituting only one or two members would not be able to carry out its duties and can be easily pressured by management to support them, particularly in their dispute with the external auditor (Habbash, 2010). The Jordanian Corporate Governance Code (2012) recommends firms to establish an AC with at least three non-executive members. It also suggests that firm performance is likely to improve as the AC grows in size without including any executive members.

Similar to past studies, this study measures AC size as the number of members reported in the firm's annual report. There has been inconclusive empirical evidence on the effect of AC size on firm performance, with some studies revealing a positive effect (e.g. Dakhllalh et al., 2020, Zraiq & Fadzil., 2018; Alqatamin, 2018) while others a negative effect (e.g. Al-Matari et al., 2012) or no effect (e.g. Ojeka et al., 2014). Based on these results and informed by the agency theory, we propose the following:

H_{1a}: *AC size positively influences the performance of listed manufacturing firms in Jordan.*

2.2 AC meeting frequency and Firm Performance

The AC regularly communicates with internal and external auditors to monitor and evaluate the internal control system, financial reporting process, and audit process (Habbash, 2010). An AC that meets frequently in a given fiscal year implies its activeness and proactivity to detect and correct potential issues. AC meeting frequency is measured as the number of AC meetings per year. Past studies have found that it is positively related with firm performance (e.g., Zraiq & Fadzil, 2018). Based on these results and informed by the agency theory, we propose the following:

H_{1b}: *AC meeting frequency positively influences the performance of listed manufacturing firms in Jordan.*

2.3 AC independence and Firm Performance

AC independence influences the monitoring process. Vicknair et al. (1993) argue that effective monitoring is only possible when the AC is independent of management, which allows internal and external auditors to be under less management or executive pressure. This argument is supported by empirical evidence that shows the positive effect of AC independence on firm performance (Dakhllalh et al., 2020, Alqatamin, 2018; Ojeka et al., 2014). Based on these results and informed by the agency theory, we propose the following:

H_{1c}: *AC independence positively influences the performance of listed manufacturing firms in Jordan.*

2.4 AC experience and Firm Performance

AC members must be educated and/or experienced in accounting and finance because they must ensure financial reporting integrity. This experience, as well, enhances their knowledge and ability to understand, identify, and mitigate issues that can potentially affect firm performance (Hussaini & Gugong, 2015). Independent members experienced in corporate finance are more likely to be aware of potential issues arising from earnings management (Juhmani, 2017; Xie et al., 2003). A financial expert is a person with the necessary qualification, professional certificate, experience, and skills in accounting and finance (Jordanian Corporate Governance Code, 2012). Firms are more likely to produce quality financial reports if the ACs include financial experts as members (Dakhlallah et al., 2020; Ojeka et al., 2014). Based on these results and informed by the agency theory, we propose the following:

H_{1d}: *AC experience positively influences the performance of listed manufacturing firms in Jordan.*

2.5 Boards of directors' ownership (BDOWN) and Firm Performance

In a firm with concentrated ownership, conflict of interests is more likely to occur between the concentrated owners and minority outside shareholders, where the former may seek to maximize their wealth and utility at the expense of the other shareholders (Shleifer & Vishny, 1997; Holderness, 2003). While large owners have the resources to control management and access insider information, minority outsider shareholders must rely on the monitoring of the BOD (Eisenhardt, 1989; Jensen & Meckling, 1976). Board effectiveness is influenced by its composition and number of independent directors (Fama & Jensen, 1983; Jensen & Meckling, 1976). Huse (1994) finds that consistent with the agency theory, board independence is positively related to its effectiveness. An independent BOD can discourage managers from making short-term decisions that can result in quick profits and instead focus on long-term firm performance. An independent BOD is expected to be more effective in monitoring the opportunistic behavior of managers, thus minimizing the agency problem (Jensen & Meckling, 1976). Independent directors have the experience, objectivity, and incentive (i.e., the interest to maintain their reputation) to improve the quality of managerial decisions (Baysinger & Hoskisson, 1990; Pearce & Zahra, 1992; Fama & Jensen, 1983). Based on these results and informed by the agency theory, we propose the following:

H₂: *BOD ownership moderates the relationship between AC characteristics and the performance of listed manufacturing firms in Jordan.*

H_{2a}: *BOD ownership moderates the relationship between AC size and the performance of listed manufacturing firms in Jordan.*

H_{2b}: *BOD ownership moderates the relationship between AC meeting frequency and the performance of listed manufacturing firms in Jordan.*

H_{2c}: *BOD ownership moderates the relationship between AC independence and the performance of listed manufacturing firms in Jordan.*

H_{2d}: *BOD ownership moderates the relationship between AC experience and the performance of listed manufacturing firms in Jordan.*

3. Methodology

The population is ASE-listed manufacturing firms. In 2015-2021, the ASE listed 33 manufacturing firms. A firm is included in the sample if its data are available and if it has not been suspended or merged with other firms during the sample period. Applying the two criteria, the final sample is 30 firms for a total of 210 observations.

