

CEO Compensation and SMEs Performance: A Structural Equation Modelling Approach from Jordanian Listed SMEs

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Abstract

This study's main goal is to discover whether the CEO's cash comparison affects SMEs'



performance, with the bonus having a favorable impact instead. The research comprises an analysis of the SMEs mentioned in the Jordanian Ministry of Industry and Trade. To test hypotheses, data were meticulously collected from a sample of 80 SMEs in Amman, Jordan, a pivotal business hub in the country. Utilizing Structural Equation Modelling through Smart PLS 3, our chosen methodological framework facilitated a comprehensive analysis of the intricate relationships between CEO compensation variables and SME performance. The study's conclusions show a substantial correlation between the performance of SMEs included and the components of CEO compensation in the Jordanian Ministry of Industry and Trade. Despite this, it has been discovered that a few additional incentive factors significantly improve performance in SMEs. This study has shown that some incentive contract theories are appropriate for businesses with specific sizes and operating in particular industries.

Keywords: CEO, sustainability, board of directors, SMEs, performance

1. Introduction

It is impossible to overstate the significance of small and medium-sized enterprises (SMEs), particularly for the development and expansion of developing economies. economies (Chege & Wang, 2020; Qalati, Yuan, Khan, & Anwar, 2021). The fact that SMEs contribute significantly to gross domestic product (GDP) and create jobs in developing nations helps to understand their role in society (Asad, Altaf, Israr, & Khan, 2020; Asad, Asif, Bakar, & Altaf, 2021; Khushi, Din, & Sulaiman, 2020; Sulaiman & Asad, 2023). Simultaneously, SMEs play a major role in the export earnings of developing nations (Asad & Kashif, 2021; Majali, Alkaraki, Asad, Aladwan, & Aledeinat, 2022; Mansour, Ahmi, & Popoola, 2021). Jordan, a developing nation, is no exception to this rule and is regarded as a haven for SMEs, with 98% of all businesses there being SMEs (Alshira'h, Alsqour, Lutfi, Adi, & Alshirah, 2020; Ta'Amnha, Magableh, Asad, & Al-Qudah, 2023). Less than 19 employees make up two-thirds of SMEs, but as their performance is dropping (Mansour, Ahmi, & Popoola, 202; Ullah et al., 2021; Satar, Alarifi, Alkhoraif, & Asad, 2023; Xie et al., 2023), SMEs in Jordan are having performance problems (Alkazali, Al-Eitan, & Aleem, 2021; Mansour, Ahmi, & Popoola, 2021). Among the various difficulties For SMEs in Jordan, Chief Executive Officer (CEO) compensation is the biggest obstacle.

The directors of the company may be seen as risk-averse, just like many reasonable people. (Teixeira & Carvalho, 2023). The implications of like behaviors explain that the majority of executives would want their comparison organized in a manner that they bear less personal risk (Asad, Asif, Allam, & Sheikh, 2021). In order to lessen their "personal" risk, executives may interact in activities that reduce the company's risk (Tumwebaze et al., 2018). These actions may negatively impact the wealth of investors (Asif, Asad, Kashif, & Haq, 2021). For a very long time, there has been much discussion about executive compensation. Chief Executive Officer (CEO) compensation and its correlation with performance have received a great deal of attention (Tosi & Gomez-Mejia, 2017). More than ever, investors appear to be persuaded that there is no relationship between executive compensation and business performance. This critique stems from rising bonuses and salaries during periods of low performance and finances.



Agency theory states that when an agent, like a CEO, sets an agenda that runs counter to the owners' interests, there is an agency problem (Dunning, 2012). In corporations, this means that managers are typically insiders with regard to the businesses they operate and therefore more knowledgeable than the principals (Hannafey & Vitulano, 2013). The directors' board would be unable to verify that the managers were genuinely working in the best interests of the owners (Basco & Voordeckers, 2015). When an executive has no individual monetary stake in the choices and results, a principal agency problem is more likely to arise (Wright & Siegel, 2021). To the detriment of the company, managers could, for instance, act opportunistically in pursuing their personal interests. It is known that managers will spend company money on pricey perks. (e.g., company jets and expensive art), engage in power struggles, invest time and money in pet projects (initiatives in which they have a personal interest but which have limited market potential), and reject or sabotage alluring merger offers because the latter could increase the risk to employment (Puyvelde, Caers, Bois, & Jegers, 2012). Therefore, by adjusting the executives based on their financial returns to the owners, the issue of principal agency conflict can be avoided. According to earlier research, executive compensation linked to business performance may encourage executives to make more decisions that maximize value for the owners. Thus, the primary goal of this research is to investigate, using empirical data, whether CEO compensation and firm performance are related in 80 SMEs that are listed with the Jordanian Ministry of Industry and Trade.

