Board Involvement on Earnings Per Share (Eps): Evidence from A Developing Economy

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Abstract

This research aims to investigate the effect of board involvement on earnings per share. The current study uses the correlation and regression models to analyze publicly available data for a sample of 69 firms quoted in the Nigerian Stock Exchange for the fiscal year 2011. This indicates that the research made use of cross sectional data. Several diagnostic tests have been applied to justify the validity of the results. The empirical investigations reveal that director' shareholdings, board size and board skills have significant impact on performance. Good corporate governance standards are very essential to every organization and should be encouraged and practiced for the interest of the investors, shareholders and other stakeholders. Is worthy of note, that from a developing country like Nigeria, especially in sub-Saharan Africa, this paper is the first of its kind and offers evidence on the effect of board involvement on earnings per share. The paper provides useful information that is of great value to policy makers, academia, corporate firms and other stakeholders.

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ABSTRACT

This research aims to investigate the effect of board involvement on earnings per share. The current study uses the correlation and regression models to analyze publicly available data for a sample of 69 firms quoted in the Nigerian Stock Exchange for the fiscal year 2011. This indicates that the research made use of cross sectional data. Several diagnostic tests have been applied to justify the validity of the results. The empirical investigations reveal that director' shareholdings, board size and board skills have significant impact on performance. Good corporate governance standards are very essential to every organization and should be encouraged and practiced for the interest of the investors, shareholders and other stakeholders. Is worthy of note, that from a developing country like Nigeria, especially in sub-Saharan Africa, this paper is the first of its kind and offers evidence on the effect of board involvement on earnings per share. The paper provides useful information that is of great value to policy makers, academia, corporate firms and other stakeholders.

Key Words: Board Involvement, Earnings per Share, and Firm Performance

1. Introduction

As a result of the responsibility vested on the boards of directors to monitor and manage the firm's activities due to some corporate scandals and malpractices, as well as the potential to increase the company's

performance through their involvement in the strategic process and through building relationships with key investors. However, shareholders and other stakeholders are having great expectations from them, and this has made the board of directors to be under scrutiny to ensure that their active involvement yields expected performance. Thus, the importance of board involvement in achieving corporate performance cannot be overemphasized because they help set organizational goals and boundaries as well as maintain the strategic plan towards attaining the performance level the firm desires. Hence, any failure of the board is a failure of the company's performance. So, given the purpose of governance as proposed, it would follow as a universal truth that the board as the direct recipient of owners' authority is accountable for all positions and functions to which it chooses to grant part of its derived authority, for that is the only way those positions and functions receive it (Carver, 2010). Firm performance is being represented with earnings per share in this research.

2. Literature Review

Historically, the study of corporate governance has been closely linked with the abuse of shareholders' interests (Ahunwan, 2002; Senaratne & Gunaratne, 2008). Shareholder activism has become a force for good in the extant corporate governance literature (Adegbite, Amaeshi & Amao, 2012; Fama & Jensen, 1983). However, the boards of directors can affect the strategy of their firms in two general ways. Boards influence strategy indirectly through "decision control" activities such as evaluating past decisions made by top management, performing high-level reviews of strategic plans, and monitoring executive and firm performance. Boards can also influence strategy through "decision management" activities such as ratifying strategic proposals, asking probing questions about important issues, and helping to formulate, assess, and decide upon strategic alternatives. Decision control is the board's most fundamental responsibility, but decision management is not traditionally considered a necessary board role (Fama & Jensen, 1983; Judge & Zeithaml, 1992; Chitayat, 1984). How the board's role is defined and the way it is structured is the two factors that help to determine the effectiveness of the BOD as a corporate governance mechanism (Cadbury Report, 1992; Carver, 2010). The board is expected to ensure managers' goal-congruent behaviour, and report to the shareholders on its stewardship (from stewardship theory perspective).
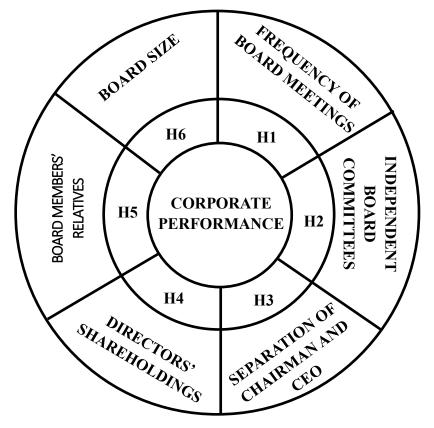
2.1 Research Framework

Figure 2.1: Research Framework

Source: Author's Survey Data.

H1. Frequency of board meetings is not associated with corporate performance.

H2. Independent board committees are not associated with corporate performance.

H3. Separation of chairman and CEO positions is not associated with corporate performance.

H4. Directors' Shareholding is not associated with corporate performance.

H5. Board Members' Relatives is not associated with corporate performance.

H6. Board's size is not associated with corporate performance.

3. Methodology

Empirical study on the impact of board involvement on firm performance requires selection of appropriate performance measure for objective analysis. Unbiased performance measurement is necessary for both strategic and diagnostic purposes.

The researchers use Earnings per Share (EPS) to measure the firm performance. EPS has been seen as one of the most used measure by researchers to evaluate corporate performance (Stickel, 1990 &. Wijethilake, Ekanayake & Perera, 2015). Furthermore, EPS is utilized to evaluate firm performance on board of

directors' commitments (Iyengar and Zampelli, 2009; Pearce and Zahra, 1991). Below is how it will be used to measure corporate performance:

EPS - is measured as net income divided by total shares (Azeez, 2015).

4. The Multiple Regression Models

$$EPS_i = \beta_0 + \beta_1 FREQUENCYBM_i + \beta_2 INDBC_i + \beta_3 SEPCHAIRMANCEO_i + \beta_4 DSHARE_i + \beta_5 BRELAT_i + \beta_6 BSIZE_i + \beta_7 FAGE_i + \beta_8 FSIZE_i + \beta_9 BSKILL_i +$$

$$\beta_{10} FLEV_i + \mu_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Where:

EPS: Earnings per Share

FRE: Frequency of Board Meeting

INDBC: Independent Board Committees

SEPCHAIRMANCEO: Separation of Chairman and CEO Positions

DSHARE: Directors' Shareholdings

BRELAT: Board Members Relatives

BSIZE: Board Size

FAGE: Firm Age

FSIZE: Firm Size

BSKILL: Board Skills

FLEV: Firm Leverage

μ_i: Error Term

Table 4.1: Descriptive Statistics of Earnings per Share

	EPS
Mean	1.123333
Median	0.220000
Maximum	21.21000
Minimum	-15.97
Std. Dev.	4.125180
Skewness	1.314850
Kurtosis	14.62390
Jarque-Bera	408.3372
Probability	0.000000
Sum	77.51000
Sum Sq. Dev.	1157.163
Observations	69

Source: Author's Survey   Data.

Table 4.2: Descriptive Statistics of Board Involvement

	FRE	INDBC	DSHARE	BRE	BSIZE	FAGE	BSKILL	FLEV
Mean	5.289855	3.811594	0.159135	0.173913	9.811594	36.55072	9.739130	0.554220
Median	5.000000	4.000000	0.061600	0.000000	9.000000	32.00000	9.000000	0.520500
Maximum	12.00000	6.000000	0.893500	1.000000	18.00000	117.0000	18.00000	1.521300
Minimum	2.000000	1.000000	0.000300	0.000000	5.000000	5.000000	5.000000	0.063400
Std. Dev.	1.863752	1.101808	0.206456	0.381812	2.936962	23.00865	2.893462	0.275184
Skewness	1.384200	-0.353064	1.457124	1.720618	0.930323	1.107770	1.003356	0.497798
Kurtosis	4.982928	2.990061	4.422937	3.960526	3.322628	4.588135	3.558992	3.550318
Jarque-Bera	33.33862	1.433810	30.23809	36.69856	10.25251	21.36352	12.47566	3.720427
Probability	0.000000	0.488261	0.000000	0.000000	0.005939	0.000023	0.001954	0.155639
Sum	365.0000	263.0000	10.98030	12.00000	677.0000	2522.000	672.0000	38.24120
Sum Sq. Dev.	236.2029	82.55072	2.898444	9.913043	586.5507	35999.07	569.3043	5.149395
Observations	69	69	69	69	69	69	69	69

  Source: Author's Survey Data.

Correlation Probability	FRE	INDBC	DSHARE	BRE	BSIZE	FAGE	BSKILL	FLEV	EPS
FRE	1.00								
INDBC	(0.31)**	1.00							
DSHARE	0.03	-0.19	1.00						
BRE	-0.01	-0.03	0.03	1.00					
BSIZE	(0.43)**	(0.34)**	-0.20	-0.05	1.00				
FAGE	0.12	0.08	(-0.26)*	-0.23	0.00	1.00			
BSKILL	(0.34)**	(0.32)**	-0.19	-0.04	(0.98)**	-0.07	1.00		
FLEV	0.17	0.17	-0.20	0.03	(0.36)**	0.20	(0.34)**	1.00	
EPS	-0.19	-0.03	(-0.27)*	-0.03	-0.08	0.02	-0.05	-0.05	1.00

  Table 4.3: Correlation Analysis

Source: Author's Survey Data.

