# IMPACT OF CORPORATE GOVERNANCE ON ORGANIZATIONAL PERFORMANCE IN THE MEDIATING ROLE OF CORPORATE SUSTAINABILITY: A CASE STUDY OF CONSTRUCTION COMPANIES OF KP

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#### **Abstract**

The purpose of this is to investigate the impact of corporate governance (CG) on organizational performance (OP) with mediating role of corporate sustainability (CS) by deploying construction companies of Peshawar, Pakistan. In this study CG has been taken as an independent variable while OP as a dependent variable with a mediating role of CS. All constructions of KP have been considered as a population in which only Peshawar construction companies selected as a sample to collect the data for this study as a primary source via adopted questionnaire in form of likert scale by using convenient sampling technique. The data has been collected from 70 respondents in out of 150 responses of the employees and employers of construction companies', Peshawar. The results of this study found significant and positive relationship between CG and OP, on other side there has a significant relationship between CG and OP with full mediation of CS. The study is applicable with regards to construction companies of Peshawar, Pakistan since the construction companies was always deemed to be one of the most vital sector for the economy to be able to function. The current study specify the acknowledgement and grasp about the implementation of CS and the appropriate attentions towards the application of all the three dimensions of sustainability will results in boosting OP of the construction companies in Peshawar, Pakistan. This study contributed to the body of knowledge by examining the mediating role of CS between CG and OP. Investors, managers and regulators can obtain further insights, especially those seeking to improve a OP in the emerging markets, through a sound CG system and extensive sustainability development.

**Keywords:** Corporate Sustainability, Organizational Performance, Corporate Governance

#### INTRODUCTION

The firm's performance (FP) affects stakeholders (shareholders, lenders, employees, business associates, society at large, and government). All of these stakeholders have specific interests in corporations, including shareholders who want to see share prices rise over time, lenders who want to protect their investments and receive interest payments on time, employees who want to stay on the job longer and for better pay, business

partners who want to increase their profits, society wants corporation to be an excellent citizen and the government wants to collect taxes. It is obvious that the interests of all stakeholders frequently clash, but among these stakeholders, only a few have greater influence in decision-making, ensuring their own interests regardless of the corporation's overall or collective stake. A system is needed to serve and safeguard stakeholders' individual

and group interests as well as to stop one stakeholder from monopolizing the decision-making process and another from appropriating another's interests. Corporate governance is the mechanism for achieving each stakeholder's as well as the corporation's stake (Butt, 2012; Javed et al., 2020 and Zhang, Gu & Wang, 2022).

Corporate Governance (CG) is a system that directs and systematically controls corporate entities in order to achieve organizational goals (Munir et al., 2019; Nuryantini, 2022). According to Owen (2003), investors, corporations, and governments have identified the importance of CG in competing locally and internationally. It is currently acknowledged as a distinct sector of the business, supporting economic expansion and preserving and enhancing investor trust. Researchers have looked at how CG affects firms' financial performance in both developed and developing nations. Researchers use a variety of CG measures, such as the board structure, compensation structure, and ownership structure, individually or in combination, to determine how these measures affect the financial performance of corporate bodies. Variables like risk, cash flow, regulation, and other factors are also assessed to determine how these factors affect firm FP (Jensen and Meckling, 1976). To evaluate the impact of different CG measures on company FP, researchers look at board structure, compensation structure, and ownership structure separately or collectively (Farhan et al., 2022; Grofčíková, 2020; Kishore & Mathews, 2021; Nasrallah & Khoury, 2021; Shehadeh, Alharasis, Haddad & Hasan, 2022; Younas et al., 2021; UGE, 2022).

In addition to CG, studies have shown that through the adoption of CS, a company behaves in the best interests of

stakeholders in business operations in addition to the profit of shareholders. The idea of sustainability has several facets and evolved from the concept of CSR. CS has emerged over the years from the "triple bottom-line" with a great interest of economic sustainability, social sustainability and environmental sustainability. Although environmental issues are frequently the center of attention, the triple bottom line definition of CS is a significant concept. Company sustainability takes into account the economic and social context of doing business as well as the corporate structures, models and behaviors crucial for long-term value development in addition to environmental preservation and the stewardship of natural resources (Lu, 2021).

As a company's reputation and competitiveness grow, implementing CS helps it perform better. There has been a lot of research done on the impact of CS on a company's OP. There are, however, contradictions among the known study findings. Chowdhury (2018) and Weber (2017) found that CS has a significant positive effect on FP with the sample commercial banks of Bangladesh and China from 2012 to 2016 and 2009 to 2013, while Yand & Jang (2020) investigated that there has no significant effect in the relationship between CS & FP by deploying SME's companies of fashion industry of South Korea.

Moreover, CS has recently become more popular with the increasing practice of CSR and global, regional, and national discussions on CSR. The strengthening of applied principles of good CG such as fairness, transparency, accountability, and responsibility has encouraged CS to touch the business world increasingly. In the light of the signaling theory, the business can use information as a

tool to communicate both good and negative signals to stakeholders and investors. Investors become interested in investing because of the CS disclosure in the annual report since they believe the company is in good standing and has carried out its obligations. Keeping in view the significance of CG, CS practices in existing situation and in particular to Pakistan, firms need to have good practices of CG and CS in order to improve OP.

#### PROBLEM STATEMENT

Several studies have been done to check the impact of CS as a mediating effect between CG and OP in developed and developing countries including Pakistan by deploying financial and non-financial sectors. But the some variables has not yet been checked in the context of construction companies to fill the gap of the current study in Pakistan by using primary source in order to collect data for the result (Pekovic& Voqt, 2021; Shrivastava&Lusia, 2021; Tiep Le & Nguyen, 2022 and Munir et al., 2019). The impact of CS performance and CG on OP has become a topic of great interest to investors, scholars, practitioners and government regulators. However, there are only limited empirical studies that examine them jointly.

