Institutional Ownership:
A Driver of Accounting Conservatism and Reporting Quality

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Abstract:
The study considered institutional ownerships as a driver of accounting conservatism and reporting quality and adopted time series data as its methodology. The objective of this study is to establish a nexus between institutional ownership and the concept of conservatism and reporting quality. The specified model was subjected to relevant eviews test so as to ascertain its potency for planning and predictions. The paper also x-rayed various theories relating to accounting conservatism and the conceptual framework of institutional ownerships. It concluded on the need for stakeholders to place overall corporate interest above parochial personal interest since the seeming potency of a model will ordinarily be defeated if the individual drivers in the entity are bent on pursuing wishful lust and sacrifice the destiny of the entity on the altar of avarice and extravagance. The paper recommended for the management not only to be doing the right thing but should be seen to have also done the right thing.

Keywords: Conservatism, linear programming, ownerships, reporting quality, test

1. Introduction
Institutional ownership refers to the ownership stake in a company that is held by large financial organizations, pension funds or endowments. Institutions generally purchase large blocks of a company's outstanding shares and can exert considerable influence upon its management. The new issue market otherwise known as the primary market is the market for raising of new funds (subscription). Securities traded in the new issue market includes ordinary shares (equities), preference shares (hybrid), debenture stock, bonds.

Companies that wish to raise funds through the new issue market offer shares or debenture for subscription. Generally offers in the issues market requires that the issuer be quoted on the Nigerian Stock Exchange. Government securities also pass through the Stock Exchange. However in advanced countries such as in the United States of America, the government bonds are predominantly issued through the over the counter market (OTC). The other kinds of institutional ownerships include sole proprietorship, Partnership and private companies. Drivers of these institutions must uphold high ethical standards in the pursuance of tasks assigned to them, they should ensure quality reporting and prepare financial statement in conformity with relevant standard and requisite conventions like conservatism concept.

According to Richard (2009) conservatism is a tendency that accountants, when encountering uncertainties in economic transactions, choose to report lower estimates for the values of assets and revenues, but higher estimates for the values of liabilities and expenses. Conservatism in accounting ensures that costs are not understated in the accounts and revenues are not overstated. Conservatism appears to be closely related to the concept of realization as conservatism implies that a profit should not be recognized before it is realized. Conservatism may in fact be the root of the realisation principle (Sterling, 1967).

Conservatism, as viewed by modern researchers and accounting standard setters, is a principle under which accountants exercise a reasonable degree of prudence in recognizing transactions subject to genuine economic uncertainties. The modern view of accounting conservatism does not seem to include, or permit, any deliberate manipulations of the accounts by understating in come in one period and overstating income in a latter period, if there is no or little economic uncertainty surrounding the transactions.

The primary objective of financial reporting is to provide high-quality financial reporting information concerning economic entities, primarily financial in nature, useful for economic decision making. Providing high quality financial reporting information is important because it will positively influence capital providers and other stakeholders in making investment, credit, and similar resource allocation decisions enhancing overall market efficiency (IASB, 2006; IASB, 2008).Although both the FASB and IASB stress the importance of high-quality financial reports one of the key problems found in prior literature is how to operationalize and measure this quality (Beest, Braam & Boelens). Also institutions have devised methodology to maximize objective (e.g. profit) and minimize objective (e.g. cost). One of the most potent tool used to achieve this giant stride is linear programming. This paper is immediately followed by objective of study and statement of the problem

1.1. Objective of Study
The objective of this study is to establish a nexus between institutional ownership and the concept of accounting conservatism and reporting quality tailored towards optimization and value added to the organization.

1.2. Statement of the Problem
Despite all efforts dissipated by investors, management and employers in moving their institutions to greater and enviable heights they are in many instances hamstrung by endogenous (funds, expertise, high cost of production) and exogenous (government policies, business environment) factors.

2. Literature Review

2.1. Conceptual Review

2.1.1. Institutional Ownership as a Driver of Conservatism and Reporting Quality
Institutions generally, especially private institutions exist as a going concern i.e. they are not intended to wind up or discontinue business operation except where the organization is set up as an ad hoc business like a joint venture arrangement or where under a voluntary arrangement and supervision by the court the business is liquidated (Okara & Ologbosere, 2004). Where an institution is established to operate perpetually it becomes incumbent on the respective players to conform with the basic concepts and conventions underlying the preparation of financial statement. One of such concept is the conservatism concept. Other concepts that help to buttress the reporting quality demand includes going concern, realization, fairness, matching, materiality etc. Management must also take a step further by rendering stewardship report of activities within a financial year. This stewardship nomenclature is normally conveyed through financial statement that is expected to be prepared in conformity with a monumental qualitative approach like embracing the newly prescribed International Financial Reporting Standards(IFRS) and under a very sound ethical disposition. Therefore reporting quality is an all encompassing reporting system carried out to add value to the people and the firm.

