

**DETERMINANTS OF THE CHANGING VOLUME OF CORPORATE ANNUAL FINANCIAL
REPORTS: EMPIRICAL EVIDENCE FROM NIGERIA**

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ABSTRACT *This contribution was motivated by the need to investigate the determinants of the changing volume of corporate annual reports. The study sample was 12 banks purposively selected from the universe of banks quoted on the Nigerian Stock Exchange from 2005 to 2014. The sample was restricted to 120 firm-year with consistent regression data. The study adopted the balanced panel data regression technique with a preference for the random effect model since the estimated coefficients of both models did not vary significantly. The study found a positive and statistically significant relationship between compulsory disclosure, narrative disclosure, product page count and the volume of the corporate annual report. The relationship between the control variables of firm size and age is insignificant. By implication, there was evidence of optimum use of corporate annual report for governance and accountability, information asymmetry and corporate control and integrated marketing communication. Against the backdrop of the multidimensional usefulness of the corporate annual report, we recommend that all corporate stakeholders should extensively rely on the document for any decision concerning corporate activities. The current study is restricted to Nigerian quoted banks; we recommend a more robust study that will integrate other Nigerian quoted companies, to help for efficient and extensive generalization.*

Keywords: Compulsory disclosure; narrative disclosure; product page count; company Size; company age.

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INTRODUCTION

Despite the increased skepticism, loss of investors' confidence and the ever-growing array of information source, and proliferation, the corporate annual report remains the primary input for corporate investment decisions. Corporate annual reports serve different functions to different users with varied interest: Image management function; tool for personnel recruitment (Sikes, 1986); protection of corporate shareholders (Wang, Sewon & Claiborne, 2008) , basis for evaluating firm compliance with laws and regulation and report card of the social contract between business and other stakeholders.

There are two strands of literature on corporate disclosure. The first is firm characteristics and corporate disclosure (Hossain & Hammani, 2000; Archambault & Archambault, 2003). The second is corporate governance characteristics and disclosure (Chen & Jaggi, 2000; Chen & Courtenay, 2005; Karamanou & Vafeas, 2005). However, there appears to be a grey area that has created a serious gap in the accounting literature. In Nigeria, the page count of the annual report of First Bank Nigeria Plc in 1990 was 62. It increased to 88 in 1990, in the year 2010, there was a quantum leap to 234 pages, representing about 166% increase in page count, and by the year 2013, the page count increased to 249. The story is not different in the case of Walmart with only 24 pages of the corporate annual report in 1990, and 68 pages by 2015. This global trend raises the fundamental question of what determines the changes in the volume of corporate annual reports. According to Hopwood (1996), the corporate annual report is largely unresearched.

Against the backdrop of the above, this study is motivated by the desire to investigate the forces that drive this global phenomenon of changing volume of corporate annual reports. A preliminary review of the result of the study reveals a significant positive relationship between mandatory disclosure, narrative disclosure and product page count. The control variables of company size and company age were both positive though statistically insignificant. The implication of the result is that product page count, narrative, and mandatory disclosure collectively account for the changes in the volume of the corporate annual report.

The study made some modest contributions to the evolving strand of literature on the changing form of corporate annual report. Apart from advancing an empirical perspective to complement our initial effort (Dandago & Ilaboya, 2016), this contribution provides a more sophisticated analysis to strengthen the current findings on this topical issue. To the best of our knowledge, this is the first attempt to employ panel data regression technique in the analysis of the dynamics of the changing volume of corporate annual reports. Compared to Lee (1994) who used data between 1964 and 1988, this contribution is an update having used data up to 2014. The study is however limited by the micronumerosity of the banks selected. Therefore, as a result of the corporate focus of the study, replicating the research using data from the Nigerian manufacturing sector is a direction for future studies.

The paper proceeds as follows: following the introduction, section two provides an overview of the extant empirical literature on corporate disclosure section. Section three addresses the methodology of the research with emphasis on analytical framework and

model specification. Section four present estimation results and discussion of findings and section five brings up the conclusion and policy implications of the results of research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

According to Lee (1994: 124), *report volume is a crude proxy for the extent to which management uses annual report as a means to construct an image of the industrial corporation*. Therefore, the greater the page count, the higher the diverse use of annual reports different from corporate compliance. Reporting volume is measured by the total page count of the corporate annual report. Following Lee (1994), this study is restricted to the reporting form and not the substance of the annual financial report. The quality of the reported disclosure and the extent of compliance are not covered in this study. Our study negates the concept of substance over form.

From casual empiricism, there have been visible changes in the form of corporate annual reports. However, the effect of these changes may be polarized. At one end of the continuum, are researchers who ascribed positivity to these changes: marketing communication (Droge et al., 1990); corporate identity (Preston, Christopher & Young et al., 1995) and social contract report. At the other end of the continuum, are views that ascribe negativity to the changing form of a corporate annual report. To this latter group, the substance of corporate reporting is relegated to, and dominated by pedestal issues of image making and quotations (Squiers, 1989). Consistent with Lee (1994), we measured the volume of the annual report (the dependent variable), using the total page count of the annual reports of each year.

Compulsory Disclosure and the Volume of Annual Report

In Nigeria, the responsibility for the preparation and presentation of financial statements is vested in the company directors (S. 334 (1) CAMA, 2004). The ten financial statements required to be prepared by the company directors are listed in S. 334 (2) of CAMA 2004. International Accounting Standard 1-*Presentation of financial statements* lists six financial statements required to be prepared by company directors. Compulsory or mandatory disclosures are components of the annual reports that are required by law, regulation or standards to be prepared by the directors at the end of every financial year.

Owusu-Ansah (1998) described mandatory disclosure as the minimum level of information in the annual report that is adequate to permit a reasonable evaluation of the risk exposure of the organisation. Mandatory disclosure is motivated by the need for regulators to secure the welfare of investors (Watts & Zimmerman, 1986); reduce information inequity between the informed and uninformed investors (Healey, 1989); agency cost and economics of scale. Barflett and Jones (1997) observed that compulsory disclosure was on the increase between 1970 and 1990. According to them, mandatory content witnessed a rapid rise as a result of the different regulatory regimes. In the same vein, Lee (1994) reported a significant positive relationship between mandatory disclosure and volume of the corporate annual report. The extent to which these results may be generalized to emerging economies like Nigeria remains largely unexplored, and this creates a knowledge gap, which forms the basis of this

current contribution. Against this backdrop, the first hypothesis of this study is thus:

H₁: Increase volume of the corporate annual report in Nigeria is as a result of compulsory disclosure.

Narrative Disclosure and the Volume of Corporate Annual Report

In the contemporary times of increasing corporate transparency and public expectations, business stakeholders are continuously demanding for improved corporate governance. This expectation has increased information asymmetry between the internal and the external members of the company. This asymmetry is reduced through improved voluntary disclosure, which may be described as insider information willingly released to the external business stakeholders by management in published accounts. Voluntary disclosure is at the discretion of management since they are not compelled by any law to disclose such information (Meek, Roberts & Gray, 1995; Healey & Palepu, 2005).

Issues of narrative or voluntary disclosure have received a robust empirical consideration (Beattie, McLnnes & Fearnley, 2004; and Rutherford, 2002). Voluntary disclosure serves a different function to various external stakeholders of the business: as a control mechanism and as a means of organizing activities (Kohl & Schaefer, 2002); Reduction of the cost of capital and information asymmetry (Bruskerie, 2010) and as a means of increasing business earnings. Since mandatory disclosure is stereotyped, narrative disclosure serves as a means of transferring additional valuable information to external stakeholders. Consistent with the corporate control hypothesis, voluntary

disclosure gives managers the opportunity to explain not too impressive financial indices that compulsory disclosure may not capture.

Anderson (1996, 2005) found a positive relationship between voluntary disclosure and the volume of the corporate annual report. Consistent with Lee (1994); Bartlett and Chander (1997); Roger and Grant (1997), there is increased dedication to narrative reporting because the content has caught the attention of different stakeholders. According to Hussainey (2009), share price anticipation of earnings increases with the volume of narrative disclosure. This increase attention is likely to enhance the volume of the corporate annual report. However, there is yet any hardcore empirical justification for this position. Hence, this forms the basis of our second hypothesis.