Therefore, this study aims to fill the gap by examining the mediating effect of CG on OP with mediating role of CS particularly in construction companies of Peshawar, KP because no study has been done in less developed countries in a current scenario and not give attention to construction companies in the light of previous literates most of the studies have been done in large companies of the country like manufacturing sectors (Non- Financial

sectors) and financial sectors listed on Pakistan Stock Exchange (PSX) where the stated study has been examined but no study has found in construction area, because they are also grappling with issues related to sustainable development and are doing so in ways that are difficult to see. Sustainability in the construction sector is widely recognized as offering a competitive advantage and having the capacity to improve building process performance. Studies on the construction industry might bring a fresh viewpoint to the literature on sustainability.

#### RESEARCH QUESTIONS

- How corporate governance does effect on corporate sustainability performance?
- 2. Does corporate sustainability performance mediate in the relationship between corporate governance and corporate financial performance?

#### RESEARCH OBJECTIVES

- To check the effect of corporate governance on organizational performance.
- To investigate the mediating effect of corporate sustainability in the relationship between corporate governance and organizational performance.

#### LITERATURE REVIEW

#### CORPORATE GOVERNANCE (CG)

Stakeholders are becoming more concerned with how businesses are run to maintain a balance between the values of the economy, society, and the environment in the context of the current dynamic environment. As a result, businesses must be socially responsible in how they

produce value for their stakeholders and must not make concessions when it comes to societal or environmental challenges (Azim, Mustapha, & Zainir, 2018; Tiep & Nguyen, 2022).

In order to balance the interests of all parties involved, including shareholders, directors, employees, clients, suppliers, lenders, financial institutions, governments, and communities, CG primarily focuses on balancing their respective interests. The context-specific Code of CG, which differs from country to country, is influenced by the economic, legal, social, cultural, and ownership-structural variables. According to Nikoli and Zlatanovi (2018), CG exists in pertinent area of research, which leads to several challenges and conflicts in current theory and practice. Additionally, the Covid-19 situation may have an impact on how corporations self-govern, handle social issues, and implement environmental policies (Eweje et al., 2021). According to the Cadbury Committee (Siswantaya, 2007), CG is a collection of rule and policies that governs the rights and obligations of shareholders, company management, creditors, governments, employees, and other internal and external interest holders. In order to guarantee that the principal/investors' money is handled wisely and efficiently, the company has an interest in establishing corporate governance (Mahrani & Soewarno, 2018).

#### CORPORATE SUSTAINABILITY

All countries now share a concern for sustainability. In order to eradicate poverty, safeguard the environment, and secure prosperity by 2030, the member states of the United Nations approved the Sustainable Development

Goals (SDGs) in 2015. All businesses are under pressure from their stakeholders to raise awareness of issues like global warming and human rights issues when carrying out their corporate duties in the era of sustainable development (Agnolucci and Arvanitopoulos, 2019; Alam et al., 2021; Shahbaz et al., 2020 and Tjahjadi, Soewarno & Mustikaningtiyas, 2021).

The idea of CS is a multifaceted construct (Kennedy et al., 2021). The word "CS" has been defined in several ways in the literature (Kücükgül, Cerin, & Liu, 2022; Swarnapali, 2020). According to certain studies, the word describes a management approach that allows companies to grow financially while also having a positive impact on the environment, society, and the economy (Kantabutra and Ketprapakorn, 2020).

The social, environmental, and economic components of CS are seen as three dimensions from the standpoint of sustainable development (Lozano, 2022). CS activities are grouped according on the groups of the target stakeholders; the community, consumers, suppliers, and workers, as a tool for stakeholder management (Inoue & Lee, 2011). Community, economy, and eco-efficiency projects were the categories used by Suluo, Anderson, et al. (2020) to classify CS in Tanzania's tourist sector. CS, according to Taticchi and Demartini (2020), is a method of conducting business that emphasises building shared value over time, working with stakeholders, and factoring in environmental, social, and governance considerations when making decisions (Sheykhi, 2022).CS will be indicated in this current study as mediating variable to examine the impact of CG on OP.

#### Organizational Performance

The purpose of organizational performance is effectively implemented organizational strategies and resources to get organizational goals (Randeree and Al Youha, 2009). Business model efficacy, efficiency, and results are only a few of the factors that make up organisational performance (Deshpandé et al., 1997; Boyatzis and Ratti, 2009; Ryan et al., 2009). Any organization's effectiveness is greatly influenced by the leadership team's ability to put strategies into action (Almatrooshi, Singh & Farouk, 2016 and Baig et al., 2020).

### HYPOTHESES DEVELOPMENT AND RESEARCH FRAMEWORK CG & OP

Nasrallah & El Khoury (2022) and Sarwar, Al-Faryan & Saeed (2022) stated that there is a positive association between CG and OP. Increased OP is a direct result of effective CG, and businesses that do better tend to enhance their CG. Strong corporate governance, in the opinion of Setiawan & Phua (2013), results in substantially higher profits. In their analysis of the relationship between CG and performance, Pillai & Al-Malkawi (2018) discovered a substantial relationship between CG variables and OP, with the same findings being validated by other scholars based on previous reviews (Page & Abdullah, 2009; Coskun and Sayilir, 2012; Coskun and Sayilir, 2012; Nasiri & Ramakrishnan, 2020; Peters and Bagshaw, 2014; Thi et al., 2020). From the review of few studies found that there has insignificant and no impact of CG on FP (Kyere & Ausloos, 2019; Kishore & Mathews, 2021; Shehadeh, Alharasis, Haddad & Hasan, 2022; Younas et al., 2021). The below

hypothesis is formulated based on Preacher & Hayes (2013):

H<sub>1</sub>: There has a significant and positive effect of corporate governance on corporate financial performance

