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## IMPACT OF BOARD CHARACTERISTICS ON EARNINGS MANAGEMENT OF FOODS AND BEVERAGES COMPANIES IN NIGERIA

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### **Abstract**

*The study investigates the impacts of board meetings, women directors and board independence on Earnings Management of foods and beverages companies in Nigeria from 2007 to 2013. The discretionary accrual was extracted by using modified Jones (1991) model. The sample size of the population is nine (9) companies. A correlational research design was used. Multiple regression was used as a technique of data analysis. The result was interpreted using fixed effect regression. The results reveal that the impact of frequency of Board Meetings and Gender Mix on Earnings Management were found to be negative and statistically significant. The study concluded that increase in number of board meetings and the proportion of women directors in the board constrain the level of discretionary accruals. Therefore, in line with the findings and conclusions, the study recommends that SEC should encourage adherence to at least the minimum requirement of board meetings by making it mandatory. Government in collaboration with Corporate Affairs Commission should come up with a policy where by companies will be forced to provide seat for women in their boards, give them responsibilities in area of finance and control related matters.*

**Keywords:** *Earnings management, Frequency of board meetings, women directors, board independence*

### **1.1 Introduction**

Agency problem have existed when managers fail to act in the best interest of the owners. Evidence from literature reveals that managers use their discretion over accounting numbers to achieve private gain; and flexibility of accounting standard usually gives room for them to adjust earnings through managing accruals. Managers have many incentives to manage earnings like compensation, avoid debt covenant violation, meeting and beating benchmark, reducing regulatory or political cost, to meet analysts' expectations and to make a firm appears a less risky investment (Kasznik, 1999 and Trueman & Titman, 1988). Bunamin, Abdulra'uf, Johari and Abdulrahman (2012) have the notion that Earnings Management with the intention to manage users' perception in firms are considered unethical even if no accounting standards are violated. Hence, Earnings Management has the propensity to mislead which may be difficult to detect by ordinary people who do not have requisite knowledge on the issue relating to accounting numbers. Earnings management sometimes make financial reporting to be of less quality and reduces the level of confidence of investors in their decision making process (Shehu & Abubakar, 2012). Nowadays, most users of financial statement do not count accounting earnings as a major yardstick for performance evaluation as well as for decision-making. Evidences from literature and financial scandals around the globe prove that Earnings Management reduces investors' confidence. On the other hand, Board of Directors are regarded as an important internal corporate mechanism responsible for mitigating agency conflicts between managers and shareholders by helping in constraining the level of Earnings Management. Therefore, one of the major roles of Board of Directors is to monitor and reduce the incidence of Earnings Management (Hashim, Ariff & Salleh, 2013). They are responsible for monitoring managers on behalf of shareholders and overseeing the financial reporting processes.

Composing Board of Directors with diverse knowledge, skills, gender, and function is an important determinant of effective board for carrying out its monitoring function. Board composition includes the determination of the proportion of independent and executive directors, mix of qualification and expertise, designating audit, proportion of female directors on the board and number of Board Meetings (Man, 2012; Bertrand & Mullainathan, 2001). Although, a lot of literature suggest that effective board helps reduce Earnings Management, but issues related to corporate governance and Earnings Management are inconclusive. This is because many corporates failure witnessed around the globe occurred in the developed countries, where they have more sophisticated, and sound corporate governance system. In addition, the board of directors were held responsible for failure to control the activities of managers.

Furthermore, foods and beverages sector of the economy has also witnessed the problem of earnings manipulation. For example, Cadbury Nigeria Plc. manipulated its financial statement to boost its image as well as push its stock price. As a result, the company inflated its turnover, profit and other performance indices. The company had been doing so since 2002 but was later discovered in 2006 (Onyenweau, 2009). According to CBN (2006), a survey by SEC indicates that weak corporate governance accounted for the corporate failures in Nigeria, as only 40% of the listed companies recognized the code of corporate governance in place

Previous studies recognise board as a crucial internal control mechanism and suggest that an effective board helps in mitigating Earnings Management activities. Despite the fact that there are many empirical studies that investigated the issue of Board of Directors' attributes/corporate governance and Earnings Management, majority focused on determining the impact of board size, board independence, CEO duality, managerial ownership and audit committee on Earnings Management. These prior studies includes: Saleh, Ja'afar & Hassan (2008), Shehu & Mamman (2011), Moustapa & Ragab (2011), Uadiale (2012), Odia & Ogiedi (2013), Ugbade, Lizan & Kaseri (2013), Musa, *et al.* (2013), Shehu (2013), Al-Damari & Ismail (2013), Swastika (2013), among others. However, frequency of Board Meetings and Gender Mix has not been studied extensively. Therefore, in addition to board independence, the study also focuses on influence of women directors and board meetings on earnings management of food and beverages companies in Nigeria.

Frequency of Board Meetings presumed to be a good proxy for the corporate governance to control managers' behaviour. Board that meets frequently are expected to solve the problem effectively. Effective board is expected to meet regularly to stay on top of accounting and control related matter to make sure financial reporting process is functioning properly (Zhou & Chen, 2004). On the contrary, Jensen (1993) argues that most of the Board Meetings are not very effective, since the board often forced to engage in high frequency activities to resolve corporate matters. Nigerian SEC code if board of directors should at least meet four times every financial year. However, looking at the meetings held by these companies within the period under review, one can attest that there is a lack of consistency in the number meetings held. Some of them held meetings below the minimum requirement while some above (up to eight times). This inconsistency may be due to the flexibility of the code or based on the matter arises at each firms. This may also affect the magnitude of earnings management of the said firms. Therefore, investigation needs to be carried out to access the

impact of frequency of board meetings on earnings management in the context of Nigerian foods and beverages firms in order to ascertain position.