H₂: Increase demand by external stakeholders beyond the minimum legal requirement will enhance the volume of the corporate annual report.

Product Page Count and the Volume of Corporate Annual Report

From the marketing perspective, corporate annual reports have become a tool for integrated marketing communication. Stranton and Stranton (2002) defined integrated marketing communication as enhancing the understanding of, association with, attitude and predisposition toward a product, service or organization. The corporate report has long been seen as an integral component of the corporate marketing mechanism with emphasis on brand public relation and customer management. However, this current trend of using the corporate annual report as a tool for image making is rather subversive and

threatens to downplay the substantive discourse to pedestal issues.

Lee (1994) focusing on some industrial companies in the United Kingdom, found a positive and significant relationship between product page count and the volume of the annual report. This form of reporting is said to have been driven by the increasing need for corporate image making (Ewen, 1988; Preston et al., 1975). The concept of postmodernism is gradually creeping into corporate annual reports. The traditional annual report, with few pages devoted to mandatory disclosure, has metamorphosed into well-packaged documents with a graphic masterpiece. How well this grandeur reflects the actual position of the organization is difficult to comprehend (Dandago & Ilaboya, 2015). Against the above backdrop, it is expected that product page count will increase the volume of the corporate annual report. This argument forms the basis of our third hypothesis.

H₃: Product page count significantly increases the volume of the corporate annual report.

Firm Size and the Volume of Corporate Annual Report

Different attempts have been made to crystallise the relationship between firm size and corporate disclosure and the results have been mainly positive (Buzby, 1974; Cerf, 1961; Cooke, 1988). According to Watts and Zimmerman (1990), the political cost of larger organisations is relatively high, and disclosure is essential to sustain public confidence and employee loyalty. Agency cost is higher with big business as a result of high external leverage to sustain the myriad of activities. The company is a network of

contract binding different stakeholders whose interests do not coincide. The need to satisfy the information need of the stakeholders will increase the disclosure requirement. Extant empirical literature has reported a positive relationship between size and corporate disclosure (Hossain, Perera & Rahman, 1995; Inchausti, 1997 and Tuhin, 2014).

However, mandatory disclosure does not depend on the size of the organisation. It is, therefore, difficult to establish the relationship between the size of the firm and the volume of the corporate annual report. This problem creates a gap that metamorphosed into our fourth hypothesis.

H₄: It is expected that increased disclosure of the desire of the different business stakeholders should increase the volume of the corporate annual report.

Company Age and the Volume of Corporate Annual Report

Company age is defined as the number of years from the date of incorporation of the business. Older firms are thought to disclose more as a result of reputation and corporate image (Akhtaruddin, 2005); improved reporting practices due to passage of time (Alsaed, 2006). The relationship between age of the firm and the level of disclosure has been relatively positive. This means disclosure tends to increase with the age of the organisation (Owusu-Ansah, 1998; Popora, Georgakopoulos, Stiroopoulos & Vasilecoy, 2013). However, the liability of obsolescence may also set in to reduce the extent of disclosure due to the age of the firm (Barnett, 1990).

The relationship between age of the business and the volume of annual report has not

received serious empirical consideration. This paucity of empiric creates a gap for investigation. This perceived gap forms the basis of our fifth hypothesis.

H₅: Since the age of the firm demands higher public confidence and improved corporate image, firm age should increase the volume of corporate annual reports.

METHODS

Corporate disclosure is a subject of different theoretics: political economy hypothesis which emphasises the self-interest of management to identify itself (Guthrie & Parker, 1989); organisational legitimacy theory which focus on the relationship between the business and the environment (Brown & Deegan, 1998); accountability theory which emphasises the link between the company and its stakeholders (Keasey & Wright, 1993); agency theory which deals with the stewardship function of management (Jensen & Meckling, 1976); marketing hypothesis popularised by Kotler (1991); and the communication theory which focus on the use of language and narrative theory in the construction of annual reports (Jameson, 2000).