#### CS MEDIATES BETWEEN CG & OP

Munir, Usman & Khurram (2019) determined that CS mediates the link between CG and OP. These results are significant in two ways. First, organizations' management, regulators, and legislators should support CG and CS. Second, our analysis offers empirical evidence to support the present policy discussion that investing in stronger sustainability practises and good governance is essential for long-term value generation to improve OP (Galbreath, 2018; Shrivastava & Addas, 2014; Jaswadi and Sumiadji, 2015; Janggu et al., 2014; Shamil et al. 2014; Esa and Nazli, 2012; Akhtaruddin and Haron, 2010; Weber et al., 2010; Adedeji et al., 2020; Worokinasih & Zaini, 2020; Mahrani & Soewarno, 2018; Tiep Le & Nguyen, 2022; Adedeji, Ong, Rahman, Odukoya & Alam, 2019 and Munir Khan, Usman & Khuram, 2019) found inconclusive and mixed results in developing and developed countries with different aspects. Hence, the mediating role of sustainability performance on the relation among CG and OP needs an empirical inquiry. The below given hypothesis is formulated based on Preacher & Hayes (2013):

 $H_2$ : There has a mediating role of corporate sustainability in the association between corporate governances on corporate financial performance

#### CONCEPTUAL MODEL

The underpinning or supported theories of the current study is stake holder theory, agency theory, institutional

theory and legitimacy theory to connect variables with other. Stakeholder theory (Edward Freeman, 1984), Agency theory (Jensen and Meckling, 1976), Stewardship theory (Boyd, 1995), Recourse dependency theory (Pfeffer and Salancik, 1978), Legitimacy Theory (Porter and van der Linde, 1995) and Institutional Theory (Caprar and Neville, 2012).

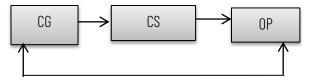


Figure 1: Conceptual Framework

#### RESEARCH METHODOLOGY

The present study based on applied, descriptive and quantitative in nature because results come in numerical data can be conducted via questionnaires, graphs and statistics (Saunders, Lewis, and Thornhill, 2009; Hussain&Rehman 2012;Rasco, 1975) and designed a questionnaire with the help of literature. The deductive and quantitative approach used to check the effect of variables by reviewing past literature and theories (Bryman& Bell, 2015; cited by Hussain&Rehman 2012). All 304 construction companies considered as a population of KP, only ninety four Peshawar construction companies selected as a sample by using convenient sampling technique. The sample size of the construction companies is mentioned in appendix - B: Adopted and adapted questionnaire was taken. The current study used the questionnaire method to collect the primary data from construction companies, which is based on five point likert scale (strongly disagree, disagree, neutral, strongly

agree and agree). One fifty questionnaires were distributed among all the employees of the construction companies in which seventy responses have been achieved from the respondents that were used to further check the reliability and accuracy of the responses by applying different analytical tools. Statistical Package for Social Science (SPSS) software used to calculate the validity, reliability of the data. Different tests in the regression have been used to find out the result of the data collected for the present study including ANOVA test, coefficient test, and Correlation test. Two items from the questionnaire (gender and construction companies) has been taken to summarize the frequencies and percentages. Test statistic and reliability statistics have also been checked. Model summary has been made.

#### **MEASUREMENT OF VARIABLES**

Table 1: Measurement of the Variables

Construct	No. of Items	Sources
CG	23	Honghui (2017)
OP	05	Narteh (2012) and Tseng (2010)
CS	22	Bansal (2005);Chan (2005) and Sharma &Vredenburg (1998)

#### RESULTS OF THE STUDY

All of the analyses and tests that were conducted on the survey data are presented in the fourth chapter of the current study. The information was verified using descriptive statistics. A correlation matrix is used to gauge the relationship between the two variables. An accompanying table is used to display the model summary. Data was subjected to a coefficient test table with both standardized and unstandardized coefficients.

To ascertain the impact that the independent variables (corporate Sustainability and Governance) had on the dependent variable (Financial Performance) in the regression analysis, a table of ANOVA test was performed.

Table 2: Reliability Statistics

Variable	CG	CS	OP	
Cronbach's Alpha	0.70	0.80	0.70	
Number of Items	22	22	5	

To deliver an appropriate assessment, reliability statistics are presented. The Cronbach's alpha coefficient has been used to assess the variables' internal consistency. The aforementioned findings demonstrate that each variable's alpha (cronbach's alpha) exceeds the required threshold of 1.

Table 3: Descriptive Statistics

VAR	N	MIN	MAX	Mean	SD
CG	45	60.00	95.00	76.5	6.466
CS	45	70.00	99.00	85.2	5.36
OP	45	19.00	25.00	22.5	1.917

The analytical tool Descriptive statistics used to describe the basic features of the data in the study. The quantitatively described values in the above table 4 shows that the mean value of CG is 76.5 with minimum and maximum value of 60 and 95 respectively in 45 observations also the standard deviation value is 6.46. Hence like that, the minimum and maximum value of CS is 70 and 99 with the mea value 85.245 and 6.46 SD value in out of 45 observations. In last the mean and SD value of OP is 22.5 and 1.9 respectively having the min and max value of 19 and 25 based on 45 observations.

**Table 4:** Regression Analysis for Mediation of CS between CG and OP

VAR	В	SE B	β	R <sup>2</sup>
Step 1				
Constant	10.90	2.86		
CG	.165	0.37	.555	.308
Step 2				
Constant	9.871	3.05		
CG	.165	.053	.155	.309
CS	010	.044	.010	.309

\*\*\*P value > 0.000

F-

Test 19.132

Table 4 shows the impact of CG on OP in the mediating role of CS in which two steps analysis is found where Step 1 shows that the R2 value is .308 revealed that the CG explained 38% variance on OP with p <.001. The results shows that there is a positive and significant impact of CG on OP (? = .163, p<.000). In Step 2, the, R2 value is .309 revealed that the CG and OP 39% variance in the mediating role of CS with F value = 19.132, p<.000). The results of this study found that there has a positive and significant impact of CG and OP with mediating role of CS (Beta = .165, p<.001) and OP positively predicted CS (? = -0.010, p <.001). The R2 change value of .309 revealed that 39% change in the variance of model 1 and model 2 with p<.001). More specifically CG has direct as well as indirect impact on OP with full mediation.