2.1.2. Types of Institutional Ownerships
The various kinds of institutional ownership that abound are:
  i)   Sole Proprietorship / Entrepreneurship
  ii) Partnership
  iii) Joint Stock Company
  iv) Public corporation
  v)   cooperatives

  ➢ Sole Proprietorship / Entrepreneurship
This is a one man business. In this form of business a single man puts up all the capital, takes the decisions, shoulders the entire responsibility for the management and operation and assumes all the risks. He is solely responsible for the success or failure of the business. If the business is successful he alone reaps the rewards in the form of profits but where the business fails he alone bears the losses which may accrue (Ojo, 1986)

  ➢ Partnership
Partnership is a type of business organization in which two or more individuals (not exceeding twenty) make a legal agreement to own and operate a business unit with a view to making profit. These individuals who voluntarily come together to form the business are called partners. They often share in the responsibility of running the business as well as in the fortunes, in terms of profit and reverses in terms of incurred losses of the business. The types of responsibility needed to run a partnership concern include provision of capital skills and devotion (Ojo, 1986). There are principally two types of partners. There is the dormant, inactive or sleeping partner who usually limit his interest and involvement in a partnership to the provision of capital and sharing of profits or losses of the enterprise. The active partner on the other hand contributes to the supply of capital funds, shares in the fortunes and misfortunes of the enterprise and takes part in the running and management of the partnership venture.

  ➢ Joint Stock Company
The joint stock company is an association of people who jointly pool capital resources together for the purpose of owning productive assets and engaging in profitable business. There are two types of joint stock company, the private company and the public company. The private company is formed with as few as two persons but not more than fifty join together to invest capital resources into a business with a view to making profit. Private company can raise capital through the financial contributions or shares of its owners. Liabilities of this shareholders are limited to the extent of the nominal values of their investment in the company and the distributed profits of the company and assets upon dissolution are split up in proportion to the value of the shares of each member. A public company is a joint stock company whose ownership is effectuated through the purchase of shares which can be subscribed to by any member of the general public. Such shares are sold and bought on the stock exchange and their daily prices are quoted or published in the newspapers. Theoretically the number of its shareholders can be limitless. Legally it must not be less than seven.

  ➢ Public Corporation
The public corporation is a business organization whose ownership is vested in the government which owns the capital. The corporation has its own legal existence and it is usually organized along business lines in the same way as the joint stock company. But it has no

shareholders and it is not essentially instituted to make profits. The corporation is organized to serve the public interest and to at least pay its way, i.e. to break even or cover costs. According to Olowe (1998) cost benefit analysis is one tool used in evaluating investment in the public sector but there are problems usually encountered in evaluating all the benefits.

> Cooperatives

A cooperative is a form of enterprise or organizational arrangement which fosters cooperation in economic activities (e.g. production, distribution, marketing) with a view to enhancing mutual and self- help and to promote the economic interest and welfare of the participating members. A cooperative enterprise derives its strength from the interest and patronage of its members who provide nearly all its finance, own, manage and control its operations. Membership of a cooperative is voluntary and open to all persons. Members are free to leave when they wish. They bear all the full risks and enjoy all the benefits of the enterprise.

2.1.3. Value Added Statement

Value Added Statement is a financial statement that depicts wealth created by an organization and how is that wealth distributed among various stakeholders. The various stakeholders comprise of the employees, shareholders, government, creditors and the wealth that is retained in the business. As per the concept of Enterprise Theory, profit is calculated for various stakeholders by an organization. Value Added is this profit generated by the collective efforts of management, employees, capital and the utilization of its capacity that is distributed amongst its various stakeholders.

Consider a manufacturing firm. A typical firm would buy raw materials from the market. Process the raw materials and assemble them to produce the finished goods. The finished goods are then sold in the market. The additional work that the firm does to the raw materials in order for it to be sold in the market is the value added by that firm. Value added can also be defined as the difference between the value that the customers are willing to pay for the finished goods and the cost of materials.

