Board Effectiveness and its Effect on Return on Equity as a Proxy of Firms Evidence from Emerging Markets

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Abstract

The goal of this article is to see if specific board qualities affect the financial performance of Jordanian manufacturing enterprises. The research utilizes a regression model on a sample of 56 Amman Stock Exchange enterprises for the fiscal years 2017-2022. According to the regression results, board features (size, meeting, and competence) are all positive and important in affecting business success. Although this conclusion contradicts the findings of several research conducted in rich countries, it is consistent with current emerging market studies. The current study does not cover all conceivable board features that assist business success, such as significant shareholder domination on the board and promoter and institutional holdings. Further investigation might look into the board's ownership structure in order to enhance the firm's performance. The findings of this work support the thesis of several previous studies that changes in corporate governance principles in emerging markets should go beyond following best practices in established markets and take into consideration country- and firmspecific factors. Unlike most corporate governance - firm performance research, this article focuses on listed non-financial enterprises rather than listed financial organizations. This study presents a comparative investigation of the influence of board qualities on firm performance of listed manufacturing businesses from a multi-theoretical approach. Furthermore, the study focuses on corporate governance problems such as board size, meeting frequency, and board expertise, as well as their impact on business performance. The topic examines the potential influence of board

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characteristics and firm-related aspects that have attracted a lot of attention in academic research, which has mostly concentrated on researching corporate governance articles in Jordan.

Keywords: board size, board meeting, board expertise, corporate performance, return on equity, Jordan.

1. Introduction

Return on equity (ROE) is a widely used financial metric to evaluate the profitability of a firm. ROE measures the net income generated by a company as a percentage of the shareholders' equity (khalil Abdo & Ibrahim, 2021). A high ROE indicates that a company is using its resources efficiently to generate profits, while a low ROE suggests the opposite. The board of directors is the most important corporate governance mechanisms (Lutfi, Alkilani, Saad, Alshirah, Alshirah, Alrawad, ... & Ramadan, 2022; Masulis et al., 2012) and plays an instrumental role in representing and safeguarding the interests of the shareholders. The most stock exchanges have focused on corporate boards as the principal vehicles for increasing the quality of the financial information provided by a firm (Alshirah, Rahman, Mustapa, 2020; Karamanou & Vafeas, 2005). In Jordan, the Jordanian corporate governance code stated that each company must have a board selected by its shareholders (Al-Khasawneh et al., 2022). The tasks of the board of directors are ensuring the strategic guidance of the firms to monitor the management effectively, and be responsible for the company and its stakeholders. Agency conflicts can arise because the managers may have a priority to achieve their own aims and may not serve in the best interests of the shareholders. The board of directors can decrease the agency conflicts by utilizing its power to monitor and control the managers (Ananzeh, Alshirah, Alshira'h, & Al-Hazaima, 2022; Fama & Jensen, 1983; Khassawneh, 2014). Therefore, it is arguable that the board of directors has a critical role in protecting the best interests of all stakeholders against the self-interests of the management (Alshirah, Alshirah & Lutfi, 2021; Li et al., 2008).

The Organization for Economic Cooperation and Development (OECD) developed corporate governance principles, concentrating primarily on the role of boards of directors in monitoring. A good board of directors may help a company achieve good results (Alshirah, Abdul Rahman, Mustapa, & Alshira'h, 2020; Hillman et al., 2000). Furthermore, boards should serve as an internal governance mechanism and a means of managing management (Alshirah, Abdul Rahman, & Mustapa, 2019; Shleifer & Vishny, 1997). According to Masulis et al. (2012), the board of directors has two key functions: monitoring (hiring, separating, and compensating managers) and advisory (advising managers on critical strategic choices). They said