#### DISCUSSION AND CONCLUSION

The current study intend to focus on the impact of CG on OP in the mediating role of CS deploying construction companies of Peshawar, Pakistan, in which three dimensions of CS were taken (Social Sustainability, Environment Sustainability and Economic Sustainability)

to investigate whether construction companies in Pakistan are practicing any of these dimensions in their work activities. The current study collected the data that in the light of primary source by using adopted and adapted questionnaire and distributed among selected companies mentioned in appendix - A, the overall distributed questionnaires are 100 in which 45 responses received from respondents. The reliability analysis was conducted to ensure the reliability of the variables item. Therefore, the regression analysis was used to determine the impact of CG on OP with mediating role of CS. Based on previous studies; corporate governance is productive in nearly all relative aspects necessary to be considered. To forecast the better future of construction companies with respect to organizational performance is checked through conducting primary survey. In the current study the researcher has developed 2 hypotheses based on Preacher & Hayes (2013) mediation model to check the impact of variables with each other. The overall results of this present study found that there has a positive and significant impact of CG on OP due to this H<sub>1</sub> is accepted as a direct relationship supported by (Adedeji et al., 2020 and Munir et al., 2019). Furthermore, there is a significant and positive impact of CG on OP in the mediating role of CS as a direct and indirect impact due to this H2 is also accepted supported by (citation)

#### CONCLUSION

According to the consequences, it is finalized that CG performs a pivotal role in the OP of construction companies in Pakistan. Correspondingly, the results show that CG impact OP with mediation of CS. Hence the study

revealed that dimensions of CG have positive significance on organizational performance, as obtained by the survey conducted through questionnaire to collect primary data from the selected construction companies in Peshawar from 45 fair respondents. The application of corporate governance is the most crucial element in the organizational performance of construction companies. Each dimension of CS including SS, ES and ES needs primary concentration in order to enhance organizational performance and extend to construction companies of Pakistan. Valid statistical analysis on collected authentic data by using primary data collection method declared desired results concerning organizational performance of construction companies.

#### LIMITATIONS AND FUTURE DIRECTION

The current study consists of a number of limitations due to lack of time and financial and non-financial resources. Due to time limitations the overall construction companies of Pakistan could not be considered for data collection as a population and neither to consider the whole KP for investigation. Therefore, only those companies were deployed to consider which was easily accessible and easy to collect our data, so Peshawar constructions were taken; the list of mentioned constructions in Peshawar in appendix B.

Moreover, only three dimensions were used to check the mediating impact of CS between CG and OP e.g. social sustainability, economic sustainability and environmental sustainability because these are the key CS practices which are mostly contributed by the organization in order to sustain and retain OP for the longer period of time,

future scholars can be used other practices of CS as well. In this current only questionnaire method has been used to collect the data. In future studies secondary method can also be considered. Due to some obstacles only Peshawar construction companies have been selected, so the further studies can be selected other areas as per their access and can be considered more than two areas in order to compare the results. CS can be taken as mediator between other variables except CG like earning management, CSR practices, FP, stock return, capital structure etc.

#### IMPLICATIONS OF THE STUDY

The study is applicable with regards to construction companies of Peshawar, Pakistan since the construction companies was always deemed to be one of the most vital sector for the economy to be able to function. The variables selected for the study are the most critical and major concerns regarding the growth and stability of construction companies. Yet there are many sectors of construction companies that need awareness about the effect of the three aspects of corporate sustainability (SS, ES and ES) and corporate governance on organizational performance. The current study specify acknowledgement and grasp about the implementation of corporate sustainability and the appropriate attentions towards the application of all the three dimensions of sustainability will results in boosting organizational performance of the construction companies in Peshawar, Pakistan

#### REFERENCES

- Adedeji, B. S., San Ong, T., Uzir, M. U. H., & Hamid, A. B. A. (2020). Corporate governance and performance of medium-sized firms in Nigeria: does sustainability initiative matter?. Corporate Governance: The International Journal of Business in Society. https://doi.org/10.1108/cg-09-2019-0291
- Akhund, M. A., Memon, A. H., Imad, H. U., Siddiqui, F. H., &Khoso, A. R. (2018). Motivational Factors for the Implementation of ISO-9001 in Construction Firms of Pakistan. *Civil Engineering Journal*, 4(9), 2023-2033.
- Alam, S. M., & Islam, K. M. (2021). Examining the role of environmental corporate social responsibility in building green corporate image and green competitive advantage. *International Journal of Corporate Social Responsibility*, 6(1), 1-16. https://doi.org/10.1186/s40991-021-00062-w
- Al-Matari, Y. A., Al-Swidi, A. K., Fadzil, F. H. B. F. H., & Al-Matari, E. M. (2012). Board of directors, audit committee characteristics and the performance of Saudi Arabia listed companies. *International Review of Management and Marketing*, 2(4), 241-251.
- Almatrooshi, B., Singh, S. K., & Farouk, S. (2016).

