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Full Length Research

Investigating leverage as a determinant of risk disclosure by deposit money banks in Nigeria

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ABSTRACT: The purpose of the paper is to investigate the relationship between leverage and risk disclosure in Nigeria. Considering the 14 deposit money banks listed on the stock exchange, a partial least square-structural equation model was run to examine the influence of leverage on the extent of risk disclosure measured through an index based on the information disclosed in their annual reports. Findings revealed that leverage has a significant relationship with the risk disclosure of deposit money banks in Nigeria. The likely cause for this decision could be the fact that those who would like to give out loans or any facility to a bank would want to see the debt profile of such a bank, that is whether they have been doing well in the past or not. The implication of the finding on the banking sector is that leverage is not independent of risk disclosure of deposit money banks in Nigeria. It is finally recommended that banks should disclose their information, most especially the risk related type to stand the higher chances of enjoying any facility that may come their way.

Keywords: Banks, disclosure, leverage, loans, risk.

INTRODUCTION

The last decade witnessed a considerable attention of the concept of risk disclosure. The importance of risk disclosure is derived from needs of the current and potential investors to get future information that help them to make various economic decisions. Risk disclosure provides information to the users to enable them to assess the risks affecting the organisations' future economic performance (Dobler, 2005; Ismail and Rahman, 2011). Enhancing the transparency of financial reports and improving the disclosure quality is one of the goals of corporate governance. The risk disclosure can play a vital role in this case through informing investors and other stakeholders about the uncertainty surrounding the business of the company and this helps them to make more effective decisions (Cabedo and Tirado, 2004). To estimate the volume and timing of a company's future cash flows in an adequate way, investors need to understand the risks facing the companies and through obtaining the information about analysis of the risks affecting the companies, measures used to assess these risks, and the processes and actions taken to manage the exposed risks (ICAEW, 2002).

The adequate disclosure of the risk can lead to a decrease in the information asymmetry problem between managers and investors, resulting in a decrease in conflict of interest which will consequently lead to reduction in agency costs, on the basis that the availability of objectivity and verifiable information can help shareholders to exercise their monitoring role toward managers effectively (Uddin and Hassan, 2011; Linsley and Shrives, 2005).

Furthermore, adequate risk disclosure and risk management activities allow shareholders and financial analysts to evaluate the stock of the company appropriately and forecast market values more accurately. Hence, the availability of adequate information about risks may prevent the overvaluation of stock prices which prevents harming of reputation and survival of the business in the long run if the equity has been evaluated

in an exaggerated form (Epstein and Buhovac, 2005; Abraham and Cox, 2007). It means the transparency of risk disclosure is important and necessary to maintain an accurate assessment of the stock prices, which will on the other way round lead to improved efficiency of capital markets (Linsley and Shrives, 2006; Epstein and Buhovac, 2006).

Studies on risk disclosure are very much an emerging area (Linsley and Shrives, 2005) and the work that has been done has concentrated on examining disclosure practices in developed countries (Linsley and Shrives, 2005, Beretta and Bozolan, 2004). There is a lack of examining risk disclosure practices of companies in developing countries in general and in Nigeria in particular. Therefore, the objective of the study is to examine if leverage has a significant relationship with risk disclosure by deposit money banks in Nigeria.

Hypotheses

H_{o1}: There is no significant relationship between leverage and risk disclosure of Deposit Money Banks in Nigeria.

LITERATURE REVIEW

The theoretical framework relating to risk disclosures is dominated by the agency theory (Jensen and Meckling, 1976). Agency theory assumes that both managers and shareholders are utility maximizers (Jensen and Meckling, 1976). But managers are in a better position to maximize their utility to the detriment of the shareholder because they are in the position of information that the shareholders do not (information asymmetry). The shareholders only get information through corporate disclosure such as risk disclosures in annual reports. To align the interest of both shareholders and managers, agency theory prescribes control mechanisms such as corporate governance on firm attributes like leverage.

