Contents lists available at Science-Gate



International Journal of Advanced and Applied Sciences

Journal homepage: http://www.science-gate.com/IJAAS.html

Audit committee characteristics and firm performance: Evidence from the insurance sector in Oman



CrossMark

Abdulqawi A. Hezabr¹, Mohammed H. M. Qeshta¹, Faiza Mohmmed Al-Msni^{2,3}, Omar Jawabreh^{4,*}, Basel J. A. Ali¹

¹Accounting and Finance Department, Applied Science University, Manama, Bahrain ²Accounting Department, Sana'a University, Sanaa, Yemen ³Accounting Department, Ar-Rasheed Smart University, Sanaa, Yemen ⁴Department of Hotel Management, Faculty of Tourism and Hospitality, The University of Jordan, Aqaba, Jordan

ARTICLE INFO

Article history: Received 1 October 2022 Received in revised form 23 January 2023 Accepted 8 February 2023 Keywords: Firm performance Committee size Independence Experience Meeting Oman

ABSTRACT

This study aims to determine the effect of audit committee characteristics on the performance of the eleven insurance companies listed in Oman between 2015 and 2019. This study focuses on the audit committee meetings and their frequency, the size of the committee, their independence, and the knowledge or expertise they possess. After conducting data analysis on the specified dataset, the regression results revealed that audit committee size is statistically significant at a p-value less than .05. This indicates that the size of an audit committee has a significant impact on an insurance company's performance. In addition, the audit committee independence was statistically significant at p=.05, demonstrating that the independence of an audit committee plays a significant role in determining the performance of a company. Moreover, the Audit committee expertise variable had a p-value of less than 0.05, indicating that it is statistically significant. This can be interpreted as meaning that the frequency of meetings has a statistically significant impact on the performance of a company. The statistical significance of only three of the four variables was determined. The variable was excluded from the regression model because its p-value was greater than .05. Therefore, the three characteristics of audit committees in the Omani market have a significant impact on the performance of an insurance company, and senior management should ensure that audit committees have approximately four members, are fully independent to limit control by the firm's management, and have extensive financial experience in order to function effectively. This study will be very useful to financial practitioners and policymakers since it contains practical ideas and recommendations. The research results may also contribute to the creation and implementation of strategic policies for improving corporate governance practices with the goal of maximizing profit and wealth.

© 2023 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The audit committee is a crucial body in an organization (Alqaraleh et al., 2022; Oudat et al., 2021). It is a subgroup of the company's board of directors and must be knowledgeable about the company's internal processes and controls. The committee must meet the following requirements which include it must have independent members

* Corresponding Author.

Email Address: o.jawabreh@ju.edu.jo (O. Jawabreh) https://doi.org/10.21833/ijaas.2023.05.003

Corresponding author's ORCID profile:

https://orcid.org/0000-0001-5647-895X

2313-626X/© 2023 The Authors. Published by IASE.

who cannot be influenced in decision-making. Hence, they have the power to engage advisors and they must have processes to manage complaints emanating from accounting practices. They play the following key roles as it checks if the company complies with codes and regulations laid down by regulatory bodies that govern their operations (Alshabibi et al., 2021; Alyaarubi et al., 2021). The audit committee should be aware of the management's responsibilities regarding laws governing anti-corruption and determine whether they have put in place appropriate controls and policies for the detection and mitigation of risks related to corruption. They should be aware of the laws regarding anti-corruption and proper financial management knowledge (Al Lawati et al., 2021; Algaraleh et al., 2022; Gharaibeh et al., 2022). Hence,

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/)

the audit committee works with management to make sure that they take the necessary steps should they detect fraud which includes asset misappropriation and financial statement fraud.

The audit committee discusses and reviews riskrelated policies and in some companies, they may be given the responsibility of cyber risk oversight. They also provide oversight of audit and financial reporting processes. The audit committee assesses the judgments and analysis of vital issues made by management regarding the financial reports. They ensure the financial information is clear, consistent, and meets the highest accountability level. They also review the effects of accounting and regulatory initiatives on financial statements (Al-Mamun et al., 2014; Jawabreh, 2020; Jawabreh et al., 2022a; Saleh et al, 2021c; Jaradat et al., 2011; Alsarayreh et al., 2011). The other role played by the committee is selecting and overseeing and compensating the company's independent auditor. The audit committee meets quarterly with the independent auditors to discuss the audit of the firm, financial reports of the company, and internal controls. The national exchanges such as the NYSE stipulate the mode of communication that the committee should adopt while engaging with the independent auditors. Some of these securities exchanges give the committee the mandate to evaluate auditors' performance and address any performance-related issues (Abdelbadie and Salama, 2019; Al Fahmawee and Jawabreh, 2022; Jawabreh et al., 2022c; Shniekat et al, 2021; Saleh et al., 2021a). Thus, it is imperative for the audit committee to hold separate meetings from the internal auditors to discuss issues relating to the financial information of the company to acquaint themselves with finer details.