2.2. Theoretical Review

2.2.1. Review of Relevant Theories

According to Richard (2009) in his thesis, the techniques, rationales, and the strengths cum weaknesses of these five existing measures of accounting conservatism were reviewed as follows:

> Basu's Asymmetric Timeliness Measure (AT)

Basu's (1997) operationalization of accounting conservatism focuses on the implication that earnings will reflect 'bad news' more quickly than 'good news', which is known as the asymmetric timeliness of earnings. Basu (1997) was the first to link asymmetric timeliness with accounting conservatism - the greater the asymmetric timeliness, the greater the degree of accounting conservatism. Empirically, Basu(1997) developed the following cross-sectional regression, also known as the Basuregression, to estimate the degree of conservatism (i.e. asymmetric timeliness):

$EPS_{it} = B_0 + B_1DR_{it} + B_0R_{it} + B_1R_{it}DR_{it} + E_{it}$

P_{it}

EPSit : Earnings per share for firm i year t

Pit : Opening stock market price for firm i year t

Rit : Stock markets return for firm i year t

DRit : Dummy variable that is equal to 1 if the stock market return for firm i

in year t is negative, and equal to 0 if the stock market return for firm i in year

t is non- negative.

> Asymmetric Accrual to Cash-flow Measure (AACF)

Ball and Shivakumar (2005) developed the AACF measure in order to estimate the degree of accounting conservatism in private (unlisted) companies, as Basu's AT measure is not suitable for private companies given that there is no stock price information available for private companies. To overcome this difficulty, Ball and Shivakumar (2005) developed essentially the non-stock-market equivalent of the AT measure, which is based on the following cross-sectional regression:

$ACC_{it} = b0+b1DCFOit +b2CFOit +b3DCFOitCFOit +eit$

where

ACCit : Operating accruals, measured as DInventory + DDebtors + DOther

current assets - DCreditors - DOther current liabilities - Depreciation.

DCFOit : Dummy variable that is set to 0 if CFOit _ 0 , and is set to 1 if

CFOit< 0.

CFOit : Cash-flow for period t.

In the regression above, the coefficient b3 is the AACF measure of accounting conservatism. A higher b3 indicates a higher degree of accounting conservatism. Clearly, the AACF measure and the Basu AT measure are based on the same fundamental idea of asymmetric timeliness and are estimated from models with a very similar structure. In essence, both models regress an earnings variable on a proxy for economic 'news'. Both models employ dummy variables (DR and DCFO) to distinguish between 'good-news' and 'bad-news'.

> The Market-to-Book ("MTB") or Book-to-Market ("BTM") Ratio

The idea underlying the use of MTB (or BTM) as a measure of accounting conservatism is that, ceteris paribus, a conservative accounting system tends to depress the net book value of a firm relative to the firm's 'true' economic value. Therefore, a higher MTB (and a lower BTM) implies a higher degree of accounting conservatism, and vice versa.5 The MTB measure is strongly rooted in the analytical work based on the Residual Income Valuation Model (RIVM) (Feltham& Ohlson,1995; Zhang, 2000; Beaver & Ryan, 2000). Feltham & Ohlson (1995) first introduced accounting conservatism in the RIVM context, and characterize conservatism as a tendency to bias downwards the book value of a firm relative to its market value.

> The Negative Accruals Measure (NA)

Givoly & Hayn (2000) propose a measure of conservatism that focuses on nonoperating accruals as a subset of the firm's book value. Non-operating accruals are calculated as total accruals minus operating accruals. Total accruals are equal to the firm's net income before depreciation minus the cash flow from operating activities, whereas operating accruals are calculated using the balance sheet approach, which is very similar to the calculation of operating accruals (i.e. ACC) used in the AACF method.

NA = TACC - OPACC

where

TACC : Total Accrual, calculated as Net Income (after depreciation) - Operating
Cash Flow
OPACC : Operating accrual, measured as DInventory + DDebtors + DOther current assets - DC reditors - DOther current liabilities.

The rationale behind using negative accruals as a measure of accounting conservatism is that accounting conservatism uses the mechanism of accruals to defer the recognition of economic gains and accelerate the recognition of economic losses.

> The Hidden Reserves Measure (HR)

The fifth measure of accounting conservatism is the hidden reserves measure. Penman
& Zhang (2002) argue that accounting conservatism creates hidden reserves (i.e. cookie jar reserves), the amount of which can be used to gauge the degree of conservatism in a firm. They argue that the higher the amount of the hidden reserves, the more conservative is the firm's financial reporting system. However, since hidden reserves are not explicitly reported in either the financial statements or anywhere else, they can only be estimated by the researchers themselves.

Two methods have been employed in the conservatism literature to estimate the amount of hidden reserves. The methods are similar and yield similar proxies for accounting conservatism. The first, developed by Ahmed et al. (2000), uses two ratios, R&D/sales and advertising expenditures/sales, as proxies for hidden reserves. But the second method, developed by Penman & Zhang (2002) is a more commonly used and more sophisticated method of estimating hidden reserves.

