Adeniyi, Segun Idowu; Adebayo, Helen Oluwatoyin

Article

Effect of financial leverage on voluntary corporate social disclosure among listed firms on Nigerian stock exchange : a study of selected manufacturing firms

Reference: Adeniyi, Segun Idowu/Adebayo, Helen Oluwatoyin (2018). Effect of financial leverage on voluntary corporate social disclosure among listed firms on Nigerian stock exchange : a study of selected manufacturing firms. In: Academic journal of economic studies 4 (3), S. 18 - 24.

This Version is available at:
http://hdl.handle.net/11159/2490

Academic Journal of Economic Studies
Vol. 4, No. 3, September 2018, pp. 18–24
ISSN 2393-4913, ISSN On-line 2457-5836

Effect of Financial Leverage on Voluntary Corporate Social Disclosure among Listed Firms on Nigerian Stock Exchange: A Study of Selected Manufacturing Firms

Segun idowu Adeniyi[1], Helen Oluwatoyin Adebayo[2]

[1]Department of Accountancy, Nnamdi Azikiwe University, Awka,, Anambra State, Nigeria, [1]E-mail: princeadeidowu@gmail.com
[2]Department of Accountancy, Federal Polytechnic, Nasarawa, Nasarawa State, Nigeria

Abstract *The study examines the effect of financial leverage on voluntary corporate social disclosure among selected listed manufacturing firms on the Nigerian Stock Exchange. The specific objectives of the study is to determine the effect of financial leverage on voluntary economic disclosure, voluntary social disclosure, voluntary environmental disclosure and the interaction of voluntary economic disclosure, voluntary social disclosure with voluntary environmental disclosure. The study employs ex-post facto design and secondary data. The study discovered that financial leverage does not significantly affect voluntary economic and environmental disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. However, financial leverage significantly affects voluntary social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. The study recommends that firms should engage in voluntary corporate social disclosure no matter the level of their financial leverage.*

Key words Financial leverage, economic disclosure, social disclosure, environmental disclosure, voluntary corporate social disclosure

JEL Codes: H54, O16

1. Introduction

The Nigerian economy received a lot of boost from corporate firms' activities towards her economic growth and development. There is no controversy on the fact that corporate firms contribute positively to Nigeria Gross Domestic Product without taking adequate measure about the negative impact of their operations on the social and natural environment of their hosting communities. Untari (2010) noted that some of the activities of corporate firms endangered community health. Some of the negative impact of their activities on the host communities are; water and air pollution, environmental noise, waste management problem, employees occupational health and safety, loss of biodiversity among others. Zhang (2013) observed that corporate firms are more concerned with profit making motive. However they ought to take the welfare of their employees and the hosting communities very seriously. The problems experienced from the activities of corporate firms necessitate the clarion call for their adequate report of their social responsibility activities in their annual reports and account Ali & Rizwan (2013) states that corporate social disclosure is dissemination of information about the firms human resource related practices, community involvement project and activities, safety and quality of products and contribution to healthy environmental where they are operating.

On this basis, Ikpor and Agha (2016) observes that corporate social disclosure will help to minimize information gap between the company management and other company stakeholders. This will induce pressure groups and other stake holders in making an informed decision, help to manage industrial crisis and improve companies and community relations. Despite the importance of corporate social disclosure, its reporting remains voluntary in Nigeria. So far the firms have the choice to report their corporate social responsibility, logical economic thinking says that firms will disclosure information that cost effective and beneficial to their own organization.

Many studies examine the influence of financial leverage on voluntary corporate social disclosure. The results of their studies are either inconclusive or contradictory, reporting positive or sometimes negative results. Sembiring (2005); Rahman and Widyasari (2008); Putra (2009); Veronica (2009); Untari (2010); Yulita (2010) discovered that financial leverage has no effect on corporate social responsibility disclosure. Apriwenni (2009); Purnasiwi (2011); Kolsi, (2012); Hajji and Ghazali (2013) discovered in their studies that financial leverage affect corporate social responsibility disclosure.

Due to inconsistent results of previous studies on corporate attributes and voluntary corporate social disclosure and methodology differences that indicate a research gap, this study will examine the effect of financial leverage on voluntary corporate social disclosure of selected manufacturing firms on Nigerian Stock Exchange. The main objective of the study is to ascertain the effect of financial leverage on voluntary corporate social disclosure of selected listed manufacturing firms on the Nigerian Stock Exchange. The specific objectives of this study are as follows:

1. To ascertain the effect of financial leverage on voluntary economic disclosure.
2. To determine the effect of financial leverage on voluntary social disclosure.
3. To ascertain the effect of financial leverage on voluntary environmental disclosure.
4. To determine the effect of financial leverage on voluntary corporate social disclosure (the interaction of economic, social and environmental disclosure).

The study will be guided by the following null hypotheses:

i. **Ho:** Financial leverage does not significantly affect voluntary economic disclosure.
ii. **Ho:** Financial leverage does not significantly affect voluntary social disclosure.
iii. **Ho:** Financial leverage does not significantly affect voluntary environmental disclosure.
iv. **Ho:** Company age does not significantly affect voluntary corporate social disclosure.

1.1. Scope of the study

The study covers thirty eight (38) consumer and industrial goods manufacturing firms listed on the Nigerian Stock Exchange for the period of the study. The preference for these firms is based on the fact that their activities impact most on the social and natural environment and their annual reports are easily accessible and capable for comparison. The study covers the period of 2014 to 2016 for statistical analysis.

2. Literature review

Modugbu and Eboigbe (2017) investigate the relationship between firm size, leverage and corporate social disclosure level. The study adopted the longitudinal research design. The result of their study shows a significant negative relationship between leverage and mandatory disclosure. Elshabasy (2017) examined the impact of corporate characteristics on environmental information disclosure among listed firms in Egypt. The study discovered that there is an insignificant relationship between Firm Financial Leverage on environmental information disclosure. Moreover, Soyinka *et al.*, (2017) examined the relationship between firm size, leverage and return on asset on corporate social responsibility disclosure. The study used data from audited annual reports and accounts of the listed Deposit Money Banks in Nigeria. The study discovered leverage was found to exhibit a negative relationship with corporate social responsibility. The above studies discovered negative relationship between leverage and corporate social disclosure level, environmental information disclosure and corporate social responsibility disclosure.

Meanwhile, Egbunike and Tarilaye, (2017) examined the association between firm's specific attributes (firm size, earnings, leverage and governance) and voluntary environmental disclosure with evidence from listed manufacturing companies in Nigeria. The study discovered that there is a positive relationship between environmental disclosure and leverage of the studied manufacturing companies in Nigeria. The study focuses only on environmental disclosure and ignores both economic and social disclosure. Ikpor and Agha (2016) examine the determinants of voluntary disclosure quality among listed firms on Nigeria Stock Exchange. The study focus on how profitability, leverage, size and board composition affect the quality of corporate social disclosure. The study used Ex-post facto research design and judgmental sampling technique to determine sample population. The study excluded some firms based on the fact that some firms' usage of financial leverage substantially differs from the other. The study fails to recognize that debt to equity ratio can be applied generally to all the firms. This could have help to increase the sample population of the study.

The study found leverage to be significant and negatively related to the disclosure quality of listed firms in Nigeria. In contrast to Ikpor and Agha (2016), Barako *et al.* (2006) investigates the extent to which company characteristics influence voluntary disclosure practices among Kenyan companies. The study discovered that leverage positively and significantly affect voluntary disclosure. Review of empirical studies shows that the results of most of these researches are either inconclusive or contradictory with some reporting positive and others negative effect of financial leverage on voluntary corporate social disclosure practices, hence the gap this research intends to cover.

3. Methodology of research

This study employs *ex-post facto* design. According to Louis, Lawrence and Keith (2005) *ex-post facto* design is a method of teasing out possible antecedents of events that have happened and cannot, therefore, be engineered or manipulated by the researcher. The data for the study already exists in corporate annual reports.

The population of the study is made up of consumer and industrial goods manufacturing firms listed on the Nigeria Stock Exchange (NSE) as at December, 2016 and have consistently submitted their annual reports to the Nigeria Stock Exchange. As at 31st December 2016, thirty eight (38) firms were listed, out of the number; only thirty three (33) firms have their financial statements available either on their website or in the office of the Nigerian Stock Exchange. Secondary data was used for the study. The sources of data include annual reports and accounts of companies, corporate website of companies and Nigeria Sock Exchange Fact books. We applied linear regression analysis and analysis of variance (ANOVA) with the aid of SPSS 20.0 software for the panel data in order to determine the relationship between the variables.

3.1. Model specification

In this study, the effect of financial leverage on corporate social disclosure is estimated by using the following regression model to empirically test the hypotheses formulated is as follows:

LOGTDIECNit= β0it + βiLOGLevit + eij (1)

LOGTDIENVit= β0it + βiLOGLevit + eij (2)

LOGTDISOCit= β0it + βiLOGLevit + eij (3)

LOGCSDIit = β0it + βiLOGLevit + eij (4)

Where:

i. TDIECN = the total disclosure index of economic performance;

ii. TDIENV = the total disclosure index of environmental performance;

iii. TDISOC = the total disclosure index of social performance;

iv. CSRD Index = corporate social disclosure score for company. It is the aggregate model of total disclosure index of Economic performance, Environmental performance and Social performance. Therefore, CSDI= Σ (TDIECN + TDIENV+ TDISOC).

v. Lev = financial leverage

vi. it= time period of study

vii. $\beta > 0$; $r^2 > 0$.

viii. β0 = intercept

ix. eij = error term

x. βi measure the effect of financial leverage on voluntary corporate social disclosure.

3.2. Variables measurement

Financial leverage was measured by Debt to Equity Ratio. The formula that was used is total liabilities divided by shareholder equity. Corporate social disclosure was measured by corporate social responsibility disclosure index (CSDic) which refers global report initiatives (GRI) indicators. GRI indicators consist of three focuses of disclosure, namely economic, environmental and social as a basis for sustainability reporting. The GRI indicators are international rules that have been recognized by the companies in the world. Corporate social responsibility disclosure index measurement refers to the study by Nurdin (2009), which uses content analysis to measure the variety of corporate social disclosure index.

Content analysis is most often viewed in corporate social reporting as a technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity (Abbot and Monsen, 1979 in Nurdin, 2009).

In consistent with Cooke (1989); Al-Shammari et al. (2008); Aljifri *et al*. (2014); each disclosure requirement mentioned in the global reporting initiative (GRI) is assigned an equal weight. Each disclosure is coded one (1) if the required disclosure was made and zero (0) if it was not. If a disclosure is not applicable to the firm, the item is dropped from the scoring system for that firm.

4. Data Analysis and Results

Hypothesis One

Ho: Financial leverage does not significantly affect voluntary economic disclosure.

Hi: Financial leverage significantly affects voluntary economic disclosure

Table 1a. ANOVA[a] Result: Economic Disclosure Index on Financial leverage

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.072	1	.072	1.918	.169[b]
	Residual	3.633	97	.037		
	Total	3.705	98			

a. Dependent Variable: economic disclosure
b. Predictors: (Constant), financial leverage

Table 1b. Regression coefficient for Economic Disclosure Index on Financial leverage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.801	.100		27.993	.000
	financial leverage	.082	.060	.139	1.385	.169

a. Dependent Variable: economic disclosure

Table 1c. Model Summary for Economic Disclosure Index on Financial leverage

Model	R	R Square	Adjusted R. Square	Std Error of the Estimate	Durbin – Watson
1	.139[a]	.019	.009	.19353	1.832

Note: $r^2 = .19$, $f(1, 97) = 1.919$, $p = .169$

The *f*-ratio (1.919) shows that the variable (financial leverage) is not the major determinant in explaining voluntary economic disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio; financial leverage explains 19 percent of the variation experienced in voluntary economic disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.196, which means P > 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that financial leverage does not significantly affect voluntary economic disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Two

Ho: Financial leverage does not significantly affect voluntary social disclosure.

Hi: Financial leverage significantly affects voluntary social disclosure

Table 2a. ANOVA[a] Result: Social Disclosure Index on Financial leverage

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.319	1	.319	8.238	.005[b]
	Residual	3.758	97	.039		
	Total	4.077	98			

a. Dependent Variable: social disclosure
b. Predictors: (Constant), financial leverage

Table 2b. Regression coefficient for Social Disclosure Index on Financial leverage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.604	.102		25.592	.000
	financial leverage	.174	.061	.280	2.870	.005

a. Dependent Variable: social disclosure

Table 2c. Model Summary for Social Disclosure Index on Financial leverage

Model	R	R Square	Adjusted R. Square	Std Error of the Estimate	Durbin – Watson
1	.280[a]	.078	.069	.19682	1.729

Note: r^2 = .78, f(1, 97) = 8.238, p = .005

The *f*-ratio (8.238) shows that the variable (financial leverage) is one of the major determinants in explaining voluntary social disclosure. It can be observed that the independent variable have a significant effect on the dependent variable based on the *f*-ratio; financial leverage explains 78 percent of the variation experienced in voluntary social disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is statistically significant because its significance value is 0.005.

Decision:

Based on the analysis above, the null hypothesis (Ho) is rejected while alternative hypothesis (Hi) is accepted; which state that financial leverage significantly affect voluntary social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Three

Ho: Financial leverage does not significantly affect voluntary environmental disclosure.