The audit committee plays a crucial role in organizations that not only benefit the management also the stakeholders. Their role but in organizational governance was strengthened by Congress when it passed the Sarbanes-Oxley Act in 2002. Before the existence of this Act, there were widespread corporate frauds and failures which affected both the companies and the investors. There were massive losses of dollars which not only impacted financial markets negatively but also the trust the investors had. The scandals include Enron, Arthur Andersen, WorldCom, Tyco, and Global Crossing (Abdou et al., 2021). To avoid negative effects associated with such scandals, this study aims to research the impact of the size of the audit committee, the independence of the audit committee, the expertise, and the frequency of the meeting held in the insurance sector in Oman. Previous studies have not exhaustively covered these areas. The available research has focused on the shorter duration across the insurance companies and thus not comprehensive in terms of explaining the impact of audit committees on the insurance industry in Oman (Al-Absy et al., 2019; Badolato et al., 2014; Saleh and Jawabreh, 2020). Hence, it can be noted that the audit committee plays a crucial role in insurance companies because since their emergence

playa a crucial role in reducing the likelihood of financial fraud across companies before materializes. This paper seeks to evaluate how audit committees play a role in the insurance industry as it relates to the performance of the insurance firms in Oman.

2. Theoretical framework and hypothesis development background

Few previous studies have researched the impact of audit characteristics on the performance of companies in Oman. The studies were not sufficient and did not provide consistent and reliable results. Likewise, the literature available on the impact of audit committee characteristics on firms' performance is rare (Al Nawaiseh et al., 2021; Ali and Oudat, 2021a; Ebrahim et al., 2021; Oudat et al., 2021; Qeshta et al., 2021). The scarcity of the literature on insurance firms makes it appropriate to conduct a study about Oman insurance listed companies (Al-Matari et al., 2014; Arslan et al., 2014; Oudat et al., 2021; Qeshta et al., 2021).

Thus, the paper will investigate the role of the audit committee in these companies and how they influence the output of the organization. The performance of the firm is a parameter widely used in the strategic management of companies; thus, it serves as the dependent variable in this study. In this paper, the theoretical framework comprises dependent and independent variables, the model will determine the relationship between these variables. The independent variables include the size of the audit committee, frequency of the meetings held, independence of the committee, and expertise in executing their role. The dependent variable for this study will be the market valuation of the firm which illustrates how the firm is performing in the Omani market.

2.1. Audit Committee and financial performance

This study finds that the audit committee plays a key role in ensuring the financial reports of the company are dependable and have high degrees of accountability. There are minimal chances of an audit committee manipulating financial reports. Should the manipulation occur, then this can be due to the audit committees being dishonest, unreliable, and not accountable while conducting their duties (Al-Faryan and Dockery, 2021). It is important to ensure that the company selects truthful, trustworthy, and independent members of audit committees.

The members who make up the audit committee and the characteristics they exhibit contribute to a great extent to the performance of the organizations. The audit committee members should have a finance and accounting background so that they can easily comprehend and interpret the figures on financial statements (Alqaraleh et al., 2022; Oudat et al., 2021; Qeshta et al., 2021). Hence, in case of any inconsistencies in the financial reports, the audit committee members can easily detect them and raise issues with the concerned parties.

Corporations vest the ownership of assets to shareholders while the corporate managers control these assets (Jawabreh et al., 2021; Jawabreh et al., 2022b). The shareholders take the consequences of any action the professional managers make in the course of running the companies (Saleh et al., 2021b). Being the shareholders' agents, they may not perfectly execute their roles which results in agency problems. The agency issues that may arise are, managers pursuing their interests at the expense of the shareholders (Algaraleh et al., 2022; Oudat et al., 2021; Qeshta et al., 2021). The managers may enter transactions that benefit themselves over shareholders, for instance, they may invest in risky projects contrary to shareholders' expectations, and shareholders are risk averse and expect managers to engage in projects that maximize revenue but minimize risk. They may also engage in empire building where they purchase other companies to grow their powers (Alawamleh et al., 2021; Ali et al., 2022; Alkhodary et al., 2022; AlNawaiseh et al., 2022). Additionally, managers may invest money in wasteful projects that may reduce the profits available to the shareholders (Al-Matari et al., 2014; Rahman et al., 2019; Shibly et al., 2021). Thus, misuse of company finances can adversely reduce the value of the firm which negatively affects the company's growth.

