Bayero Journal of Interdisciplinary Studies

Volume 2 Number 3 December 2009



Bayero University, Kano, Nigeria

Bayero Journal of Interdisciplinary Studies

Volume 2

Number 3

December 2009

EDITORIAL BOARD

Prof. Mustapha Ahmad Isa, Editor-in-Chief
Dr. Rabi Abdulsalam Ibrahim, Editor
Dr. Mahmud Lawan, Managing Editor
Prof. Joseph S. Enaburekhan, Member
Dr Balarabe A. