



## Link between Agency Costs and Firms Performance of Listed Oil and Gas Companies in Nigeria

Dr. C.I Nwifo; E. N Jenkwe; T. N Oladosu

Associate Professor, University of Abuja, Nigeria

Received: 25.03.2026 | Accepted: 25.04.2026 | Published: 26.04.2026

\*Corresponding author: Dr. C.I Nwifo

DOI: [10.5281/zenodo.19791513](https://doi.org/10.5281/zenodo.19791513)

### Abstract

### Original Research Article

The objective of this study is to examine the relationship between chief executive's human capital and chief executive officer's compensation of listed conglomerate companies in Nigeria. The correlation research design was adopted for this study. The population of this study consists of six (6) conglomerate companies quoted on the Nigeria Stock Exchange (NSE). The study sampled all the six (6) listed conglomerate companies in Nigeria using census approach. The panel secondary data were collected from annual reports of the sampled companies for five years period from 2019-2023. In analyzing the data, Ordinary Least Square (OLS) was used. The results of the multiple regression revealed that CEO education level has a significant positive relationship with CEO compensation. The study found a significant negative relationship between CEO field of study and CEO compensation. While the findings of the study showed that CEO work experience has no significant relationship with CEO compensation. The study recommends that conglomerate companies should focus on the CEO human capital factors that are deemed to have significant associated with CEO compensation. By understanding how these independent variables affect CEO compensation among conglomerate companies, can gain more insights on what they are paying for and whether the CEO compensation are determined at an acceptable level.

**Keywords:** Chief executive officer, CEO work experience, CEO education level, CEO field of study, Human capital.

Copyright © 2026 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC 4.0).

## INTRODUCTION

### Background to the study

In contemporary discussions of agency theory, agency costs and their influence on firm performance have recently drawn considerable attention. For financial management reasons, maximizing shareholder wealth is the core aim of any corporation-a definition suggesting that

firms have to constantly pursue enhancement of their performance. Strong performance is not only important for maintaining stakeholders' confidence but also sends signals of stability and growth prospects to investors. The performance of a firm is primarily evaluated by means of some financial ratios and the indicators of market value development (Kiprono, Cheboi, & Kosgei, 2024). With the end of achieving these



objectives, shareholders typically delegate management powers either to professional persons called managers or agents, who are supposed to carry out their obligations in the best interest of shareholders. But in reality, managers may pursue their own hidden agenda, which brings conflict to the interest of shareholders—some form of managerial opportunism—aimed at the satisfaction of personal welfare with increased compensation, for example, or expansion of the firm and imposition of unnecessary costs on the company.

Good and effective management is, therefore, the basis of success for any organization, whereas poor management is a sure way to failure. Doing the right thing in leading minimizes information asymmetry, creates stakeholder confidence, and emanates positive signals to investors (Ramesh, 2025). On the contrary, bad management is characterized by innumerable wrong choices, misallocation of resources, and generally bad decisions that drain competitiveness and threaten long-term sustainability (Khan, Zahid, Shahzad, Hussain, & Kitendo, 2022).

More complicated becomes the situation since agency costs are widely regarded as exaggerated, unfair, and hard to justify. Agency costs are seen widely to be one of the principal determinants in motivating the very executive leadership that inspires the contours of the organization's direction and outcomes (Njoku & Lee, 2025). Bouteska and Mefteh-Wali (2021) and Marozva and Maloa (2026), among many other researchers, have analyzed factors determining CEO compensation based on different methodological approaches. Nonetheless, controversies exist, surrounding which factors are most significant, how they are ranked in terms of importance, and the ways in which they might shape the compensation structure.