** and * indicate the significance levels at 0.01 and 0.05 respectively.

According to the correlation analysis, probabilities of the association between FRE and INDBC, FRE and BSKILL, INDBC and BSIZE, INDBC and BSKILL, BSIZE and BSKILL, BSIZE and FLEV, BSKILL and FLEV are all significant at 1% level, while DSHARE and FAGE, DSHARE and EPS are having significant association at 5% level.

DSHARE is the only independent variable whose hypothesis was rejected because it correlates with EPS, while FRE, INDBC, BRE and BSIZE are the independent variables whose hypotheses fails to be rejected because they are not correlated with EPS.

5. Regression Models and Diagnostics Tests

The researcher tested the appropriateness of the regression model using several diagnostic tests.

Table 5.1: Breusch-Godfrey Serial Correlation LM Test:

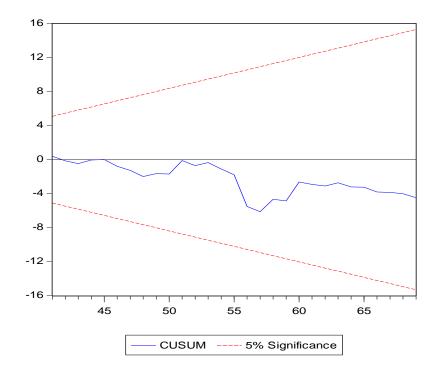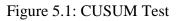|			
F-statistic	0.220352	Prob. F(2,57)	0.8029
Obs*R-squared	0.529392	Prob. Chi-Square(2)	0.7674

Source: Author's Survey Data.

Probability of observed R square is 0.76. This is insignificant at 5%. It indicates that residuals are not correlated over the cross-sections and they are independent. This means that results are valid.

Table 5.2: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.561109	Prob. F(8,60)	0.8053
Obs*R-squared	4.802877	Prob. Chi-Square(8)	0.7784
Scaled explained SS	23.01082	Prob. Chi-Square(8)	0.0034

Source: Author's Survey Data.

Probability of the observed R-square is 0.77. This is insignificant. Therefore, variance of residual is constant. It indicates that residuals are having homoscedasticity and no heteroskedasticity problem. Accordingly, model is appropriate and providing valid results.

Figure 5.1: CUSUM Test

Source: Author's Survey Data.

The researchers tested the parameters stabilization using CUSUM test with respect to 5% level of significance. The curve behaves between the two (2) border lines. This indicates that the parameters of the regression models are stable. Accordingly, result is more valid. Furthermore, it also means that the model can be used for prediction because the model is valid.

5.1 Effect of Board Involvement on Earnings per Share (EPS)

The effect of board involvement on earnings per share has been analyzed using multiple regression models. Result is provided by Table 5.3.

Table 5.3: Individual Effect of Board Involvement on Earnings per Share (EPS)

Dependent Variable: Earnings per Share (EPS)
Method: Least Squares
Sample: 1 69
Included observations: 69

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.826	2.471	1.144	0.257
FRE	0.100	0.311	0.323	0.748
INDBC	-0.057	0.447	-0.127	0.899

DSHARE	-5.913	2.378	-2.487	(0.016)**
BRE	0.335	1.230	0.272	0.786
BSIZE	-2.798	0.984	-2.842	(0.006)**
FAGE	0.006	0.022	0.267	0.791
BSKILL	2.697	0.964	2.797	(0.007)**
FLEV	-1.365	1.804	-0.756	0.452
R-squared	0.303	Mean dependent var		1.123
Adjusted R-squared	0.197	S.D. dependent var		4.125
S.E. of regression	3.697	Akaike info criterion		5.586
Sum squared resid	806.385	Schwarz criterion		5.910
Log likelihood	-182.723	Hannan-Quinn criter.		5.715
F-statistic	2.852	Durbin-Watson stat		1.976
Prob(F-statistic)	0.007			

Source: Author's Survey Data.

   ** and * indicate the significance levels at 0.01 and 0.05 respectively.

Probability of F-test statistics is 0.007. This is significant at 1% level. Therefore, explanatory variables jointly influence on EPS. As the P-value is highly significant, regression model is appropriate.

Only Hypothesis 4 and 6 were rejected because DSHARE and BSIZE are both significant at 1% level. Also BSKILL is significant at 1% level.

Separation of chairman and CEO was dropped because it's having singular matrix problem. In other words, there is no variability in the variable. This implies that the sample firms have it in record that both the chairman position and the CEO position were occupied by two different persons throughout the research. Hence, hypothesis 3 was not analyzed.