that the effectiveness of the directors in completing these responsibilities demonstrates that boards of directors are effective at creating shareholder value and assisting in corporate decision making. When board of directors is well-structured (e.g., size, meeting frequency, and expertise), When a board of directors is wellstructured (e.g., size, meeting frequency, and expertise), it has a greater ability to deter and monitor management's opportunistic behavior (Alshirah, Alfawareh, Alshira'h, Al-Eitan, Bani-Khalid, & Alsqour, 2022; Fama & Jensen, 1983). In keeping with this viewpoint, Jordan's corporate governance code emphasizes the importance of the board of directors. The code establishes regulations for the composition and organization of the board of directors in order to promote its effectiveness, primarily in terms of size, meeting frequency, and experience. As a result, considering that the board of directors' characteristics are essential indications of its efficacy (Alshira'h, Al-Shatnawi, Al-Okaily, Lutfi, & Alshirah, 2021; Amezaga-Alonso et al., 2020; Ishak, & Al-Ebel, 2013), extending the regional literature by investigating the possible effect of such stated and focused in the code attributes (i.e., size, meetings, and expertise) on the level of firms' performance in Jordan would assist regulators, policymakers, and related authorities in protecting investors' wealth and enhancing firm performance, which could extend to the entire economy.

2. Literature Review and Hypothesis Development

In this section, the study discusses in detail the three main characteristics of the board of directors and tries to develop the research hypotheses after the illustration of the logical relationship of the independent variables with the dependent variable.

2.1 Board Size

Another key facet of corporate governance that might impact business success is board size. The size of a board of directors can have an impact on decision-making and the board's capacity to properly oversee and offer strategic counsel to the management team. The number of directors who act on the board has been characterized as the board size (Alshirah, Alshira'h, & Lutfi, 2022; Minton et al., 2014). Boards of directors play an important role in corporate governance in publicly traded enterprises (Elzahar & Hussainey, 2012), and the size of the board is viewed as an important aspect determining the board's efficiency (Allini et al., 2016; Elshandidy & Neri, 2015). Furthermore, Lee and Chen (2011) contend that board size is an important component of corporate governance procedures and is used as an active instrument for successful monitoring. The Jordanian corporate governance legislation stipulates that the board membership of

shareholding enterprises listed on the ASE be between five and thirteen members (JSC, 2009).

The empirical data suggests that a bigger board size can improve management's capacity to carry out their tasks (Singh & Harianto, 1989). Larger boards might therefore help to resolve a distributional issue between inner and minority outside shareholders (Allegrini & Greco, 2013). Al-Qudah and Al-Soub (2020) discovered a negative association between board size and ROE, implying that larger boards may cause coordination issues and decision-making delays, resulting in worse business performance. Other research, however, have shown contradictory findings. In Jordan, for example, Al-Sa'eed and Al-Thuneibat (2017) discovered no significant association between board size and business success. The study analyzed a sample of 43 organizations from 2010 to 2014 and discovered that board independence and CEO duality were the most important factors of firm performance, rather than board size. Similarly, a study by Al-Dmour and Al-Hares (2019) The study looked at the effect of board size on business performance for a sample of 45 Amman Stock Exchange companies. The study discovered that board size had no significant influence on ROE, implying that board size may not be a relevant predictor of business success in Jordan. Overall, while there is no agreement in Jordan on the relationship between board size and firm performance, companies should focus on improving board independence and separating the roles of CEO and chairman, rather than solely focusing on reducing board size, to improve their performance. In addition, Henry (2008) observed that board size had a positive relationship with business value, as did Matari et al. (2014) who revealed that the board size is positively related with the performance. Cole, Daniel, and Naveen (2008), on the other hand, believe that diverse, big enterprises have an incentive to have a higher number of directors on their boards for the reasons of monitoring and advising. According to Ismail, Dunstan, and Van Zijl (2010), a large board performs its monitoring job more successfully than a small one. As a result, the current analysis predicts a favourable link between company performance and board size. As a result, the following theory is proposed:

H1: There is a positive relationship between the board size and and firms' performance.

2.2 Board Meetings

Board meetings are an important component of the corporate governance structure, where board members come together to discuss the company's strategy, performance, risks, and opportunities. The effectiveness of board meetings can have a significant impact on the performance of the firm. Active boards that hold their meetings more regularly have more probability to fulfill their duties effectively,

particularly monitoring the financial reporting (Allini et al., 2016). In other words, the regular meetings assist the board of directors in fulfilling its duties (Conger et al., 1998). Research has shown that there are several factors that can influence the effectiveness of board meetings, such as frequency, duration, agenda setting, attendance, and engagement of board members. For instance, a study by Hillman, Cannella Jr., and Paetzold (2000) found that board meeting frequency had a positive impact on firm performance, as it allowed board members to stay informed and engaged in the company's affairs.