According to Gallego, Garcia & Rodriguez (2010), board of diverse gender may better avoid practice of Earnings Management, hence, provides shareholders with more reliable financial reporting. Oscar and Daniel (2013) argued that female board member improve board monitoring and hence prevent earnings management to a larger extent. This is because males are likely view leadership as a series of transaction with subordinates, while female are more likely to have more interactive leadership style. Despite there is these arguments in favour of women directorship, in reality, their representation in the foods and beverages firms' team of board of directors is very low, as some firms within the sector did not provide even a single seat for women. Even those that provided the seat for them, the proportion is very low.

Therefore, there is need to conduct research on this aspect to determine the impact women directors on earnings management. Hence, the combined effect of these variables (women directors, frequency of board meeting and board independence) on Earnings Management is hoped to yield an effective result different from other researches.

The major objective of this study is to examine the impact of Board Characteristics on Earnings Management of foods and beverages firms in Nigeria. While the study has the following specific objectives:

- i. To determine the impact of frequency board meetings on earnings management of foods and beverages firms in Nigeria.
- ii. To evaluate the effect of women directors on earnings management of foods and beverages firms in Nigeria.
- iii. To ascertain the effect of board independence on earnings management of foods and beverages firms in Nigeria.

The following hypotheses were formulated in null form:

**H<sub>01</sub>:** Frequency of board meetings does not have significant impact on earnings management of foods and beverages firms in Nigeria.

**H<sub>02</sub>:** Women directors do not have significant impact on earnings management of foods and beverages firms in Nigeria.

**H<sub>03</sub>:** Board independence does not have significant effect on earnings management of foods and beverages firms in Nigeria.

## 2.1 Literature Review

### **2.1.1 Frequency of Board Meetings and Earnings Management**

Nowadays, there is a lot of criticism by many financial and academic publications on Board of Directors for not attending Board Meetings regularly; and which by extension may lower their ability to monitor management well (Modugu & Dabor 2013). The levels of board interaction and activities have influence on Earnings Management. Boards that normally meet often are more likely to solve the problems of the company effectively (Lipton & Lorsch, 1992). Lawler and Conger (2001) suggest that number of times a board meet is an important resource in improving the effectiveness of the board. Directors on board that meet frequently are more likely to discharge their duties in accordance with shareholders' interest because more time can be devoted to monitoring issues such as Earnings Management, conflict of interest and monitoring management.

Kantudu & Ishaq (2015) examines the impact of monitoring characteristics on financial reporting quality of the Nigerian listed oil marketing firms. Financial reporting quality is represented with the qualitative characteristics of financial statement. Data for the study were obtained from an audited annual report and accounts of the sampled oil marketing companies for twelve years covering 2000 to 2011. Multiple regression was used to analyzed the data. Board meeting has an insignificant negative relationship with FRQ of the listed oil marketing companies in Nigeria in both OLS and RE regressions. This implies that frequency of meeting increases the level of earning manipulation which in turn decreases the quality of financial reporting. The finding is contrary to our expectation. Francis, Hasan & Wu (2012) use the current financial crisis as quasi-experiment to examine whether and to what extent corporate boards affect the firm performance by using cumulative stock returns over the crisis to measure firms' performance. The study finds that the frequency of Board Meetings, directors' attendance behaviours, and director age (experience) affect firms' performance during the crisis.

Jaiswal & Banerjee (2009) examine the relationship between Earnings Management and corporate governance characteristics in the Indian context. The result suggests that more number of Board Meetings and higher attendance in these meetings resort to lesser Earnings Management. DeMelo (2009) also examines the effect of the Dutch corporate governance code on the practice of Earnings Management by publicly listed companies in Netherland by using a sample of 33 firms over the period 1997 to 2006. He finds that frequency of Board Meetings does not have significant relationship with Earnings Management. Gulzar & Wang (2011) examine the effect of corporate governance characteristics on Earnings Management and find a significant positive association between Earnings Management and different corporate governance

characteristic such as CEO duality and board meeting. Vafeas (1999) empirically investigates the relationship between board activities and the firm performance. He uses frequency of Board Meetings as a proxy for board activities. He finds that increase in Board Meetings lead to improved firm performance.

Sukeecheep, *et al.* (2013) investigates the influence of Board Characteristics on Earnings Management behaviour in Thai listed companies. The sample of the study consists of 550 firms for a period 2006 to 2010. The study finds no significant impact of Board Meetings on the Earnings Management of top Thai listed firms. The expectation is that Board of Directors that meet frequently will be more effective in monitoring the integrity of financial management and therefore, more likely to constraints earning management. Zhou & Chen (2004) investigate the impact of audit committee and Board Characteristics on Earnings Management by using abnormal loan loss provision to measure Earnings Management for a sample of over 300 listed firms in China over the period 2000-2002. The result reveals that Board Meetings are negatively related to Earnings Management for low Earnings Management banks. But for high Earnings Management group, Board Meetings, audit committee, board independence and board size play an important role in constraining Earnings Management. They suggest that board activity is an important dimension of board operation and effective board should meet regularly to stay on top of accounting and control related matters. Hence, Board Meetings among others are important mechanism of corporate governance. Moradi, Salehi, Bighi & Najari (2012) investigate the relationship between Board Characteristics and Earnings Management of listed companies on Tehran stock exchange during 2006 to 2009. The result shows the frequency of Board Meetings does not have significant impact on Earnings Management.

### **2.1.2 Women Directors and Earnings Management**

Adam & Ferreira (2009) find that female directors can be better monitor of managers' behaviour through board input such as attendance. Gulzar & Wang (2011) describe that the studies evidence the emergence of an issue of board sex diversity in corporate governance literature started from the last few years. Several studies have recently focused that the female member in the board can affect the firms' performance. However, some studies suggest that firm performance has no significant impact with board gender diversity. Carter, Simkins & Simpson (2003) argue that women may improve decision making of the board. Fondas & Salsalos (2000) argue that heterogeneous board is more efficient than homogenous board.