3. Methodology

The methodology adopted for this study is secondary source of data. Particularly the financial report of Cadbury Nig. Plc. as a group for fifteen years sample size was examined. The times series data explored in this study from the financial report demands that subjecting the data of an organization to test overtime might precipitate a more rational decision by stakeholders than a cross-sectional data in which just a period data is being subjected to test. The paper identified three major variables having institutional ownership as independent variable and two dependent variables namely conservatism and reporting quality. Institutional ownership was measured via share capital and earnings per share. conservatism was measured via net profit after tax and reporting quality was measured via value added statement. Analysis was made by Eviews having series of test such as simple regression model, normality test, diagnostic test, unit root test, Johansen cointegration test and VAR model.

3.1. Analysis of Data

S/ N	Years	Share Capital	Net Profit After Tax	Earnings Per Share	Value Added Statement	Asset Turnover
1.	2000	264,143,000	1,064,163,000	2.02	4,575,000,000	1.86
2.	2001	330,178,000	1,647,836,000	2.06	5,519,000,000	1.40
3.	2002	375,315,000	2,681,434,000	3.50	5,832,558,000	1.80
4.	2003	375,315,000	2,249,319,000	3.58	6,646,003,000	1.88
5.	2004	500,420,000	2,812,623,000	2.81	7,857,919,000	1.51
6.	2005	500,420,000	2,710,921,000	2.70	8,793,649,000	1.22
7.	2006	550,420,000	-4,665,459,000	-4.28	-413,036,000	1.31
8.	2007	71,280,000,000	-464,231,000	0.42	9,041,475,000	0.75
9.	2008	38,080,000,000	88,800,000,000	2.28	11,175,000,000	0.62
10.	2009	1,564,594,000	-1,235,917,000	0.84	7,666,246,000	1,01
11.	2010	1,564,594,000	1,168,167,000	0.38	8,794,580,000	1.02
12.	2011	1,564,594,000	3,670,555,000	1.17	11,757,563,000	1.01
13.	2012	1,564,594,000	3,454,991,000	1.10	12,092,405,000	0.84
14.	2013	1,565,187,000	6,023,219,000	1.92	14,589,302,000	0.83
15.	2014	939,101,000	1,512,687,000	0.75	8,536,927,000	1.06

Table 1

3.2. Operationalization of Variables
Dependent Variable(Y_A) = Accounting Conservatism
Dependent Variable(Y_R) = Reporting Quality
Independent Variable (X) = Institutional Ownership
Net Profit After Tax (NPAT) = Used to measure Accounting conservatism
Value Added Statement(VAS) = Used to measure Reporting Quality
Share capital, Earnings Per Share, Total Asset Turnover= Used to measure Institutional ownership
SC = Share Capital
EPS = Earnings Per Share
TAT = Total Asset Turnover
Y_A = F (EPS, SC)
Y_R= F (EPS, SC, TAT)
LAG 1 SHARE CAPITAL = SC (-1)
LAG 1 EARNINGS PER SHARE = EPS (-1)

3.3. Model Specification
Using simple linear regression: $Y = \beta_0 + \beta1X1 + \beta2X2 + \beta3X3 + B4X4 + et$

3.4. Model One (Autoregressive Regression Model)
Y_A= β0 + β1NPAT(-1) + β2EPS + β3EPS(-1) + β4SC + β5D(SC) + β6D(D(SC)) + et
NPAT = β0 + β1NPAT (-1) + β2EPS + β3EPS (-1) + β4SC + β5D(SC) + β6D(D(SC)) + et

3.5. Model Two
Y_R= β0 + β1EPS + β2EPS (-1) + β3SC + β4SC (-1) + β5TAT + β6TAT (-1) + β7D(VAS) + et
VAS = β0 + β1EPS + β2EPS (-1) + β3SC + β4SC (-1) + β5TAT + β6TAT (-1) + β7D(VAS) + et