Similarly, Eng and Mak (2003) investigated the influence of board meeting time on company performance for Hong Kong-listed companies. Longer board meetings were shown to be associated with greater business performance, since longer sessions allowed for more in-depth discussion and debate on crucial topics. Furthermore, the quality of board meeting agendas and preparation might have an impact on their efficacy. According to Millar and Hindawi (2013), the utilization of pre-meeting briefing materials and a clear agenda are connected to the efficacy of board meetings. Board member attendance and involvement are other crucial elements in evaluating the efficacy of board meetings. According to Chen and Chen (2004), the attendance rate of independent directors is positively associated to business performance, implying that having independent directors participate in board meetings might lead to improved decision-making and monitoring. In this context, Lipton and Lorsch (1992) discovered that the frequency of board meetings was positively related to the board's efficacy. Furthermore, Vafeas (1999) saw board meetings as a significant mechanism for improving board efficiency, hence meeting frequency was used to quantify board efficiency. More frequent board meetings provide its directors enough time to examine the firms' performance. That is, a board of directors that meets on a regular basis is more proactive in overseeing the business's management, and this greater frequency is predicted to lessen agency issues between a firm and its investors (Conger et al., 1998; Vafeas, 1999). Another supporting study by Schwartz-Ziv and Weisbach (2013) claims that increasing the frequency of board meetings improves corporate performance by lowering agency difficulties. Kakanda et al. (2017) explored the relationship between corporate governance and business financial performance in their study. Finally, the efficacy of board meetings can have a major impact on corporate success. Companies should consider elements like as frequency, duration, agenda setting, attendance, and involvement of board members to ensure that their board meetings are effective in delivering strategic counsel and supervision to the management team. Their research discovered a link between the frequency of board meetings and business success. As a result, the following theory is proposed:

H2: There is a positive relationship between frequency of board meetings and firms' performance.

2.3 Board Expertise

Board expertise is an important component of corporate governance since it may add to the board's effectiveness in giving strategic counsel and supervision to the management team. Board members with appropriate knowledge and experience in the company's sector or function can give useful insights, guidance, and direction to the management team, eventually leading to improved business performance. Demands for expanded engagement in strategic decision-making have compelled enterprises and boards to assess whether members of the board of directors have the necessary skills and expertise to participate fully in these processes (Roy, 2008). As a result, board experience promotes improved internal control (Naiker & Sharma, 2009). According to agency theory, directors can use their skills and knowledge to help dissuade management's opportunistic behavior (Fama & Jensen, 1983). Furthermore, directors that serve on numerous company boards develop greater information, skills, and competence, which aids them in carrying out their oversight tasks on managers' actions (Idris & Mohammed, 2017). Several studies have been conducted to investigate the association between board expertise and business performance. Finkelstein and Hambrick (1996) discovered, for example, that board expertise, as evaluated by the percentage of outside directors with industry-specific experience, was positively connected to business performance because it provided the board with necessary information and abilities to make educated judgments (Idris & Mohammed, 2016). Similarly, Chang, Chen, and Cheng (2008) investigated the influence of board experience on company performance for Taiwan Stock Exchange-listed companies. The study discovered a link between board competence and business success, as it aided in improved decision-making and board monitoring.

Furthermore, Othman, Zainuddin, and Rahman (2012) investigated the influence of board knowledge on business performance in Malaysian listed enterprises. The study discovered a positive association between board competence and company performance as evaluated by return on assets (ROA) and return on equity (ROE), implying that board experience plays an essential role in improving firm performance. In this context, Alzoubi and Selamat (2012) propose that audit committees with financial and accounting competence may increase their monitoring abilities. Similarly, Alzoubi (2014) found that the financial knowledge of the board is positively associated to the quality of financial reports in Jordan. Furthermore, directors with significant experience and positive occupational traits may enhance the board's competence in monitoring the management more

effectively (Beasley, 1996). Manager opportunism becomes less common as the monitoring function gains skill (Anderson et al., 2004). In the similar spirit, Bedard et al. (2004) discovered that the presence of expertise on the board of directors acts as a deterrent to profits management tactics. As a result, multiple board experience is particularly advantageous since such directors, as members of other organizations' boards, may contribute significant insights (Dahya, Lonie, & Power, 1996). As a result, board members' abilities, experience, expertise, and knowledge are likely to impact their successful monitoring of CEO activities, reviewing management strategies, and planning succession. According to resource dependency theory, expert boards with more members who have appropriate knowledge and skills have a greater ability to contribute more external resources. Similarly, Kakanda et al. (2017) found that board expertise has positive relationships with the firm's performance. Hence, this study hypothesises the following hypothesis:

H3: There is a positive relationship between board expertise and firms' performance.