Executive compensation remains one of the most recurrent themes in corporate governance literature, especially concerning the questions surrounding the drivers for CEO pay. In Nigeria, studies such as Olaniyi and Olayeni (2020) have predominately examined the relationship between CEO compensation and firm performance. However, the intricate role that executive human capital plays in this remuneration outcome has received less

academic attention. Studies to date have focused on board composition, firm size, and governance mechanisms, yet very few have addressed how CEO compensation may be affected by his or her education, working experience, and discipline of study, particularly in conglomerate firms. This gap brings up the serious issue of whether human capital attributes exert influence on CEO remuneration in Nigeria or whether they are more influenced further by institutional and organizational dynamics, thus raising larger concerns about fairness, transparency, and value creation in executive remuneration structures.

### Research Objectives

The main objective of this study is to examine the relationship between executive's human capital and chief executive officer's compensation of listed conglomerate companies in Nigeria. The specific objectives are to:

- i. Evaluate the impact of CEO education level on CEO's compensation;
- ii. Assess the influence of CEO work experience on CEO's compensation; and
- iii. Identify the influence of CEO field of study on CEO's compensation.

### Research Hypotheses

Based on the review of prior studies, following testable null hypotheses were formulated.

**H<sub>01</sub>:** There is no significant relationship between CEO education level and CEO's compensation.

**H<sub>02</sub>:** There is no relationship between CEO work experience and CEO's compensation.

**H<sub>03</sub>:** There is no significant relationship between CEO field of study and CEO's compensation.

This research was limited to the educational level of the CEO, the working experience of the CEO, and the CEO's field of study as human capital factors influencing the compensation of chief executive officers of listed conglomerate firms in Nigeria. The study considered financial statements of conglomerate firms covering a period of five (5) years between 2019 and 2023.

## LITERATURE REVIEW

### Conceptual Framework

#### Executive Compensation

Executive pay can also be commensurate with the knowledge or skill that an executive has acquired. Human capital is a function of the manager's experience and background and is an important source of compensation to the extent it is recognized and valued in a firm (Park & Byun, 2021). According to Human Capital Theory (Becker, 1975), there are different employee attributes related to lifetime income. The most prominent of these attributes are those relating to investments in training such as formal education and on-the-job training. This suggests that the number of years of formal education and market-related experiences shapes most of the variances there are in the salary levels of individuals. It also indicates that cognitive abilities—a strong predictor of job performance—will increase pay levels, being that more capable people acquire training at a lower cost.

While human capital is often invoked to explain compensation, it has rarely been formally operationalized in the empirical study of executive pay. These empirical studies have looked at varied human capital factors such as managerial experience, education, and tenure. Schmid and Baldermann (2021) noted a positive relationship between job-related experience and executive compensation. Hendriks, Burger, and Commandeur (2022) showed that a CEO's bonus payment (but not his total cash compensation or salary) is related to his general management experience. Kumar, Sarkar, and Dhiman (2019) revealed that compensation levels for senior and middle managers increase with human capital investment represented by years of education, years of experience in the labor market, firm tenure, and length of job tenure. Conyon, Haß, Vergauwe, and Zhang (2018) found that CEO international experience is positively related to total pay levels.

#### CEO Education Level and Executive Compensation

The educational attainment of an individual qualifies him or her, whereas qualification, in

general, could insinuate that the person has enough capability to carry out his or her job/task. Qualification serves as an indication to agreeability for employment in favor of that person, even for a company's directors. Having better qualifications translates into better knowledge and ought to thus do the difference in compensation (Hussein, 2021). Harymawan, Minanurohman, Nasih, Shafie, and Ismail (2022), observed that Chief Financial Officers (CFOs) with MBA received higher salaries than those without MD; while Birhanu, Geiler, Renneboog, and Zhao (2021) established that directors with strong skill and knowledge in takeover deals will be favorably rewarded in the merger and acquisition process. Arif, Mustapha, and Abdul Jalil (2023) and Foong and Lim (2023) found that the level of education that represents the prestige power of executives was significantly and positively related to executive remuneration in Malaysian government-linked companies, indicating that executives with low remuneration suffer from their low level of education.