2. Literature Review and Theory

Any study attempting to ascertain whether there exists a connection between executives' comparability and effectiveness starts with agency theory. There are two problems in agency relationships that are addressed by agency theory. The first is the agency problem, which occurs when the owners' and managers' goals are at odds with one another and when it is costly or difficult for the principal to confirm what the agency is truly doing (Alajmi & Worthington, 2021). The issue of risk sharing is the second one. When there are disparities between the agent and the principal sentiments and inclinations regarding threat, this problem occurs (Salvioni & Gennari, 2019). For example, executives may support more diversification efforts because they boost the company's size and, consequently, executive compensation (Arayssi, Jizi, & Tabaja, 2020). However, because of the possibility that these initiatives will devalue their property, the owners might be against them.

The theory outlines the optimal way to classify partnerships wherein a different party (the agent, defined as the Chief Executive Officer) accepts the task after one party (the principal, defined as the owners) decides what needs to be done (Victor, ul Haq, Sankar, Akram, & Asad, 2021). The theory, among other things, contends that difficult monitoring conditions—like incomplete information and uncertainty—may give rise to an agency problem, such as moral hazard, which is a common issue in the contracting of labor disputes (Alajmi & Worthington, 2021). This is a circumstance wherein the principal is unsure of whether the agent has given it his all. Anytime two parties enter a risk-sharing arrangement, and their private actions have an impact on the overall profitability of the result, moral hazard issues may arise (Yusoff, Mohamad, & Darus, 2013). Optimal risk sharing is typically excluded in cases like this because it does not provide the right incentives to make the right



choice (Ali, Liu, & Su, 2018). Compensation structures can be a manifestation of moral hazard issues. Ever since, the CEO's earnings have remained constant despite the owner's varying levels of profit from his labor; therefore, a set income could act as a deterrent to him assuming calculated risks, optimizing value, and giving his all (Chit, 2019). There must be a way to replace, in order to address this situation, some risk sharing where incentives can be used to achieve the desired results (Dwaikat & Queiri, 2020). The degree of risk sharing between the principal and the agent will determine the course of action that is best for the agent. Contracts with incentives can provide the right incentives for risk sharing (El-Bassiouny & El-Bassiouny, 2019). The theory of the moral hazard problem suggests substituting compensation tied to the profits of the SMEs for fixed wages in order to incentivize the Chief Executive Officer to perform to the best of his or her abilities (Erkan-Barlow & Wells-Dietel). By making an executive's compensation performance-based, ownership rights serve to lessen the incentive for moral hazard.

The CEO incentive programs include salary, which is a set sum distributed throughout the year. The length of employment, prior efficiency, tenure in years, living expenses (inflation), and other factors may all be considered when determining the salary from year to year. Likewise, the CEO incentive programs include bonuses, which are a variable total that is frequently paid all at once at the year's conclusion or the next year (Jouini, Ajina, & Derbali, 2018). Bonuses are determined by performance and frequently depend on meeting predetermined performance standards (Kahan & Rock, 2020). Bonuses are typically given out in the event that predetermined performance thresholds or limits are crossed (Kavitha, Nandagopal, & Uma, 2019). Similarly, the CEO incentive programs include stock options, in which the CEO has the option to purchase business stock at a fixed price that is higher than the stock's current market value. This offer, which is only good for a limited time, will incentivize the CEO to raise stock prices so that they can profit from the difference between the current stock price and the price they set for the future (Nasrallah & Khoury, 2022). Finally, the CEO incentive programs include restricted stock awards, which are shares granted to the CEO or offered to them at a steep discount and are known as restricted stock awards (Nazir & Afza, 2018). There are some limitations on these stocks. These limitations could mean that the stocks cannot be sold for a set period or can't be sold before a set of performance standards are satisfied (Teixeira & Carvalho, 2023; Arindi et al., 2023).

