Directors' Efficiency and Performance of Enterprises Listed on the Nigerian Stock Exchange: A Motivation Perspective

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Abstract Directors are a strategic factor of success in any enterprise, thus their motivation should form a fundamental aspect for efficient achievement of the overall objective and improve performance of an enterprise. This study examined the effect of directors' efficiency on the performance of enterprises listed on the Nigeria Stock Exchange (NSE). Therefore, the specific objectives of the study are to ascertain the effect of directors' efficiency factor (DEF) on return on capital employed (RoCE), Tobin's Q (TQ) and earnings per share (EPS). Hypotheses were formulated in alternate form as directors' efficiency factor has a significant effect on capital employed (RoCE), Tobin's Q (TQ) and earnings per share (EPS). In order to achieve the objectives stated above, the study adopted ex-post facto research design, and data were sourced from African Financials, Nigeria Stock Exchange (NSE) Fact Book and Annual Reports and Accounts of the enterprises under study. Eighty-eight enterprises were selected using purposive sampling technique from 2010 to 2019, and data collected were analyzed using panel data regression model. The study found that DEF has a positive and significant effect on RoCE, but has a negative and significant effect on EPS and has an insignificant negative effect on TQ. Hence, the study recommended that regulatory agencies of the government should ensure that remuneration/compensation/pay package of Directors is commensurate with the performance indicators of the

enterprise; and fringe benefits for Directors should be structured as a means of motivation that could increase their efficiency. Stakeholders would continuously and critically review the activities of the Directors, analyze the growth rate as well as evaluate the performance indices of the enterprises in order to determine any form of augmentation.

Keywords Directors' Efficiency, Motivation; Enterprise Performance

1. Introduction

Motivation is a stimulating factor that induces or propels human behavioral pattern. It is a process which consists of extrinsic and intrinsic factors. Extrinsic factors are a host of external things an individual requires as an incentive to increase productivity. These include remuneration, bonuses, promotion and fringe benefits [35]. Intrinsic factors are internal to an individual, thus inherent and less tangible. More so, they are highly subjective as they represent the individual's perception and feelings which are highly unstable. These intrinsic motivational characteristics include healthy relationship, coordinated competence and progress [22]. Some schools of thought argue that extrinsic factors are more powerful and

effective in attaining motivation, performance and commitment [5] in Legault ([21]), while other schools of thought argue that intrinsic factors are best suited for motivation [11] in Legault [21]. Researchers however, mostly consider a mixture of both intrinsic and extrinsic factors for greater efficiency. [25]. Nonetheless, there is no motivational factor as adequately effective as reward for outstanding performance which is an extrinsic factor. An individual who is properly rewarded for services rendered will definitely be motivated to exceed previous performance, all other things being equal. Hence, the medium in which individuals are motivated is through their sumptuous remuneration in consensus with the increase in the strategic performance and shareholders' value of an enterprise. In order to propel the motivational impulse of Directors, enterprises must meet the needs of the Directors through their remuneration or compensation. Therefore, enterprises must be efficiently managed by the Directors to enable the enterprises to meet their demands (remuneration). Truly, Directors deserve their remuneration but recent discoveries show that some of the enterprises over which they preside are going down or are being acquired by another company or insolvent [27] without downward review of Directors' remuneration. However, over the years, it has been observed that Directors' remuneration has been on the increase as opposed to the rate of increase in shareholder's value and strategic performance of the enterprise [15]. Although there might be ethical and competitive reasons for explaining the increase such as shortage of individuals who are considered to have the ability to lead major stock market enterprises. The implication is that Directors would only be concerned about what they have to gain, and this might affect the enterprise's sustainability and stability with regard to earnings. Conversely, if an emphasis on Directors' remuneration/compensation is structured toward motivating Directors, their efficiency would be enhanced. Thus, the improvement in enterprise performance will lead to the creation of strategic value for the enterprise without impairing sustainable growth in earnings.