Leverage and risk disclosure

Leverage refers to the ratio of a company's loan capital (debt) to the value of its ordinary shares (equity). Leverage indicates the level of indebtedness of the business, which refers to the degree of financial risk that is faced by the business. The problem of information asymmetry and agency cost exists between creditors and companies (Jensen and Meckling, 1976). Therefore, to cope with this problem management should disclose more information, thus, establishing a positive relationship between leverage and risk disclosure. Before providing any loans, the lenders and creditors asked for more information from the companies (Naser *et.al.,* 2002), therefore the firms who have the intention to obtain more debts disclose more information in their annual reports. Findings of Hossain et al., (1994), Naser et al. (2002) and Lim et al. (2007) supported this theoretical expectation. Contrary to that expectation, Uyar et al. (2013) and Habbash et al. (2016) identified the negative relationship. Furthermore, Leventis and Weetman (2004) identified that there is no relationship between leverage and the risk disclosure level. Based on the above, the hypothesis for this study was formulated.

Sayed Abd Elghaffar (2019) looked at determining factors that affect risk disclosure level in Egyptian banks. The study measured and investigated Egyptian banks' risk disclosure levels from 2010-2017, sample included 28 banks. Credit risk, market risk, liquidity risk, capital structure and sufficiency risk, operational risk, and other non-financial hazards were included in an unweighted risk disclosure index. Also, risk disclosure was measured using content analysis. The findings showed that sample banks disclosed risk averagely. Banks with a high number of independent board members, a large board, a large audit committee, duality, and stronger institutional ownership were more driven to boost risk disclosure. Leverage, bad news, and bank social responsibility reduce risk disclosure. Leverage, board size, audit committee size, auditor types, independence, duality, institutional ownership, bank social responsibility, and bad news effect risk disclosure in Egyptian banks. This paper's findings have many ramifications. Investors and depositors value bank risk transparency. Risk disclosure index lets regulators evaluate Egyptian banks' risk disclosure practices. This research analyses factors affecting bank managers' disclosure of risk information in Egypt.

Netti (2018) investigated the relationship between firm characteristics and risk disclosure in the Italian context. Analysing a sample of 183 non-financial Italian listed companies, a regression model was run to examine the influence of some firm determinants, such as size, industry, board of directors' independence, ownership structure and leverage (independent variables), on the extent of risk disclosure measured through an index based on the information disclosed in annual report (dependent variable). From the methodology standpoint, both the bivariate (Pearson correlations) and the multivariate (OLS regression model) statistics have been used, while content analysis was carried out to find the useful information to build the risk index. Findings show a positive relationship between firm size and the extent of risk disclosure. Contrarily, there is no statistically significant evidence between information provided by Italian companies regarding their risks and the other firm determinants. The results suggest that, in the Italian context, despite the recent interventions from the legislator to improve risk disclosure in corporate reporting, there is a remarkable difference between the disclosure provided by large and small sized companies. The findings could be conducive for regulators and policymakers, to enhance risk disclosure practices and to enhance transparency in the annual report.

Table 1. Computation of disclosure index.

S/N	Bank	Gen. risk info.	Accounting policies	Financial instrument	Derivative hedging	Reserves	Segment Info.	Fin & other risks	Total	Disclo. Index	Leverage	Board Size	Board Indep.
1.	ACCESS	1	1	1	0	1	1	0	5	0.71429	8.00208	15	0.27
2.	ECO	1	1	1	1	1	1	0	6	0.85714	14.4592	15	0.4
3.	FBN	1	1	1	1	1	0	1	6	0.85714	0.03103	12	0.25
4.	FCMB	0	1	0	1	1	0	1	4	0.57143	0.0129	10	0.2
5.	FIDELITY	0	1	1	1	1	1	0	5	0.71429	7.51172	12	0.17
6.	GT	1	1	1	0	1	1	0	5	0.71429	4.29952	14	0.21
7.	STANBIC	0	1	1	1	1	1	0	5	0.7142	0.056618	10	0.2
8.	STANDARD	1	1	1	1	1	0	0	5	0.71429	12.67894	12	0.67
9.	STERLING	0	1	1	0	1	1	0	4	0.57143	10.07934	12	0.17
10.	UNION	1	1	1	0	1	1	1	6	0.85714	5.618606	15	0.13
11.	UBA	1	1	1	1	1	0	1	6	0.85714	8.85004	19	0.21
12.	UNITY	0	1	1	0	1	1	0	4	0.57143	-1.96836	9	0.11
13.	WEMA	0	1	1	0	1	1	1	5	0.71429	6.75552	12	0.17
14.	ZENITH	1	1	1	1	1	1	0	6	0.85714	6.35046	11	0.18