#### CEO Work Experience and Executive Compensation

Experience matters for executive human capital to an extent where it may very well shape compensation expectations. In terms of the human capital theory, years of toil create increased expertise, skill, and leadership due to their career enhancement, which ultimately reflects on their economic value to the firm (Leontes & Hoole, 2024). While work experience develops managerial skills, strategic insights, and exposure to complicated decision-making, the CEO may warrant higher pay. In addition to tenure, experience also creates social capital that opens networks, resources, and industry opportunities to enhance a CEO's value (Luehlfing, McCumber, & Qiu, 2023). Therefore, compensation could be seen as an appreciation of both technical capabilities and relational assets acquired during the lifetime of a career. Yet experience is not always commensurate with innovation or adaptability in dynamic environments (Li, Pu, & Liao, 2022). So CEO work experience in some sense should be taken as an item of qualitative and quantitative

resource in the context of factors such as organizational culture, governance structures, and market conditions that influence compensation.

### **CEO Field of Study and Executive Compensation**

It is an important consideration when relating to salary determinations in CEOs' educational training since the field of study refers to where a CEO qualified and obtained degrees. Generally, most employers prefer these business-related degrees, thinking that these degrees are relevant in providing direct managerial, financial, or strategic skills, which are mostly applied in corporate leadership (Tushar & Sooraksa, 2023). Therefore, Thi and Nguyen (2024) have indicated that Chinese CEOs with degrees in business, economics, or management earn more than their colleagues qualified in non-business subjects. This is to say that business education will enable a CEO to align the corporate strategy to that of shareholders; thus, a higher pay is justified. This will be understood that field of study is the signal of specialized human capital that determines executive pay forms.

### **Theoretical Framework**

The theories underpinning chief executive compensation and which are considered appropriate for this study are; agency theory, and human capital theory.

#### **Agency theory**

The agency theory establishes the existence of a relationship between the principals (the shareholders) and the agents (the managers) and highlights the conflicts arising from the managers following their interests at the expense of the shareholders' wealth as per Jensen and Meckling (1976). Because managerial behavior may incorporate a self-serving bias, for example, maximizing their compensation, prestige, or job security, there is asymmetric information between principals and agents, and this ignorance will create agency costs that tend to inhibit firm performance. To deal with this

phenomenon, an important design of executive compensation has been considered an incentive device that aligns managerial actions with the interests of shareholders (Siwendu & Ambe, 2024). Make the link between pay and performance the incentive structure for what serves as both a motivational tool as well as the monitoring device firms set up to bring down opportunistic behavior and, thus, control managers into actions maximizing firm value. Conceptually, these two agencies give a basis for the understanding of how CEO-compensation are derived as tools for managing some discretion by managers against accountabilities owed by shareholders.

#### **Human Capital Theory**

The Human Capital theory stresses how the value of people's acquired knowledge and skills eventually becomes one of the main determinants of productivity and hence, economic welfare (Becker, 1975). Applied to executive pay, the theory would suggest that such attributes as education, work experience, and professional specialization are investments in human capital that would give an executive the additional capability of enhancing marketing performance (Ullah, Mehmood, Amin, & Abbas, 2022). Thus, the higher paid CEOs are expected to be those who hold higher qualifications or have greater managerial experience since their human capital would signal a higher degree of ability to create value and manage organizational complexity. From this standpoint, compensation can be viewed as a return on investment in skills and expertise whereby firms reward executives with an advantage based on their human capital (Gerhart, Kim, & He, 2025). Theoretically, this means that CEO compensation should factor in not only company results but could also integrate the depth and relevance of the executive's human capital as one of the considerations for compensation.

In this regard, the present study has theorized on two theories: Agency theory, and Human capital theory. In other words, the study is underpinned by the two theories because of the nature of variables considered (CEO education level, CEO work experience, and CEO field of study).