  Determinants of organizational performance: a proposed framework. *International Journal of Productivity and Performance Management*.
- Asaf, S., Hassnain, M. A., and Al-Zahrani S., "Causes of Contractors' Failure in Industrial Projects in Saudi Arabia", Research Journal of Applied

- Sciences, Engineering and Technology, Volume 9, No. 3, pp. 158-164, 2015
- Azim, F., Mustapha, M. Z., & Zainir, F. (2018). Impact of corporate governance on related party transactions in family-owned firms in Pakistan. *Institutions and Economies*, 22-61. https://doi.org/10.12816/0046065
- Azim, F., Mustapha, M. Z., &Zainir, F. (2018).Impact of
  Corporate Governance on Related Party
  Transactions in Family-Owned Firms in Pakistan.
  Institutions and Economies, 22-61.
- Babic, Verica. "Corporate governance problems in transition economies." Winston-Salem: Wake Forest University, Social Science Research Seminar. Vol. 2. 2003.
- Baig, U., Muhammad, G., Hussain, B. M., & Aleem, M. U. (2020). Role of corporate governance in corporate social responsibility: Mediating role of organizational performance. *KASBIT Business Journal*, 13(2), 21-45.
- Blowfield, M.; Murray, A. Corporate Responsibility: A Critical Introduction; Oxford University Press: Oxford, UK, 2008.
- Cheung, Y. L., Jiang, P., Limpaphayom, P., & Tong, L. U. (2008). Does corporate governance matter in China?. China Economic Review, 19(3), 460-479.
- Choiriah, Siti, Yvonne Augustine, and Yuzwar Z. Basri. "The Influence of Corporate Governance and Culture on Corporate Reputation." *Technium Soc. Sci. J.* 20 (2021): 499.
- Chowdhury, R. K. (2018). Corporate sustainability and financial performance of Bangladeshi banks (Master's thesis, University of Waterloo).

- Christofi, A.; Christofi, P.; Sisaye, S. Corporate sustainability: historical development and reporting practices. Manag. Res. Rev. 2012, 35, 157–172
- Cintra, Y.; Carter, D. Internalizing sustainability: Reflections on management control in Brazil. Int. J. Strateg. Manag. 2012, 12, 108–125.
- Donkor, Augustine, Hadrian Geri Djajadikerta, and Saiyidi

  Mat Roni. "Impacts of combined assurance on
  integrated, sustainability and financial reporting
  qualities: evidence from listed companies in
  South Africa." International Journal of
  Auditing 25.2 (2021): 475-507.
- Du, J., & Dai, Y. (2005). Ultimate corporate ownership structures and capital structures: Evidence from East Asian economies. *Corporate Governance: An International Review, 13*(1), 60-71.
- Edwards, M., Halligan, J., Horrigan, B., & Nicoll, G. (2012). *Public sector governance in Australia*. ANU Press.
- Eweje, G. (2021). Barriers to environmental sustainability practices of multinational mining companies in Ghana: an institutional complexity perspective. *Corporate Governance: The International Journal of Business in Society*. https://doi.org/10.1108/cq-06-2021-0229
- Farhan, N. H., Almaqtari, F. A., Tabash, M. I., & Al-Homaidi, E. A. (2022). The impact of corporate governance on financial performance of Indian hotels: cluster analysis. International Journal of Management Practice, 15(1), 24-58. https://doi.org/10.1016/j.ribaf.2019.101083

- Gazder, U., & Khan, R. (2018).Effect of Organizational
  Structures and Types of Construction on
  Perceptions of Factors Contributing to Project
  Failure in Pakistan.
- Grofčíková, J. (2020). Impact of selected determinants of corporate governance on financial performance of companies. Ekonomicko-manazerske spektrum, 14(2), 12-23.
  - http://dx.doi.org/10.1007/978-3-030-38253-7\_1 https://doi.org/ https://10.3390/su122410322 https://doi.org/10.1057/s41310-020-00099-6
- Hussain, N., Rigoni, U., &Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411-432.
- Hussain, N., Rigoni, U., &Orij, R. P. (2018). Corporate governance and sustainability performance:

  Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411-432.
- Hussain, N., Rigoni, U., &Orij, R. P. (2018). Corporate governance and sustainability performance:

  Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411-432.
- Hussin, J. M., Rahman, I. A., & Memon, A. H. (2013). The way forward in sustainable construction: issues and challenges. International Journal of Advances in Applied Sciences, 2(1), 15-24.
- Imran, M., Khaliq, M., Hye, A., & Ekareesakul, K. (2019).
  Influence of risk factors on construction firm

- project success in Pakistan. Decision Science Letters, 8(3), 285-294.
- Javed, M., Rashid, M. A., Hussain, G., & Ali, H. Y. (2020). The effects of corporate social responsibility on corporate reputation and firm financial performance: Moderating role of responsible leadership. *Corporate Social Responsibility and Environmental Management*, 27(3), 1395-1409. https://doi.org/10.1002/csr.1892
- Kennedy, S., Grewatsch, S., Liboni, L., & Cezarino, L. O. (2021). A Systems Approach to Business Sustainability Education. In Academy of Management Proceedings (Vol. 2021, No. 1, p. 15644). Briarcliff Manor, NY 10510: Academy of Management.

#### https://doi.org/10.5465/AMBPP.2021.227

- Kishore, N., & Mathews, S. B. (2021). A Study on Impact of Corporate Governance on Financial Performance of Companies Listed in NSE Nifty Fifty. SCHOOL OF MANAGEMENT, 154.
- Kishore, N., & Mathews, S. B. (2021). A Study on Impact of Corporate Governance on Financial Performance of Companies Listed in NSE Nifty Fifty. SCHOOL OF MANAGEMENT, 154.
- Koech, P., Namusonge, G. S., & Mugambi, F. M. (2016). Board Characterics as a Determinant of Effectiveness of Corporate Governance in State Corporation in Kenya.
- Kücükgül, E., Cerin, P., & Liu, Y. (2022). Enhancing the value of corporate sustainability: An approach for aligning multiple SDGs guides on reporting. *Journal of Cleaner*

Production, 333,130005.