3.6. Running a Simple Regression Model to Ascertain Fitness

Dependent Variable: NPAT			
Method: Least Squares			
Date: 04/08/16 Time: 22:36			
Sample (adjusted): 2002 2014			
Included observations: 13 after adjustments			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.15E+09	1.06E+09	2.979281	0.0247
NPAT(-1)	-0.484507	0.032467	-14.92296	0.0000
EPS	9.87E+08	1.94E+08	5.092081	0.0022
EPS(-1)	-8.61E+08	4.36E+08	-1.973119	0.0959
SC	0.997168	0.059642	16.71915	0.0000
D(SC)	-1.039161	0.074274	-13.99094	0.0000
D(D(SC))	-0.106378	0.037139	-2.864321	0.0286
R-squared	0.998568	Mean dependent var		8.36E+09
Adjusted R-squared	0.997136	S.D. dependent var		2.43E+10
S.E. of regression	1.30E+09	Akaike info criterion		45.11444
Sum squared resid	1.02E+19	Schwarz criterion		45.41864
Log likelihood	-286.2439	Hannan-Quinn criter.		45.05191
F-statistic	697.3708	Durbin-Watson stat		1.329804
Prob(F-statistic)	0.000000			

Table 2:Model One

The above regression model shows that of the six independent variables five are significant and only one is not significant. Also, the joint significance of the series evident from the Prob(F-stat.) makes the model good fitted. Adjusted R-squared very close to one has help to further buttress the goodness of the model.

3.7. Diagnostic Test for Serial Correlation (Model One)
  → H0: Model does not have serial correlation (auto correlation)
  → H1: Model have serial correlation (auto correlation)

F-statistic	1.628364	Prob. F(2,4)	0.3038
Obs*R-squared	5.834235	Prob. Chi-Square(2)	0.0541
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 04/10/16 Time: 17:20			
Sample: 2002 2014			
Included observations: 13			
Presample missing value lagged residuals set to zero.			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35125620	1.00E+09	0.035106	0.9737
NPAT(-1)	0.001368	0.029776	0.045952	0.9656
EPS	-1.64E+08	2.10E+08	-0.781468	0.4782
EPS(-1)	-34558689	4.11E+08	-0.084184	0.9370
SC	0.001080	0.055941	0.019303	0.9855
D(SC)	-0.000798	0.068030	-0.011734	0.9912
D(D(SC))	0.001897	0.034295	0.055327	0.9585
RESID(-1)	0.186090	0.404014	0.460604	0.6690
RESID(-2)	-1.093136	0.634125	-1.723849	0.1598
R-squared	0.448787	Mean dependent var		-1.48E-06
Adjusted R-squared	-0.653638	S.D. dependent var		9.20E+08
S.E. of regression	1.18E+09	Akaike info criterion		44.82650
Sum squared resid	5.60E+18	Schwarz criterion		45.21762
Log likelihood	-282.3722	Hannan-Quinn criter.		44.74610
F-statistic	0.407091	Durbin-Watson stat		1.890971
Prob(F-statistic)	0.869992			

Table 3

The guideline is that if Prob. Value is less than 5% we reject the null and accept alternative, but if P(Value) is higher than 5% we cannot reject null rather we accept null. Since the above P(value) is 0.0541 (5.41%) greater than 5% we cannot reject null rather we accept null meaning; H0: model does not have serial correlation.

3.8. Diagnostic Test for Normality
For normality test the formal test is Jarque-Bera.
  → H0: Series is normally distributed (well behaved)
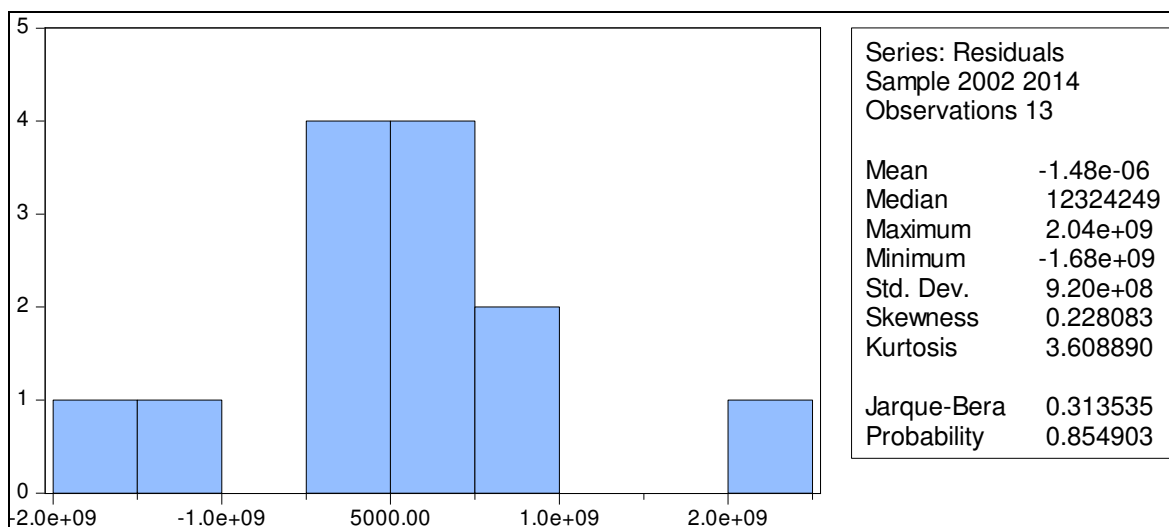 → H1: Series is not normally distributed