Hi: Financial leverage significantly affects voluntary environmental disclosure

Table 3a. ANOVA[a] Result :Environmental Disclosure Index on Financial leverage

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.002	1	.002	.065	.799[b]
	Residual	3.229	97	.033		
	Total	3.231	98			

a. Dependent Variable: environmental disclosure
b. Predictors: (Constant), financial leverage

Table 3b. Regression coefficient for Environmental Disclosure Index on Financial leverage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.849	.094		30.206	.000
	financial leverage	.014	.056	.026	.255	.799

a. Dependent Variable: environmental disclosure

Table 3c. Model Summary for Environmental Disclosure Index on Financial leverage

Model	R	R Square	Adjusted R. Square	Std Error of the Estimate	Durbin – Watson
1	.026[a]	.011	.010	.18246	1.010

Note: r^2 = .11, f(1, 97) =0. 065, p = .799

The *f*-ratio (0.065) shows that the variable (financial leverage) is not the major determinant in explaining voluntary environmental disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio; financial leverage explains 11 percent of the variation experienced in voluntary environmental disclosure among selected manufacturing firms listed on Nigerian Stock Exchange. The independent variable is not statistically significant because its significance value is 0.799, which means P > 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that financial leverage does not significantly affect voluntary environmental disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

Hypothesis Four

Ho: Financial leverage does not significantly affect voluntary corporate social disclosure.

Hi: Financial leverage significantly affects voluntary corporate social disclosure.

Table 4a. ANOVA[a] Result: Voluntary Corporate Social Disclosure Index on Financial leverage

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.002	.965[b]
	Residual	13.473	97	.139		
	Total	13.473	98			

a. Dependent Variable: corporate social disclosure
b. Predictors: (Constant), financial leverage

Table 4b. Regression coefficient for Voluntary Corporate Social disclosure Index on financial leverage

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.828	.193		19.867	.000
	lfinancial leverage	-.005	.115	-.005	-.045	.965

a. Dependent Variable: corporate social disclosure

Table 4c. Model Summary for Voluntary Corporate Social Disclosure Index on financial leverage

Model	R	R Square	Adjusted R. Square	Std Error of the Estimate	Durbin – Watson
1	.015[a]	.011	.010	.37269	1.537

Note: $r^2 = .11$, $f(1, 97) = .002$, $p = .965$

The *f*-ratio (0.002) shows that the variable (financial leverage) is not the major determinant in explaining voluntary corporate social disclosure. It can be observed that the independent variable does not give a significant effect on the dependent variable based on the *f*-ratio; financial leverage explains 11 percent of the variation experienced in voluntary corporate social disclosure among selected manufacturing firms listed on Nigeria Stock Exchange. The independent variable is not statistically significant because its significance value is 0.965, which means P > 0.05

Decision:

Based on the analysis above, the alternative hypothesis (Hi) is rejected while null hypothesis (Ho) is accepted; which state that financial leverage does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

5. Discussions, Conclusions and Recommendations

The study discovered that financial leverage does not significantly affect voluntary economic and environmental disclosure among selected listed manufacturing firms on Nigerian Stock Exchange. However, financial leverage significantly affects voluntary social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange.

The interactions between economic disclosure, social disclosure and environmental shows that financial leverage does not significantly affect voluntary corporate social disclosure among selected listed manufacturing firms on Nigerian Stock Exchange because its significance value is 0.965, which means P > 0.05. This result is consistent with Modugbu and Eboigbe (2017); Uwuigbe and Egbide (2012) and Ikpor and Agha (2016) who found a significant negative relationship between leverage and corporate social disclosure. The implication of this finding is that companies with relatively lower financial leverage will have sufficient funds for financing corporate social responsibility and report its activities to its stakeholders. Corporate social disclosure will help the management to reduce pressure from creditors. However, highly financial leverage companies are more likely to comply with corporate social responsibility regulations. This may encourage them to report their corporate social responsibility activities to their stakeholders. The study finds that companies with high financial leverage increase their volume of corporate social disclosure to reduce their agency cost while companies with relatively lower financial leverage may be able to have sufficient funds for financing corporate social disclosure and it will reduce pressure from their creditors. Therefore, we recommend that firms should engage in voluntary corporate social disclosure no matter the level of their financial leverage.

References

Ali, W. & Rizwan, M (2013) Factors Influencing Corporate Social & Environmental Disclosure (CSED) Practices in the Developing Countries: An Institutional Theoretical Perspective International *Journal of Asian Social Science*, 3(2).

Aljifri, K., Alzarouni, A., Ng, C., & Tahir, M. I. (2014). The association between firm characteristics and corporate financial disclosures: Evidence from UAE Companies. *The International Journal of Business and Finance Research*, 8(2), 101- 123.

Al-Shammari, B., Brown, P., & Tarca, A. (2008). An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states. The International Journal of Accounting, 43(4), 425.

Apriwenni, P. (2009). Faktor-faktor yang memperngaruhi pengungkapan corporate social responsibility pada laporan tahunan perusahaan untuk industry manufaktur tahun 2008. *Jurnal Ekonomi dan Bisnis,* Volume 6 Nomor 1,April, 41-58.

Barako, D.G., Hancock, P. & Izan, H. Y (2006) Factors influencing voluntary corporate disclosure by Kenyan companies, Corporate Governance: An International Review 14(2): pp 107125.

Cooke, T.E. (1989). Disclosure in the corporate annual reports of Swedish companies. *Accounting and Business Research, 19*(74), 113-124.

Egbunike, P.A. & Tarilaye, N. (2017). Firms specific attributes and voluntary environmental disclosure in Nigeria: Evidence from listed manufacturing companies. *Academy of Accounting and Financial Studies Journa.* 21 (3).

Elshabasy,Y.N.,(2017).The impact of corporate characteristics on environmental information disclosure: an empirical study on the listed firms in Egypt. *The Business and Management Review, Volume 8 Number 5*

Global Reporting Initiative (2011). Sustainability Reporting Guidelines: G3.1 version, Retrieved from http://globalreporting.org on 1th February, 2018.

Hajji, G. & Ghazali,M.. (2013). The quality and determinants of voluntary disclosure in annual reports of Shariah compliant companies in Malaysia. *Humanomics, 29*(1).

Ikpor, I.M., & Agha,N, (2016). Determinants of voluntary disclosure quality in emerging economies: Evidence from firms listed on Nigeria Stock Exchange. *International Journal of Research in Engineering & Technology*. 4(2).

Kolsi, M. (2012). The determinants of corporate voluntary disclosure: Evidence from the Tunisian capital market. *Journal of Accounting Research & Audit Practices, 4*, 49-68.

Louis,C., Lawrence,M. & Keith, M. (2005). Research methods in education, (5th Ed.).RoutledgeFalmer, New York.

Modugu-, K.P., & Eboigbe, S.U. (2017). Corporate attributes and corporate disclosure level of listed companies in Nigeria: A post - IFRS adoption study. *Journal of Finance and Accounting*. 5(2), 44-52

Nigeria Stock Exchange Fact Book (2015/2016). *Nigerian Stock Exchange*.

Nurdin, A. (2009). *Corporate governance dan profitabilitas: pengaruhnya terhadap pengungkapan tanggungjawab sosial perusahaan (Studi empiris pada perusahaan yang tercatat di Bursa Efek Indonesia*. Universitas Diponegoro: Thesis.

Putra, A.A. (2009). *Analisis faktor-faktor yang mempengaruhi pengungkapan tanggungjawab sosial serta hubungan pengungkapan tanggungjawab social dengan reaksi investor.* Universitas Indonesia: Skripsi.

Rahman, A., & Widyasari, K.N. (2008). The analysis of company characteristic influence toward CSR disclosure: empirical evidence of manufacturing companies listed in JSX. *Jurnal Akuntansi & Auditing Indonesia*, 12 (1), 25-35.

Sembiring, E.R. (2005). *Karakteristik perusahaan danpengungkapan tanggungjawab sosial: Studi empiris pada perusahaan yang tercatat di Bursa Efek Jakarta*. Simposium Nasional Akuntansi 8, Solo.

Soyinka, K.A, Sunday, O.M. & Adedejji, D. B. (2017). Determinant of corporate social responsibility disclosure in Nigeria. *International Journal of Academic Research in Business and Social Sciences.*7 (7).

Untari, L. (2010). *Effect on company characteristics corporate social responsibilities disclosures in corporate annual report of consumption listed in Indonesia Stock Exchange*. Universitas Gunadarma: Skripsi.

Uwuigbe, U., Uwuigbe, O., & Ajayi, A.O. (2011). Corporate social responsibility disclosures by environmentally visible corporations: A study of selected firms in Nigeria. *European Journal of Business and Management.* 3(9)

Veronica, T.M. (2009). *Pengaruh karakteristik perusahaan terhadap pengungkapan tanggungjawab sosial pada perusahaan sektor pertambangan yang terdaftar di Bursa Efek Indonesia*. Universitas Gunadarma: Skripsi.

Yulita, L. (2010). *The effect characteristics of company toward corporate social responsibility in mining company listed at Indonesia Stock Exchange.* Universitas Gunadarma: Skripsi.

Zhang, J. (2013), Determinants of Corporate Environmental and Social Disclosures in Chinese Listed Mining, Electricity Supply, and Chemical Companies Annual Reports. Edith Cowan University.