However, the framework that best situates the current discourse is the organisational legitimacy theory. This theory places enormous power on the public with which they regulate the activities of businesses. From the perspective of organisational legitimacy, the corporate annual report is seen as a tool with which management legitimises their operations by responding to external

expectations (Stranton & Stranton, 2002). Dowling and Pfeffer (1975) defined legitimacy as the quality of congruence between corporate actions and social values; legitimacy is the perception that the organisation's activities conform to some socially constructed values.

Against the above backdrop, it is expected that the organisation must comply with some minimum legal requirements (CAMA, 2004; BOFIA, 2004), standards (IFRS) and other regulatory provisions (EFCC, CBN, NDIC, SEC, and NSE). These myriads of disclosure are likely to increase the volume of corporate annual reports (Lee, 1994; Gouws & Cronje, 2008; Popava, 2012; Hussainey & Walker, 2009; Bartlett & Jones, 1997). Therefore, hypothesis 1 is functionally expressed as:

$$VOLAR = f(\text{Compulsory disclosure}) \quad - \quad - \quad - \quad - \quad - \quad (i)$$

In the same vein, the social contract between the business and its environment requires a high level of voluntary disclosure geared towards creating corporate identity, predicting corporate failure, avoiding litigation cost, reducing information asymmetry and cost of capital. A significant relation is therefore expected between voluntary disclosure and volume of the annual report (Lee, 1994; Andersen, 1996; Smith & Tafler, 2000; Bruslerie et al., 2000; and Jones, 1996). Hypothesis 2 is transformed as:

$$VOLAR = f(\text{Narrative disclosure}) \quad - \quad (ii)$$

The corporate annual report has also been viewed as a means of integrated marketing communication (Burnett & Moriarty, 1998). According to Preston et al. (1995), annual financial reports are visual mediums for corporate identity that is a vital input in marketing communication (Droge et al.,

1990). To fulfil this objective, we expect a relationship between product page, count and the volume of annual report as:

$$VOLAR = f(\text{Product page count}) \quad - \text{ (iii)}$$

The age of the organisation has been identified in the extant literature as a determinant of disclosure (Popova, Georgakopoulos, Sotiropoulos, & Vasileiou, 2013; Owusu-Ansah, 1998). Therefore, it is expected that older firms should have a higher volume of the annual report. Thus, the fifth hypothesis is represented in a functional form as:

$$VOLAR = f(\text{Company age}) \quad - \text{ (iv)}$$

In the same vein, a positive and significant relationship exists between firm size and corporate disclosure (Cerf, 1961; Buzby, 1974; and Cooke, 1998). Against this background, a robust association is expected between company size and volume of the corporate annual report.

$$VOLAR = f(\text{Company size}) \quad - \text{ (v)}$$

Collectively, equation 1, 2, ..., 6 may be represented as:

$$VOLAR = f(\text{Compulsory disclosure, voluntary disclosure, product page count, company age, company size})$$

$$VOLAR = f(\text{COMPDISK, VOLDISC, PPC, FSIZE, FAGE}) + \varepsilon_{it} \quad - \quad - \text{ (vi)}$$

Equation 6 is transformed as:

$$VOLAR_{it} = \beta_0 + \beta_1 \text{COMPLD}_{it} + \beta_2 \text{NARD}_{it} + \beta_3 \text{PPC}_{it} + \beta_4 \text{FAGE}_{it} + \beta_5 \text{FSIZE}_{it} + \varepsilon_{it} \quad - \quad - \text{ (vii)}$$

Where: *VOLAR* = Volume of corporate annual report;
COMPDISK = Compulsory

disclosure; *VOLDISC* = Voluntary disclosure; *PPC* = Product page count; *FAGE* = Firm age; *FSIZE* = Firm size; ε = Error term; $i = 1, 2, \dots, 12$; $t = 1, 2, \dots, 10$.

It is presumptively expected that the explanatory variables will exceed zero based on theoretical exposition and extant literature (Lee, 1994).