## METHODOLOGY

### Research Design

The purpose of this correlational research is to discover the effect of characteristics of executive human capital (education level, work experience, and field of studies) on CEO compensation of listed conglomerate firms in Nigeria. This design was chosen because correlation research emphasizes the relationship between variables and identifies the effect of an independent variable(s) upon a dependent variable, in order to prove whether or not a causal relationship exists with the said variables.

### Population of the Study

The study population comprises of the six conglomerates quoted in the Nigeria Stock Exchange. The grouse for selecting these companies comes from the fact that they fully met the Nigeria Stock Exchange's (NSE) listing requirements and that data that are basically needed for this study are available.

### Sample and Sampling Technique

Because of the availability of data of the companies, coupled with the fact that they are very few in number, the study adopted census sampling for all the six (6) populations. The companies selected are: A.G. Leventis (Nigeria) Plc; Chellarams Plc; John Holt Plc; SCOA (Nigeria) Plc; Transnational Corporation of Nigeria Plc; and UACN Plc.

### Sources and Methods of Data Collection

They used the panel secondary data within the periods of 2019-2023 accounting years as obtained from the annual report and accounts of the sample companies. The use of panel secondary data in this study is based on the fact that the data used are cross-sectional and time series. The dependent variable of CEO's remuneration was gotten from note to the financial statements of the annual reports and accounts of sample firms while data for executive human capital variables (CEO educational level, CEO work experience, and

CEO field of study) were sourced from non-financial statements of the annual reports and accounts of sample listed conglomerate firms in Nigeria.

### Model Specification

The model uses CEO's remuneration as the dependent variable and three independent variables, which include CEO educational level, CEO work experience and CEO field of study. This is formulated as follows:

$$CEORM_{it} = \beta_0 + \beta_1 CEOEDL_{it} + \beta_2 CEOWEP_{it} + \beta_3 CEOFOS_{it} + \varepsilon_i$$

Where:

$CEORM_{it}$  = Chief executive officer's remuneration

$\beta_0$  = Coefficient of the constant variable

$CEOEDL_{it}$  = Chief executive officer education level for company in  $i$  year  $t$

$CEOWEP_{it}$  = Chief executive officer work experience for company in  $i$  year  $t$

$CEOFOS_{it}$  = Chief executive officer field of study for company in  $i$  year  $t$

$\beta_1, \beta_2, \beta_3$  = Regression coefficients of independent variables

$\varepsilon_i$  = error term.

### 3.6 Measurement of variables

The dependent variable being measured is the compensation of the chief executive officer defined as the log of total cash compensation, which consists of salaries and bonus payments. Transforming levels of the compensations through natural logarithm reduces the distortion that may arise from outliers. This method corroborates with the work of West (2021) and Choi, Buckley, Kuiper, and Keil (2022). Obviously, the chief executive officer receives a whole range of payments: share options, grants, and market-based incentives, but calculating the present income equivalent of such payments is expected to be very intricate and error-prone. That is why share options, grants, and market-

based incentives are not included in CEO compensation in this study.

### 3.7 Technique of data analysis

Descriptive statistics were used to show the characteristics of the study's variables. The Pearson product-moment correlation was employed in establishing the interdependence of two variables (dependent and independent). Pooled ordinary least square (POLS) regression analysis was used to investigate the relationship between executive human capital characteristics and CEO compensation. The study did some test on Normality, Multicollinearity, and Heteroskedasticity in order to make its results reliable. The essence is to guard against supposition. This pool ordinary least square

model is thought about appropriate due to its flexibility and robustness as well as powerfulness in producing optimal results and predicting numeric output when it is properly structured. Panel data since the nature of data is both time series and cross sectional.

## 4.0 DATA ANALYSIS AND INTERPRETATIONS

### 4.1 Descriptive Statistics

Table 4.1 describes the descriptive statistics in detail where minimum, maximum, mean and standard deviation of the data for the variables used in the study are stated.