Moreover, the managers may reward themselves with huge salaries and wages, a factor that leaves the shareholders with less amount to subdivide as dividends (Ali and Oudat, 2021b). To eliminate the conflicts highlighted above, organizations hire audit committees that function as the bridge between the company owners and the managers. They oversee the operations of the managers concerning financial reporting to eliminate financial scandals. They also ensure that they use the organization's resources efficiently thus increasing shareholders' wealth. In recent studies, the effective audit committee has been affecting the output of the companies. Previous research shows that larger committees are more effective as compared to one with fewer members because they bring diversity in accounting and financial knowledge (Al Lawati et al., 2021; Alqaraleh et al., 2022; Alrabei et al., 2022; Alshirah et al., 2022; Salameh et al., 2020). This leads to transparency among managers in financial disclosures in a manner that eliminates scandals that can lead to the closure of a firm.

Lastly, it is important to understand the factors that affect the performance of a firm so that decisions are made by the management in consideration of them. Tobin's Q, sometimes referred to as Q Ratio, is used to determine the market value of a firm and it is calculated by adding the book value of a firm's debt and the market value of equity capital and dividing them by the book value of total assets of a firm. When the market value is equivalent to the book value of the firm's asset which is the replacement cost, it can be termed that the firm is in equilibrium (Ali et al., 2016). Thus, Tobin's Q is a ratio that illustrates the relationship that exists between the market valuation and its intrinsic value, it can be used as a way of estimating if a firm in a given market is undervalued or overvalued. When Tobin's Q is greater than 1, it can be explained to mean that the market value is higher than the value of the firm's recorded assets, this would suggest that the market value incorporates some unrecorded or unmeasured assets of the firm (Fu et al., 2016). Hence, understanding the relationship between the market performance of a firm, represented by Tobin's Q, and the characteristics of its audit committee would be essential in determining what factors are important to consider when preparing its financial reports.

2.2. Development of hypotheses

Several studies have claimed that the characteristics of an audit committee contribute significantly to the quality of the duties executed with claims that more skilled, attentive, independent, larger, and more engaged committee members seem to execute their functions more efficiently and effectively (Abdelbadie and Salama, 2019; Al-Faryan and Dockery, 2021; Al Nawaiseh et al., 2021; Algaraleh et al., 2022). This research study seeks to explore the following four hypotheses regarding audit committee characteristics and how it influences firm performance in the insurance sector in Oman.

H1: The size of the audit committee has a significant positive relationship with the performance of the firm.

The code of Omani corporate governance necessitates that a firm must appoint an Audit Committee of at least three non-executive members and the majority of them should be independent. The team should have at least one of them possessing financial expertise and should have at least four meetings annually. Rahman et al. (2019) noted that the size of an audit committee plays an important role in monitoring the quality of financial reports. A smaller audit committee has a higher likelihood of executing fraudulent activities as few members can collude and perform a fraudulent transaction while this is harder in a larger committee. Additionally, the size of an audit committee considerably determines the depth of expertise and skill diversity which can impact its performance (Algaraleh et al., 2022). Hence, this study needs to explore the impact of the size of the audit committee on the performance of the insurance firms in Oman.

H2: The frequency of audit committee meetings has a significant positive relationship with the performance of the firm.

There is a dire need for an audit committee to hold meetings regularly to discuss arising issues and

ensure that existing challenges are resolved remarkably in a manner that eradicates irregular information (Al-Mamun et al., 2014). Several studies have claimed that the frequency of audit committee meetings can be used to demonstrate the diligence of executing its responsibilities of ensuring that the process of financial reporting is functioning accordingly and making follow-up on any arising financial problems (Al Nawaiseh et al., 2021; Harban et al., 2021). Thus, this study must explore the impact of the frequency of audit committee meetings in relation to the performance of insurance firms in Oman.

H3: The expertise of an audit committee has a significant positive relationship with the performance of the firm.