4. Measurement of Variables:

4.1 Dependent Variable

Common proxies of firm performance include return on assets (ROA) (Almomani et al., 2022; Kallamu & Saat, 2015), return on equity (ROE), and efficiency ratios (Kim & Rasiah, 2010; Obeidat et al., 2021). Other measures include accrued dividend and stock price (Ponnu, 2008). Nevertheless, there is no consensus on which measure is the most appropriate (Ntim & Oseit, 2011).

In this study, firm performance is measured using ROA, which is defined as the ratio of year-end profit before tax to total assets. ROA is used because it is typically used by regulators and as a measure of investment project profitability (Kallamu & Saat, 2015). ROA also reflects the firm's ability to generate returns from its asset portfolio, and it is not affected by the equity market (Hutchinson & Gul, 2004). ROA is also preferable within the corporate governance context because it reflects the management's ability to generate earnings and add value to the firm through their exploitation of the firm's assets and resources (Sufian & Habibullah, 2010).

4.2 Independent and Control Variables

AC size (COMSIZE) is measured as the total number of members (Al-Matari, 2013), while AC independence (COMINDE) as the ratio of independent members to total members (Kallamu & Saat, 2015). AC experience (COMEXPE) is proxied by the ratio of members with accounting or finance education and experience (Dellaportas et al. 2012). AC meeting frequency

(COMMEET) means the number of meetings held during the year (Dellaportas et al. 2012). Firm size and leverage ratio are included in the model to control for their effects. Both have been found to affect performance (Al-Matari, 2013; Almomani et al., 2020). Table 1 summarizes the definitions and measurements of all variables. The following empirical model estimates the relationship between AC characteristics and firm performance.

Table 1
Measurement of variables

Variable	Label	Measurement
Audit Committee size	COMSIZE	Total number of audit committee members.
Audit Committee independence	COMINDE	Proportion of independent directors to total number of directors on the audit committee.
Audit Committee experience	COMEXPE	Proportion of members with education/experience in accounting or finance.
Frequency of meetings	COMMEET	Number of audit committee meetings during the year.
Boards of directors' ownership	BDOWNER	Proportion of shares held by major shareholders of the Company (more than 5%).
Firm's performance	PERFORM	ROA as a proxy for company's performance.
firm size	FSIZE	The natural log. Of a firm's total assets.
leverage	FLEVER	Total liabilities divided by total assets.

4.3 Empirical Models Specification

In this paper, the researcher analyzes the impact of Family ownership on the relationship between the financial flexibility indicators on the firm's performance. To test the hypothesis, the researcher used the following equation:

$$ROA_{t,i} = \alpha_{t,i} + \beta_1 AC\ size_{t,i} + \beta_2 ACM_{t,i} + \beta_3 IndAC_{t,i} + \beta_4 ACExp_{t,i} + \beta_5 FSize_{t,i} + \beta_6 FLev_{t,i} + \varepsilon_{t,i} \tag{1}$$

$$ROA_{t,i} = \alpha_{t,i} + BDOWN_{t,i} + \beta_1 AC\ size_{t,i} + \beta_2 IndAC_{t,i} + \beta_3 ACExp_{t,i} + \beta_4 ACM_{t,i} + \beta_5 BDOWN * AC\ size_{t,i} + \beta_6 BDOWN * IndAC_{t,i} + \beta_7 BDOWN * ACExp_{t,i} + \beta_8 BDOWN * ACM_{t,i} + \beta_9 FSize_{t,i} + \beta_{10} FLev_{t,i} + \varepsilon_{t,i} \tag{2}$$