**Table 4.1: Summary of Descriptive statistics**

	Number of Observation	Mean	Standard Deviation	Max.	Min.
CEORM	30	8.024	0.561	8.756	6.927
CEOEDL	30	0.833	0.379	1	0
CEOWEP	30	25.633	5.135	35	17
CEOFOS	30	0.666	0.479	1	0

**Source: STATA 13 Output**

The above descriptive statistics illustrate those about CEO compensation, education level, work experience, and field of study. CEO compensation's mean value is 8.024, with standard deviation of 0.561. Its maximum is at 8.756, while the minimum level of the CEO compensation is at 6.927. The mean education level of the CEO equals 0.833, with a standard deviation of 0.379, both respective maximum and minimum values of 1 and 0. The highest and lowest values for CEO working experience are 35 and 17, respectively, while the mean value is

25.633 and standard deviation is 5.135. For the CEO field of study, the mean is 0.666 with SD of 0.479 whereas maximum and minimum are 1 and 0 correspondingly.

### Correlation Analysis

Table 4.2 shows the correlation between CEO compensation, CEO education level, CEO work experience and CEO field of study.

**Table 4.2: Correlation Matrix of Dependent and Independent Variables**

	CEORM	CEOEDL	CEOWEP	CEOFOS
CEORM	1			
CEOEDL	0.6771	1		
CEOWEP	-0.0574	0.2332	1	
CEOFOS	0.2111	0.6325	0.0887	1

Source: STATA 13 Output

As indicated in Table 4.2, CEO work experience and CEO compensation of conglomerate firms are negatively related to each other with the value of -0.0574. On the other hand, there exists a significant positive association between CEO compensation and either of the two variables—the CEO education level and the CEO field of study. The highest correlation between independent variables is 0.6325 and occurred between the CEO field of study (CEOFOS) and CEO education level (CEOEDL). According to Kim (2019), simple correlation among independent variables is not harmful till it goes beyond the limit of 0.8 or 0.9.

**Regression Diagnostics**

The regression analysis is carried out to assess the fitting of the research model and its elements

concerning the reliability of the results to be provided. The tests comprise the tests for normality, multicollinearity, and heteroscedasticity.

**Normality Test**

Normality tests determine how much likelihood is there for a given data set to come from a normal distribution. In other words, the errors (residuals) should be normally distributed. This study utilized the Shapiro Wilk test for normal data in order to find statistical evidence against the hypothesis that the study's variables' data follow a normal curve. The results of the normality tests of all independent variables are found in table 4.3.

**Table 4.3: Results of Normality Test**

Variables	N	W	V	Z	Prob > z
CEORM	30	0.90379	3.058	2.311	0.01041
CEOEDL	30	0.77650	7.104	4.054	0.00003
CEOWEP	30	0.96219	1.202	0.380	0.35189
CEOFOS	30	0.96490	1.116	0.226	0.41046

Source: STATA 13 Output

The assumption of the null hypothesis for CEORM and CEOEDL regarding the normality of data was rejected, while for CEOWEP and CEOFOS data, the null hypothesis was not rejected. This was based on the 1% level of

significance with a p-value of 0.0000 for all model variables, except for CEOWEP and CEOFOS, which had p-values of 0.35189 and 0.41046 respectively.

### Multicollinearity Tests

Problems related to multicollinearity, which can arise while fitting a regression model, occur when a high degree of correlations (linear dependence) exists between the independent

variables of the model (Singh, Singh, & Paprzycki, 2023). From our result in Table 4.4, the variance inflation factor (VIF) values are far below 10 and therefore, there is no multicollinearity problem between the variables.

**Table 4.4: Results of Multicollinearity Test**

Variables	VIF	Tolerance
CEOEDL	1.76	0.568377
CEOFO5	1.68	0.596342
CEOWEP	1.06	0.939845
Mean VIF	1.50	

**Source: STATA 13 Output**

### Heteroskedasticity

Heteroscedasticity presents a systematic pattern for errors, that is, where the variances of the errors are not constant. A multiple regression analysis will assume that residuals (errors) will not show any degree of heteroskedasticity. If the

p-value shows no significance or;  $p > 5\%$  (Rajh-Weber, Huber, & Arendasy, 2026), then it implies that residuals (errors) are constant (homoscedasticity). According to the results shown in table 4.5 below, there was no heteroscedasticity problem as the p-value (0.8146) is greater than the 5% threshold.