When determining an agent's compensation, an incentive contract should be set up so that the agent must meet predetermined "incentive" targets in order to fulfill the terms of the contract. The incentive contracts are meant to encourage agents' efforts while discouraging waste and inefficiency on their part (Costandi, Hamdan, Alareeni, & Hassan, 2019). A fixed-price contract is one type of incentive contract. Because of this, the contract covers a standard profit, and exceptional performance may necessitate the payment of an additional award fee (Suhadak, Kurniaty, Handayani, & Rahayu, 2018). A higher proportion of equity-based executive remuneration will encourage the CEO to make more risk-averse choices that serve the owners' interests (Black, Jang, & Kim, 2006). When it comes to the contract, the duration of performance needs to be such that the interests of the owners and the top manager are aligned (Puni & Anlesinya, 2020). Incentive contracts usually include a base salary, annual



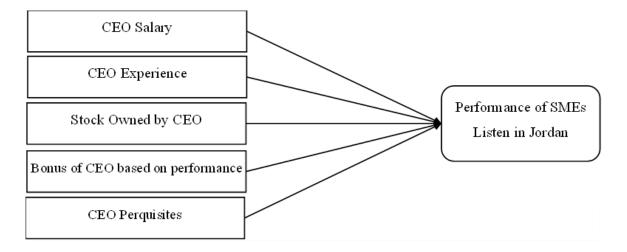
cash incentives, equity-based incentives, and retirement plans. Seventy percent of the compensation packages for the eighty SMEs under observation are equity-based (Black, Jang, & Kim, 2006). The yearly cash incentive, which is contingent upon performance standards and may be disbursed in the subsequent year, and the base salary are both one-time lump sum payments that are given at the conclusion of the fiscal year (Saidat, Silva, & Seaman, 2019). Long-term incentive plans (LTIP) are incentives that are based on equity. They come in the form of deferred share units, stock appreciation rights (SAR), restricted stock plans, phantom stock plans, stock option plans, and restricted stock plans (Endrikat, Villiers, Guenther, & Guenther, 2021). The stock option plan links compensation to the interests of owners because the value of the inducement is directly correlated with the company's future stock value. The primary goal of this plan is to incentivize option holders to maximize owners' value in the long run (Bartholomeusz & Tanewski, 2006). It lets the company reward experienced and capable top managers for their long-term performance while also attracting and keeping them (Bae, Masud, Kaium, & Kim, 2018). The most popular type of long-term incentive plan appears to be a stock option plan (Almansour, Asad, & Shahzad, 2016). One potential issue with utilizing stock options as the main component of an incentive contract is that, in contrast to the owner, who can insure against the risk associated with their option (i.e., trade the option or short sell it), a CEO is not permitted to take any of these actions (Hannafey & Vitulano, 2013). Furthermore, unlike principals, who can diversify their assets, company executives are unable to reduce some of their risk because a sizable portion of their assets—such as their salary in the form of stock options—are invested in the company.

2.1 Agency Theory and Incentive Compensation

According to agency theory, executives are encouraged to make the right kind of efforts on behalf of owners when their compensation is linked to the success of the company or the wealth of the owners (Zaman, Jain, Samara, & Jamali, 2022). Value-enhancing incentives can be offered by compensation policies via a variety of methods (Dunning, 2012). One example of an internal control mechanism is executive compensation. Incentive compensation schemes include share ownership schemes, share options, and bonuses based on performance. Executives' work locations are determined by their compensation package, and their level of effort is influenced by it. Risk-averse owners are more likely to favour a compensation plan with the highest degree of performance-based variability (Hannafey & Vitulano, 2013). Nonetheless, the inclination of a risk-averse executive is to seek a compensation package that offers the highest level of certainty (Ratmono, Nugrahini, & Cahyonowati, 2021). Therefore, it is necessary to weigh the interests of owners and executives when determining the degree to which compensation is dependent on company performance (Salvioni & Gennari, 2019). Over the past ten years, innovations in compensation policy have drawn a lot of attention (Khan, Asad, Khan, Asif, & Aftab, 2021). Often, the goal of these innovations has been to rebalance certain performance-dependent components or long-term and more immediate forms of compensation (Fernando, 2013). This paper only addresses CEO cash compensation, despite the fact that numerous compensation plans have been developed to address the agency problem. In order to maintain his or her position and the compensation that goes along with it, a manager acts in their own best interests. Models that have not been frequently



utilized in studies on SMEs are presented in this paper.