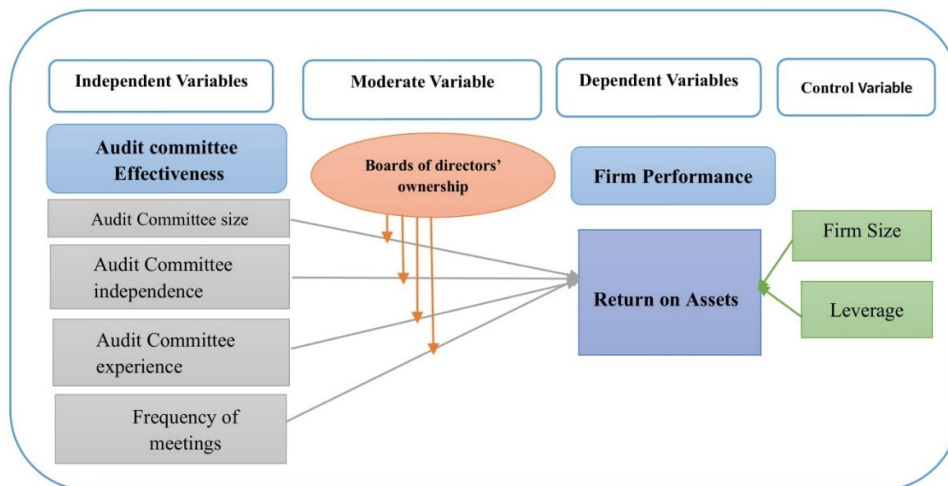


Fig. 1. Study Framework.

5. Results and Analysis

The descriptive statistics in Table 2 shows that the means of the AC variables are small, indicating the weak corporate governance mechanism of the firms. Weak corporate governance may reduce the earnings quality of the firm and subsequently its financial performance.

Table 2
Descriptive statistics

Variable	Mean	Minimum	Maximum	Standard deviation
COMSIZE	0.347	3	5	1.002
COMINDE	0.056	0	1	0.231
COMEXPE	0.066	0	1	0.248
COMMEET	0.278	0	6	1.071
FSIZE	7.309	5.596	9.087	0.635
Lev.	29.468	0.399	88.815	19.369
ROA	3.059	0.42	0.059	7.208

Table 3
Data Validity

Variables	Multicollinearity		Autocorrelation
	Tolerance	VIF	Durbin-Watson
COMSIZE	.709	1.409	2.131
COMINDE	.653	1.531	
COMEXPE	.509	1.966	
COMMEET	.839	1.191	
FSIZE	.705	1.418	
Lev.	.725	1.379	

To ensure that the data are fit for analysis, data distribution, collinearity, and autocorrelation are examined. Table 3 shows the results. The data are found to be normally distributed. The tolerance coefficient and variance inflation factor (VIF) are computed for each variable to detect any overlap between the variables. The VIF coefficients are less than 10, indicating that the variables do not overlap. The Durbin-Watson test (D-W) is used to observe autocorrelation. It returns a value of 1.614, suggesting the absence of autocorrelation. Acceptable D-W statistic is between 1.5 and 2.5 (Gujarati, 2003). Taken together, these results indicate the validity of the proposed model.

Table 4
Results of the moderating effect of BDOWN between AC characteristics and ROA

Variable	Model 1			Model 2		
	Unstandardized Coefficient (B)	(T)	Sig.	Unstandardized Coefficient (B)	(T)	Sig.
Constant	0.367	2.377	0.018			
COMSIZE	-0.062	-4.358	0.000	-0.022	-0.623	0.534
COMINDE	0.025	0.624	0.532	-0.182	2.043	0.023
COMEXPE	0.113	3.026	0.003	0.085	0.866	0.043
COMMEET	0.002	0.287	0.774	0.034	-2.300	0.388
BDOWN				-0.193	-2.000	0.047
BDOWN * COMSIZE				0.041	1.217	0.026
BDOWN * COMINDE				0.172	2.455	0.015
BDOWN * COMEXPE				0.131	-1.705	0.042
BDOWN * COMMEET				-0.012	-1.025	0.307
Firm's Size _{it}	-0.028	-1.355	0.176	-0.370	-3.202	0.002
Lev. _{it}	-0.002	-3.613	0.000	-0.004	-3.075	0.002
R ²		0.322			0.467	
F		3.995			3.319	
Sig.	0.000			0.000		

Table 4 shows the estimation results of two empirical models. The first model includes only AC characteristics, while the second model includes the interaction effects. The R^2 of model 2 increases to .467, indicating the increased power of the model to explain the variance in ROA. The results show that AC size and AC meeting frequency are not significantly related to firm performance. In contrast, AC independence and AC experience are significantly and positively related to firm performance. Accordingly, H1b and H1d are supported. The results are also congruent with Dakhllalh et al. (2020) and Zraiq and Fadzil (2018). They suggest that firm performance improves as the AC becomes more independent and has more experienced members.