There are many factors that affect the remuneration of directors, but the most profound one is the performance of the enterprise. The performance of an enterprise is ascertained based on certain parameters within a specified period of time. However, an enterprise can properly and adequately measure its performance using both internal and external approach. The internal performance approach is measured using accounting variables through the computation of financial ratios, while the external performance approach is measured using market variables through stock market performance.

Therefore, the main aim of this study is to examine Directors' efficiency in terms of being motivated to perform and the effect on the enterprise performance. The efficiency of Directors translates to the level of motivation driving them. The implication is that when Directors'

motivation is low, their efficiency will be impaired; thus having resultant effect on enterprise performance and vice versa.

This study is framed into five (5) major themes which are: theme one deals with introduction and statement of the problem; theme two boards on the review of relevant literature; theme three explains the method applied; theme four involves results and discussion of findings and lastly, theme five gives conclusion and recommendation.

2. Review of Relevant Literature

Conceptual Review

Measurements of Performance

Within the confines of this study, the measures of performance are return on capital employed, Tobin's Q and earnings per share. Return on capital employed is mathematically stated as earnings before interest and tax divided by capital employed. Earnings before interest and tax are the part of profit of an enterprise before deducting interest and tax. While capital employed arrived at by subtracting current liabilities from the total assets of an enterprise. Capital employed can be gotten from both the asset and the liability/equity sides of the statement of financial position [37]. According to Murtala, Ibrahim, Lawal and Abdullahi [26], capital employed measures or establishes the relationship between earnings and capital employed which portrays the efficient utilization of capital to generate revenue earnings for the enterprise. This, in essence, is an evaluation of financial result (earnings) against total financial resources put into use by the enterprise and makes return on capital employed ratio as the utmost index to measure performance. This measure of performance assists enterprise's managers and investors to evaluate a business whether it produces more earnings or returns to settle its cost of capital. The implication is that the rate at which the enterprise is borrowing should be less when compared to the rate of return on the capital employed. However, the interpretation of the rate of return on capital employed should be done with caution. The return on capital employed can differ as a result of short-term impact and the composition of capital employed (gross capital employed, net capital employed and average capital employed) especially in carrying out comparative analysis with similar entities. Earnings per share is made up of basic earnings per share and diluted earnings per share. However, IAS 33 – *Earnings per share* has prescribed in detail as regards the computation, disclosure and presentation of the two components (basic and diluted) in the financial statements. For the purpose of this study, earnings per share is earnings after tax divided by the numbers of ordinary shares issued and fully paid. According to Wet [39], earnings per share is considered the most popular, the holy grail of financial performance

index yet the most controversial. Despite earnings per share being widely used, Wet [39] revealed pertinent limitations in the interpretation and representation. For example, the failure of earnings per share to reflect shareholders' value creation, earnings management and inherent bias towards positive earnings per share growth. Therefore, in calculating earnings per share, enterprises should consider the significant impact of inflation on debts in its capital structure. Tobin's Q ratio is widely used in financial literatures as a proxy for performance. In managing the assets of an enterprise, Tobin's Q is used as an indicator that demonstrates performance especially to create value for the enterprise [17]. Tobin's Q is one of the variables measuring the performance of an enterprise from the market or investment perspective. According to Rajeev, Liang and Mohinder [33], Tobin's Q is a ratio that is gotten by dividing the market value of an enterprise by the assets' replacement value which is used to investigate the diverse financial phenomenon and decisions. The Tobin's Q ratio is an indication of current and anticipated change in value and quality of an enterprise [20] which implies that the stock is undervalued or overvalued. Undervalued stock occurs when the replacement value of the asset of an enterprise is higher than the stock value, that is, Q is less than 1. While overvalued stock occurs when the replacement value of the asset of an enterprise is less than the stock value, that is, Q is higher than 1.