3. Method

The current study adopted a cross-sectional research design to establish the effect of CEO compensation on the performance of SMEs in Jordan. Thus, to test the hypotheses set under this study, data were collected from 80 SMEs (Zikmund, Carr, & Griffin, 2013) operating in Amman, Jordan, which is the hub of businesses and SMEs in Jordan. In total, 200 questionnaires were distributed, and finally, 80 complete, usable questionnaires were included in the analysis (Quinlan, Zikmund, Babin, Carr, & Griffin, 2018). The researchers applied probability sampling to increase the generalizability of the results. The researchers adopted the instruments from prior studies; therefore, there was no need for pre-testing. The items for performance of SMEs were adopted from Asad, Shabbir, Salman, Haider, & Ahmad (2018), and the items for CEO compensation were adopted from Tosi & Gomez-Mejia (2017). The items in the research instrument were evaluated on a 5-point Likert scale. To test the hypothesis, researchers used structural equation modeling using Smart PLS 3. In order to confirm the generalizability and validity of the findings, the validity and reliability of the instrument are necessary; therefore, researchers evaluate item loads to confirm the suitability of each and every item. Afterward, Cronbach's alpha, composite reliability, average variance extracted, and discriminant validity were also analyzed (Hair, Ringle, & Sarstedt, 2013).

4. Results

Due to the fact that the instruments used for the analysis were modified from various studies carried out in various contextual settings, sectors, and organizational sizes, it was necessary to confirm the instrument used for data collection. First, item loadings were measured in this regard, and items with loading values greater than 0.7 were considered in the model (Henseler, Ringle, & Sinkovics, 2009). Table 1 lists the outcomes of item loadings.



Table 1. Item Loadings

Items	CEO	CEO	CEO	Bonus based	Stock Owned	Performance
	Salary	Perquisites	Experience	on Performance	by CEO	of SMEs
	(CS)	(CP)	(CE)	(CBP)	(SOC)	(PSME)
CS1	0.880					
CS2	0.868					
CS3	0.902					
CP1		0.942				
CP2		0.908				
CP3		0.966				
CE1			0.788			
CE2			0.870			
CE3			0.897			
CBP1				0.872		
CBP2				0.929		
CBP3				0.963		
SOC1					0.926	
SOC2					0.905	
SOC3					0.915	
PSME1						0.804
PSME2						0.981
PSME3						0.584
PSME4						0.816
PSME5						0.905
PSME6						0.762
PSME7						0.736

Following the verification that the instrument's items have adequate loading values, the overall dependability of every construct has been assessed. Table 2 lists Cronbach's Alpha, Composite Reliability, and Average Variance Extracted as methods for confirming the constructs' validity and reliability.

Table 2. Reliability and Validity

Constructs	Cronbach's	Composite	Average Variance	
	Alpha	Reliability	Extracted (AVE)	
Bonus of CEO Based on Performance	0.911	0.944	0.850	
CEO Experience	0.814	0.889	0.727	
CEO Perquisites	0.933	0.957	0.882	
CEO Salary	0.859	0.914	0.780	
Performance of SMEs	0.921	0.937	0.682	
Stock Owned by CEO	0.904	0.940	0.838	

after verifying the validity and reliability of the variables. Making sure that each construct's materials are distinct from those used in the other was the next step. In place of the well-known Fornell-Larcker Criterion. Table 3 mentions the analysis's conclusions.



Table 3. Discriminant Validity

Constructs	CBP	CE	CP	CS	PSME	SOC
Bonus of CEO Based on Performance	0.922					
CEO Experience	0.697	0.853				
CEO Perquisite	0.437	0.593	0.939			
CEO Salary	0.550	0.607	0.562	0.883		
Performance of SMEs	0.489	0.644	0.642	0.680	0.826	
Stock Owned by CEO	0.486	0.552	0.434	0.702	0.605	0.916

Bootstrapping has been used to validate the inner model in order to identify the relationship between the variables and to confirm the dependence of Performance of SMEs over the Compensation and benefits given to the CEO of the enterprise, after it has been determined that the instrument is reliable, and the overall outer model is satisfactory. Table 4 includes a mention of the boot strapping findings.