Omoye & Eriki (2014) conducted a study to classify Nigerian quoted companies into high and low earnings management levels and to investigate how corporate governance mechanisms relate to these categories of earnings management levels. A sample of 130 companies was drawn from quoted companies on the Nigerian stock exchange over the period of 2005 to 2010 and to identify the unique firm's corporate governance characteristics. The study revealed that, quoted companies in Nigeria prefer to use high earnings management practices; and that board gender representation had a negative and significant influence on the probability of Nigerian firms adopting absolute high earnings management.

Srinidhi et al. (2011) conduct a study on US firms over the years 2001-2007 and use accruals quality (extended Dechow & Dichev model as proposed by McNichols (2002)) and target beating as proxies for earnings quality. All the results show that female presence on the board is associated with both higher accruals quality and less propensity to manage earnings to beat benchmarks. They conclude that firms with women on the board have higher earnings quality. Gaviious et al. (2012) use a sample consisting of 60 Israeli high-technology firms listed in the USA between 2002 and 2009 to investigate whether gender diversity on the board affects earnings quality. They analyse four earnings quality metrics of which two are ex-post measures (abnormal accruals and non-operating accruals) and two are ex-ante measures (presence of a Big Four auditor and financial leverage). Their results suggest that female presence on the board is associated with better earnings quality.

Bunamin *et al.* (2011) examines the impact of board diversity and discretionary accrual of the top 100 companies in Malaysian Corporate Governance index. They find that Malaysian Corporate Governance index companies manage earnings despite their best compliance on corporate governance. They also find that women on board have positive relationship with discretionary accruals that is increases in the proportion of women in the board would lead to increase in Earnings Management. Also O'Reilly and Main (2012) examine the effect of women outside directors on firm performance and CEO compensation. Using a sample of over 2000 firms for the period 2001 to 2005, the result shows no evidence that adding women outsiders to the board enhances corporate performance.

Hili & Affes (2012) empirically study the impact of gender diversity of the Board of Directors on earnings quality and on Earnings Management by using a sample of 70 French firms. The result reveals that the enhancement of earnings persistence could not attribute to gender diversity that is gender diversity does not have significant impact whether positive or negative on Earnings Management.

Also Carter, D'Souza, Simkims & Simpson (2010) investigate the relationship between the number of women directors and the number of ethnic minority directors on the board and financial performance. They find no significant relationship between the gender and ethnic diversity of the board and financial performance for a sample of major US Corporation.

Emilia & Sami (2010) examine the association between gender, firms' executives and Earnings Management for a sample of 500 Finland firms. Panel regression of discretionary accruals is used. The result provides a considerable evidence to suggest that firms with female directors are associated with income-decreasing accruals. This implies that females are following more conservative Earnings Management strategies. The result of the empirical analysis indicates that the gender of the firms' executive may affect the quality of financial reporting. Also, Rose (2007) find that no significant association between female board representation and firm performance. Gulzar & Wang (2011) investigate the efficiency of corporate governance characteristics in reducing Earnings Management among listed firms of Shanghai and Shenzhen stock exchange in China. The result shows that presence of female director in the board help to reduce the level of Earnings Management.

Tsui, *et al.* (2011) investigate the relationship between female participation and corporate boards and earnings quality drawn from a sample of US listed firms from 2007 to 2011. They employ two measures of earnings quality: discretionary accruals and propensity of firms to beat earnings benchmark by small amount. The result of the study shows that the presence of female directors in monitoring position on audit and corporate governance committees makes more transparent reporting and earnings quality. It also reveals a positive relationship between female participation in corporate boards and earnings quality. Furthermore, after controlling for endogeneity, and other firms and industry characteristics, the result still shows a higher earnings quality in firms with female board participation. Also Niskanen, *et al.* (2009) reveals that earnings quality is positively associated with gender diversity in corporate management.

Ghazaleh & Garkaz (2015) examine the relation between the presence of women on the boards of directors of listed companies in Tehran Stock Exchange using and earnings management with discretionary accruals index. The required information was extracted from 90 accepted firms in Tehran Stock Exchange using Cochran sampling method for 7-years period (2006-2012). The findings of the study indicate that the presence of female directors in board is significantly and negatively associated with earnings management. It was made clear that firms

with women on their boards, they have less use discretionary accruals for earning management.

### **2.1.3 Board Independence and Earnings Management**

Board independence influences the effectiveness of a board which in turn are related to level of earnings management. The board composition must enable an effective, accurate and fast decision making. Independent director has the task of ensuring a balanced decision making, especially to protect minority stockholders and other relevant parties (Nugroho and Eko, 2011). Domination of insiders as directors may lead to transfer of wealth at the expense of the stockholders (Beasley 1996; Fama 1980). Therefore, outsider directors are appointed on the board to obtain independent monitoring mechanism over the board process thereby reducing agency conflicts and improve performance (Craven & Wallace 2001). Consistent with this theory result in prior studies suggest that independent directors are negatively related to fraudulent reporting (. Similarly, negative relation between outside directors and earning management exist (Klein 2002). The independent directors must be solely outsiders who have no other relationship with the company except of being on the board of directors (Roodposhti & Chashmi, 2010). Nugroho and Eko (2011), analyse the effect of board of directors' characteristics on earnings management of companies listed on the Indonesia stock exchange for the period, 2004 and 2008. The researcher used modified Jones model. The researcher discovered that independent directors and board size do not affect earning management practices in manufacturing and non-manufacturing companies.