Directors' Motivation and Efficiency

The term 'motivation' is believed to be an entity that compels one to action [14]. Several factors such as human resources, capital and environment influence the performance of an enterprise with human resource having the most impact. Hence, Directors control the resources and affairs of the enterprise through their monitoring responsibility. Thus, adequately motivated Directors are the pillars of successful enterprises [4]. Directors' efficiency is the relationship between benefits received by them and their efforts. This is better expressed as a ratio of Directors' input (benefit) and output (effort). The benefit or input of a Director could be represented by the remuneration/compensation/pay/fee which he receives for the services rendered. Furthermore, the effort or output of Directors could be represented by the revenue generated by the enterprise. Directors' efficiency is used because they are not the only human resource available to the enterprise, but they monitor and direct other resources. Therefore, unmotivated Directors may contribute less effort in their responsibilities and possibly be absent from place of work which will result in inefficiency. Implicitly, well-motivated Directors mean an efficient Director and

increase in the performance of the enterprise. These motivated Directors would apparently need to motivate senior management staff if they want to achieve the strategic objectives of the enterprise. According to Mnzava [24] effectively motivated Directors result in achieving the strategic objectives of the enterprise and thus eliminating operational inefficiency. Improved motivation affects positively the achievement of strategic goals of an enterprise in general. Directors are strategic factors of success in any organisation, thus their motivation should form a fundamental aspect of achieving the overall enterprise objective.

Directors' Remuneration and Performance

Remuneration is the payment or compensation received for services rendered or employment which includes basic salary and any bonuses or other economic benefits that an employee or executive or Director receives during employment. Director remuneration can be described as a recompense given to a senior officer (executive and non-executive Directors) in correspondence with the policies set forth in the enterprise's articles of association as approved by the owners of the enterprise (shareholders). Hence, shareholders have the right to approve or disapprove the remuneration of Directors. The remuneration of Directors covers salary, bonuses, fees, commission, incentives and perquisite benefits such as health-care, use of enterprise properties which are usually tied to the performance (profit) of the enterprise [16], [28]. Directors' remuneration and performance have been and are still topical issues in both developed and developing countries. There are various factors that impinge on the performance of enterprises, and Directors' remuneration is one of such factors that impact on enterprise performance. According to Edvinsson and Joachim [13], remuneration includes all factors that contribute significantly towards Directors' motivation, their loyalty and eventually the performance of the enterprise. These factors are fixed or base pay (cash paid regardless of enterprise performance), qualification and wealth of experience of the Director as well as enterprise size. The relationship between enterprise expenses and performance has been established as a rise in enterprise expenses adversely affects the performance of the enterprise [28]. According to Shetty [36], Directors' remuneration is usually an analysis when analyzing the operation expenses of the enterprise for competitiveness. Compensation is a remuneration package which goes with labour services, and basic salary is a pivotal element of compensation with the assurance of minimum increment over time.