Table 4. Path Coefficients

	Original	Sample	Standard Deviation	T Statistics	P
	Sample (O)	Mean (M)	(STDEV)	(O/STDEV)	Values
Bonus of CEO Based on	0.437		0.169	2.586	0.012
Performance -> PSME					
CEO Experience -> PSME	0.337		0.168	2.001	0.051
CEO Perquisite -> PSME	0.289		0.117	2.464	0.014
CEO Salary -> PSME	0.269		0.136	1.982	0.047
Stock Owned by CEO -> PSME	0.378		0.128	2.953	0.001

The results of the path coefficients showed that the performance of SMEs is significantly impacted by each of the five independent variables that make up CEO compensation. Blind folding has been used to further validate the model's predictive relevance; the outcomes are shown in Table 5.

Table 5. Construct Cross validated Redundancy.

	SSO	SSE	Q2 (=1-SSE/SSO)
Performance of SMEs	693.000	425.099	0.387

The computed value in the table above is greater than 0, indicating that the model has strong predictive relevance.

5. Conclusions

The primary data-based findings verified that CEO compensation enhances performance. The researchers used structural equation modeling to ascertain the connection between the performance of SMEs in Jordan and the CEO component. P-values for SMEs' performance are less than 0.05, meaning that at a 95% confidence level, significant relationships have been found. The consistency of these findings strongly implies that, in developing nations such as Jordan, there is a strong correlation between the performance of SMEs and CEO compensation components. According to this data, incentive compensation plans are essential



for managing the principal-agency issue. These results lend credence to earlier research suggesting that the ability to measure performance accurately may be a determining factor in incentive compensation programs' tendency to align owners' and executives' interests. Executive compensation is thought to be an internal system that could assist in resolving agency disputes between managers and owners. A number of creative incentive and compensation plans have been developed to link executive salaries to the wealth of owners. In emerging economies such as Jordan, this paper investigates the relationship between CEO cash compensation and performance. Given that executive compensation and corporate governance reforms are relatively new mandates, these markets offer a unique opportunity to study the effects of incentive compensation on performance. In emerging markets, the use of compensation schemes is becoming more widely accepted. The main goal of this paper is to analyze the impact of a CEO cash compensation scheme on performance. The relationship between the CEO's percentage ownership stake and monetary compensation, as well as company performance, is investigated.

The usefulness of a CEO compensation plan for raising performance in developing economies has been investigated in this paper. In summary, the lack of evidence found in this paper supports the hypothesis that, among SMEs listed with the Jordanian Ministry of Industry and Trade, there is a meaningful correlation between CEO cash compensation and corporate performance. This consistent result lends credence to managerialist theories positing executives' incentives to optimize firm performance.

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Data sharing statement

No additional data are available.

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References

Alajmi, A., & Worthington, A. C. (2021). Corporate Governance: Joining the Dots between Institutional Reform, Organisational Change and Firm Performance. *Organisational Change and Firm Performance*. https://doi.org/10.2139/ssrn.3884655

Ali, S., Liu, B., & Su, J. J. (2018). Does corporate governance quality affect default risk? The role of growth opportunities and stock liquidity. *International Review of Economics & Finance*, 58, 422-448. https://doi.org/10.1016/j.iref.2018.05.003

Alkazali, A., Al-Eitan, G., & Aleem, a. A. (2021). The role of corporate governance in enhancing the performance of Jordanian commercial banks. *Accounting*, 7(6), 1471-1478. https://doi.org/10.5267/j.ac.2021.3.017

Almansour, A. Z., Asad, M., & Shahzad, I. (2016). Analysis of corporate governance compliance and its impact over return on assets of listed companies in Malaysia. *Science International*, 28(3), 2935-2938.

Alshira'h, A. F., Alsqour, M., Lutfi, A., A. A., & Alshirah, M. (2020). A socio-economic model of sales tax compliance. *Economies*, 8(4), 1-15. https://doi.org/10.3390/economies8040088

Arayssi, M., Jizi, M., & Tabaja, H. H. (2020). The impact of board composition on the level of ESG disclosures in GCC countries. *Sustainability Accounting, Management and Policy Journal*, 11(1), 137-161. https://doi.org/10.1108/SAMPJ-05-2018-0136

Arindi, A. C., Budiman, F. N., Az-Zahra, L. B., Septina, L., Fajriah, N., & Kartika, L. (2023). Analysis of compensation systems based on salary mapping adhered and overlapping methods in RL SMEs. *INVEST*: Jurnal Inovasi Bisnis dan Akuntansi, 4(1), 186-200.