The sample for the study was selected using purposive sampling technique. We restrict the sample to firm-years for which corporate annual reports were readily available. The final sample was 120 firm-years with consistent regression variables. The variables were collected through content analysis of the corporate annual reports. Consistent with Gouws and Cronje, 2008; Lee (1994); and Smith and Taffler (2000), we estimated the page count of each disclosure category. Balanced panel data regression technique was used for data estimation with a preference for random effect model going by the result of the Hausman test. By studying repeated cross-sectional observations, panel data regression is better suited to address the dynamics of change. The regular regression assumption tests of normality, heteroskedasticity, model specification and serial correlation were carried out to ensure the accuracy of the model.

The volume of annual report: The total page count of the annual report is taken as the dependent variable of the study. It is expected that the higher the level of disclosure, the higher the page count of the corporate annual report.

Compulsory disclosure: This is taken as the page count of all financial statements that

comply with S. 334 (2); as complemented by IAS 1 and other disclosure required by relevant regulatory authorities.

Narrative Disclosure: This is taken as the page count devoted to reports not required by law, such as chairman’s reports corporate governance report, environment and corporate social responsibility disclosure, and directors’ profile.

Product page count: This is the number of pages of the corporate annual report devoted to pictures of the different products of the company.

Company size: This is taken as the natural logarithm of the total assets of the selected banks.

Company age: This is the number of years from the date of incorporation of each company.

RESULTS AND DISCUSSION OF FINDINGS

Descriptive Statistics

TABLE 1: RESULTS OF THE DESCRIPTIVE STATISTICS

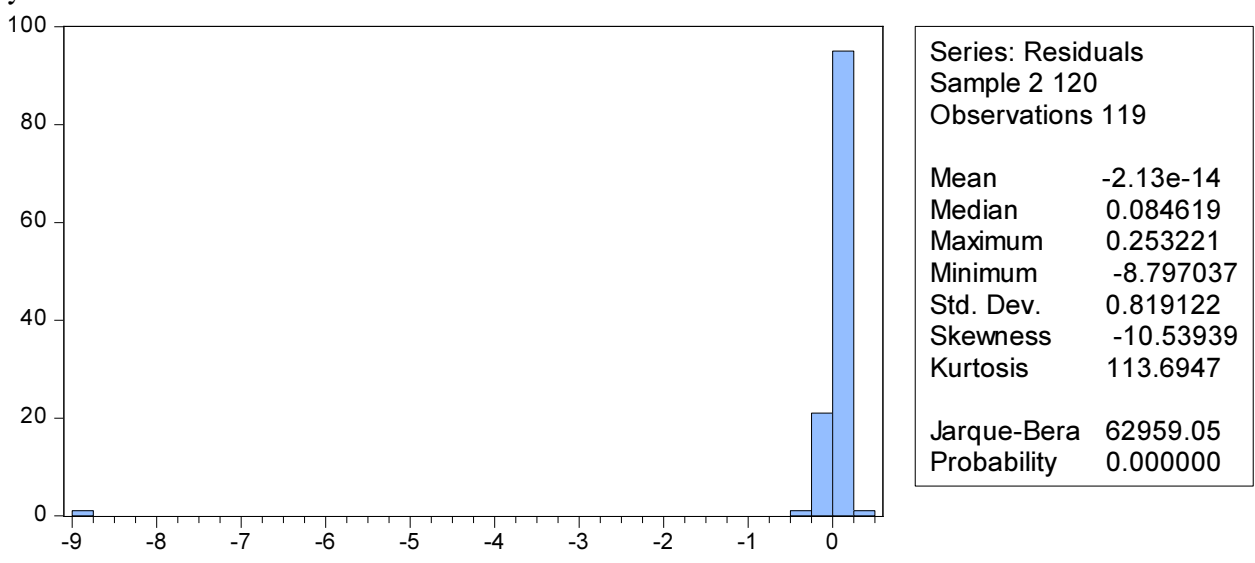
	COMPDISC	NARTDISC	PRODPC	AGE	FSIZE	VOL
Mean	64.65546	48.16807	0.773109	42.91597	3.42E+11	113.5210
Median	51.00000	42.00000	0.000000	27.00000	9.79E+10	102.0000
Maximum	245.0000	208.0000	13.00000	119.0000	2.46E+12	453.0000
Minimum	4.000000	7.000000	0.000000	14.00000	845231.0	31.00000
Std. Dev.	43.91641	30.81473	2.293827	31.00289	5.00E+11	66.18334
Skewness	1.836395	1.898906	3.436093	1.189617	1.844749	1.726890
Kurtosis	6.635026	8.965936	15.12440	3.168718	6.250136	8.030498
Jarque-Bera	132.4014	247.9949	963.0477	28.20905	119.8716	184.6211
Probability	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000
Sum	7694.000	5732.000	92.00000	5107.000	4.07E+13	13509.00
Sum Sq. Dev.	227580.9	112046.6	620.8739	113419.2	2.95E+25	516867.7

Observations 119 119 119 119 119 119

Source: Researchers computation (E-VIEWS 8) 2015

The result shows that the maximum page of the corporate annual report is 453 pages with a minimum of 31 pages and a mean page count of 114. Compulsory disclosure has the highest mean page count of 65, followed by narrative disclosure with 48 pages. The average age of the banks is 48 years with an average company size of ₦34 Billion. The variables

are leptokurtic with a mean value of 113.6947 (see Figure 1), showing the data is highly peaked near the mean (see figure 1). The result of the Jarque-Bera statistics with an average of 6295.05 and associated probability value of 0.000000 shows that the regression variables conform to the Gaussian distribution. The bell-shaped histogram strengthens this in figure 1.



skewed to the left with an average skewness of -10.53939

The histogram normality test in Figure 1 shows a bell-shaped histogram that indicates that the regression variables are normally distributed. The distribution is negatively

Correlation Coefficient

TABLE 2: RESULT OF THE CORRELATION COEFFICIENT

Covariance Analysis: Ordinary				
Date: 09/30/15 Time: 08:42				
Sample: 2004 2013				
Included observations: 119				

Balanced sample (listwise missing value deletion)						
Correlation						
t-Statistic						
Probability	COMPDISC	NARTDISC	PRODPC	AGE	FSIZE	VOL
COMPDISC	1.000000					

NARTDISC	0.521622	1.000000				
	6.613180	-----				
	0.0000	-----				
PRODPC	0.271365	0.137703	1.000000			
	3.049698	1.503814	-----			
	0.0028	0.1353	-----			
AGE	0.145178	0.337988	-0.021125	1.000000		
	1.587161	3.884503	-0.228548	-----		
	0.1152	0.0002	0.8196	-----		
FSIZE	0.045613	0.499705	-0.056871	0.422658	1.000000	
	0.493891	6.240080	-0.616148	5.044472	-----	
	0.6223	0.0000	0.5390	0.0000	-----	
VOL	0.916632	0.787811	0.279227	0.253708	0.261744	1.000000

	24.80386	15.37127	3.145416	2.837105	2.933459	-----
	0.0000	0.0000	0.0021	0.0054	0.0040	-----

Source: Researchers computation (E-VIEWS 7) 2015

Consistent with Weisberg (1985) and Hossain and Hammani (2000), we tested the regression variables for multicollinearity using correlation coefficients and variance inflation factor. The correlation coefficients are relatively weak and not up to the problematic levels of 0.80 – 0.90 (Bryman & Cramer, 1997). The coefficients of the regressors and the regressand are relatively weak except 0.787811 between the volume of the annual report and narrative disclosure.

Variance Inflation Factor

TABLE 3: RESULTS OF THE TEST OF VARIANCE INFLATION FACTOR

Variance Inflation Factors

Date: 09/30/15 Time: 09:03

Sample: 1 120

Included observations: 119

Variable	Coefficient		VIF	
	Uncentered	Centered	Uncentered	Centered
C	0.244380	NA	41.50618	NA
COMPDISC	4.88E-06	1.584428	5.047761	1.584428
NARTDISC	1.01E-05	1.620516	5.613706	1.620516
PRODPC	0.001223	1.084147	1.208344	1.084147
AGE	7.59E-06	1.228951	3.603782	1.228951

FSIZE 0.000447 42.66064 1.236808

Source: Researchers computation (E-VIEWS 7) 2015

Consistent with Neter, Wasserman and Kutner (1989), only VIF more than 10 is indicative of multicollinearity.