Table 1. Empirical Review on Directors' Motivation

AUTHOR(S)	OBJECTIVE(S)	METHODOLOGY	FINDING(S)
Walther, Moltner and Morner ([38])	To identify motivation profiles among non-executive directors and explore why they continue to serve on boards.	Multiple case study using within-case and cross-case analysis.	The study shows that non-executive director motivation revolves around managerial incentives, reputation, meaningfulness, congruence with firm goals, and enjoyment.
Deci, Olafsen and Ryan ([12])	To examine the relations of self-determination theory to transformational leader, job characteristics, justice, compensation and high quality performance in workplace.	Meta-analysis and critiques.	The study established that compensation systems that reward people without pressuring them can add to basic need supports.
Chareonwongask ([9])	To examine the motivation of cooperative boards of directors on the effect of cooperative performance in Thailand.	This study used the structural equation modelling (SEM).	The result suggests that the motivation of cooperative board of directors significantly affects cooperative performance.
Ogbeide and Akanji ([28]).	To evaluate the effect of executive remuneration and firm's financial performance in Nigeria.	Panel estimate generalised least square (EGLS) with fixed effect.	Executive remuneration has a relationship with firms' performance but negatively impacted on it even though was not statistically significant.
Ryan and Deci ([34])	To specify the conditions that tend to support natural activity and performance as against elicit or exploit their vulnerability.	This study used causal research to evaluate effect of self-determination theory in the work place.	The study found out that autonomy, competence and relatedness foster greater internalisation and integration, which is of great significance for individuals who intend to motivate others in a way that engenders commitment, effort and high-quality performance.
Boivie, Graffin and Pollock ([7])	To provide an unanswered questions in corporate governance research on why do directors serve on boards?	The study used time series logistic regression with random effects, Hausman test and generalised estimating equations (GEE).	The study established that the prestige associated with being a director, the ability to have influence, and identification with the director role make directors less likely to exit. It was also discovered that the value of being on the board of a prestigious firm diminishes when the firm experience events that tarnish its prestige, although these events decrease the likelihood of director exit when prestige is lacking.
De Jong, Hooghiemstra and Van Rinsum ([10])	To explore the personal motives for people to accept or turn down offers to become a non-executive director.	The study used partial least square (PLS) which is a form of structural equation modelling that is particularly useful for small companies.	The study found out that bot intrinsic and extrinsic motives are reasons for accepting and rejecting offers. The study identified quality of management and supervision as motives of accepting an offer and reputational concern as a motive for rejection of offers.
Akewushola and Saka ([2])	To examine financial performance as a determinant of executive compensation.	The study used panel data regression model.	The research findings revealed that financial performance measured by profit after tax, capital employed, return on equity and return on investment, have significant influence on what is to be paid as executive compensation.
Olaniyan ([30])	To determine the effect of executive compensation on the performance of non-financial entities in the Nigerian Stock Exchange (1996-2012)	The study adopted fixed effect regression model.	The study found that the measures of performance (return on asset, return on equity and Tobin's Q) reveal a negative significant relationship between executive compensation.
Olalekan and Bodunde ([29])	To investigate the impact of managing Directors pay on performance of 11 selected Nigerian quoted banks between 2005 and 2012	The study used dynamic Generalized Method of Moments (GMM).	The research reveals that managing Directors pay exerts significant but negative influence on bank performance measured by earnings per share in Nigeria.
Oyerogba, Riro and Membba ([32])	To assess the impact of executive compensation on firms' profitability on listed entities in Nigeria using a period of ten years ranging from 2004 to 2013.		The results revealed that a significant positive relationship exists between the Directors' cash incentives, bonus issue of share and earnings per share. The relationship between non-cash incentive and earnings per share was insignificant.

Source: Authors Computation (2021)

According to Akewushola and Saka ([2]), factors of compensation structure are qualification, attitude, experience and existing rates in the competitive industry.

They stated that the type of employees who receive compensation/remuneration packages include company presidents, vice presidents, managing Directors, chief

executive officers, chief financial officers and other senior executives. Junaidu and Sani [18] gave an elaborate definition of compensation. They defined compensation or pay as financial and non-financial benefits or rewards from an enterprise for services rendered. Also, Abdul, Muhammad, Ghazanfar and Muhammad [1] define compensation as financial payments and non-monetary rewards given to strategic level management for their services on behalf of the enterprise. The various types of compensation received by executive Directors include basic salary, stock options, bonuses, pension, severance package and grant of shares [6]. According to Akewushola and Saka [2], enterprise size, risk, age, and job are contending factors identified as determinants of Directors' remuneration. However, it has been observed that the size of the enterprise is one of the strong components that can influence Directors' remuneration/compensation [3].

According to Miyianda, Oirere and Miyogo [23], the nexus between enterprise performance and the remuneration of Directors can be viewed in two sides. Firstly, it could be viewed on the decision to base Directors' remuneration/compensation on enterprise performance. Secondly, it could be viewed on the residual effect of compensation/remuneration packages on enterprise performance. Implying that in order to motivate Directors, their remuneration/compensation should be based on performance of the enterprise. Therefore, it is obvious that Directors' remuneration/compensation and performance determine each other. Also, it is important to justify the remuneration/compensation received by Directors through proper evaluation of enterprise performance.