https://doi.org/10.55583/invest.v4i1.474

Asad, M., & Kashif, M. (2021). Unveiling success factors for small and medium enterprises during COVID-19 pandemic. *Arab Journal of Basic and Applied Sciences*, 28(1), 187-194. https://doi.org/10.1080/25765299.2020.1830514

Asad, M., Altaf, N., Israr, A., & Khan, G. u. (2020). Data analytics and SME performance: A bibliometric analysis. 2020 International Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy (ICDABI) (pp. 1-7). Sakhir: IEEE. https://doi.org/10.1109/ICDABI51230.2020.9325661

Asad, M., Asif, M. U., Allam, Z., & Sheikh, U. A. (2021). A mediated moderated analysis of psychological safety and employee empowerment between sustainable leadership and sustainable performance of SMEs. *2021 International Conference on Sustainable Islamic Business and Finance* (pp. 33-38). Sakheer: IEEE. https://doi.org/10.1109/IEEECONF53626.2021.9686340

Asad, M., Asif, M. U., Bakar, L. J., & Altaf, N. (2021). Entrepreneurial orientation, big data analytics, and SMEs performance under the effects of environmental turbulence. *2021 International Conference on Data Analytics for Business and Industry (ICDABI)* (pp. 144-148). Zallaq: IEEE. https://doi.org/10.1109/ICDABI53623.2021.9655870

Asad, M., Shabbir, M. S., Salman, R., Haider, S. H., & Ahmad, I. (2018). "Do entrepreneurial orientation and size of enterprise influence the performance of micro and small enterprises? A study on mediating role of innovation. *Management Science Letters*, 8(10), 1015-1026. https://doi.org/10.5267/j.msl.2018.7.008

Asif, M. U., Asad, M., Kashif, M., & Haq, A. u. (2021). Knowledge exploitation and knowledge exploration for sustainable performance of SMEs. *2021 Third International Sustainability and Resilience Conference: Climate Change* (pp. 29-34). Sakheer: IEEE. https://doi.org/10.1109/IEEECONF53624.2021.9668135

Bae, S. M., Masud, M., Kaium, A., & Kim, J. D. (2018). A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. *Sustainability*, 10(8). https://doi.org/10.3390/su10082611

Bartholomeusz, S., & Tanewski, G. A. (2006). The relationship between family firms and corporate governance. *Journal Of Small Business Management*, 44(2), 245-267. https://doi.org/10.1111/j.1540-627X.2006.00166.x

Basco, R., & Voordeckers, W. (2015). The relationship between the board of directors and firm performance in private family firms: A test of the demographic versus behavioral approach. *Journal of Management & Organization*, 21(4), 411-435. https://doi.org/10.1017/jmo.2015.23

Black, B. S., Jang, H., & Kim, W. (2006). Does corporate governance predict firms' market values? Evidence from Korea. *The Journal of Law, Economics, and Organization*, 22(2), 366-413. https://doi.org/10.1093/jleo/ewj018



Chege, S. M., & Wang, D. (2020). Information technology innovation and its impact on job creation by SMEs in developing countries: an analysis of the literature review. *Technology Analysis & Strategic Management*, 32(3), 256-271.

https://doi.org/10.1080/09537325.2019.1651263

Chit, M. M. (2019). Financial information credibility, legal environment, and SMEs' access to finance. *International Journal of the Economics of Business*, 26(3), 329-354. https://doi.org/10.1080/13571516.2019.1645379

Costandi, S., Hamdan, A., Alareeni, B., & Hassan, A. (2019). Educational governance and challenges to universities in the Arabian Gulf region. *Educational Philosophy and Theory*, 51(1), 70-86. https://doi.org/10.1080/00131857.2018.1434621

Dunning, J. (2012). *Agency Theory and CEO Incentives*. https://doi.org/10.2139/ssrn.2034618

Dwaikat, N., & Queiri, A. (2020). Corporate governance in the small and medium enterprises (SMEs) as performance enhancer. *Proceedings of the 35th International Business Information Management Association Conference (IBIMA)*.