Peasnell, Pop and Young (2004) examined the relation between board monitoring and earnings management. The result of their study showed that large proportion of independent non-executive director are negatively related top earnings management and that outside directors play more effective role in monitoring to managers aggressive behavior than insiders. Sukeecheep et al (2013) investigated the influence of board characteristics on earnings management behavior in Thai listed companies from 2006 to 2010. The result suggests that board independence is found to have a positive association with earnings management. He concluded by saying perhaps the outside directors in Thailand lack real independence and power to influence management from resorting to earnings management. Roodposhti and Chashmi (2010) examine the effect of board composition and ownership concentration on earning management. The population used in this study comprises firms listed on the Tehran stock exchange between the period of 2002 and 2008. The sample population is 196 firms. The result shows that there is negative association between independent directors and earnings management. Klein (2006) also found a negative association between board independent and

earnings management. It suggests that adding 5 outside directors to the board of directors may improve in monitoring the firms' earnings management. Gulzar and Wang (2011), analyse corporate governance characteristics and earnings management in Chinese listed firms, taking abnormal working capital accruals as proxy for earnings management. The result shows no evidence to support the relationship between proportion of independent directors and discretionary accruals.

Uadiale (2012) examine the role of board of directors and audit committee in preventing earnings management in Nigeria. The study surveyed a sample of 100 respondents in Lagos. The data were obtained through the use of questionnaire and analysed using Chi square. The result showed that board dominated by outside directors brings a greater breadth of experience to the firm and are in a better position to monitor and control earnings manipulation in Nigeria. Abed et al (2012) documented a positive but insignificant relation between earnings management and percentage of outsiders in board.

## **2.2 Theoretical Framework**

The theory underpinning this study is agency theory. This is the theoretical framework used by most researchers for clear understanding of the impact of board characteristic and firm value (Cater, Simkins & Simpson, 2003). Agency theory elucidates the existence of the incentive for management to use Earnings Management (Salah, 2010). Management may manage earnings to hide the true financial position and relevant information of a business organization that investors ought to have known. Therefore, their action as an agent of shareholders may provide better monitoring of management that in turn leads to transparent and quality reporting. Shareholders employ team of Board of Directors to oversee the effective performance of the management in order to protect and enhance their value as well as meeting the companies' obligation to its employees and other stakeholders. Thus, certain characteristics of Board of Directors are suggested in the literature to be effective in constraining the level of Earnings Management. Agency theory suggests that a more diverse board may provide better monitoring of management. Furthermore, board of diverse gender may better avoid practice of Earnings Management, hence, provides shareholders with more reliable financial reporting (Gallego, Garcia & Rodriguez, 2010).

## **3.1 Methodology**

The study used correlational research design by employing both descriptive and inferential statistics using regression analysis. In addition to correlational research design, the study also adopts ex-post facto or causal-comparative design. Data are collected after the event or phenomenon under investigation has taken place, which is why it is called ex-post facto. The sample size of the study is nine (9)

foods and beverage companies listed on the Nigeria stock exchange. The sample size covered 43% of the population. This is arrived at after setting that a firm must meet the criterion of being listed on the NSE within 2007-2013 and should not have been delisted within the period as well as having information on the variables. Panel data Multiple regression (fixed and random effect regression) was used to analyse the relationship between Board Characteristics and Earnings Management.

The model of the study is stated as follows:

$$DAC_{it} = b_0 + b_1FBM_{it} + b_2WD_{it} + b_3BI + b_4ROA_{it} + E_t$$

Where:

DAC: Discretionary accruals;  $b_0$ : intercept (constant);  $b_1 - b_6$ : parameters (slope coefficient); FBM: Frequency of Board Meetings; WD: women directors; ROA: Return on asset

### **Variables Measurement- Independent and Dependent Variables**

<b>Dependent Variable</b>	<b>Measurement</b>
Earnings Management (Discretionary Accruals)	The absolute values of discretionary accruals (residual obtained from modified Jones model (by Dechow et al. (1995))
<b>Independent Variables</b>	
Frequency of Board Meetings	Natural logarithms of number of board meetings held in a year.
Gender Mix	Proportion of female directors to total board of directors members.
Board Independence	Proportion of independent director(s) to total board of directors members.
<b>Control Variables</b>	
Return on Asset (ROA)	EBIT/Total Asset

Source: compiled by the author (2016)

### **Measurement of Discretionary accruals measurement**

This study used discretionary accruals to measure Earnings Management. Modified Jones (1995) model was used to extract the discretionary accrual, that is, the residual values obtained after regressing in the modified Jones Model. The model is presented below:

$$TACC / TA_{i,t} = \hat{\alpha}_1 \left( \frac{1}{TA_{i,t-1}} \right) + \hat{\alpha}_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{TA_{i,t-1}} \right) + \hat{\alpha}_3 \left( \frac{PPE_{i,t}}{TA_{i,t-1}} \right) + e_t$$

Where = TACC = Total accrual (Discretionary + Non-discretionary) for firm 'i' in year t

$\Delta$  REV = Change in operating revenues for firm i in year t

$\Delta$  REC = Change in account receivables for firm i in year t

PPE = Gross property, plant and Equipment for firm i in year t

t and t-i = time subscript

i = firm subscript

e= error term (residual value) - discretionary accruals.

#### 4.1 Descriptive Statistics

**Table 4.1: descriptive statistics**

Variables	Obs	Mean	Std.Dev.	Minimum	Maximum	Skewness	Kurtosis
DAC	63	0.0574	0.0527	0.0018	0.2537	1.5676	5.6724
FBM	63	1.5249	0.1999	0.6931	2.0794	-0.7048	6.9657
WD	63	0.0711	0.0712	0.0000	0.2500	0.7184	2.9856
BI	63	0.2012	0.0223	0.217	0.3217	-0.6710	2.3642
ROA	63	0.1788	0.1826	-0.3076	0.6117	-0.7060	3.9142

**Source:** Extracted from STATA output 10

The absolute value of discretionary accruals of the listed foods and beverages firms in Nigeria (based on the modified Jones model) has a minimum value of 0.0018, (which is much closer to zero) and a maximum of 0.2537. This shows that the minimum percentage of discretionary accruals from the total accruals of the sampled firms is 0.18% (which is less than 1%). While during the period, some firms manage earnings to the extent of 25% of the total accruals. The magnitude of absolute value of discretionary accruals in the sample firms has a mean of 0.0574 with standard deviation of 0.0527. This indicates that the deviation between companies is quite very small. The discretionary accrual values are above zero, which suggests the existence of Earnings Management in the listed foods and beverages firms in Nigeria.