### https://doi.org/10.1016/j.jclepro.2021.130005

- Kumala, R., & Siregar, S. V. (2020). Corporate social responsibility, family ownership and earnings management: the case of Indonesia. *Social Responsibility Journal*. https://doi.org/10.1108/SRJ-09-2016-0156
- Kyaw, K., Olugbode, M., & Petracci, B. (2017). The role of the institutional framework in the relationship between earnings management and corporate social performance. Corporate Social Responsibility and Environmental Management, 24(6), 543-554. https://doi.org/10.1002/csr.1426
- Kyere, M., & Ausloos, M. (2021). Corporate governance and firms financial performance in the United Kingdom. International Journal of Finance & Economics, 26(2), 1871-1885. <a href="https://doi.org/10.1002/ijfe.1883">https://doi.org/10.1002/ijfe.1883</a>
- Lu, 2016; Al-Matari, Al-Swidi, Fadzil& Al-Matari, 2012; and Hussain, Rigoni, &Orij, 2018Review of existing literature reveals that agency theory (Jensen and Meckling 1976) and stakeholder theory (Freeman 1984) are the two dominant perspectives used to explain the relationship between governance and SP
- Lu, W. (2016). An Exploration Of The Associations Among Corporate Sustainability Performance, Corporate Governance, And Corporate Financial Performance.
- Lu, L. W. (2021). The moderating effect of corporate governance on the relationship between corporate sustainability performance and corporate financial performance. *International Journal of Disclosure and Governance*, 18(3), 193-206.

- Lu, Y., & Zhang, X. (2016).Corporate sustainability for architecture engineering and construction (AEC) organizations: Framework, transition and implication strategies. *Ecological indicators*, 61, 911-922.
- Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018). Does corporate governance affect sustainability disclosure? A mixed methods study. *Sustainability*, *10*(1), 207.
- Munir, A., Khan, F. U., Usman, M., & Khuram, S. (2019).

  Relationship between Corporate Governance,

  Corporate Sustainability and Financial

  Performance. Pakistan Journal of Commerce &

  Social Sciences, 13(4).

  https://doi.org/10.26772/CJSMS2020050101
- Munir, A., Khan, F. U., Usman, M., & Khuram, S. (2019).

  Relationship between Corporate Governance,
  Corporate Sustainability and Financial
  Performance. Pakistan Journal of Commerce &
  Social Sciences, 13(4).

  https://doi.org/10.26772/CJSMS2020050101
- Nasrallah, N., & El Khoury, R. (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.
- Nasrallah, N., & El Khoury, R. (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

- Nigri, G., & Del Baldo, M. (2018). Sustainability Reporting and Performance Measurement Systems: How do Small-and Medium-Sized Benefit Corporations Manage Integration?. Sustainability, 10(12), 4499.
- Nuryantini, N. P. D. (2022) Earnings Management Mediate
  the Effect of Managerial Over Confidence, Good
  Corporate Governance and Corporate Social
  Responsibility on Company Performance.
  https://doi.org/10.1002/csr.1803
- OECD, O. (2004). The OECD principles of corporate governance. *Contaduría y Administración*, (216).
- Okoro, Blessing Chineme, and Wechi Ibekwe. "Tactics for Integrating Sustainability: Basis for Corporate Governance and Nation Building." *Nigerian Academy of Management Journal* 17.2 (2022): 175-186..
- Pekovic, S., & Vogt, S. (2021). The fit between corporate social responsibility and corporate governance: the impact on a firm's financial performance. Review of Managerial Science, 15(4), 1095-1125. <a href="https://doi.org/10.1007/s11846-020-00389-x">https://doi.org/10.1007/s11846-020-00389-x</a>
- Perrini, F.; Tencati, A. Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems.

  Bus. Strategy Environ. 2006, 15, 296–308.
- Riyadh, H. A., Sukoharsono, E. G., &Alfaiza, S. A. (2019).The impact of corporate social responsibility disclosure and board characteristics on corporate performance. *Cogent Business & Management*, (just-accepted), 1647917.

- Samuel, B., Ong, T. S., Rahman, M., Olumide, O., &Alam, M. K. (2019). Corporate governance, Sustainability initiatives and firm performance: Theoretical and conceptual perspectives. International Journal of Asian Social Science, 9(1), 35-47.
- Sawani, Y.; Mohamed Zain, M.; Darus, F. Preliminary insights on sustainability reporting and assurance practices in Malaysia. Soc. Responsib. J. 2010, 6, 627-645
- Shah, S. I. U., & Rahim, N. A. (2019). Addressing the recent developments and potential gaps in the literature of corporate sustainability. *Journal of Studies in Social Sciences and Humanities*, 5(1), 28-40.
- Shahbaz, W., & Sajjad, A. (2020). Integrating management control systems, mindfulness and sustainability: an occupational health and safety perspective. Corporate Governance: The International Journal of Business in Society. https://doi.org/10.1108/CG-06-2020-0242
- Shahzad, M., Ying, Q., Ur Rehman, S., Zafar, A., Ding, X., & Abbas, J. (2019). Impact of knowledge absorptive capacity on corporate sustainability with mediating role of CSR: analysis from the Asian context. *Journal of Environmental Planning and Management*, 1-27.
- Shehadeh, M., Alharasis, E. E., Haddad, H., & Hasan, E. F. (2022). The Impact of Ownership Structure and Corporate Governance on Capital Structure of Jordanian Industrial Companies. *Wseas Transactions on Business and Economics*, 19, 361-75. https://doi.org/10.37394/23207.2022.19

- Singh, S. K., Burgess, T. F., Heap, J., Almatrooshi, B., & Farouk, S. (2016). Determinants of organizational performance: a proposed framework.