In the recent past, the financial expertise of audit committee members has gained the interest of regulators across the globe to assess whether financial expertise has an impact on improving the effectiveness of monitoring financial records (Oudat et al., 2021). Given that the Omani Code of 2002 stresses financial expertise and endorses that public firms must include at least one committee member who possesses relevant financial management or accounting expertise, this is an inference that Oman inspires companies to select members with mixed expertise. These committee members bring resources to organizations as human capital that consists of knowledge, experience, skills, and reputation (Al Lawati et al., 2021). Therefore, this study needs to explore the impact of the expertise of an audit committee in relation to the performance of insurance firms in Oman.

H4: The independence of the audit committee chairperson has a significant positive relationship with the performance of the firm.

Recent studies have alleged that the new regulations on corporate governance have increased the accent of independence on audit committee members and especially the chairperson who is leading the team, for the efficiency and effectiveness of audit committees (Al-Absy et al., 2019; Al Nawaiseh et al., 2021; Ali and Oudat, 2021b; Algaraleh et al., 2022; Ebrahim et al., 2021). Furthermore, the principles of corporate governance require the audit committees to conduct their responsibilities with independence and ensure professionalism is maintained for accurate information to be recorded in the financial records (Qeshta et al., 2021). Some research has urged that the independence of the audit committee has a likelihood of improving the performance of a firm since independent members can manage and monitor the financial records better since they have no economic relationship with an organization (Ali and Oudat, 2021b; Algaraleh et al., 2022; Arslan et al., 2014; Ebrahim et al., 2021). Hence, it is crucial for this study to explore the impact of the independence

of the audit committee chairperson on the performance of insurance firms in Oman.

3. Methodology

The dataset considered for this research project was obtained from the annual reports of insurance firms that are listed on the Muscat Securities Market (MSM) for the period between 2015 and 2019. It was noted that the total number of listed insurance firms on the MSM stock exchange was 11 firms that formed the sample of this study.

According to Table 1, the total observations considered for this study are 55 (5*11), this is from 11 insurance companies for a period of 5 years. Among the financial sub-sector companies, the insurance sector had the highest number of companies compared to other subsectors. The statistical technique to be considered for this analysis is the multiple regression analysis that seeks to assess the influence of audit committee characteristics on the performance of a firm.

Table 1: Financial sub-sector companies

Table 1. I manetal sub sector companies				
Financial sub-sector	Ν			
Insurance	11			
Investment	10			
Banking	8			
Financial services	5			
Real estate	1			
Total companies	35			

The variables of consideration include committee size, meeting frequency, and audit committee expertise. The regression equation for this research study is as follows:

$Yi = \beta 0 + \beta 1 X 1 + \beta 2 X 2 + \beta 3 X 3 + \epsilon.$

 $TQ = \beta 0 + \beta 1 \ ACSIZE + \beta 2 \ ACMEETN + \beta 3 \ ACEXP + \beta 4 \ ACINDE + \varepsilon$

where, TQ is Tobin's Q which is calculated by adding the book value of the firm's debt and market value of equity capital and dividing them by the book value of the total assets of a firm. ACSIZE is the audit committee size. ACMEETN is the audit committee meeting frequency. ACEXP is the audit committee's financial expertise. ACINDE is the independence of an audit committee. β is the coefficient and ε is the error term.

4. Empirical analysis and results

The descriptive statistics of the variables are presented in Table 2. It can be noted that the dataset considered had 55 observations (N= 55). The market value of the firms considered ranged between 0.132 and 4.103, with a mean valuation of 1.326. Moreover, the average size of audit committees in these firms is approximately 3 to 4 individuals. It was noted that the audit committees are highly independent with a mean of 0.878, although some ACs were reported to be lacking independence. It was noted that the audit committees had an average of 4 meetings annually

times a year, the firm with the least AC meetings was 3 while the highest had 8 meetings. Lastly, the audit committees' financial expertise averaged 0.56 which is an indication that most of them had high financial expertise. It was also noted that 82 percent of the chairpersons of the audit committees reported being fully independent while 18 percent were partially independent (Fig. 1). This is in accordance with the Omani Code of Corporate Governance which endorses that the chairperson of an audit committee must be an independent director to avoid conflict of interests.