**Table 4.5 Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity**

Test	Chi-square	Prob>chi2
Breusch-Pagan / Cook-Weisberg	0.05	0.8146

**Source: STATA 13 Output**

### Regression Results

**Table 4.6: Regression Results**

---

Mode Summary

---

No. of Observation	30
F-statistic	12.082
Prob. > F	0.0000
R-square	0.5967

Adj. R-squared 0.5501  
 Root MSE 0.3763

Variables	Coefficient	Std. Err.	t-statistic	Sig.
CEOEDL (CEO education level)	1.451065	0.2445235	5.93	0.000
CEOWEP (CEO work experience)	-0.027028	0.0140341	-1.96	0.061
CEOFOS (CEO field of study)	-0.4524474	0.1887258	-2.40	0.024
(Constant)	7.821737	0.3640188	21.49	0.000

Source: STATA 13 Output

From the results obtained in Table 4.6 above, the coefficient of determination (R<sup>2</sup>) stands at 0.59, while the adjusted (R<sup>2</sup>) value is 0.55. This indicates that 55% of CEO compensation for listed conglomerate firms is explained by the independent variables of the model, while 45% of CEO compensation is explained by the error term and other unobserved independent variables.

### Discussion of Findings

This study bases its discussion of findings on multiple regression results.

#### CEO Education Level and CEO Remuneration

The CEO's education level, according to the statistical test, is significant at the 0.01 alpha level. Thus, a unit increase in the CEO's level of education would require an increase in compensation payable by listed conglomerate firms in Nigeria by 1.45. The regression results show that the education level of the CEO is among the major determinant factors for CEO pay in listed conglomerates in Nigeria. This finding corroborates that of Thi and Nguyen (2024), which states that raising the education level of the CEO is associated with an increase in remuneration paid by companies to their top leaders. However, Hendriks, Burger, and Commandeur (2022) stated that no significant relationship exists between CEO education level and CEO compensation.

#### CEO Work Experience and CEO Remuneration

In tables 4.6, the regression results show that the coefficient of work experience held by CEO is computed as -0.027 having a significant value of 0.061. Implicating therefore that there is no link between CEO compensation and work experience of the CEO contrary to findings of the study by Schmid and Baldermann (2021) which found that there is significant relationship between CEO compensation and the work experience of CEOs.

#### CEO Field of Study and CEO Remuneration

Results of the regression establish a negative relationship between CEO field of study and CEO compensation: that is, for every one-unit increase in CEO field of study, CEO compensation decreases by 0.452-an opposite result to Conyon, Haß, Vergauwe, and Zhang (2018), who found no significant relationship between CEO field of study and CEO compensation.

### CONCLUSION AND RECOMMENDATIONS

#### Conclusion

It was concluded based on the findings of this study that a positive significant relationship exists between the level of education of the CEO and the CEO compensation, while the field of study of the CEO has a negative significant relationship with CEO compensation.

Meanwhile, the findings of the study indicated that work experience has no significant relationship with CEO compensation.

### Recommendations

Moreover, it shall be recommended to conglomerates based on study findings that their focus should be on some human capital factors of the CEO that significantly correlate with the CEO's compensation. By knowing how these independent variables affect hybrid CEOs' recompenses with conglomerate firms, the insights they get about being paid what they pay for will further veer compared to how they perceive whether the compensation for the chief executive is set at tolerable levels. There are many telling instances in this study in which conglomerate companies can be convinced about the applicability of human capital factors in considering the value in relation to weight in creating value-added and correlated to CEOs in conglomerate companies.