ACCESS = Access Bank Plc; ECO = Ecobank Nigeria Plc; FBN = Firstbank of Nigeria Limited; FCMB = First City Monument Bank Plc; FIDELITY = Fidelity Bank Plc; GT = Guaranty Trust Bank Plc; STANBIC = Stanbic IBTC Bank Plc; STANDARD = Standard Chartered plc; STERLING = Sterling Bank Plc; UNION = Union Bank of Nigeria Plc; UBA = United Bank of Africa; UNITY = Unity Bank Plc; WEMA = Wema Bank Plc; ZENITH = Zenith Bank Plc.

METHODOLOGY

This study employs a survey design that is cross-sectional in nature to examine the relationship between the predictor variable (leverage) and risk disclosure. The study population comprises of all the 14 listed deposit money banks on the Nigerian Stock Exchange as at December 2020 (Table 1). This includes deposit money banks that are listed on the Nigerian Stock Exchange (NSE) and are still actively participating as at the time of data collection for this study. Data for the analysis were extracted from the annual reports of the banks as of December, 2020 following the retrospective nature of reports.

Data presentation and analysis

The statistical tool used for testing the hypotheses is the partial least squares (PLS)- Structural Equation Model (SEM) as it provides accurate out-of-sample forecasts of returns and cash-flow growth (Kelly and Pruitt, 2013). However, the regression model for testing the hypotheses was estimated in the form:

Rdisclosure = bo+b2BL+ej

Where: Rdisclosure = Risk disclosure, BL =Bank leverage, bo =Constant, b2 = Regression coefficients and ej = Error term

For the operationalisation of the study variable, leverage is measured as a ratio of total liabilities to equity, following prior studies. And from the disclosure literature, risk disclosure is measured using the index approach. The disclosure checklist is made up of seven (7) information items of risk disclosure in areas such as general risk information, accounting policies, financial instruments, derivatives hedging, reserves, segment information and financial and other risks (Elkelish and Hassan, 2014). The unweighted approach is used to score the items on the disclosure checklist.

RESULTS AND DISCUSSION

To test for normality of the data collected, the Kolmogorov-Smirno and Shapiro-Wilk Tests were conducted considering the small sample size (14), and the computations and results are as indicated in Table 2.

From the results shown on Table 3, both tests are significant (p>0.05). The data, therefore, meets the assumption of normality. The descriptive statistics

Table 2. Kolmogorov-Smirnov and Shapiro-Wilk Tests (Test of Normality).

Parameters	Kolmogorov-Smirnov				Shapiro –Wilk		
	Mean	Statistic	df	Sig.	Statistic	df.	Sig.
Leverage	2.00	0.129	26	0.200#	0.956	26	0.319
Disclo.Ind	2.00	0.201	26	0.078	0.926	26	0.061

Table 3. Descriptive statistics for the study variables.

Parameters	Min	Max	Mean	Std.Dev
Risk disclosure	3.00	5	4.1429	0.77033
Leverage	1.00	4.00	2.2143	0.85090

Table 4. Correlations of the study variables.

Leverage (2) Risk Disclosure (2)	0.228##	0.380##

##Correlation is significant at the 0.01 level (2-tailed).

Table 5. Results of Direct Paths of all the variables

Parameters	B	t-value	p-value
Leverage Risk disclosure	0.646	11.283	0.000

R^2 = 0.8667, adj. R^2 = 0.172, p = 0.000.

was analysed to check if the statistical mean of the data provides a good fit of the observed data and whether the study variables have relationships (correlation). The computation and the following results were found (Table 3).

The descriptive statistics for the study variables shown on Table 3 indicate that the mean scores of the latent variables range between 2.2 and 4.1 on a 5- point Likert scale, while the standard deviation ranges between 0.77 and 0.85. The standard deviation is small relative to their respective means, implying that the statistical mean provides a good fit of the observed data. This agrees with the finding of Field (2009).