	Table 2: Descriptive statistics (N=55)					
Variable	Observations	Minimum	Maximum	Mean	Std. deviation	
Tobin's Q (TQ)	55	0.132	4.103	1.326	0.596	
AC size (ACSIZE)	55	3.000	5.000	3.554	0.664	
AC meeting (ACMEETN)	55	3.000	8.000	4.158	1.345	
AC independence (INDEP)	55	0.000	1.000	0.878	0.255	
AC expertise (ACEXP)	55	0.540	1.000	0.856	0.089	



Fig. 1: Chairperson independence

Upon assessing the correlation of the variables, the results of the correlation matrix are shown in Table 3. It was noted that multicollinearity was not an issue of concern because the variables had low correlation as the independent variables with the highest correlation were 0.328. A problem of multicollinearity exists if there is a correlation among the variables that is greater than 0.8 (Tabachnick and Fidell, 2013). The firm's performance denoted by TQ had a moderately stronger positive correlation with the audit committees' size (ACSIZE) and the weakest was between TQ and meeting frequency (ACMEET).

Table 3: Correlation matrix

		141	ne on donrelation i			
	TQ	ACSIZE	ACINDE	ACMEET	ACEXP	ACSIZE
TQ	1					
ACSIZE	-0.128	1				
ACINDE	0. 143***	0.0689	1			
ACMEET	-0.092	0.198***	0.328***	1		
ACEXP	0.165***	-0.262	0.033	0.082	1	
ACSIZE	0.286***	0.092	0.027***	0.236***	-0.029	1
		***· Correlatio	n is significant at the 0.0	1 level (1-tailed)		

When regression analysis was executed, the findings obtained are shown in Table 4. The results show that the overall model is significant since the pvalue is less than .05 and the F-statistic is 3.46. Additionally, the R-squared of the model at .3678 signifies that the independent variables can account for 36.78 percent of the variability of the dependent variable (TQ).

Table 4: Regression results				
Variable	Coefficient	t- statistic	P-value	
ACSIZE	0.0089	0.17	0.0442**	
ACINDE	-0.0017	-0.35	0.0361**	
ACMEET	0.0323	0.16	0.642	
ACEXP	0.7123	2.33	0.049**	
Constant	0.8825	1.28	0.324	
R-squared	0.3678			
Sig	0.000***			
F-statistics	3.46			

: Correlation is significant at the 0.05 level (1-tailed): *: Correlation is significant at the 0.01 level (1-tailed)

Based on the regression results above, it can be noted that ACSIZE is statistically significant at a significance level of .05 at a p-value of 0.0442. This can be explained to mean that the size of an audit committee has a significant influence on the performance of an insurance firm. This result is

consistence with Al-Matari et al. (2012) but inconsistent with Oudat et al. (2021) and Qeshta et al. (2021).

Moreover, the p-value of ACINDE at 0.0361 illustrates that the independence of an audit committee plays a significant role in determining the value of a firm. This study is consistent with Buallay and Al-Ajmi (2019) but inconsistent with Oudat et al. (2021) and Qeshta et al. (2021).

Furthermore, the p-value of ACMEET is not statistically significant as p> .05. Hence, this variable will not be considered in the regression model because it is not statistically significant. This study is consistent with Oudat et al. (2021).

The ACEXP has a p-value of 0.049 which is less than .05, this can be explained to mean that the frequency of meetings is statistically significant to the performance of a firm. This result is consistence with Wakaba (2014). Hence, the resulting regression model that can be obtained from these findings is shown as follows:

TQ = 0.8825 + 0.0089 (ACSIZE) - 0.0017 (ACINDE) + 0.7123(ACEXP)

The regression model shows that an insurance firm gains 0.0089 units of value per every single unit of AC size, and a single unit of independence contributes negatively to 0.0017 units of the firm's valuation. In addition, a single unit of AC experience contributes positively to 0.7123 units of a firm's valuation. Hence, the regression model can be used to estimate with a 95 percent level of confidence the market value of insurance value in Oman.

5. Conclusion

This report can be concluded that there is a significant effect of three audit committee characteristics that influence a firm's profitability and valuation among the listed insurance companies in Oman. This study discovered that out of the four only three important characteristics of audit committees contributed significantly to the market value of a firm which are audit committee size, audit committee independence, and audit committee experience. These characteristics of an audit committee impact the effectiveness of committee members in monitoring and validating the financial records of insurance firms in the Omani market. Therefore, based on the findings of these findings it can be recommended that insurance companies need to ensure that the audit committee size is approximately 4 members to the least so that financial records can be audited properly. Also, it is recommended that the audit committee should have full independence which limits control of them committed by the firm's management as it relates to the financial records reporting. Besides, another recommendation is that the audit committee should have high financial experience for the audit committee to be committed and effective in their responsibility in a manner that can improve the company's profitability. It is important for insurance companies in Oman to consider the noted factors that have been identified in this research as contributing factors to the market performance of a firm.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