The number of meetings held by the Board of Directors of listed foods and beverages firms during the period has a mean of 4.6824 (1.5249) with standard deviation of 0.9127 (0.1999) and the range is from the minimum of 2 (0.6931) to a maximum of 8 (2.0794). Furthermore, the SEC code states that, for Board of Directors to effectively perform its oversight function and monitor managers' performance, they should at least meet 4 times in a financial year. From the foregoing, we can see that some companies did not conform to the provision of

the code (for seating two times). But some companies have gone beyond the minimum requirement (for sitting up to 8 times). However, on average, the sampled companies have conformed to the provision of the code for having a mean of 4.6825.

Women Directors refers to the number of female directors divided by the total number of directors on the board. From the table, we can see that the proportion of women on the boards range from a minimum of 0.0000 to a maximum of 0.2500 and a mean of 0.0712. This shows that the women representation on the board of the sampled companies is very poor. This is because the average representation is only 6.4%. The minimum of 0.000 proves that some companies did not include women in their team of Board of Directors during this period of study; and for those that included women, the maximum representation is only 25%. The standard deviation of 0.0712 indicates the deviation between companies is low. This shows that representation of women on the board is poor across the sampled companies. However, representations of women tend to be low even in the developed economies (Catalyst, 1999).

The return on asset (ROA) is used as control variable. The ROA has a mean of 0.1718 with a standard deviation of 0.1826, a minimum of -0.3076 and a maximum of 0.6117. This shows that the profitability between the companies varies greatly as some companies reported negative ROA of -30.76% while some company (ies) reported positive ROA as high as 61.17%. The variance in ROA of the listed foods and beverages firms in Nigeria may sometimes differ across the companies due to size in their total assets. The standard deviation of 0.1826 proves that ROA between companies varies; as such, there is an expectation that the magnitude of Earnings Management will differ across the companies. This is because ROA is scaled by total size (firm size); and firm size is believed to have an effect on the magnitude of Earnings Management. On average, the sampled firms reported positive ROA of 17.18%.

## 4.2 Correlation Matrix

**Table 4.2: Correlation matrix**

Variables	DAC	FBM	WD	BI	ROA
DAC	1.0000				
FBM	-0.2620	1.0000			
WD	-0.1793	-0.2202	1.0000		
BI	-0.1021	-0.0122	0.2121	1.000	
ROA	0.2937	0.1608	0.2184	0.2132	1.0000

**Source: Extracted from STATA output 10**

The frequency of Board Meetings has a significant but weak negative association with Earnings Management of listed foods and beverages firms in Nigeria. This is because; the correlation coefficient is 0.2620 significant at 5% level. The direction of the relationship suggests that more meetings by Board of Directors may have a reducing effect on the level of Earnings Management of listed foods and beverages firms in Nigeria.

Furthermore, the degree of association between Gender Mix and Earnings Management is -0.1793. This shows that there is a negative association between the two. Although the association is weak, but the correlation coefficient indicates that, there is an inverse relation between the two. This statistical association suggests that adding woman in a board may reduce the incidence of Earnings Management. The correlation coefficient will not serve as a basis for generalization on the impact of Board Characteristics on Earnings Management as it only gives a degree of association between the dependent variable and the independent variables.

Additionally, the ROA introduced as a control variable has a significant positive relationship with Earnings Management of listed foods and beverages firms. This can be confirming from the correlation coefficient of 0.2937.

## 4.3 Robustness test

Reliability test shows that fixed effect regression is the most reliable for statistical inferences. To choose between fixed or random effects the study run hausman test. The results from random effect and fixed effect reveal that F-statistics are significant in all scenarios. But hausman specification test considered fixed effect (within) regression as the most appropriate estimator of parameters. This is shown by the chi-square value of 23.59 and a probability value of 0.0003. Therefore, hausman test indicated that the fixed effect (within) regression is the preferred model that should be used.

## 4.5 Regression results

**Table 4.3: Regression Result**

Fixed Effect		
Variables	Coefficient	t-statistics
Constant	-0.1089	-0.56 (0.580)
FBM	-0.0953	-4.03 (0.0000)
WD	-0.2243	-2.70 (0.009)
BI	0.0806	0.79 (0.4350)
<b>Control Variables</b>		
ROA	0.2845	4.57 (0.000)
R-square	71%	
Adj-R square	63%	
F-Statistic	9.01 (0.0000)	

**Source: Extracted from STATA output 10**

## 4.6 Test of Hypotheses

The above result shows that frequency of Board Meetings has a t-value of -4.03 with a significant value of 0.0000 (that is significant at 1% level). This signifies that frequency of Board Meetings is negatively influencing the Earnings Management of listed foods and beverages in Nigeria. This implies that the higher the Board Meetings the lower the discretionary accruals. The beta coefficient of -0.0953 indicates that discretionary accruals reduce by 9.53% with an increase in one more board meeting. This is in line with the argument put by Vafeas (1999), Jaiswal, and Bernajee (2012) that the greater the meeting frequencies the more effective will be the boards' monitoring function and subsequently constrain Earnings Management. The implication of this finding is that foods and beverages firms' compliance to Board Meetings will enhance earnings quality by reducing the level of discretionary accruals. The result provides justification for the rejection of the null hypothesis, which states that frequency of Board Meetings has no significant effect on Earnings Management of listed foods and beverages firms. The finding is in line with those of Jaiswal and Banerjee (2012), Zhou and Chen (2004) and Vafeas (1999) who also found a negative impact of Board Meetings on Earnings Management. But the finding contradicts those of Sukeecheep et al. (2013) and Moradi et al. (2012) who did not find evidence of a significant relation between frequency of Board Meetings and Earnings Management.