  International Journal of Productivity and Performance Management.
- Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018).Corporate governance and Tobin's Q as a measure of organizational performance. *British Journal of Management*, 29(1), 171–190.
- Sulkowski, A.J.; Edwards, M.; Freeman, R.E. Shake Your Stakeholder: Firms Leading Engagement to Cocreate Sustainable Value. Organ. Environ. 2017.
- Syaravina, S., & Lusia, E. (2021). Implementation of Global
  Sustainability Management in Micro Small
  Medium Enterprises of Undergraduate Students
  in an Entrepreneurship Major.
  https://doi.org/10.9770/jesi.2021.9.1(1)
- Thangaru, M. W., &Kinyua, G. M. (2017). Influence of Organizational Competence on Corporate Governance Practices in National Industrial Training Authority. International Journal of Education and Research, 5(3), 83-90.
- Tiep Le, T., & Nguyen, V. K. (2022). The impact of corporate governance on firms' value in an emerging country: The mediating role of corporate social responsibility and organizational identification. *Cogent Business & Management*, *9*(1), 2018907. https://doi.org/10.1080/23311975.2021.2018907
- Urbański, M., Haque, A. U., &Oino, I. (2019). The moderating role of risk management in project planning and project success: evidence from construction

- businesses of Pakistan and the UK. Engineering Management in Production and Services, 11(1), 23-35.
- Weber, O. (2017), "Corporate sustainability and financial performance of Chinese banks", Sustainability Accounting, Management and Policy Journal, Vol. 8 No. 3, pp. 358-385. https://doi.org/10.1108/SAMPJ-09-2016-0066
- Yang, S. J., & Jang, S. (2020). How Does Corporate
  Sustainability Increase Financial Performance
  for Small-and Medium-Sized Fashion Companies:
  Roles of Organizational Values and Business
  Model Innovation. Sustainability, 12(24), 10322.
- Yilmaz, C., &Buyuklu, A. H. (2016). Impacts of corporate governance on firm performance: Turkey case with a panel data analysis. Eurasian Journal of Economics and Finance, 4(1), 56-72.
- Yoon, J., &Suh, M. G. (2019). Determinants of organizational performance: some implications for top executive leadership in Korean firms. Asia Pacific Business Review, 25(2), 251-272.
- Younas, N., UdDin, S., Awan, T., & Khan, M. Y. (2021).

  Corporate governance and financial distress:

  Asian emerging market perspective. Corporate

  Governance: The International Journal of Business

  in Society. PAKISTAN Cement sector Chemical
  sector Engineering sector.

  https://doi.org/10.1108/CG-04-2020-0119
- Zain, Mustaffa Mohamed, Zubaidah Zainal Abidin, and Roslani Embi. "The level of knowledge of corporate governance in federal statutory bodies

in Malaysia." *Procedia Economics and Finance* 28 (2015): 170-175.

Zhang, T., Gu, L., & Wang, J. J. (2022). State-owned capital and corporate social responsibility of private-

Finance. <a href="https://doi.org/10.1111/acfi.12931">https://doi.org/10.1111/acfi.12931</a>

Appendix -A	QUESTIONNAIRE	
AGE:	DEPARTMENT:	GENDER: MALE
[ ] FEMALE [	] ORGANIZATION:	
DESIGNATION: _		_

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

### Corporate Governance

#### **Board Size**

- 1. Smaller board enhances organizational performance.
- Larger size boards are more adept in the provision of resources.
- Large board of directors is prone to more conflicts among board members which makes it difficult to reach agreements.
- 4. The firm benefit from larger boards since they provide effective oversight of management and increase resource availability in the organization which leads to the improvement of organizational performance
- 5. A larger board will bring more expertise and experience to the board

#### Board Independence

- 1. The number of executive directors is higher than that of Non-Executive Directors.
- 2. The board is more independent when the proportion of outside directors Increases.
- 3. Executive directors are better placed in handling the affairs of the organization since they have a deeper understanding of the organizations Operations.

#### **Board Diversity**

- 1. Appointment of board members has always considered a mix of skills required in the stewardship of the organization.
- 2. The organization's board appointment process has been political.
- A member's academic qualifications have been considered before for appointment to the organization's board.
- 4. All stakeholders have been involved in the

- appointment of the Board
- 5. The board has been composed of both genders.
- 6. All Board members have had relevant industry experience required to steward the organization.
- 7. Number of board committees
- 8. There is an audit committee established on the board.
- Independent committees would focus on improving the company competitiveness and performance
- 10. Audit committee are not effective against risk they are just overloaded.
- 11. The existence of independent committees enhances financial performance of the organization.

#### Board meeting

- 1. There is poor attendance in board meetings.
- 2. All the Board meetings have been relevant to the organization's mandate.
- 3. The Board meetings have been chaired by board members with the relevant qualifications.
- 4. There have been other members attending Board meetings even when they are not gazetted as its members. The number of board meetings has an influence on firm performance.

#### Organizational Performance

- There has been an integral improvement in the operations, administrations, services and overall organizational performance
- 2. There has been an integral improvement in the relationship between the organization and its services
- There has been an integral improvement in organization effectiveness and efficiency (e.g. timing of launching new projects, quality control or management procedures, etc.
- 4. There has been an integral improvement in resource development (e.g. labor skills and personal development, etc.)
- 5. There has been an integral improvement in preparing for the future of the organization (e.g. quality/depth of planning, indicators of partnerships and alliances, anticipating and preparing for changes in the environment, etc.)