3. Research Design

3.1 Sample and Data Collection

The study population included all 56 industrial enterprises registered on the Amman Stock Exchange, with the final sample consisting of 195 companies that undertook the analytic procedure during a three-year period, accounting for 70% of the population. To obtain the necessary data for the study variables, the public financial reports of the firms included in the research sample were employed. This research spans three years, from 2017 to 2022, with a focus on enterprises whose financial situation remained constant over that time.

3.2 Research Model and Measurement of Variables

To evaluate the study Hypotheses 1, 2, and 3, we estimate the following equations, which illustrate the relationships between the board of directors and business performance.

$$ROE_{it} = \beta_0 + \beta_1 BSIZ_{it} + \beta_2 BME_{it} + \beta_3 BEXP_{it} + \varepsilon_{it}$$

Where:

Table 1 Measurement of Variables

| Variable | Measurement |
|----------|--|
| ROE | Return on Equity measured by "net income/ total equity" (Zhou et al., 2018). |
| BSIZ | Board Size measured by "total number of directors on a firm's board of directors" (Qadorah et al., 2018). |
| BME | Board Meeting measured by the "number of meetings held by BOD's during a year" (Qadorah et al., 2018). |
| BEXP | Board financial expertise calculated as a "dummy variable equal 1 if the board's members have financial expertise and 0 otherwise" (Al-Sraheen et al., 2014) |

4. Results and Discussions

4.1 Descriptive Statistics

Table 2 explains the descriptive analysis for 117 firms that met the necessary data from the years of 2017 to 2022.

Table 2 Descriptive Statistics

| Variables | Minimum Maximum Mean | | Mean | Std. Deviation | |
|-----------|----------------------|-------|--------|----------------|--|
| ROE | -20.69 | 18.37 | 6.238 | 10.405 | |
| BSIZ | 8.00 | 15.00 | 11.923 | 1.707 | |
| BME | 2.00 | 9.00 | 5.410 | 2.160 | |
| BEXP | .00 | 1.00 | .717 | .455 | |

Table 2 reveals that the average ROE is 6.238, which is too near to the mean of 6.891 provided by (Al Daoud, Al-Sraheen, & Alslehat, 2015), with a minimum of -20.69 and a high of 18.37. Furthermore, the average board size is around 12, which meets the criteria of the Jordanian Corporate Governance Code. According to the findings, nearly 71% of Jordanian firms have board members with financial experience, indicating a strong adherence to Jordanian corporate governance rules. The boards of directors of Jordanian enterprises meet on a regular enough basis to carry out their obligations and functions; the results show that they meet 5 times per year on average to discuss a variety of key problems to the organization including the performance of management.

4.2 Correlation Analysis

Table 3 shows the correlations between the independent variables and dependent variable

Table 3 Correlation Matrix

| | ROE | BSIZ | ВМЕ | ВЕХР |
|-----|-----|------|-----|------|
| ROE | 1 | | | |

| BSIZ | .387* | 1 | | |
|------|-------|-----|------|---|
| ВМЕ | .328* | 020 | 1 | |
| BEXP | .249 | 265 | .067 | 1 |

The correlation matrix of the research variables is depicted in Table 3. According to the literature, the multicollinearity problem emerges when the correlation between two variables is 90% or above. The strongest correlation value obtained, as indicated in the table, is 0.387 percent between board size (BSIZ) and (ROE). Overall, the current study does not have an issue with multicollinearity. Furthermore, as shown in table (3), there is a positive relationship between ROE and other variables in the study model.

4.3 Regression Analysis

The adjusted R2 value for the study model is 32.8, which is higher than the R2 of 14.3 reported by Al-Sraheen et al., (2014) in Jordan. This outcome demonstrated the research model's validity.