The average centered variance inflation factor is 1.34 which is sufficiently close to 1.00 and suggests the absence of multicollinearity.

Regression Diagnostics

TEST STATISTIC	F-STATISTIC	PROBABILITY
SERIAL CORRELATION	0.750446	0.3882
HETEROSKEDASTICITY	0.328609	0.8948
RAMSEY RESET	0.025498	0.9748

Source: Researchers computation (E-VIEWS 8) 2015

The result of serial correlation test debunked the null hypothesis of the presence of serial correlation in the variables. The probability values of the Breusch-Godfrey serial correlation LM test are 0.9748 and 0.9730 respectively. Similarly, the test of heteroskedastic residuals is not significant with p-values of 0.8948 and 0.8882, the

benchmark of 0.05. The result of the Ramsey RESET could not sustain the null hypothesis of misspecified model hence we accepted the alternative that the regression model is correctly specified.

Analyses of Regression Results

THE HAUSMAN TEST

TABLE 8: RESULTS OF THE HAUSMAN TEST

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
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Cross-section random 0.742628 5 0.9805

Source: Researchers computation (E-VIEWS 7) 2015

The Hausman test in Table 6 presents estimated chi-square value of 0.742628, which sustains the null hypotheses of no significant difference between the fixed effect and random effect model.

TABLE 7: RESULTS OF THE RANDOM EFFECT MODEL

Dependent Variable: VOL				
Method: Panel EGLS (Cross-section random effects)				
Date: 09/30/15 Time: 08:49				
Sample: 2004 2013				
Periods included: 10				
Cross-sections included: 12				
Total panel (unbalanced) observations: 119				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.236650	0.193614	-1.222281	0.2241
COMPDISC	1.000114	0.002258	442.8324	0.0000
NARTDISC	1.002243	0.003844	260.6992	0.0000
PRODPC	1.006190	0.037228	27.02755	0.0000
AGE	0.000716	0.003177	0.225345	0.8221
FSIZE	3.01E-14	2.12E-13	0.142112	0.8872
	Effects Specification			
			S.D.	Rho
Cross-section random			0.189447	0.0483

Idiosyncratic random		0.841226	0.9517
Weighted Statistics			
R-squared	0.999841	Mean dependent var	92.61450
Adjusted R-squared	0.999834	S.D. dependent var	64.07113
S.E. of regression	0.825223	Sum squared resid	76.95222
F-statistic	142071.6	Durbin-Watson stat	2.325869
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.999846	Mean dependent var	113.5210
Sum squared resid	79.34153	Durbin-Watson stat	2.255827

Source: Researchers computation (E-VIEWS
 7) 2015 *significant at 0.05%*

The regression result shows that our regressors largely explain the determinants of the changing volume of corporate annual reports. The adjusted R-squared value of 0.999834 signifies very high internal validity which means about 99.99% of the cross-sectional variation in the volume of the corporate annual report is accounted for by the explanatory variables. The F-statistics of 142071.6 and the associated probability value of 0.000000 indicates a significant linear relationship between the regression variables. The Durbin-Watson statistics of 2.3 is within the grey area and not indicative of the problem of autocorrelation.

The statistical significance of compulsory disclosure is beyond the likelihood of chance. The robust coefficient of 1.000114 means that

a unit increase in compulsory disclosure will increase the volume of annual report by 1.000114%. The robust t-value of 443 and associated probability value of 0.000000 provides support for our first hypothesis. The positive, statistical relationship between compulsory disclosure and the volume of annual report is consistent with the extant empirical literature (Bartlett & Jones, 1997; Lee, 1994; Popova et al. (2013) and Gouws & Cronje, 2008). With the highest mean page value of 65, it shows that annual report still serves its stewardship function. This is inconsistent with the position of Lee (1994) who found that the page count of narrative disclosure exceeds the page count of compulsory disclosure. Among others, the result of our study has helped to debunk Lee's (1994) image management hypothesis of corporate annual reports. In addition to the increased emphasis on accountability and transparency, the result may have been influenced by the global convergence of

accounting standards. This is, however, arguable and form a suitable basis for future research. Our results support the legitimacy theory upon which the research is achieved.