- Abdelbadie RA and Salama A (2019). Corporate governance and financial stability in US banks: Do indirect interlocks matter? Journal of Business Research, 104: 85-105. https://doi.org/10.1016/j.jbusres.2019.06.047
- Abdou HA, Ellelly NN, Elamer AA, Hussainey K, and Yazdifar H (2021). Corporate governance and earnings management nexus: Evidence from the UK and Egypt using neural networks. International Journal of Finance and Economics, 26(4): 6281-6311. https://doi.org/10.1002/ijfe.2120
- Al Fahmawee EAD and Jawabreh OA (2022). A study architectural and intangible environment affecting occupancy rate of five stars business hotel in Amman. Journal of Environmental

Management and Tourism, 13(2): 530-545. https://doi.org/10.14505/jemt.v13.2(58).22

- Al Lawati H, Hussainey K, and Sagitova R (2021). Disclosure quality vis-à-vis disclosure quantity: Does audit committee matter in Omani financial institutions? Review of Quantitative Finance and Accounting, 57(2): 557-594. https://doi.org/10.1007/s11156-020-00955-0
- Al-Absy MSM, Ismail KNIK, and Chandren S (2019). Audit committee chairman characteristics and earnings management: The influence of family chairman. Asia-Pacific Journal of Business Administration, 11(4): 339-370. https://doi.org/10.1108/APJBA-10-2018-0188
- Alawamleh HA, ALShibly MHAA, Tommalieh AFA, Al-Qaryouti MQH, and Ali BJ (2021). The challenges, barriers and advantages of management information system development: Comprehensive review. Academy of Strategic Management Journal, 20(5): 1-8.
- Al-Faryan MAS and Dockery E (2021). Testing for efficiency in the Saudi stock market: Does corporate governance change matter? Review of Quantitative Finance and Accounting, 57(1): 61-90. https://doi.org/10.1007/s11156-020-00939-0
- Ali BJ and Oudat MS (2021a). Accounting information system and financial sustainability of commercial and Islamic banks: A review of the literature. Journal of Management Information and Decision Sciences, 24(5): 1-17.
- Ali BJ and Oudat MS (2021b). Board characteristics and intellectual capital performance: Empirical evidence of Bahrain commercial banks. Academy of Accounting and Financial Studies Journal, 25(4): 1-10.
- Ali BJ, Alawamleh HA, Allahham MIO, Alsaraireh JM, AL-Zyadat A, and Badadwa A (2022). Integration of supply chains and operational performance: The moderating effects of knowledge. Information Sciences Letters, 11(4): 1069-1076. https://doi.org/10.18576/isl/110407
- Ali MR, Mahmud MS, and Lima RP (2016). Analyzing Tobin's Q ratio of banking industry of Bangladesh: A comprehensive guideline for investors. Asian Business Review, 6(2): 85-90. https://doi.org/10.18034/abr.v6i2.31
- Alkhodary D, Abu-AlSondos IA, Ali BJ, Shehadeh M, and Salhab HA (2022). Visitor management system design and implementation during the COVID-19 pandemic. Information Sciences Letters, 11(4): 1059-1067. https://doi.org/10.18576/isl/110406
- Al-Mamun A, Yasser QR, Rahman MA, Wickramasinghe A, and Nathan TM (2014). Relationship between audit committee characteristics, external auditors and economic value added (EVA) of public listed firms in Malaysia. Corporate Ownership and Control, 12(1): 899-910. https://doi.org/10.22495/cocv12i1c9p12
- Al-Matari EM, Al-Swidi AK, and Fadzil FHB (2014). Audit committee characteristics and executive committee characteristics and firm performance in Oman: Empirical study. Asian Social Science, 10(12): 98-113. https://doi.org/10.5539/ass.v10n12p98
- Al-Matari YA, Al-Swidi AK, Fadzil FHBH, and Al-Matari EM (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. https://doi.org/10.5296/ijafr.v2i2.2384
- AlNawaiseh KH, Hamzeh AA, Al Shibly M, Almari MO, AbuOrabi T, Jerisat R, Basel A, and Badadwa A (2022). The relationship between the enterprise resource planning system and maintenance planning system: An empirical study. Information Sciences Letters, 11(5): 1335-1343. https://doi.org/10.18576/isl/110502
- Alqaraleh MH, Almari MOS, Ali BJ, and Oudat MS (2022). The mediating role of organizational culture on the relationship between information technology and internal audit effectiveness. Corporate Governance and Organizational