The result further reveal that women directors has negative and significant impact on Earnings Management of listed foods and beverages firms at 1% significant

level. This can also be observed from the statistical t-value of -2.7000 with probability value of 0.009. This shows that increase in the proportion of women directors on the board significantly reduces the Earnings Management of listed foods and beverages firms in Nigeria. By implication therefore, even though the percentage of women on the board of listed foods and beverages firms is very low, an increase in female representation on the board will enhance earnings quality through constraining the level of discretionary accruals. The beta coefficient of -0.2242 indicates that discretionary accruals will reduce by 22.42% with an increase of at least one-woman director. This finding confirms the assertion made by Tsui et al. (2011) that female participation in a board can improve earnings quality because they have better communication; use more informed decision and independent thinking and have a developed trust leadership. The finding serves as a base for the rejection of the null hypothesis, which states that Gender Mix has no significant impact on Earnings Management of listed foods and beverages firms in Nigeria. Interestingly, this finding is similar to the findings of Gulzar and Wang (2011), Tsui et al. (2011). The result is contrary to those found by Hili and Affes (2012), Sun et al. (2011) and O'Reilly and Man (2012) who did not find evidence of a significant impact of gender diversity on Earnings Management.

The regression results reveals that Board independence has no significant impact on Earnings Management of listed foods and beverages firms in Nigeria. This can be confirmed from t-value of 0.79 with significant value of 0.435. The control variable-ROA has a significant positive impact on Earnings Management of listed foods and beverages firms in Nigeria. The t-value of 4.57 and the probability value of 0.0000 suggest the positive impact. The second control variable is firm size.

The F-statistic as shown in the table measures the overall impact of independent variables on the dependent variable-discretionary accruals. The result shows that F-statistic is 9.01 significant at 1% level. This implies that the board characteristic variables investigated in the study have a significant combined impact on Earnings Management of listed foods and beverage firms in Nigeria during the period under review (2007-2013). It also suggests the fitness of the model. The R-square- coefficient of determination is 0.705. This explained the individual variation of the dependent variable because of change in the independent variables. Therefore, the Board Characteristics have combined predictive power of 71% in controlling Earnings Management of listed foods and beverages firms in Nigeria. While a negligible 29% is attributed to stochastic error variances. The R-square adjusted for the number of variables that have strong correlation in the model occupies 63% of the Earnings Management. Based on this it can be

concluded that Board Characteristics have significant impact on Earnings Management of foods and beverages firms in Nigeria.

### **5.1 Conclusions and Recommendations**

Based on the findings of the study the following conclusions were made: The empirical findings in the study provide evidence that Board Characteristics have significant impact on Earnings Management of listed foods and beverages firm in Nigeria. The empirical findings revealed that two individual characteristics of Board of Directors (frequency of Board Meetings and Gender Mix) have a significant negative effect on Earnings Management of listed foods and beverages firm in Nigeria, while Board Independence does not have significant influence on Earnings Management.

The study confirms the importance of corporate board meetings in enhancing the monitoring function of Board of Directors. The significant negative effect of frequency of Board Meetings on Earnings Management was an indication that more frequency of Board Meetings reduces Earnings Management of listed foods and beverages firms in Nigeria. This is possible when board members meet frequently to discharge their duties in accordance with shareholders' interest. Therefore, firms with board of directors' meetings that are more frequent are associated with low Earnings Management.

Moreover, the significant negative impact of women directors on Earnings Management of listed foods and beverages firms in Nigeria was an indication that Earnings Management reduces with an increase of women in the team of Board of Directors. This is possible because women do normally challenge management decision by their question; and they always develop trust leadership than their male counterpart. Hence, more women participation in the affairs of the board reduces the incidence of Earnings Management.

[ Also, it was recommended that SEC should encourage adherence to at least the minimum requirement (four times in a financial year) by making it mandatory to hold meetings at least four times in a year. The SEC should encourage more frequent meeting by board of directors because the empirical evidence indicates that Board Meetings are associated with low Earnings Management. SEC should henceforth consider gender composition when designing or amending the provision of the code. It should provide a means of enforcing women participation on corporate boards. There is need for her to specify the proportion of women a company should at least maintain as directors and to make it mandatory for companies to abide by it.