According to the findings of this study, the first research hypothesis on the link between board size and firm performance, board size (BSIZ) was shown to have a significantly positive effect on firm performance (t = 3.541, p 0.001), as shown in Table 4. Our findings were consistent with both the agency theory and the resource dependence theory, which both confirmed the presence of a positive link between board size and corporate performance favoring larger boards. As a result, the initial research hypothesis.

Table 4 Regression Analysis

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------------------------------|--------------------------------|---------------|------------------------------|----------|------|
| | В | Std. Error | Beta | t | Sig. |
| (Constant) | -43.276 | 11.431 | | -3.786 | .001 |
| BSIZ | 2.977 | .841 | .488 | 3.541 | .001 |
| ВМЕ | 1.509 | .642 | .313 | 2.351 | .024 |
| BEXP | 8.161 | 3.155 | .358 | 2.587 | .014 |
| N=117 R ² =32.8 | F sig.= 7.179 | | Sig. 0.001 | Adjusted | |

Furthermore, the frequency of board meetings (BME) has a significant positive link with ROE (t = 2.351, Sig. 0.024). This study provides more proof of the usefulness and relevance of board meetings to Jordanian enterprises. The findings are congruent with previous study done in Jordan by Al-Daoud, Saidin, and Abidin (2016). Furthermore, this finding is compatible with agency theory, which states that board meetings aid in the creation of robust monitoring and controlling activities to monitor management behavior and improve

performance. As a result, the second research hypothesis is supported by this study.

Table 4 also depicts the association between financial skill and ROE. This study implies that financial expertise and ROE have a positive connection. Table 4 depicts the association between board financial knowledge and performance is positive and significant (t = 2.587, P = .014). This conclusion is consistent with our expectations, and this relationship highlights the need of accounting and financial understanding for board directors in order to ensure transparent financial information and minimize manipulation difficulties. Previous study has found that financial experience improves the quality of financial reporting (Agrawal & Chadha, 2005;). The bottom line is that, based on the current study's findings and prior research' findings, hypothesis H3 is validated.

5. Conclusion

Board effectiveness is an important facet of corporate governance that has an impact on business success. Corporate governance has received increased attention from regulators, investors, and academics in Jordan, as it has in many other nations, in recent years. One of the most essential variables in determining a company's success is the efficacy of its board of directors in carrying out its obligations. The purpose of this study is to look at the link between the board of directors' characteristics, which are represented by the size of the board, the number of meetings, and the board members' financial knowledge. Following the validation of the research hypotheses, the study indicated that all of the aforementioned board qualities have a positive and substantial relationship with business success, and that the results are also consistent with the agency theory. This study contributed to providing good confirmation about the most important characteristics of the board of directors, which together constitute an effective board of directors in carrying out its controlling role, particularly in emerging markets where companies do not strictly adhere to corporate governance requirements...

6. Implications

Companies ought to think about increasing the size of their boards in order to boost their effectiveness, as there is a positive correlation between board size and firm performance. When it comes to making decisions and keeping an eye on the management team, boards that are larger tend to be generally more nimble, effective, and efficient. Companies can improve coordination and decision-making by increasing board size, which can ultimately result in improved firm

performance. The positive connection between executive gathering recurrence and firm execution recommends that organizations ought to zero in on having customary and continuous executive gatherings. Board members can stay up to date and involved in the business's affairs by attending regular meetings, giving the management team strategic direction and oversight. Companies can boost their decisionmaking and monitoring efficiency by holding board meetings more frequently, resulting in improved company performance. Companies ought to concentrate on selecting board members with relevant financial expertise and experience due to the positive correlation between board financial expertise and firm performance. Members of the board who are financially savvy may be able to offer the management team valuable insights, guidance, and direction, which will ultimately result in improved financial decision-making and performance. Companies can improve their ability to provide strategic guidance and oversight by increasing the financial expertise of their boards, resulting in improved firm performance.