El-Bassiouny, D., & El-Bassiouny, N. (2019). Diversity, corporate governance and CSR reporting: A comparative analysis between top-listed firms in Egypt, Germany and the USA. *Management of Environmental Quality: An International Journal*, 30(1), 116-136. https://doi.org/10.1108/MEQ-12-2017-0150

Endrikat, J., Villiers, C. D., Guenther, T. W., & Guenther, E. M. (2021). Board characteristics and corporate social responsibility: A meta-analytic investigation. *Business & Society, 60*(8), 2099-2135. https://doi.org/10.1177/0007650320930638

Erkan-Barlow, A., & Wells-Dietel, B. P. (n.d.). The current state of cyber insurance and regulation in the context of investment efficiency and moral hazard: A literature review. *Journal of Insurance Regulation*.

Fernando, A. C. (2013). *Corporate Governance Issues Theory and Practice*. London: Pearsons.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Editorial-partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1), 1-12. https://doi.org/10.1016/j.lrp.2013.01.001

Hannafey, F. T., & Vitulano, L. A. (2013). Ethics and executive coaching: An Agency Theory approach. *Journal of Business Ethics*, *115*(3), 599-603. https://doi.org/10.1007/s10551-012-1442-z

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277-319. https://doi.org/10.1108/S1474-7979(2009)0000020014

Jouini, F., Ajina, A., & Derbali, A. (2018). Corporate governance and corporate social



responsibility. *International Journal of Management and Enterprise Development*(17), 155-167. https://doi.org/10.1504/IJMED.2018.090841

Kahan, M., & Rock, E. B. (2020). Index funds and corporate governance: Let shareholders be shareholders.

Kavitha, D., Nandagopal, R., & Uma, M. (2019). Impact of the busyness and board independence on the discretionary disclosures of Indian firms. *International Journal of Law and Management*, 61(1), 250-265. https://doi.org/10.1108/IJLMA-04-2018-0062

Khan, A. A., Asad, M., Khan, G. U., Asif, M. U., & Aftab, U. (2021). Sequential mediation of innovativeness and competitive advantage between resources for business model innovation and SMEs performance. *2021 International Conference on Decision Aid Sciences and Application (DASA)* (pp. 724-728). Sakheer: IEEE. https://doi.org/10.1109/DASA53625.2021.9682269

Khushi, M., din, S. M., & Sulaiman, M. A. (2020). Effects of profitability measures on free cash flow; Evidence from Pakistan Stock Exchange. *International Journal of Scientific & Technology Research*, 9(2), 3882-3889.

Majali, T., Alkaraki, M., Asad, M., Aladwan, N., & Aledeinat, M. (2022). Green transformational leadership, green entrepreneurial orientation and performance of SMEs: The mediating role of green product innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(191), 1-14. https://doi.org/10.3390/joitmc8040191

Mansour, A. A. Z., Ahmi, A., & Popoola, O. M. J. (2021). The interaction effect of personality factor on capability and competence requirement. *Business and Economic Research*, 11(1), 1-14. https://doi.org/10.5296/ber.v11i1.17982

Nasrallah, N., & Khoury, R. E. (2022). Is corporate governance a good predictor of SMEs financial performance? Evidence from developing countries (the case of Lebanon). *Journal of Sustainable Finance & Investment*, *12*(1), 13-43. https://doi.org/10.1080/20430795.2021.1874213

Nazir, M. S., & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market. *Future Business Journal*, 4(1), 139-156. https://doi.org/10.1016/j.fbj.2018.03.001

Puni, A., & Anlesinya, A. (2020). Corporate governance mechanisms and firm performance in a developing country. *International Journal of Law and Management, 32*(2), 147-169. https://doi.org/10.1108/IJLMA-03-2019-0076

Puyvelde, V., Caers, S. R., Bois, C. D., & Jegers, M. (2012). The governance of nonprofit organizations integrating agency theory with stakeholder and stewardship theories. *Nonprofit and Voluntary Sector Quarterly*, 41(3), 431-451. https://doi.org/10.1177/0899764011409757

Qalati, S. A., Yuan, L. W., Khan, M. A., & Anwar, F. (2021). A mediated model on the adoption of social media and SMEs' performance in developing countries. *Technology in Society*, 64, 1-12. https://doi.org/10.1016/j.techsoc.2020.101513



Quinlan, C., Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2018). *Business Research Methods* (2 ed.). London: Cengage Learning.