For the correlation, whose aim is to find out if the independent variable (leverage) in the study has a relationship with the dependent variable, the Pearson correlation is used and the results is as indicated in Table 4. The result reveals that leverage and risk disclosure are correlated (r=0.380, p≤01). However, to find out if the relationship is significant or not, leads us to the tests of hypothesis in the next section.

Having established that the study variables are correlated with the dependent variable, Structural Equation Modeling (SEM) was then employed to test the significance of such relationships and hypothesis earlier formulated in the study. A structural model was run to test the relationships between the study variables. The results are shown on Table 5 and Figure 1.

H_{01}: Leverage has no significant relationship with the risk disclosure of deposit money banks in Nigeria

The decision rule is that if the p-value is less than the level of significance of 0.05, the null hypothesis will be rejected while the alternate hypothesis is accepted. But if the p-value is greater than the level of 0.05, we fail to reject the null hypothesis and reject the alternate. As shown in Figure 1 and Table 5, the standardized regression Beta-value for leverage on risk disclosure is 0.646, suggesting that this path is statistically significant at α = 0.05. This indicated that leverage has a positive and significant relationship with risk disclosure of deposit money banks in Nigeria, entailing that if there was increase in leverage then it would positively influence risk disclosure of deposit money banks. However, given that the p-value 0.000 is less than the significant level of 0.05 as shown in Table 5, we reject the null hypothesis which states that leverage has no significant relationship on the risk disclosure of deposit money banks in Nigeria, while the alternate hypothesis is accepted. This means that leverage has a significant relationship with the risk disclosure of deposit money banks in Nigeria. The likely cause for this decision could be the fact that those who would like to give out loans or any facility to a bank would want to see the debt profile of such a bank, that is whether they have been doing well in the past or not. This finding is supported by Naser *et al*.

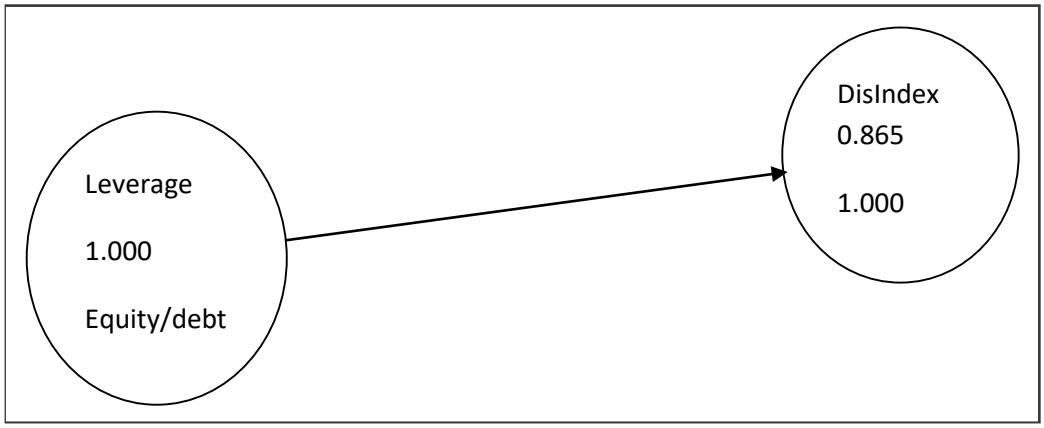

Figure 1. Structural model with path coefficients.

(2002) who explained that firms who have intention to obtain more debts disclose more information in their annual reports. Findings of Hossain *et al*. (1994) and Lim *et al.* (2007) supported this view as they further asserted that disclosure of critical information on the annual reports of firms is a necessary ingredient for them receiving more facilities from donor agencies. The implication of the finding on the banking sector is that leverage is not independent of risk disclosure of deposit money banks in Nigeria.