Behavior Review, 6(1): 8-18. https://doi.org/10.22495/cgobrv6i1p1

- Alrabei AM, Al-Othman LN, Al-Dalabih FA, Taber TA, and Ali BJ (2022). The impact of mobile payment on the financial inclusion rates. Information Sciences Letters, 11(4): 1033-1044. https://doi.org/10.18576/isl/110404
- Alsarayreh MN, Jawabreh OA, Jaradat MM, and ALamro SA (2011). Technological impacts on effectiveness of accounting information systems (AIS) applied by Aqaba tourist hotels. European Journal of Scientific Research, 59(3): 361-369.
- Alshabibi B, Pria S, and Hussainey K (2021). Audit committees and COVID-19-related disclosure tone: Evidence from Oman. Journal of Risk and Financial Management, 14(12): 609. https://doi.org/10.3390/jrfm14120609
- Alshirah M, Al-Dalabih F, Alshira'h A, Alsqour M, and Ali B (2022). The relationship between tax knowledge and compliance: An empirical study. Information Sciences Letters, 11(5): 1393-1401. https://doi.org/10.18576/isl/110508
- Alyaarubi HJ, Alkindi DS, and Ahmed ER (2021). Internal auditing quality and earnings management: evidence from sultanate of Oman. Journal of Governance and Integrity, 4(2): 115-124. https://doi.org/10.15282/jgi.4.2.2021.6054
- Arslan M, Zaman R, Malik RK, and Mehmood A (2014). Impact of CEO duality and audit committee on firm performance: A study of oil and gas listed firms of Pakistan. Research Journal of Finance and Accounting, 5(17): 151-156. https://doi.org/10.2139/ssrn.2515067
- Badolato PG, Donelson DC, and Ege M (2014). Audit committee financial expertise and earnings management: The role of status. Journal of Accounting and Economics, 58(2-3): 208-230. https://doi.org/10.1016/j.jacceco.2014.08.006
- Buallay A and Al-Ajmi J (2019). The role of audit committee attributes in corporate sustainability reporting: Evidence from banks in the Gulf cooperation council. Journal of Applied Accounting Research. 20(2): 249-264. https://doi.org/10.1108/JAAR-06-2018-0085
- Ebrahim SAH, Ali BJA., and Oudat MS (2021). The effect of board characteristics on intellectual capital in the commercial banks sector listed on the Bahrain bourse: An empirical study. Information Sciences Letters, 10(4): 91-109. https://doi.org/10.18576/isl/10S106
- Fu L, Singhal R, and Parkash M (2016). Tobin's q ratio and firm performance. International Research Journal of Applied Finance, 7(4): 1-10.
- Gharaibeh AT, Saleh MH, Jawabreh O, and Ali BJ (2022). An empirical study of the relationship between earnings per share, net income, and stock price. Journal of Applied Mathematics, 16(5): 673-679. https://doi.org/10.18576/amis/160502
- Harban FJMJ, Ali BJ, and Oudat MS (2021). The effect of financial risks on the financial performance of banks listed on Bahrain bourse: An empirical study. Information Sciences Letters, 10(S1): 71-89. https://doi.org/10.18576/isl/10S105
- Jaradat MM, Jawabreh OA, Saleh MMA, and Abu-Eker EFM (2011). The extent of applying the methods of management accounting in planning, controlling and pricing in Aqaba hotels. European Journal of Economics, Finance and Administrative Sciences, 36: 123-132.
- Jawabreh O (2020). Innovation management in hotels industry in Aqaba special economic zone authority; hotel classification and administration as a moderator. Geo Journal of Tourism and Geosites, 32(4): 1362-1369. https://doi.org/10.30892/gtg.32425-581
- Jawabreh O, Abdelrazaq H, and Jahmani A (2021). Business sustainability practice and operational management in hotel industry in Aqaba special authority economic zone authority (ASEZA). Geo Journal of Tourism and Geosites, 38(4): 1089-1097. https://doi.org/10.30892/gtg.38414-748