### References

- Arif, H. M., Mustapha, M. Z., & Abdul Jalil, A. (2023). Do powerful CEOs matter for earnings quality? Evidence from Bangladesh. *PLOS ONE*, *18*(1), e0276935. <https://doi.org/10.1371/journal.pone.0276935>
- Becker, G. S. (1975, February 2). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, Second Edition. Retrieved March 6, 2026, from NBER Books website: <https://ideas.repec.org/b/nbr/nberbk/beck75-1.html>
- Birhanu, A. G., Geiler, P., Renneboog, L., & Zhao, Y. (2021). Acquisition experience and director remuneration. *Journal of International Financial Markets, Institutions and Money*, *101*356. <https://doi.org/10.1016/j.intfin.2021.101356>
- Bouteska, A., & Mefteh-Wali, S. (2021). The determinants of CEO compensation: new insights from United States. *Journal of Applied Accounting Research*, *22*(4), 663–686. <https://doi.org/10.1108/jaar-08-2020-0176>
- Choi, G., Buckley, J. P., Kuiper, J. R., & Keil, A. P. (2022). Log-transformation of Independent Variables: Must We? *Epidemiology*, *33*(6), 843–853. <https://doi.org/10.1097/ede.0000000000001534>
- Conyon, M. J., Haß, L. H., Vergauwe, S., & Zhang, Z. (2018). Foreign experience and CEO compensation. *Journal of Corporate Finance*. <https://doi.org/10.1016/j.jcorpfin.2017.12.016>
- Foong, S.-S., & Lim, B.-L. (2023). Does the Founder CEO Receive a Higher Pay for the Firm's Performance? Evidence from Malaysia. *Malaysian Journal of Economic Studies*, *60*(1), 1–28. <https://doi.org/10.22452/mjes.vol60no1.1>
- Gerhart, B., Kim, J. H., & He, S. (2025). How Important Is Pay and What Are the Effects (Positive and Negative) of Pay for Performance?: Evaluating Claims and Evidence. *Human Resource Management*. <https://doi.org/10.1002/hrm.70037>
- Harymawan, I., Minanurohman, A., Nasih, M., Shafie, R., & Ismail, I. (2022). Chief financial officer's educational background from reputable universities and financial reporting quality. *Journal of Accounting & Organizational Change*, *19*(4). <https://doi.org/10.1108/jaac-12-2021-0195>
- Hendriks, M., Burger, M., & Commandeur, H. (2022). The Influence of CEO Compensation on Employee Engagement. *Review of Managerial Science*, *17*. <https://doi.org/10.1007/s11846-022-00538-4>