The research created a 7-point index to quantify risk disclosure: general risk information, accounting policies, financial instruments, derivative hedging, reserves, segment information, and financial and other hazards. Leverage was studied as a factor in risk disclosure by Nigerian listed deposit money institutions. The statistical research found that leverage affects risk disclosure in deposit money banks. In this situation, stakeholders who want to lend to a bank must know its debt load. This reveals that corporations seeking more financing disclose more in their annual reports. Thus, banks should provide their information, especially risk-related data, to increase their chances of getting a loan

Conclusion

The work adds to accounting and risk disclosure literature. It presents evidence from the Nigerian business environment, a developing country, that leverage is crucial in analysing a bank's risk disclosure level. This investigation can benefit the disclosing bank and the overseers. The bank can use the risk disclosure index criteria to strengthen its risk disclosure system. The capital market authority or accounting standards authorities may use the study's findings to guide best practice. The current study sampled only 14 Nigerian listed deposit money banks. This is because rising economies have few data sources. Due to the small number of banks, the researcher cannot generalise the results. Further exploratory research could analyse the viewpoints of financial statement stakeholders to propose other dimensions to assess risk disclosure not considered in the present study, based on user informational demands. Interviewing users (such as investors or financial analysts) might help refine the weighting of risk disclosure amount components to match user importance. Finally, it may be useful to study how risk disclosure affects the stock market and also studying the influence of risk disclosure on Nigerian equity costs.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39(3), 265-288.

better risk reporting. *Balance Sheet*, 10(4), 18-21.

Cabedo, J. D., & Tirado, J. M. (2004), The disclosure of risk in financial statements. *Accounting Forum*, *28*(2), 181-200.

Dobler, M. (2005). National and international developments in risk reporting: May the German accounting standard 5 lead the way internationally? *German Law Journal*, *6*(8), 1191-1200.

Elkelish, W. W., & Hassan, M. K. (2014). Organizational culture and corporate risk disclosure. An empirical investigation for United Arab Emirate listed companies. *International Journal of commerce and management*, 24(4), 279-299.

Epstein, M. J., & Buhovac, A. R. (2005). Identifying, measuring, and managing organizational risks for improved performance: Management accounting guideline. Society of Management Accountants of Canada.

Epstein, M. J., & Buhovac, A. R. (2006). *Organizational risk reporting for internal and external decision making*. Management: for strategic business ideas. Pp. 26-30.

Field, A. (2009). Discovering statistics using SPSS. Third edition. SAGE Publications.

Hossain, M., Tan, L. M., & Adams, M. (1994). Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur Stock

Exchange. *The International Journal of Accounting*, 29(4), 334-351.

Institute of Charted Accountants in England and Wales (ICAEW) (2002). No surprises: Working for

Ismail, R., & Rahman, R. A. (2011). Institutional investors and board of directors' monitoring role on risk management disclosure level in Malaysia. *IUP Journal of Corporate Governance*, *10*(2), 37-61.

Jensen, M., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(1), 305-360.

Kelly, B., & Pruitt, S. (2013). Market expectations in the cross-section of present values. *The Journal of Finance*, 68(5), 1721-1756.

Leventis, S., & Weetman, P. (2004). Impression management: dual language reporting and voluntary disclosure. *Accounting Forum*, 28(1), 307-328.

Lim, S., Matolcsy, Z., & Chow, D. (2007). The association between board composition and different types of voluntary disclosure. *European Accounting Review*, 16(3), 555-583.

Linsley, P. M., & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. The British Accounting Review, *38*(4), 387-404.

Linsley, P. M., & Shrives, P. J. (2005). Examining risk reporting in UK public companies. *Journal of Risk Finance*, 6(4), 292-305.

Naser, K., Alkhatib, K., & Karbhari, Y. (2002). Empirical evidence on the depth of corporate information disclosure in developing countries: the case of Jordan. *International Journal of Commerce & Management*, 12(1), 122-34.

Netti, A. (2018). Firm determinants of risk disclosure: Evidence from Italian listed companies. *Corporate Ownership and Control*, *16*(1-1), 168-177.

Sayed Abd Elghaffar, E. (2019). Determining factors that affect risk disclosure level in Egyptian banks. *Banks and Bank Systems*, *14*(1), 159-171.

Uddin, M. H., & Hassan, M. K. (2011). Corporate risk information in annual reports and stock price behavior in the United Arab Emirates. *Academy of Accounting and Financial Studies Journal*, *15*(1), 59-84.