- Jawabreh O, Jahmani A, Shukri MB, and Ali BJA (2022a). Evaluation of the contents of the five stars hotel website and customer orientation. Information Sciences Letters, 11(4): 1077-1085. https://doi.org/10.18576/isl/110408
- Jawabreh O, Shniekat N, Saleh MMA, and Ali BJ (2022b). The strategic deployment of information systems attributes and financial performance in the hospitality industry. Information Sciences Letters, 11(5): 1419-1426. https://doi.org/10.18576/isl/110510
- Jawabreh OA, Fahmawee EADA, Al-Rawashdeh OM, Alrowwad A, and Alrjoub AMS (2022c). Green energy products and the relationship of the customer's consideration for the environment and perceived risk involved with the mediating position of customer purchasing intentions: The point of view of foreign tourist in Jordan. International Journal of Energy Economics and Policy, 12(4): 334-341. https://doi.org/10.32479/ijeep.13265
- Nawaiseh KHA, Abd-Alkareem MH, Alawamleh HA, Abbas KM, and Orabi TGA (2021). Dimensions of corporate governance and organizational learning: An empirical study. Journal of Management Information and Decision Sciences, 24(5): 1-11.
- Oudat MS, Ali B, and Qeshta MH (2021). Financial performance and audit committee characteristics: An empirical study on Bahrain services sector. Journal of Contemporary Issues in Business and Government, 27(2): 4278-4288. https://doi.org/10.47750/cibg.2021.27.02.453
- Qeshta MH, Alsoud GFA, Hezabr AA, Ali BJ, and Oudat MS (2021). Audit committee characteristics and firm performance: Evidence from the insurance sector in Bahrain. Revista Geintec-Gestao Inovacao E Tecnologias, 11(2): 1666-1680. https://doi.org/10.47059/revistageintec.v11i2.1789
- Rahman MM, Meah MR, and Chaudhory NU (2019). The impact of audit characteristics on firm performance: An empirical study from an emerging economy. The Journal of Asian Finance, Economics and Business, 6(1): 59-69. https://doi.org/10.13106/jafeb.2019.vol6.no1.59
- Salameh A, AlSondos IA, Ali B, and Alsahali A (2020). From citizen's overview: Which antecedents' can assist to increase their satisfaction towards the ubiquity of mobile commerce applications? International Journal of Interactive Mobile Technologies, 14(17): 45-54. https://doi.org/10.3991/ijim.v14i17.16589
- Saleh M, Shniekat N, Jawabreh O, and Al Omary R (2021c). Artificial intelligence (AI) and the impact of enhancing the consistency and interpretation of financial statement in the classified hotels in Aqaba, Jordan. Academy of Strategic Management Journal, 20(3): 1-18.
- Saleh MMA and Jawabreh OA (2020). Role of environmental awareness in the application of environmental accounting disclosure in tourism and hotel companies and its impact on investor's decisions in Amman stock exchange. International Journal of Energy Economics and Policy, 10(2): 417-426. https://doi.org/10.32479/ijeep.8608
- Saleh MMA, Jawabreh O, and Abu-Eker EFM (2021b). Factors of applying creative accounting and its impact on the quality of financial statements in Jordanian hotels, sustainable practices. Journal of Sustainable Finance and Investment, 13(1): 499-515. https://doi.org/10.1080/20430795.2021.1962662
- Saleh MMA, Jawabreh OA, Al-Amro SAH, and Saleh HMI (2021a). Requirements for enhancing the standard of accounting education and its alignment with labor market requirements a case study hospitality and industrial sector in Jordan. Journal of Sustainable Finance and Investment, 13(1): 176-193. https://doi.org/10.1080/20430795.2021.1891781
- Shibly M, Alawamleh HA, Nawaiseh KA, Ali BJ, Almasri A, and Alshibly E (2021). The relationship between administrative empowerment and continuous improvement: An empirical study. Revista Geintec-Gestao Inovacao E Tecnologias, 11(2): 1681-1699.

- Shniekat N, Jawabreh O, and Saleh MMA (2021). Efficiency and effect on the competitive advantage of management information systems (MIS) in classified hotels in the city of Petra; type of management as moderator. Academy of Strategic Management Journal, 20: 1-18.
- Tabachnick BG and Fidell LS (2013). Using multivariate statistics: International edition. Pearson Education, Boston, USA.
- Wakaba R (2014). Effect of audit committee characteristics on financial performance of companies listed at the Nairobi securities exchange. M.Sc. Thesis, University of Nairobi, Nairobi, Kenya.