3. Research Method

This study adopted *ex-post facto* research design and data were sourced from African Financials, Nigeria Stock Exchange (NSE) Fact Book and Annual Reports and Accounts of enterprises under study listed on the Nigerian Stock Exchange from 2010 to 2019. The population of the study was 162 enterprises listed on the Nigerian Stock Exchange (NSE) during the period under study. However, after applying judgmental sampling technique, data of 88 enterprises was extracted. The criteria used for deselecting enterprises were unaudited and abridged financial statements of entities, unlisted entities on the Nigerian Stock Exchange (NSE) prior 2010 and enterprises' financial statements presented in foreign currency for the period under study.

Model Specification

To determine the effect of Directors' efficiency and the proxies of enterprise performance under study, this study adopted the panel regression model of either the random or fixed effect. Directors' efficiency is the independent

variable proxies by Directors' efficiency factor (DEF) while the dependent variable is the performance proxies by return on capital employed (ROCE), Tobin's Q (TQ) and earnings per share (EPS). To control for the independent variable, log of net income (LNI) and log of net asset (LNA) were used as control variables. Descriptive statistical approach with the aid of tables, as well as panel data analysis were employed in testing the hypotheses and the unit root test was used to avoid spurious results.

This research used the panel data model to simulate the multi-variable regression to examine the effect between the dependent and independent variables. It is stated mathematically thus;

$$Y = f(X) \quad (1)$$

Where Y is the dependent variable and X is the independent variable.

This can be re-written as;

$$PF = f(DEF) \quad (2)$$

Where PF = Performance.

DEF = Director's Efficiency Factor.

The above function can be stated statistically in a linear model;

$$PF = \beta_0 + \beta_1 X_{i-t} + \beta_2 X_{i-t} + \beta_3 X_{i-t} + \mu \quad (3)$$

Where PF is the dependent variable and X_{i-t} , X_{i-t} , X_{i-t} are the independent variables. This can be re-written as:

$$PF_{i-t} = f(DEF_{i-t}, LNI_{i-t}, LNA1_{i-t}) \quad (4)$$

In the light of the above, the models below were estimated for hypotheses one to three using six sets of data (Directors' efficiency factor, return on capital employed, Tobin's Q, earnings per share, log of net income and log of net asset.). Each model will represent a given hypothesis respectively.

Starting with our first hypothesis which says: Directors' efficiency factor has significant effect on return on capital employed is represented as:

$$ROCE_{i-t} = \beta_0 + \beta_1 DEF_{i-t} + \beta_2 LNI_{i-t} + \beta_3 LNA1_{i-t} + \mu \quad (5)$$

For hypothesis two which states that Directors' efficiency factor has significant effect on Tobin's Q is represented as:

$$TQ_{i-t} = \beta_0 + \beta_1 DEF_{i-t} + \beta_2 LNI_{i-t} + \beta_3 LNA1_{i-t} + \mu \quad (6)$$

For hypothesis three which states that Directors' efficiency factor has significant effect on earnings per share is represented as:

$$EPS_{i-t} = \beta_0 + \beta_1 DEF_{i-t} + \beta_2 LNI_{i-t} + \beta_3 LNA1_{i-t} + \mu \quad (7)$$

Where:

DEF = Directors' efficiency factor; ROCE = Return on capital employed; TQ = Tobin's Q; EPS = Earnings per share; LNI = log of Net Income; LNA1 = log of Net Asset; β_0 = Constant indicating the point of interception; β_1 = Coefficient of explanatory Variable and μ = Error term.

Decision Rule

If the P-values as presented above are less than 5%, the null hypothesis is rejected and the alternative hypothesis accepted. On the other hand, if the P-value does not have a positive sign and its probability greater than 0.05, the null hypothesis is accepted and the alternate rejected.