Figure 1

The guideline for normality is that if the prob. value is less than 5% we reject the null and accept the alternative but where the prob. value is greater than 5% we cannot reject the null but rather we accept the null. Since our prob. value is 0.8549(85.49%) greater than 5% we accept the null i.e. H0: series is normally distributed

3.9. Ramsey Reset Test

Ramsey reset test is to test specification bias. The guiding principle is that if Ramsey F –stat. (p-value) is less than 5% we can reject the null otherwise we accept the null.

→ H0: Functional form of the variable is correctly specified
→ H1: Functional form of the variable is not correctly specified

Ramsey RESET Test				
Equation: UNTITLED				
Specification: NPAT C NPAT(-1) EPS EPS(-1) SC D(SC) D(D(SC))				
Omitted Variables: Squares of fitted values				
	Value	df	Probability	
t-statistic	0.467634	5	0.6597	
F-statistic	0.218681	(1, 5)	0.6597	
Likelihood ratio	0.556489	1	0.4557	
F-test summary:				
	Sum of Sq.	df	Mean Squares	
Test SSR	4.26E+17	1	4.26E+17	
Restricted SSR	1.02E+19	6	1.69E+18	
Unrestricted SSR	9.73E+18	5	1.95E+18	
Unrestricted SSR	9.73E+18	5	1.95E+18	
LR test summary:				
	Value	df		
Restricted LogL	-286.2439	6		
Unrestricted LogL	-285.9656	5		
Unrestricted Test Equation:				
Dependent Variable: NPAT				
Method: Least Squares				
Date: 04/10/16 Time: 20:02				
Sample: 2002 2014				
Included observations: 13				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.45E+09	1.31E+09	2.638866	0.0460
NPAT(-1)	-0.190181	0.630357	-0.301704	0.7750
EPS	1.01E+09	2.16E+08	4.701954	0.0053
EPS(-1)	-1.16E+09	7.88E+08	-1.469180	0.2017
SC	0.287225	1.519508	0.189025	0.8575
D(SC)	-0.366058	1.441583	-0.253928	0.8097
D(D(SC))	-0.067059	0.093034	-0.720803	0.5033
FITTED^2	6.77E-12	1.45E-11	0.467634	0.6597
R-squared	0.998628	Mean dependent var		8.36E+09
Adjusted R-squared	0.996707	S.D. dependent var		2.43E+10
S.E. of regression	1.40E+09	Akaike info criterion		45.22548
Sum squared resid	9.73E+18	Schwarz criterion		45.57314
Log likelihood	-285.9656	Hannan-Quinn criter.		45.15402
F-statistic	519.9392	Durbin-Watson stat		1.423962
Prob(F-statistic)	0.000001			

Table 4

From the computation above Ramsey F-stat (p-value) is 0.6597 i.e. 65.97% greater than 5% so we cannot reject null, therefore we accept H0**:** Functional form of the variable is correctly specified

3.10. Granger Causality Test for the Dependent Variables

The granger causality is to test a joint causative of the explanatory variables. Therefore we can formulate hypothesis. H0: VAS cannot cause NPAT, H1: VAS can cause NPAT

VAR Granger Causality/Block Exogeneity Wald Tests			
Date: 05/01/16 Time: 16:34			
Sample: 2000 2014			
Included observations: 13			
Dependent variable: NPAT			
Excluded	Chi-sq	Df	Prob.
VAS	14.12746	2	0.0009
All	14.12746	2	0.0009
Dependent variable: VAS			
Excluded	Chi-sq	Df	Prob.
NPAT	0.275698	2	0.8712
All	0.275698	2	0.8712

Table 5

Since p-value 0.0009 is less than 5% we can reject null and accept alt. meaning VAS can cause NPAT

3.11. Johansen Test for Co-Integration
The essence of this test is to ascertain the long run association or equilibrium of the series