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Bibliography

- Alshirah, M. H., Rahman, A. A., & Mustapa, I. R. (2020). Board of directors' characteristics and corporate risk disclosure: the moderating role of family ownership. EuroMed Journal of Business, 15(2), 219-252.
- Ananzeh, H., Alshirah, M. H., Alshira'h, A. F., & Al-Hazaima, H. (2022). Political connection, family ownership and corporate philanthropy: empirical evidence from Jordan. Journal of Accounting in Emerging Economies, (ahead-of-print).
- Alshirah, M., Alshirah, A., & Lutfi, A. (2021). Audit committee's attributes, overlapping memberships on the audit committee and corporate risk disclosure: Evidence from Jordan. Accounting, 7(2), 423-440.
- Alshirah, M. H., Abdul Rahman, A., Mustapa, I. R., and Alshira'h, A. F. (2020). The Effect of Firms Characteristics on Corporate Risk Disclosure: Empirical Evidence from Amman Stock Exchange. International Journal of Academic Research in Accounting, Finance and Management Sciences. 10(3), 336-348
- Alshirah, M. H., Abdul Rahman, A., & Mustapa, I. R. (2019). The role of foreign directors in corporate risk disclosure: Empirical evidence from Jordan. International Journal of Financial Research, 10(4), 119.
- Alshirah, M. H., Alfawareh, F. S., Alshira'h, A. F., Al-Eitan, G., Bani-Khalid, T., & Alsqour, M. D. (2022). Do Corporate Governance and Gender Diversity

- Matter in Firm Performance (ROE)? Empirical Evidence from Jordan. Economies, 10(4), 84.
- Alshirah, M. H., Alshira'h, A. F., & Lutfi, A. (2022). Political connection, family ownership and corporate risk disclosure: Empirical evidence from Jordan. Meditari Accountancy Research, 30(5), 1241-1264.
- Alshira'h, Ahmad Farhan, Moh Alsqour, Abdalwali Lutfi, Adi Alsyouf, and Malek, Alshirah. 2020. A Socio-Economic Model of Sales Tax Compliance. Economies 8: 88. https://doi.org/10.3390/economies8040088.
- Alshirah, Malek, Abdalwali Lutfi, Ahmad Alshirah, Mohamed Saad, N. M. E. S. Ibrahim, and Fathallah Mohammed. 2021. Influences of the environmental factors on the intention to adopt cloud based accounting information system among SMEs in Jordan. Accounting 7: 645–54. https://doi.org/10.5267/j.ac.2020.12.013.
- Abraham, S., & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. The British Accounting Review, 39, 227–248.
- Al-Khasawneh, A. L., Eyadat, H. M., Alrawad, M., Almaiah, M., & Lutfi, A. A. (2022). The impact of organizational training operations management on job performance: An empirical study on Jordanian government institutions. Global Business Review, 09721509221133514.
- Alshira'h, A. F., Al-Shatnawi, H. M., Al-Okaily, M., Lutfi, A., & Alshirah, M. H. (2021). Do public governance and patriotism matter? Sales tax compliance among small and medium enterprises in developing countries: Jordanian evidence. EuroMed Journal of Business, 16(4), 431-455.
- Alqudah, H., Lutfi, A., Al Qudah, M. Z., Alshira'h, A. F., Almaiah, M. A., & Alrawad, M. (2023). The impact of empowering internal auditors on the quality of electronic internal audits: A case of Jordanian listed services companies. International Journal of Information Management Data Insights, 3(2), 100183.
- Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. The Journal of Law and Economics, 48(2), 371-406.
- Al Daoud, K. A., Al-Sraheen, D. O., & Alslehat, N. A. (2015). The moderating effect of an audit committee on the relationship between non-audit services and corporate performance. Research Journal of Finance and Accounting, 6(14), 170-179.
- Al-Daoud, K. I., Saidin, S. Z., & Abidin, S. (2016). Board meeting and firm performance: Evidence from the Amman stock exchange. Corporate Board: Role, Duties and Composition, 12(2), 6-11.
- Allini, A., Rossi, F., & Hussainey, K. (2016). The board's role in risk disclosure: An exploratory study of Italian listed state-owned enterprises. Public Money & Management, 36(2), 113–120.
- Alzoubi, E. S. S. (2014). Board characteristics and financial reporting quality: evidence from Jordan. Corporate Ownership and Control, 11(3), 8-29.
- Alzoubi, E. S. S., & Selamat, M. H. (2012). The effectiveness of corporate governance mechanisms on constraining earning management:

- literature review and proposed framework. International Journal of Global Business, 5(1), 17-35.
- Amezaga-Alonso, M. T., Cilleruelo-Carrasco, E., Zarrabeitia-Bilbao, E., & Ruizde-Arbulo-López, P. (2020). Present and future of risk disclosure in Spanish non-financial listed companies. Revista de Contabilidad-Spanish Accounting Review, 23(1), 18-49.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. Journal of accounting and economics, 37(3), 315-342.
- Beasley, M. (1996) An empirical analysis of the relation between the board of director composition and financial statement fraud. Accounting Review 71, 443-465.
- Bedard, J., Chtourou, S.M., Courteau, L. (2004), The effect of audit committee expertise, independence, and activity on aggressive earnings management. Auditing: Journal of Practice and Theory, 23(2), 13-36.
- Conger, J., Finegold, D., & Lawler, E. 1998. Appraising board room performance. Harvard Business Review, 76, 136–48.
- Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. The Journal of Risk Finance, 13(2), 133–147.
- Fadzil, F. H. B., & Ismail, S. S. B. S. (2014). The influence of corporate ownership structure and board members' skills on the accounting conservatism: Evidence from non-financial listed firms in Amman stock exchange. International Journal of Accounting and Financial Reporting, 4(1), 177.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. The Journal of Law and Economics, 26(2), 327-349.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. The Academy of Management Review, 28(3), 383-396.
- Hillman, A. J., Canella, A. A., & Paetzold, R. L. (2000). The resource dependency role of corporate directors: Strategic adaptation of board composition in response to environmental change. Journal of Management Studies, 37(2):235–255.
- Idris, K. M., & Mohamad, R. (2016). The influence of technological, organizational and environmental factors on accounting information system usage among Jordanian small and medium-sized enterprises. International Journal of Economics and Financial Issues, 6(7), 240-248.
- Idris, K. M., & Mohamad, R. (2017). AIS usage factors and impact among Jordanian SMEs: The moderating effect of environmental uncertainty. Journal of Advanced Research in Business and Management Studies, 6(1), 24-38.
- Ishak, Z., & Al-Ebel, A. M. (2013). Board of Directors, Information Asymmetry, and Intellectual Capital Disclosure among Banks in Gulf Co-Operation Council (Lembaga Pengarah, Maklumat Asimetri dan Pendedahan Modal Intelek dalam Kalangan Bank di Majlis Kerjasama Teluk). Jurnal Pengurusan, 37(2013), 33–43.

- Khassawneh, A. A. L. (2014). The influence of organizational factors on accounting information systems (AIS) effectiveness: A study of Jordanian SMEs. International Journal of Marketing and Technology, 4(10), 36-46.
- khalil Abdo, A. A., & Ibrahim, N. M. E. (2021). Effect of Adopting the Criterion of Revenue from Contracts with Clients on Accounting Conservatism. Proceedings of ICGER 2021, 55.
- Kakanda, M. M., Salim, B., & Chandren, S. (2017). Corporate Governance, Risk Management Disclosure, and Firm Performance: A Theoretical and Empirical Review Perspective. Asian Economic and Financial Review, 7(9), 836–845.
- Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. Journal of Accounting Research, 43(3), 453–486.
- Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. Accounting and Business Research, 38(2), 137-159.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. The Business Lawyer, 48 (1), 59-77.
- Lutfi, A., Alkilani, S. Z., Saad, M., Alshirah, M. H., Alshirah, A. F., Alrawad, M., ... & Ramadan, M. H. (2022). The Influence of Audit Committee Chair Characteristics on Financial Reporting Quality. Journal of Risk and Financial Management, 15(12), 563.
- Lutfi, Abdalwali, Maryam Ashraf, Waqas Ahmad Watto, and Mahmaod Alrawad. 2022e. Do Uncertainty and Financial Development Influence the FDI Inflow of a Developing Nation? A Time Series ARDL Approach. Sustainability 14: 12609.
- Masulis, R. W., Wang, C., & Xie, F. (2012). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. Journal of Accounting and Economics, 53(3), 527-554.
- Qadorah, A. A. M., & Fadzil, F. H. B. (2018). The Effect of Board Independence and Board Meeting on Firm Performance: Evidence from Jordan. Journal of Finance and Accounting, 6(5), 105.
- Qadorah, A. A. M., & Fadzil, F. H. B. (2018). The relationship between board size and CEO duality and firm performance: Evidence from Jordan. International Journal of Accounting, Finance and Risk Management, 3(3), 16-20.
- Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. Journal of International Accounting, Auditing and Taxation, 31, 20-36.