4. Results and Discussion of Findings

The result shows the spread and variation in Director's efficiency factor at 0.158611, return on capital employed at 0.237490, return on asset 0.089123, return on equity at 0.370181, Tobins Q at 13.14249, earning per share at 2.162506 while the control variables, net income stood at

7.416463 and net asset at 9.359819. All variables except the control variables show a positive skewness of 23.63765, 9.792531, 3.726003, 26.93747, 29.35400 and 5.743177 respectively measuring the degree of departure from the mean. On the other hand, net income and net asset show a negative skewness of -1.621005 and -0.279063 respectively. All variables show a positive value for kurtosis. These revealed that the degree of tailedness of all variables used within the period has a heavier tail and this is called leptokurtic distribution.

The correlation matrix for the dependent and independent variables is demonstrated in table 3. The coefficients between all variables are found to be significant at 0.01 level of significance. In addition, it is showed that all the variables are not highly correlated with each other.

Table 2. Descriptive statistics of variables for the period, 2010-2019

	DEF	ROCE	TQ	EPS	LNI	LNA1
Mean	0.158611	0.237490	13.14249	2.162506	7.416463	9.359819
Median	0.029550	0.126500	0.058350	0.540000	7.588577	9.123582
Maximum	44.43640	8.826700	10554.00	57.63000	12.61422	13.80203
Std. Dev.	1.662407	0.540935	356.8402	4.797516	2.764511	1.898723
Skewness	23.63765	9.792531	29.35400	5.743177	-1.621005	-0.279063
Kurtosis	599.1090	126.7993	867.2200	49.96961	8.214020	4.723549
Jarque-Bera	13111301	576027.3	27511840	85729.61	1379.068	120.3446
Observations	880	880	880	880	880	880

Source: E-view 10.0 Output, 2021

Table 3. Correlation Analysis

	DEF	ROCE	TQ	EPS	LNI	LNA1
DEF	1.0000					
ROCE	-0.025596	1.0000				
TQ	-0.003413	-0.015442	1.0000			
EPS	-0.031864	0.097235	-0.015677	1.0000		
LNI	-0.154873	0.028411	-0.120810	0.171789	1.0000	
LNA1	-0.029664	-0.198915	-0.189981	0.204998	0.619485	1.0000

Source: E-view 10.0 Output, 2021

Table 4. Summary of Panel Unit Root Test

Variables	Levin, Lin & Chu t	Im, Pesaran and Shin W-stat	ADF - Fisher Chi-square	PP - Fisher Chi-square	Status
DEF	-39.9579*** (0.0000)	-8.93210*** (0.0000)	343.933*** (0.0000)	354.325*** (0.0000)	1(0)
ROCE	-51.8098*** (0.0000)	-12.1623*** (0.0000)	406.879*** (0.0000)	555.908*** (0.0000)	1(0)
TQ	331.537** (0.0000)	-50.5468*** (0.0000)	305.870*** (0.0000)	494.297*** (0.0000)	1(1)
EPS	-90.0042*** (0.0000)	-12.8380*** (0.0000)	317.232*** (0.0000)	433.898*** (0.0000)	1(0)
LNI	-22.1701*** (0.0000)	-8.74643*** (0.0000)	409.456*** (0.0000)	724.004*** (0.0000)	1(1)
LNA1	-23.6669*** (0.0000)	-5.74701*** (0.0065)	296.231*** (0.0011)	358.115*** (0.0000)	1(0)

Source: E-view 10.0 Output, 2021

The P-values are in parenthesis. They are all smaller than 1%; so the null hypothesis is rejected, we therefore conclude that the variables series are stationary. The result illustrates that all the variables both explanatory, regressor and control variables are stationary at both levels and 1st difference.

Panel Regression Analysis

Hypothesis One: Directors' efficiency factor has significant effect on return on capital employed

Hausmann Test Hypothesis

H₀: Random effect model is appropriate

H₁: Fixed effect model is appropriate;

If the p-value of the test result as presented in table 5 below is less than 5%, reject the null hypothesis otherwise accept the alternate hypothesis.