Date: 05/01/16 Time: 18:08				
Sample (adjusted): 2002 2014				
Included observations: 13 after adjustments				
Trend assumption: Linear deterministic trend				
Series: EPS SC TAT VAS				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**
None *	0.962129	78.79360	47.85613	0.0000
At most 1 *	0.842039	36.23717	29.79707	0.0079
At most 2	0.532400	12.24690	15.49471	0.1455
At most 3	0.166338	2.365054	3.841466	0.1241
Trace test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigen value)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**
None *	0.962129	42.55643	27.58434	0.0003
At most 1 *	0.842039	23.99026	21.13162	0.0192
At most 2	0.532400	9.881848	14.26460	0.2198
At most 3	0.166338	2.365054	3.841466	0.1241
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):				
EPS	SC	TAT	VAS	
3.101643	4.47E-11	-0.121455	-7.19E-10	
1.629138	-1.33E-10	-0.130109	-1.17E-09	
1.171833	-8.82E-12	-0.018621	6.48E-11	
-0.445680	6.91E-12	0.017357	6.10E-10	
Unrestricted Adjustment Coefficients (alpha):				
D(EPS)	-1.034289	-0.556172	-1.206383	0.027614
D(SC)	-3.28E+09	4.64E+08	2.23E+09	9.58E+08
D(TAT)	-2.759015	10.12393	-1.706073	4.227950
D(VAS)	-1.30E+09	-8.35E+08	-1.68E+09	-5.82E+08
1 Cointegrating Equation(s):	Log likelihood	-656.1156		
Normalized cointegrating coefficients (standard error in parentheses)				

EPS	SC	TAT	VAS	
1.000000	1.44E-11	-0.039158	-2.32E-10	
	(3.3E-12)	(0.00166)	(2.3E-11)	
Adjustment coefficients (standard error in parentheses)				
D(EPS)	-3.207995			
	(2.07986)			
D(SC)	-1.02E+10			
	(4.6E+09)			
D(TAT)	-8.557479			
	(17.9694)			
D(VAS)	-4.02E+09			
	(3.4E+09)			
2 Cointegrating Equation(s):		Log likelihood	-644.1204	
Normalized cointegrating coefficients (standard error in parentheses)				
EPS	SC	TAT	VAS	
1.000000	0.000000	-0.045274	-3.05E-10	
		(0.00093)	(1.6E-11)	
0.000000	1.000000	4.24E+08	5.060300	
		(3.9E+07)	(0.68282)	
Adjustment coefficients (standard error in parentheses)				
D(EPS)	-4.114077	2.76E-11		
	(2.23089)	(8.9E-11)		
D(SC)	-9.43E+09	-0.208424		
	(5.2E+09)	(0.20748)		
D(TAT)	7.935798	-1.47E-09		
	(15.2402)	(6.1E-10)		
D(VAS)	-5.38E+09	0.052928		
	(3.6E+09)	(0.14518)		
3 Cointegrating Equation(s):		Log likelihood	-639.1795	
Normalized cointegrating coefficients (standard error in parentheses)				
EPS	SC	TAT	VAS	
1.000000	0.000000	0.000000	2.49E-10	
			(2.1E-10)	
0.000000	1.000000	0.000000	-0.127723	
			(2.02762)	
0.000000	0.000000	1.000000	1.22E-08	
			(4.7E-09)	
Adjustment coefficients (standard error in parentheses)				
D(EPS)	-5.527757	3.83E-11	0.220447	
	(1.64202)	(6.2E-11)	(0.07954)	
D(SC)	-6.81E+09	-0.228119	2.97E+08	
	(4.5E+09)	(0.17082)	(2.2E+08)	
D(TAT)	5.936566	-1.45E-09	-0.950347	
	(15.8925)	(6.0E-10)	(0.76988)	
D(VAS)	-7.35E+09	0.067725	2.97E+08	
	(3.0E+09)	(0.11506)	(1.5E+08)	

Table 6

This means all the series have long run association as evident in the above test. Both trace test and Maximum Eigenvalue suggest that all the variables are co-integrated, therefore the golden rule is that if series are co-integrated then we can run the Vector Error Correction Model (VECM). Although we decided to run unrestricted VAR model because one of the requirement for running VECM model is that variables must be non-stationary at level but when converted to first difference it becomes stationary. But our data is stationary at level making VAR model to suffice.