The interaction effects are estimated in Model 2. The interactions BDOWN \times COMSIZE, BDOWN \times COMINDE, and BDOWN \times COMEXPE have positive and significant effects on ROA. These findings support H2a, H2c and H2d, and are similar to Dakhllalh et al. (2020) and Zraiq and Fadzil (2018). These results suggest that BOD ownership positively moderates between certain AC characteristics (size, independence, and experience) and firm performance. They also imply that BOD ownership has a favorable effect on firm performance. Finally, both control variables significantly influence firm performance.

6. Conclusion

This study examines how BOD ownership moderates between AC characteristics and firm performance. This paper extends knowledge on corporate governance and performance by investigating the relationships in the Jordanian context. The study is motivated by the gap in existing literature and the limited evidence in developing countries. There is a paucity of existing literature that examines these relationships in emerging countries, specifically Jordan.

The findings in the first model indicate that AC meeting frequency and independence significantly and positively influence the performance of the firms. However, AC size is not significantly related to firm performance. The findings in the second model indicate that BOD ownership positively moderates between AC characteristics (size, independence, and experience) and firm performance. The findings have useful implications for shareholders, regulators, and policymakers, especially with regards to how internal corporate governance mechanisms influence firm performance. Regulators and policymakers can introduce new regulations and guidelines that can enhance good governance practices and amend or remove those that inhibit firm performance.

The current research has two limitations. First, it focuses only on manufacturing firms listed on the ASE, thus the findings may not be generalizable to other sectors. Future work may focus on the services and financial sectors, whose roles in the developing markets, including Jordan, are increasingly important. Second, the study uses only BOD ownership as the moderator. Future work may consider other moderators.

References

- Abdullatif, M. (2006). The effectiveness of audit committees in Jordanian public shareholding companies and potential company characteristics affecting it: Perceptions from auditors in Jordan. *Dirasat, Administrative Sciences*, 33(2), 450-468.
- Al-Matari, Y. A. A. T. (2013). Board of Directors, Audit Committee Characteristics and the Performance of Public Listed Companies in Saudi Arabia, Universiti Utara Malaysia.
- Al-Matari, Y. A., Al-Swidi, A. K., FADZIL, F. H. B. H., & Al-Matari, E. M. (2012). Board of directors, audit committee characteristics and the performance of Saudi Arabia listed companies. *International Review of Management and Marketing*, 2(4), 241-251.
- Almomani, T. M., Obeidat, M. I. S., Almomani, M. A., & Darkal, N. M. A. M. (2022). Capital structure and firm value relationship: The moderating role of profitability and firm size: Evidence from Amman stock exchange. *WSEAS Transactions on Environment and Development*, 18, 1073-1084.
- Almomani, M. T., Ayedh, M. A., & Almomani, A. M. (2020). The Effects of the Family Ownership Structure on the Relationship between Board of Directors and Earnings Quality: Evidence Manufacturing Firms in Amman Stock Exchange. *International Journal of Advanced Science and Technology*, 29(7), 13005-13015.
- Alqatamin, R. M. (2018). Audit committee effectiveness and company performance: Evidence from Jordan. *Accounting and Finance Research*, 7(2), 48.
- Baysinger, B., & Hoskisson, R. E. (1990). The composition of boards of directors and strategic control: Effects on corporate strategy. *Academy of Management review*, 15(1), 72-87.
- Bedard, J., Chtourou, S., & Courteau, L. (2004). The effect of audit committee expertise, independence and activity on aggressive earnings management. *Auditing: A Journal of Practice and Theory*, 23(2), 13 – 35.
- Bhasin, M. (2012). Audit committee mechanism to improve corporate governance: Evidence from a developing country. *Modern Economy*, 3(07), 856 – 872.
- Dakhlallah, M. M., Rashid, N., Abdullah, W. A. W., & Al Shehab, H. J. (2020). Audit committee and Tobin's Q as a measure of firm performance among Jordanian companies. *Journal of Advance Research in Dynamical & Control Systems*, 12(1), 28-41.
- Dalton, D. R., C. M. Daily, A. E. Ellstrand, & J. L. Johnson. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19(3), 269-290. [https://doi.org/10.1002/\(SICI\)1097-0266\(199803\)19:3<269::AID-SMJ950>3.0.CO;2-K](https://doi.org/10.1002/(SICI)1097-0266(199803)19:3<269::AID-SMJ950>3.0.CO;2-K).
- Datta, S. (2000). Corporate governance: role of audit committee. *The Management Accountant*, 35(7), 502 – 504.
- Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management journal*, 32(3), 543-576.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.
- Gujarati, N. D. (2003). *Basic Econometrics*, 4th ed., McGraw-Hill, New York.
- Habbash, M. (2010). The Effectiveness of Corporate Governance and External Audit on Constraining Earnings Management Practice in the UK. (PhD thesis). (Accounting and Finance Department), Durham University.
- Hamdan, A., Sarea, A., & Reyad, S. (2013). The Impact of Audit Committee Characteristics on the Performance: Evidence from Jordan. *International Management Review*, 9(1), 32 – 42.
- Holderness, C. G. (2003). A survey of blockholders and corporate control. *Economic policy review*, 9(1).
- Huse, M. (1994). Board-management relations in small firms: The paradox of simultaneous independence and interdependence. *Small Business Economics*, 6, 55-72.
- Hussaini, B., & Gugong, B. K. (2015). Audit committee characteristics and earnings quality of listed food and beverages firms in Nigeria. *International Journal of Accounting, Auditing and Taxation* 2(8), 216-227.
- Jensen, M. C., & W. H. Meckling. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- Jordan Companies Control Department (2008). Jordanian Corporate Governance, Code Private Shareholding Companies, Limited Liability Companies, Non -Listed Public Shareholding Companies. Available at: [<http://ccd.gov.jo/english/index.php>]. Jordan securities commission (JSC), 2012. Amman, Jordan].
- Juhmani, O. (2017). Audit Committee Characteristics and Earnings Management: The Case of Bahrain. *International Journal of Accounting and Financial Reporting*, 7(1).
- Kallamu, B. S., & Saat, N. A. M. (2015). Audit committee attributes and firm performance: evidence from Malaysian finance companies. *Asian review of accounting*, 23(3), 206-231.
- Kim, P. K., & Rasiah, D. (2010). Relationship between corporate governance and bank performance in Malaysia during the pre and post Asian financial crisis. *European Journal of Economics, Finance and Administrative Sciences*, 21(1), 39-63.
- Obeidat, M., Almomani, T., & Almomani, M. (2021). Analyzing the cash conversion cycle relationship with the financial performance of chemical firms: Evidence from Amman Stock Exchange. *Accounting*, 7(6), 1339-1346.
- Ojeka, S., Iyoha, F. O., & Oigbemi, I. F. (2014). Effectiveness of audit committee and firm financial performance in Nigeria: an empirical analysis. *Journal of Accounting and Auditing: Research & Practice*.
- Okpala, K. (2012). Audit committee and integrity of financial statements: A Preventive Mechanism for Corporate Failure. *Australian Journal of Business and Management Research*, 2(8), 32 – 40.