- Hussein, A. (2021). THE IMPACT OF EDUCATIONAL ATTAINMENT ON INDIVIDUAL EARNING AND SOCIAL CLASS MOBILITY. *British Journal of Education*, 9(4), 45–54. Retrieved from <https://ejournals.org/wp-content/uploads/The-Impact-of-Educational-Attainment-on-Individual-Earning-and-Social-Class-Mobility.pdf>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Khan, M. K., Zahid, R. M. A., Shahzad, K., Hussain, M. J., & Kitendo, M. M. (2022). Role of Managerial Ability in Environmental, Social, and Economics Sustainability: An Empirical Evidence from China. *Journal of Environmental and Public Health*, 2022, 1–11. <https://doi.org/10.1155/2022/8588385>
- Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology*, 72(6), 558–569. <https://doi.org/10.4097/kja.19087>
- Kiprono, C., Cheboi, J. Y., & Kosgei, D. (2024). Financial performance, intellectual capital disclosure and firm value: the winning edge. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2302468>
- Kumar, R., Sarkar, S., & Dhiman, A. (2019). Determinants of managerial compensation: An empirical exploration. *IIMB Management Review*, 31(2), 105–115. <https://doi.org/10.1016/j.iimb.2019.03.008>
- Leontes, N. I., & Hoole, C. (2024). Bridging the Gap: Exploring the Impact of Human Capital Management on Employee Performance through Work Engagement. *Administrative Sciences*, 14(6), 129–129. <https://doi.org/10.3390/admsci14060129>
- Li, X., Pu, R., & Liao, H. (2022). The impacts of innovation capability and social adaptability on undergraduates' employability: The role of self-efficacy. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.954828>
- Luehlfing, M. S., McCumber, W. R., & Qiu, H. (2023). CEO Social Capital and the Value Relevance of Accounting Metrics. *Risks*, 11(4), 78. <https://doi.org/10.3390/risks11040078>
- Marozva, R. R., & Maloa, F. (2026). Impact of Macro-Economic Factors on CEO Compensation: Evidence from JSE-Listed Banks. *Economies*, 14(1), 25. <https://doi.org/10.3390/economies1401025>
- Njoku, O. E., & Lee, Y. (2025). Agency Costs, Ownership Structure, and Cost Stickiness: Implications for Sustainable Corporate Governance. *Sustainability*, 17(11), 5144–5144. <https://doi.org/10.3390/su17115144>
- Olaniyi, C. O., & Olayeni, O. R. (2020). A new perspective into the relationship between CEO pay and firm performance: evidence from Nigeria's listed firms. *Journal of Social and Economic Development*. <https://doi.org/10.1007/s40847-020-00103-3>
- Park, W., & Byun, C. (2021). Effect of SME's Managerial Ability and Executive Compensation on Firm Value. *Sustainability*, 13(21), 11828. <https://doi.org/10.3390/su132111828>
- Rajh-Weber, H., Huber, S. E., & Arendasy, M. (2026). Using Heteroskedasticity-Consistent Standard Errors and the Bootstrap for Linear Regression Analysis Available in SPSS: A Tutorial. *Advances in Methods and Practices in Psychological Science*, 9(1). <https://doi.org/10.1177/25152459251408046>
- Ramesh. (2025). 21st Century Do You Think Management is Essential - International

- Journal of Research and Innovation in Applied Science (IJRIAS). *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 542–553. Retrieved from <https://rsisinternational.org/journals/ijrias/articles/21st-century-do-you-think-management-is-essential/>
- Schmid, S., & Baldermann, S. (2021). CEOs' International Work Experience and Compensation. *Management International Review*, 61(3), 313–364. <https://doi.org/10.1007/s11575-021-00444-z>
- Singh, P., Singh, S., & Paprzycki, M. (2023). Detection and elimination of multicollinearity in regression analysis. *International Journal of Knowledge-Based and Intelligent Engineering Systems, Preprint*(Preprint), 1–7. <https://doi.org/10.3233/KES-221622>
- Siwendu, T. O., & Ambe, C. M. (2024). A Systematic Literature Review on Transparency in Executive Remuneration Disclosures and Their Determinants. *Journal of Risk and Financial Management*, 17(10), 466–466. <https://doi.org/10.3390/jrfm17100466>
- Thi, T., & Nguyen, C. V. (2024). Does the education level of the CEO and CFO affect the profitability of real estate and construction companies? Evidence from Vietnam. *Heliyon*, 10(7), e28376–e28376. <https://doi.org/10.1016/j.heliyon.2024.e28376>
- Tushar, H., & Sooraksa, N. (2023). Global employability skills in the 21st century workplace: A semi-systematic literature review. *Heliyon*, 9(11), e21023. Sciencedirect. <https://doi.org/10.1016/j.heliyon.2023.e21023>
- Ullah, A. A. -, Mehmood, W., Amin, S., & Abbas, Y. A. (2022). Human capital and organizational performance: A moderation study through innovative leadership. *Journal of Innovation & Knowledge*, 7(4), 100261. <https://doi.org/10.1016/j.jik.2022.100261>
- West, R. M. (2021). Best practice in statistics: The use of log transformation. *Annals of Clinical Biochemistry: International Journal of Laboratory Medicine*, 59(3), 162–165. <https://doi.org/10.1177/00045632211050531>