### Corporate Sustainability

#### Economic Sustainability (ES)

- 1. Your firm sold waste product for revenue
- 2. Your firm reduced costs of inputs for same level of outputs
- 3. Your firm reduced costs for waste management for same level of outputs

4.	Your firm worked with government officials to	7.	M/S Technicon Enterprise
	protect the company's interest	8.	M/S Mohmand Construction Co. Pvt Ltd
5.	Your firm created spin-off technologies that could	9.	M/S Rana Construction Company
	be profitably applied to other areas of the business	10.	M/S Kasteer International Pvt Ltd
6.	Your firm differentiated the process/product based	11.	M/S Sanaullah And Company
•	on the marketing efforts of the process/product's	12.	M/S Construction Dynamics
	environmental performance	13.	M/S Raco Builders
Social Su	stainability (SS)	14.	M/S Khattak Allied Construction Company
1.	your firm improved employee or community health	15.	M/S Luqman Brother Construction Company
	and safety	16.	M/S Bannu Constructions
2.	your firm recognized and acted on the need to fund	17.	M/S Jee Construction Company Pvt Ltd
۷.	local community initiatives	18.	M/S Zarif Shah
3.	your firm protected claims and rights of aboriginal	19.	M/S Khalil Construction Company
	peoples or local community	20.	M/S Nasrullah Khan & Co
4.	your firm showed concern for the visual aspects of	21.	M/S Waqas Khalid
	the firm's facilities and operations	22.	M/S Samin Jan & Sons
5.	your firm communicated the firm's environmental	23.	M/S Azk Construction Co.
0.	impacts and risks to the general public	24.	M/S ZainUlAbideen& Sons
6.	Your firm considered interests of stakeholders in	25.	M/S Ijaz& Co
0.	investment decisions by creating a formal dialog	26.	M/S Walayat Khan Wazir
Fnvironm	nental Sustainability (EVS)	27.	M/S United Construction Co
1.	Your firm reduced energy consumption	28.	M/S SirajUlHaq& Sons
2.	Your firm reduced wastes and emissions from	29.	M/S Sarhad Engineering & Electric Company
۷.	operations	30.	M/S M.F.F.A Group
3.	Your firm reduced impact on animal species and	31.	M/S Izhar And Brothers Enterprise
0.	natural habitats	32.	M/S Sabz Ali Khan & Co
4.	Your firm reduced the environmental impacts of its	33.	M/S AkhunzadaZaidullah& Co
٦,	products/service	34.	M/S National Rcc Works Pvt Ltd
5.	Your firm reduced environmental impact by	35.	M/S Shaukat Khan & Company
0.	establishing partnerships	36.	M/S Al-Fatah Construction Pvt Ltd
6.	Your firm reduced the risk of environmental	37.	M/S Pir Muhammad & Co
0.	accidents, spills, and releases	38.	M/S Fida Muhammad & Sons
7.	Your firm reduced purchases of non-renewable	39.	M/S Kausar Ali & Brothers
,.	materials, chemicals, and components	40.	M/S Muhammad Younas
8.	Your firm reduced the use of traditional fuels by	41.	M/S Muhammad Iqbal& Sons
0.	substituting some less polluting energy sources	42.	M/S Haji Noor Dil Khan
9.	Your firm undertook voluntary actions (e.g., actions	43.	M/S Jansons Construction & Company
	that are not required by regulations) for	44.	M/S Abid Constructions
	environmental restorations	45.	M/S HccHashtnagar Constructions & Co
10.	Your firm undertook actions for environmental	46.	M/S AkhunzadaFazleJamil
10.	audit, public disclosure, employee training and	47.	M/S Iqbal Constructions
	immunity	48.	M/S Masood Khan Constructions
	inindincy	49.	M/S BangashYousafzai
		50.	M/S Dilawar Khan Constructions
APPENDIX	X – R	51.	M/S Rehman Constructions
	AR BASED CONSTRUCTION COMPANIES	52.	M/S Syed Mohsin Shah & Sons
LUITANA	IN DAGED SOMETHOUTION SOLII MINES	53.	M/S Shah Faisal Construction Co.
1.	M/S GhulamHabib& Co Ghc	54.	M/S Dawood Construction Pvt Ltd
2.	M/S Essa Khan & Co	55.	M/S Bcc Construction Co.
3.	M/S Shah ZamanPvt Ltd	56 <b>.</b>	M/S Anar Jan & Co.
0.	MOOLE TO STATE	50.	MOUNT OUT & CO.

57.

58.

59.

M/S Hidayat Construction

M/S Zahir Shah & Brothers

M/S ZakhaKhel Constructions

4.

5.

M/S Shinwari Constructions

M/S Muhammad Islam & Co. Pvt Ltd

M/S Sheen Ghar Construction Co

60.	M/S Niaz Muhammad
61.	M/S Royal Builders Pvt Ltd
62.	M/S Malik Constructions
63.	M/S Asmatullah& Brothers
64.	M/S Ismaeel Constructions Pvt Ltd
65.	M/S Recent Construction
66.	M/S Durrani Construction
67.	M/S ManzarHussain
68.	M/S Sak Constructions Co.
69.	M/S Zeb Brother's
70.	M/S Salehljaz Constructions
71.	M/S Khilji Brother's
72.	M/S Bashir Ahmad
73.	M/S Mohsin Constructions
74.	M/S Pakhtunkhwa Constructions
75.	M/S BakhtZada
76.	M/S Icc Imran Construction
77.	M/S Syed Yaqoob Shah & Sons
78.	M/S Sahil Builders
79.	M/S Jhk Constructions
80.	M/S Jibran Khan & Brothers
81.	M/S Rahim Khan & Co.
82.	M/S Farman Ali Khan
83.	M/S New Khan Builders
84.	M/S Chirat Constructions
85.	M/S BakhtajUddin& Co.
86.	M/S Haji Aurangzeb Khan Gandapur& Sons
87.	M/S Haji Muhammad Khan & Sons
88.	M/S PirAzmat Shah & Sons
89.	M/S AbdurRahman& Co.
90.	M/S Muhammad Ajmal Khan & Sons
91.	M/S Level Up Constructions
92.	M/S AmjidKhattak Constructions
93.	M/S Anwar Said & Co.
0.1	M/O D 1 1 1 1 1 1/1 00

M/S Raja Adalat Khan &Sons .

94.