The Durbin Watson test statistics is 1.97. This is between 1.5 and 2.5. Therefore, residuals are independent and the model is more appropriate.

Table 5.4: Relationship between Residuals and Explanatory Variables

Sample: 1 69	
Covariance Analysis: Ordinary	
Correlation	
Probability	RESID
FRE	1.47E-15
P value	1.00
INDBC	-2.50E-15
P value	1.00
DSHARE	-1.10E-16
P value	1.00
BRE	2.68E-16
P value	1.00
BSIZE	1.22E-15
P value	1.00
FAGE	8.23E-16
P value	1.00
BSKILL	-4.56E-16
P value	1.00
FLEV	3.67E-15
P value	1.00

Source: Author's Survey Data.

In the table 5.4, probability of each independent variable is 1.00. They are perfectly insignificant. Therefore, residuals are not correlated with independent variables. The model is appropriate.

6. Discussion of Findings and Recommendations

This study has examined the relationship between board involvement and EPS in Nigeria. The results of the investigation are quite revealing.

Firms should at all times consider the shareholdings of directors, the size of the board and the skills of board members in order to achieve performance. The reason is because they are both jointly and individually significant with EPS. Directors' shareholding recorded negative significance on firm performance for EPS. The implication of this is that when directors' shareholdings increase, performance will reduce, and when there is a decline in directors' shareholdings, corporate performance will rise. In addition to the above point, DSHARE correlates with EPS.

Board size is having negative significant effect on firm performance at 1% level with EPS. Whereas, Azeez (2015) found out that board size is having negative significant effect with EPS at 5% level. These differences might be as a result of varying contextual factors pertaining to research settings, such as national diversity, status of economies, political stability, institutional constraints, and cultural background. This is why Carver (2010) argues that there is no universal applicability of corporate governance. However, Morck & Yeung (2009) supported this argument by saying that corporate governance differs fundamentally across countries. This is true because, board size differs from company to company as well as from country to country. For example; Dutch "boards" on average are two-thirds the size of U.S. boards (Ees, Postma & Sterken, 2003). And some of these differences are seen in other factors as mentioned above. And also, due to their different contextual characteristics, developing countries are likely to experience issues that may not be prevalent in developed countries (Achchuthan & Kajananthan, 2013). This indicates that there is a need to develop models of corporate governance that consider the conditions in each developing country and that are not directly borrowed from developed countries. Furthermore, Chisanga (2010) argued in same direction by saying that corporate governance is not about quick fixes, but a methodical and patient process that must be relevant and appropriate to each country's stage of development.

The implications of board size having negative significant effect on performance is that, when board size increases, firm performance will reduce and when board size reduces, corporate performance will increase. This result is consistent with Dharmadasa, Premarthne & Hearth (2014) argument, which supported the claim that small board size has influenced on firm performance. Hence, the board should be composed in such a way as to ensure diversity of experience without compromising compatibility, integrity, availability, and independence.

Further findings reveal that BSIZE is significant in relation to EPS. EPS has been operationalized with respect to net income and total shares. Accordingly, BSIZE is having a significant association with net income and total shares. EPS result is consistent with Azeez (2015) and Wijethilake, Ekanayake & Perera (2015). DSHARE and BSKILL are also having significant association with net income and total shares.

Firms with board members having the required skills and experiences will encourage learning, teamwork and effective performance. However, EPS recorded positive significance at 1% level for board skills. This implies that as board skills increase, firm performance will also increase and any decrease in board skills will automatically decrease firm performance. This is why there is need for firms to have policies that ensure the consideration of potential board members' experiences before appointment to the board. Also,

there is the need for continuous training and development for board members in order to ensure efficient discharge of their responsibilities.

The positive significant effect of board skills can also be as a result of appointing board members who have the qualifications and experiences, and their expertise is of good to the company. In other words, board members having adequate mixture of the qualifications and experiences needed to yield performance. Thus, board members should be thorough in their areas of specialties.

Even though some of the other independent variables are not individually significant with EPS, they are jointly having effect on EPS. Therefore, it's of paramount important that those variables should not be taken in isolation; rather they should all be considered jointly in order for them to really have jointly effect on corporate performance.

Though this research focused on Nigeria, but it's worthy of note that the applicability of these recommendations and suggestions should not only be limited to Nigeria but to other developing countries and developed countries who sees what will be of great importance to their corporate governance practices when they apply such recommendation(s) and suggestion(s).

7.   Limitations and Further Research

During the period of this research, the researchers encountered some limitations. Such limitations are the unavailability of all the required data needed for this research and the study covers one country i.e. Nigeria. As further research, this study can be applied to different countries and also to different period of times.

8.   Acknowledgement

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