- Oqab, R. (2012). The role of the audit committee in raising the efficiency of the internal control system to combat money laundering in Jordanian banks. *International research journal of finance and economics*, 1(88), 102-117.
- Ortega, W. R., & Grant, G. H. (2003). Maynard manufacturing: An analysis of GAAP-based and operational earnings management techniques. *Strategic Finance*, 85(1), 50.
- Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of management studies*, 29(4), 411-438.
- RamCharan, B. (1998). *How Corporate Boards Create Competitive Advantage*. Sam Francisco: Jossey-Bass.
- Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*, 15(2), 404-413. <https://doi.org/10.1111/j.1467-8683.2007.00570.x>
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Tamimi, A. H., & Wajer, J. (2014). The role of indicators of cash flows to assess the quality of profits. *Journal of Business and Economics*, 95, the University of Baghdad, Iraq.
- Vicknair, D, Hickman, K and Cames, K, 1993. A Note on Audit Committee Independence: Evidence from the NYSE on Grey Area Directors. *Accounting Horizons*, 7(1), 53 – 57.
- Xie, B., Davidson, W., & DaDalt, P. (2003). Earnings Management and Corporate Governance: The Role of Board and the Audit Committee. *Journal of Corporate Finance*, 9(3), 295 – 316.
- Yermack, D. (1996). Higher market evaluation of companies with a small board of directors. *Journal of Financial Economics*, 40 (2), 185 – 211.
- Zabri, S. M., K. Ahmad, & K. K. Wah. (2016). Corporate Governance Practices and Firm Performance: Evidence from Top 100 Public Listed Companies in Malaysia. *Procedia Economics and Finance*, 35, 287-296. [https://doi.org/10.1016/S2212-5671\(16\)00036-8](https://doi.org/10.1016/S2212-5671(16)00036-8)
- Zraiq, M., & Fadzil, F. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Scholar Journal of Applied Sciences and Research*, 1(5).



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