Expectedly, we find a positive and significant relationship between narrative disclosure and volume of corporate annual report. The result shows that a unit increase in narrative disclosure will increase the volume of annual report by 1.002243 units. The robust t-value of 260.6992 and the associated probability of 0.000000 provides support for our second hypothesis. The result is consistent with the results of prior studies (Beattle, 2010; Barrtlett & Chander, 1997; Lee, 1994; Andersen, 1996; Rogers & Grant, 1997; and Rutherford, 2002). The finding shows that in addition to stewardship function, corporate annual report communicates valuable insider information that helps to reduce information asymmetry between the informed and the uninformed business stakeholders. Our finding corroborates the corporate control hypothesis that emphasises the opportunity for managers to communicate the result of other activities beyond the mandatory disclosure.

The relationship between product page count and the volume of the annual report is positive and significant and provides empirical support for hypothesis three. The t-value of 27.02755 and the associated probability value of 0.000000 is in conformity with the image management hypothesis of the corporate annual report and also in line with the integrated marketing communication hypothesis. It is consistent with Lee (1994) who found a positive and significant

relationship between product page count and the volume of the corporate annual report.

Contrary to expectations, the relationship between the control variables of firm age and size were not significant at the 5% level. To the best of our knowledge, these variables have not been tested against the volume of corporate annual report in any known study. The structural inertia hypothesis expects size to affect the volume of disclosure. Similarly, the reputation which age confers is expected to affect the disclosure level and hence the volume of corporate annual reports. The result negates these hypotheses.

CONCLUSION AND POLICY IMPLICATIONS

This contribution investigates the determinants of the changing volume of corporate annual reports utilizing twelve banks purposively selected from banks quoted on the Nigerian Stock Exchange Market. The result of the study shows that there exist a positive and significant relationship between compulsory disclosure, narrative disclosure, product page count and volume of the corporate annual report. However, the control variables of firm size and firm age were not significant.

The result of our analysis does not support the image management hypothesis of corporate annual reports. The result of the study shows that the mean page count devoted to compulsory disclosure is 64 pages compared to 48 pages in the case of narrative disclosure. This means that the corporate annual disclosure serves its stewardship function. In addition to compulsory disclosure, the corporate annual report is used to communicate valuable insider information

that helps to reduce information asymmetry between the informed and the uninformed business stakeholders. Our statistical analyses conform to the few existing literature that establishes positive relationship between disclosures and volume of annual report.

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APPENDIX 1: REGRESSION DIAGNOSTICS

RAMSEY RESET TEST

TABLE 4: RESULTS OF THE RAMSEY RESET TEST

Ramsey RESET Test

Equation: UNTITLED

Specification: VOL C COMPDISC NARTDISC PRODPC AGE
 FSIZE

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	0.866283	112	0.3882
F-statistic	0.750446	(1, 112)	0.3882
Likelihood ratio	0.794690	1	0.3727

F-test summary:

	Sum of Sq.	Df	Mean Squares
Test SSR	0.526963	1	0.526963
Restricted SSR	79.17333	113	0.700649
Unrestricted SSR	78.64637	112	0.702200
Unrestricted SSR	78.64637	112	0.702200

LR test summary:

	Value	df
Restricted LogL	-144.6084	113
Unrestricted LogL	-144.2110	112

Source: Researchers computation (E-VIEWS 7) 2015

HETEROSKEDASTICITY TEST

TABLE 5: RESULTS OF THE HETEROSKEDASTICITY TEST

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.328609	Prob. F(5,113)	0.8948
Obs*R-squared	1.705490	Prob. Chi-Square(5)	0.8882
Scaled explained SS	86.65338	Prob. Chi-Square(5)	0.0000

Source: Researchers computation (E-VIEWS 7) 2015

SERIAL CORRELATION TEST

TABLE 6: RESULTS OF THE SERIAL CORRELATION TEST

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.025498	Prob. F(2,111)	0.9748
Obs*R-squared	0.054646	Prob. Chi-Square(2)	0.9730

Source: Researchers computation (E-VIEWS 7) 2015