Ratmono, D., Nugrahini, D. E., & Cahyonowati, N. (2021). The effect of corporate governance on corporate social responsibility disclosure and performance. *The Journal of Asian Finance, Economics and Business*, 8(2), 933-941. https://doi.org/10.13106/jafeb.2021.vol8.no2.0933

Saidat, Z., Silva, M., & Seaman, C. (2019). The relationship between corporate governance and financial performance: Evidence from Jordanian family and nonfamily firms. *Journal of Family Business Management*, *9*(1), 54-78. https://doi.org/10.1108/JFBM-11-2017-0036

Salvioni, D. M., & Gennari, F. (2019). Stakeholder perspective of corporate governance and CSR committees. *Emerging Issues in Management*, *1*, 28-39. https://doi.org/10.4468/2019.1.03salvioni.gennari

Satar, M. S., Alarifi, G., Alkhoraif, A. A., & Asad, M. (2023). Influence of perceptual and demographic factors on the likelihood of becoming social entrepreneurs in Saudi Arabia, Bahrain, and United Arab Emirates – an empirical analysis. *Cogent Business & Management,* 10(3), 1-20. https://doi.org/10.1080/23311975.2023.2253577

Suhadak, S., Kurniaty, K., Handayani, S. R., & Rahayu, S. M. (2018). Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value. *Asian Journal of Accounting Research*, *4*(1), 18-34. https://doi.org/10.1108/AJAR-07-2018-0021

Sulaiman, M. A., & Asad, M. (2023). Organizational learning, innovation, organizational structure and performance: Evidence from Oman. *ISPIM Conference Proceedings* (pp. 1-17). Ljubljana: ISPIM.

Ta'Amnha, M. A., Magableh, I. K., Asad, M., & Al-Qudah, S. (2023). Open innovation: The missing link between synergetic effect of entrepreneurial orientation and knowledge management over product innovation performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 1-9. https://doi.org/10.1016/j.joitmc.2023.100147

Teixeira, J. F., & Carvalho, A. O. (2023). Corporate governance in SMEs: a systematic literature review and future research. *Corporate Governance*. https://doi.org/10.1108/CG-04-2023-0135

Tosi, H. L., & Gomez-Mejia, L. R. (2017). CEO compensation monitoring and firm performance. *Academy of Management Journal*, *37*(4), 1002-1016. https://doi.org/10.5465/256609

Tumwebaze, Z., Mukyala, V., Ssekiziyivu, B., Tirisa, C. B., Tumwebonire, A., & Ntim, C. G. (2018). Corporate governance, internal audit function and accountability in statutory corporations. *Cogent Business & Management*, *5*(1). https://doi.org/10.1080/23311975.2018.1527054

Ullah, Z., Sulaiman, M. A., Ali, S. B., Ahmad, N., Scholz, M., & Han, H. (2021). The effect



of work safety on organizational social sustainability Improvement in the healthcare sector: The case of a public sector hospital in Pakistan. *International Journal of Environmental Research and Public Health*, 18(12), 1-18. https://doi.org/10.3390/ijerph18126672

Victor, S., ul Haq, M. A., Sankar, J. P., Akram, F., & Asad, M. (2021). Paradigm shift of promotional strategy from celebrity to social CEO. *2021 International Conference on Decision Aid Sciences and Applications (DASA)* (pp. 1016-1023). Zallaq: IEEE. https://doi.org/10.1109/DASA53625.2021.9682256

Wright, M., & Siegel, D. (2021). Alternative investments, new organizational forms, and corporate governance. *Academy of Management Perspectives*, *35*(1), 1-8. https://doi.org/10.5465/amp.2018.0182

Xie, Z. Q., S. A., M. L., B. A., M. A., & Q. N. (2023). Understanding factors influencing healthcare workers' intention towards the COVID-19 vaccine. *PLOS ONE*, *18*(7), e0286794. https://doi.org/10.1371/journal.pone.0286794

Yusoff, H., Mohamad, S. S., & Darus, F. (2013). The influence of CSR disclosure structure on corporate financial performance: Evidence from stakeholders' perspectives. *Procedia Economics and Finance*, 7, 213-220. https://doi.org/10.1016/S2212-5671(13)00237-2

Zaman, R., Jain, T., Samara, G., & Jamali, D. (2022). Corporate governance meets corporate social responsibility: Mapping the interface. *Business & Society, 61*(3). https://doi.org/10.1177/0007650320973415

Zikmund, W. G., Carr, J. C., & Griffin, M. (2013). *Business Research Methods*. London: Cengage Learning.