### **References**

- Abdul Ra'uf, F. A., Johari, N. H., Bunamin, S. B., & Rahman, N. R. (2012). The impact company and board characteristics and earnings management. *Global review of Accounting and Finance*, 3 (2), 114-127.
- Abed, S., Al-Attar, A., & Suwaidan, M. (2012). Corporate governance and earnings management: Jordanian evidence, *International Business Research*, 5(1).
- Adams, R., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94, 291-309
- Adams, R. B. (2000). What do boards do? Evidence from committee meeting and director compensation. *Working Paper, New York*.
- Akenbor, C. O., & Ibanichuka, E. A. L. (2012). Creative accounting practices in Nigeria banks. *An International Multidisciplinary Journal*, Ethiopia, 6(3).
- Bala, H., & Gugong, B. K. (2015). Board characteristics and earnings management of listed food and beverages firms in Nigeria. *European journal of Accounting, Auditing and Financial Research*, 3 (8), 25-41
- Bartov, E., Givoly, D., & Hayn, C. (2001). The rewards to meeting or beating earnings.
- Bello, A., & Yero, J. I. (2011). Debt reliance and earnings management in the listed conglomerates. *Nigerian Journal of Accounting Research*, Ahmadu Bello University, Zaria, Nigeria, 7(2).
- Bertrand, M., & Mullainathan. S. (2000). Enjoying the quiet life? Managerial behaviour following anti-takeover legislation. MIT, *Working Paper*.
- Brennan, M. J. (1995). Corporate finance over past 25 years. *Financial Management*, 24(2) 9-22.
- Credit Suisse research institute (2012). Gender diversity and corporate performance.
- Dabor, E. L., & Okoeguale, I. P. (2013). An evaluation of the implication of earnings determinants in the banking industry: The case of Nigeria. *African Journal of Social Sciences*, 3(3).
- Dchow, P., & Dicheve, I. (20002). The quality of accruals and earnings: The role of accrual estimation error, *The Accounting Review*, 77, 35-59.
- Dechow, P., & Skinner, D. (2000). Earnings management: Reconciling the views of accounting academics, practitioners and Regulators. *Accounting Horizons*, 14, 235-250.
- Dechow, P., Sloan, R. G., & Sweeny, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70 (2), 193-225.
- Emilia, P., & Sami, V. (2010). Female executives and earnings management. *Department of Accounting and Finance*, university of Vaasa. [www.emeraldinsight.com](http://www.emeraldinsight.com).

- Francis, B., Hassan, I., & Wu, Q. (2012). Do corporate boards affect firm performance? New evidence from the financial crisis.
- Gallego, I., Garcia, I. M., & Rodriguez, L. (2010). The influence of gender diversity on corporate performance. *Account Review*, 13(1), 55.
- Ganiyu, Y. O., & Abiodun, B. Y. (2012). Impact of corporate governance on capital structure decision of Nigerian firms. *Research Journal in Organizational Psychology and Educational Studies*, 1(2), 121-128.
- Ghazaleh, E., & Garkaz, M. (2015). The association between presence of female members on the board of directors and earnings management with discretionary accruals index on the listed companies in Tehran stock exchange. *Journal of Current Research in Science*, 3 (1), 39- 43
- Gavious I, Segev E, Yosef R. (2012). Female directors and earnings management in high- technology firms. 2012: *Pacific Accounting Review*, Vol. 24 No. 1, PP: 4-32
- Gul, F. A., B. Srinidhi and J. Tsui: 2007, 'Do female directors enhance corporate board monitoring? Some evidence from earnings quality', *Working paper*, The Hong Kong Polytechnic University
- Gulzar, M. A., & Wang, Z. (2011). Corporate governance characteristics and earnings managements: Empirical evidence from Chinese listed firms. *International Journal of Accounting and Financial Reporting*, 1(1), 133-151.
- Hambrick, D., & Mason, P. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review*, 9, 193-206.
- Hashim, H. A., Salleh, Z., & Ariff, A. M. (2013). The underlying motives for Earnings Management. *International Journal of Trade, Economics and Finance*, 4 (5).
- Healy, P. M., & Wahlen, J. (1999). A review of the earnings management literature and its implication for standard setting. *Accounting Horizons*, 13(4), 365-383.
- Hendry, K., & Kiel, G. C. (2004). The role of the board in firm strategy: Integrating agency and organisational control perspectives. *Corporate Governance. An International Review*, 12(4), 500-520.
- Heninger, W. G. (2000). The Association between auditor litigator and abnormal accruals. State university of New York, Buffalo.
- Hermalin, B. E., & Wesberch, M. S. (2012). Information disclosure and corporate governance. *Journal of finance*, LXVII (1).
- Hili, W. & Affes, H. (2012). Corporate board gender diversity and earnings persistence: the case of French listed firms. *Global Journal of Management and Business Research*.

- Ibrahim, S. S. A., & Mohamad, H. S. (2012). The effectiveness of corporate governance on constraining earnings management: literature review and proposed framework. *International Journal of Global business*, 5 (1), 17-35
- Jaiswal, M., & Banerjee, A. (2012). A study on the state of corporate governance in India: exploring the relation between Earnings Management and corporate governance characteristics in the Indian context.
- Jensen, M. C., & Meckling, W. H. (1979). Theory of the firm, managerial behaviour agency, cost and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
- Johari, N. H., Sale, N. M., Jaffar, R., & Hassan, M. S. (2008). The influence of board independence, competency and ownership on earnings management in Malaysia. *Journal of Economics and Management*, 2(2), 281-306
- Kantudu, A. S., & Ishaq, A. S. (2015). Board characteristics, independent audit committee and financial reporting quality of oil marketing firms: evidence from Nigeria. *Journal of Finance, Accounting and Management*, 6 (2), 34-50
- Kaplan, R. S. (1985). Comments on Paul Healy: Evidence on the effect of bonus schemes on accounting procedure and accrual decisions. *Journal of Accounting and Economics*, 7, 109-113.
- Klein, A. (2006). Audit committee, board of directors' characteristics and earning management. *Law & Economics Research Paper Series, Working Paper*, 06-42.
- Kothari, S. P., Leone, A. J., & Waslwy, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39, 163-197.
- Krishnan, G. V., & Parsons, L. M. (2005). Getting to the bottom line: an exploration of gender and earnings quality. *Journal of Business Ethics*, 78, 65-76.
- Lawler, E. E., & Conger, J. A. (2001). Strategy and business. *10(3)*, 431-457.
- Lee, Y. (2013). Can independence directors improve the quality of earnings? Evidence from Taiwan. *Advance in Management and Applied Economics*, 3(3), 45-66.
- Man, C. (2012). Corporate governance and earnings management: a survey of literature. *Working Paper*.
- Man, C., & Wong, B. (2013). Corporate governance and earnings management: a survey of literature. *Journal of Applied Business Research*, 29(2).
- Matsumoto, D. A. (2002). Management incentives to avoid negative earnings surprises. *The Accounting Review*, 77, 483-514.