Table 5. Hausmann Test for Hypothesis One

Hypothesis One			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.960273	3	0.8109

Source: E-view 10.0 Output, 2021

The Hausmann test was adopted so as to decide on the best fit model for the test. The cross-section chi-square statistic with 5 degree of freedom is 0.96 and the p-value is 0.811 as presented in table 5 above. The p-value of the Hausmann chi-square statistics is greater than 5% so the null hypothesis is accepted for hypothesis one. In conclusion, random effect model is a better option than the fixed effect for hypothesis one.

Table 6. Directors' efficiency factor has significant effect on return on capital employed

Dependent Variable: Return on Capital Employed

Variables	Coefficient	Std Error	t-statistics	Pro.
DEF	0.004718	0.007038	0.670368	0.5028
LNI	0.066131	0.031669	2.088210	0.0371
LNA01	-0.127060	0.045967	-2.764153	0.0058
C	0.936268	0.257784	3.631983	0.0003
R ²	8.6%			
Adjusted R-square	0.08			
F- stat	27.32%			
P-value	0.000000			
Durbin-Watson stat	11.96≈ 2			

Source: E-view 10.0 Output, 2021

From table 6, the R² of 8.6% represent the goodness of fit of the panel regression. The independent variable is responsible for 8.6% variation in the dependent variable with an unexplained variation of 91.4%. This implies

there are other variables that are responsible for change in the dependent variable which is not accounted for. Although this figure is high, it cannot discredit the model because the result shows that the data set are normally distributed as evidenced by the F-statistic of 27.32, Durbin-Watson stat of 1.96 approximately 2 and the corresponding probability value of 0.000000. These parameters all showed a joint significant of the variables used. This implies the result is good enough for a meaningful analysis. Director's efficiency factor revealed a positive and significant effect on return on capital employed of the sampled enterprises in Nigeria for the period studied. This implies a unit increase in Director's efficiency factor correspondingly results to a unit increase in return on capital employed of the sampled enterprises. This finding is in line with the findings of Olayinka [31] whose finding revealed a positive and significant impact of board structure on corporate financial performance.

Hypothesis Two: Directors' efficiency factor has significant effect on Tobins Q

Table 7. Hausmann Test for Hypothesis Two

Hypothesis Two			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.309750	3	0.0975

Source: E-view 10.0 Output, 2021

The cross-section chi-square statistic with 5 degree of freedom is 6.31 and the p-value is 0.09 as presented in table 7. The p-value of the Hausmann chi-square statistics is greater than 5%, so the null hypothesis is accepted for hypothesis two. In conclusion, random effect model is a better option than the fixed effect for hypothesis two.

Table 8. Directors' efficiency factor has significant effect on Tobins Q

Dependent Variable: Tobins Q

Variables	Coefficient	Std Error	t-statistics	Pro.
DEF	-1.521493	7.465238	-0.203810	0.8386
LNI	-140.2769	16.57374	-8.463804	0.0000
LNA01	-16.38081	10.13406	-1.616412	0.1064
C	1448.348	152.2340	9.513963	0.0000
R ²	20%			
Adjusted R-square	0.11			
F- stat	2.25%			
P-value	0.000000			
Durbin-Watson stat	12.43			

Source: E-view 10.0 Output, 2021

Table 8 shows the panel least square result for hypothesis two. From the result, the R² of 20% represent the goodness of fit of the panel regression. The independent variable is responsible for 20% variation in

the dependent variable with an unexplained variation of 80%. This implies there are other variables that are responsible for change in the dependent variable which is not accounted for. Although this figure is high it cannot discredit the model because the result shows that the data set are normally distributed as evidenced by the F-statistic of 2.25, Durbin-Watson stat of 2.43 and the corresponding probability value of 0.000000. These are pointers that the result is good enough for a meaningful analysis. Director's efficiency factor revealed a negative and insignificant effect on Tobin's Q of the sampled enterprises in Nigeria for the period studied. This implies a unit increase or decrease in Director's efficiency factor correspondingly would not result to a unit increase or decrease in Tobin Q of the sampled enterprises. This finding is in line with the findings of Olaniyan [30] and Campbell [8] whose findings have a negative but significant relationship between executive compensation and the accounting based measure of performance used. Furthermore, the finding of Miyenda, Oirere and Miyogo [23] established statistically positive but weak effect between Tobin's Q and Directors' remuneration, which does not align with the result of this study.