3.12. Var Model

	Coefficient	Std. Error	t-Statistic	Prob.
System: UNTITLED				
Estimation Method: Least Squares				
Date: 05/04/16 Time: 16:47				
Sample: 2002 2014				
Included observations: 13				
Total system (balanced) observations 26				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.108669	0.220438	-0.492968	0.6287
C(2)	0.190902	0.230971	0.826520	0.4207
C(3)	2.725111	1.503894	1.812037	0.0888
C(4)	-6.519442	1.754419	-3.716013	0.0019
C(5)	3.46E+10	1.49E+10	2.317430	0.0341
C(6)	-0.028060	0.053677	-0.522762	0.6083
C(7)	-0.007450	0.056241	-0.132467	0.8963
C(8)	0.264199	0.366197	0.721467	0.4810
C(9)	0.094616	0.427200	0.221479	0.8275
C(10)	5.99E+09	3.64E+09	1.646460	0.1192
Determinant residual covariance	1.45E+39			
Equation: NPAT = C(1)*NPAT(-1) + C(2)*NPAT(-2) + C(3)*VAS(-1) + C(4)				
*VAS(-2) + C(5)				
Observations: 13				
R-squared	0.657656	Mean dependent var		8.36E+09
Adjusted R-squared	0.486485	S.D. dependent var		2.43E+10
S.E. of regression	1.74E+10	Sum squared resid		2.43E+21
Durbin-Watson stat	1.002611			
Equation: VAS = C(6)*NPAT(-1) + C(7)*NPAT(-2) + C(8)*VAS(-1) + C(9)*VAS(				
-2) + C(10)				
Observations: 13				
R-squared	0.094849	Mean dependent var		8.64E+09
Adjusted R-squared	-0.357726	S.D. dependent var		3.64E+09
S.E. of regression	4.24E+09	Sum squared resid		1.44E+20
Durbin-Watson stat	2.006411			

Table 7

The VAR model shows the significance or otherwise of the independent variables e.g. to ascertain the significance of VAS (-2) under NPAT equation above all we need do is to go to C4 which is 0.0019 meaning significance

3.13. Model Two

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: VAS				
Method: Least Squares				
Date: 04/08/16 Time: 22:46				
Sample (adjusted): 2001 2014				
Included observations: 14 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.99E+10	1.45E+09	13.75037	0.0000
EPS	8.83E+08	3.38E+08	2.616456	0.0398
EPS(-1)	1.22E+09	7.45E+08	1.640464	0.1520
SC	0.014491	0.051006	0.284101	0.7859
SC(-1)	-0.075705	0.030220	-2.505148	0.0462
TAT	-68994552	17371270	-3.971762	0.0074
TAT(-1)	-49930192	19869019	-2.512967	0.0457
D(VAS)	0.528680	0.231252	2.286162	0.0623
R-squared	0.960375	Mean dependent var		8.42E+09
Adjusted R-squared	0.914146	S.D. dependent var		3.60E+09
S.E. of regression	1.05E+09	Akaike info criterion		44.68459
Sum squared resid	6.66E+18	Schwarz criterion		45.04977
Log likelihood	-304.7921	Hannan-Quinn criter.		44.65079
F-statistic	20.77424	Durbin-Watson stat		2.122746
Prob(F-statistic)	0.000833			

Table 8

The above model 2 also shows that of the seven independent variables, four are significant. All the variables are also jointly significant as given by Prob(F-stat) which is 0.00083. we also have adjusted R squared very close to one i.e. 0.914146. The model is good fitted. The model also survives the litmus test as tested under model one such as serial correlation, normality, Ramsey reset, Johansen cointegration.

4. Conclusion

Institutional ownership entails the dilution of diverse interest in entities that assumes forms such as sole proprietorship, partnership, joint stock companies, cooperatives. Accounting conservatism and reporting quality is a supposed offshoot of qualitative ownership. The time series data considered salient data in the financial report of Cadbury Nig. Plc that suffice as requisite variables to be subjected to various test such as simple regression test diagnostic test for normality, ramseyreset, granger causality Johansen co-integration and VAR model test. All the tests reveal the variables and the models are reliable for prediction and forecast

5. Recommendation

The reliability of the variables via the various Eviews test help to attest to the fact that institutional ownerships drive of accounting conservatism and reporting quality is one of the fundamental recipe to the growth and sustainability of a concern. Accounting conservatism is one of the concept that corroborate a healthy financial statement while reporting quality is the oxygen that gives life to an entity   so as to ensure its longevity and usefulness. Therefore owners of organizations should place the interest of stakeholders above personal interest and they should eschew any act of parochial character that will only truncate the lofty goals and objectives that has been set for the business. In addition management and employees should see each other as a team and partner in progress by desisting from unethical practice that is deleterious to the health of the business and injurious to their profession. This is because no matter how potent and vibrant a model is able to transform an organization if the actors that are meant to drive it are undesirable and mischievous or lethargic about its need that can jettison the usefulness of the model. Lastly not only should the stakeholders be doing the right thing at all times but they should also be seen to have done the right thing.

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