- Metawee, A., (2013), "The relationship between characteristics of audit committee, board of directors and level of earning management, Evidence from Egypt", *Journal of International Business and Finance*, Plymouth Business School, UK, January.
- Modugu, K. P., & Dabor, E. L. (2013). Discourses on corporate governance and earnings management: A theoretical approach. *Journal of Accounting and Finance*, 3(1), 31-33
- Moradi, M., Salehi, M., Bighi, S. J. & Najari, M. (2012). A study of relationship between board characteristics and earnings management: Iranian scenario. *Universal Journal of Management and Social Sciences*, 2(3).
- Musa, I. F., Ibikunle, J., & Victor, C. O. (2013). Corporate governance mechanisms and reported earnings quality of listed Nigerian insurance firms. *International Journal of Finance and Accounting*, 2(5), 279-286.
- Nahandi, Y. B., Baghbani, S. M., & Bolouri, A. (2011). Board combination and earnings management: evidence from Iran. *Journal of Basic and Applied Scientific Research*, 1(12).
- Nat OFO, (2013). Historical development of corporate governance in Nigeria: Corporate governance, law and business. Available at [http:// the corporateprof.com](http://the.corporateprof.com).
- Niskanen, J., Karjalainen, J., Niskanen, M., & Karjalainen, J. (2009). Auditor gender and corporate earnings management behaviour in private Finnish firms. Available at [ssrn.com/abstract](http://ssrn.com/abstract).
- Ntim, C. G., & Osei, K. A. (2011). The impact of board meetings on corporate performance in South Africa. *African Review of Economics and Finance*, 2(2).
- O'Reilly, C. A., & Main, B. G. M. (2012). Women in the boardroom, symbol or substance? *Research Paper Series (2098)*, Stanford graduate school of business.
- Odia, J. O., & Ogiedu, K. O. (2013). Corporate governance, regulatory agency and creative accounting practices in Nigeria. *Mediterranean Journal of Social Sciences*, Italy, 4(3).
- Omoye, A. S., & Eriki, P. O. (2014). Corporate governance determinants of earnings management: evidence from Nigerian quoted companies. *Mediterranean Journal of Social Sciences*, Rome-Italy, 5 (3)
- Onyeweaku, O. (2009). Cadbury pin revival on right issue-business hallmark, *Proshare*.
- Oscar, N., & Daniel, V. (2013). Individual characteristics and earnings quality: executive reputation and board director gender. *Master's Thesis in Accounting and Financial Management*, Department of Accounting, Stockholm School of Economics

- Oyejide, T. A., & Soyibo, A. (2001). Corporate governance in Nigeria. Paper presented at the *conference on corporate governance*, Accra Ghana, 29-30 January, 2011.
- Peasnell, K. V., Pope, P. F., & Young, S. (2000). Detecting earnings management using cross-sectional abnormal accruals models. *Lancaster University*.
- Riahi, Y., & Ben Arab, M. (2011). Disclosure frequency and earnings management: An analysis in the Tunisian context. *Journal of Accounting and Taxation*, 3(3), 47-59.
- Roodposhti, F. R., & Chasmi, S. A (2011). Impact of corporate governance mechanism on earnings management. *African Journal of Business Management*, 5(11), 4143-4151.
- SEC (2011). The code of best practice on corporate governance for public companies.
- Shehu, U. H., & Abubakar, A. (2012). Ownership structure and opportunistic accounting: A case of listed foods and beverage firms in Nigeria. *International Journal of Physical and Social Science*, 2(7), 236-256.
- Shehu, U. H. (2013). Financial reporting quality: Does monitoring characteristics matter? *The Business and Management Review*, 3(2).
- Short, Zhang, & Keasly (2002). The link between dividend policy and institutional ownership. *Journal of Corporate Finance*, 8, 105-122.
- Soliman, M. M., & Ragab, A. A. (2013). board of directors' attributes and earnings management. *Proceeding of 6<sup>th</sup> international business and social sciences research conference*. Dubai, UAE, 3-4 January, 2013.
- Springer, K. (2008). Gender Diversity in Corporate Governance and Top Management, *Journal of Business Ethics* 81, 83 – 95
- Srindhi, B., Gul, F. A. & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, 28(5), 1610-1644.
- Sukeecheep, S., Yarram, S. R., & Al-farooque, O. (2013). Earnings management and board characteristics in Thai listed companies. *International Conference on Business, Economics and Accounting*, Bangkok, Thailand.
- Sun, J., Liu, G., & Lan, G. (2011). Does female directorship on independent audit committees constrain earnings management? *Journal of Business Ethics*, 99(3), 369-382
- Teoh, S. H., Welch, I., & Wong, J. J. (1998). Earnings management and the post issue underperformance of seasoned equity offerings. *Journal of Economic Economics*, 50.
- Trueman, B., & Titman, S. (1988). An explanation for accounting income smoothing. *Journal of Accounting Research*, 26, 127-143.
- Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53.

- Vincent, O. M., Olaegbe, B. A., & Sobona, A. L. (2008). Fundamental of business research. Olas venture, Lagos, Nigeria.
- Water, J. (2014). Correlational research design guidelines: Conducting correlational research. Available at [www.capilanou.ca](http://www.capilanou.ca).
- Yousef, I. S. A., Nur Hidayah, B. L. & Kharil Faizal, B. K. (2014). Board of directors and earnings management among Jordanian listed companies: proposing conceptual framework. *International Journal of Technical Research and Application*, 2 (3), 01-07
- Yusof, R. M. D. (2009). Malaysian code of corporate governance: the impact on the quality of reported earnings of Kuala Lumpur composite index components.
- Zhou, J., & Chen, K. (2004). Audit committee, board characteristics and earnings management by commercial banks.