Hypothesis Three: Directors' efficiency factor has significant effect on Earnings per Share

Table 9. Hausmann Test for Hypothesis Three

Hypothesis Three			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.711960	3	0.8704

Source: E-view 10.0 Output, 2021

The cross-section chi-square statistic with 5 degree of freedom is 0.71 and the p-value is 0.87 as presented in table 9. The p-value of the Hausmann chi-square statistics is greater than 5%, so the null hypothesis is accepted for hypothesis three. In conclusion, random effect model is a better option than the fixed effect for hypothesis three.

Table 10. Directors' efficiency factor has significant effect on Earnings per Share

Dependent Variable: Earnings per Share

Variables	Coefficient	Std Error	t-statistics	Pro.
DEF	-0.047241	0.023659	-1.996739	0.0462
LNI	0.119968	0.073897	1.623443	0.1049
LNA01	0.409239	0.049535	8.261666	0.0000
C	-2.546870	0.345135	-7.379356	0.0000
R ²	4.6%			
Adjusted R-square	0.04			
F- stat	13.90%			
P-value	0.000000			
Durbin-Watson stat	11.57			

Source: E-view 10.0 Output, 2021

Table 10 shows the panel least square result for hypothesis three. From the result, the R² of 4.6% represent the goodness of fit of the panel regression. The independent variable is responsible for 4.6% variation in the dependent variable with an unexplained variation of 95.4%. This implies there are other variables that are responsible for change in the dependent variable which is not accounted for. Although this figure is high, it cannot discredit the model because the result shows that the data set are normally distributed as evidenced by the F-statistic of 13.90, Durbin-Watson stat of 1.57 approximately 2 and the corresponding probability value of 0.000000. These are pointers that the result is good enough for a meaningful analysis. Director's efficiency factor revealed a negative but significant effect on earnings per share of the sampled enterprises in Nigeria for the period studied. By implication, a unit increase in Director's efficiency factor has significant negative effect on earnings per share of the sampled enterprises. This finding is in line with the findings of Oyerogba, Riro and Memba [32], whose result revealed a significant positive effect on the one hand and an insignificant negative effect on the other hand between executive compensation and financial performance. However, the finding of this study is not consistent with Khalid and Rehman [19] which found positively significant impact of Directors' remuneration on earnings per share in a study carried out on 70 Pakistani corporate firms listed on Karachi Stock Exchange for the period of 2007 – 2011.

5. Conclusions and Recommendation

The empirical findings provide different effects of Directors' efficiency on the performance indicators of enterprises listed on the Nigerian Stock Exchange. Directors' efficiency factor has a significant effect on return on capital employed and earnings per share but insignificant on Tobin's Q. This indicates that most corporate enterprises do not assess the Directors' efficiency to determine how remuneration and fringe benefits motivate Directors inputs. Therefore, it is recommended that regulatory agencies such as the Corporate Affairs Commission (CAC), Securities and Exchange Commission (SEC) of Nigeria should ensure that remuneration /compensation/pay package of Directors is commensurate with the performance indicators of the enterprise. This is to prevent or control persistent increase in the remuneration/compensation/pay package of Directors especially when the enterprise's performance indicators are nose diving. Financial and fringe benefits for Directors should not be perceived as the only motivational factors that could increase their efficiency. Psychological needs that trigger motivation such as autonomous motivation, wellness and relatedness could also be considered. Shareholders must critically review the activities of the Directors, analyze the growth rate as

well as evaluate performance indices of the enterprise. This will serve as a guide in determining if Directors have been efficient in the affairs of the enterprise as to deserve any form of augmentation.

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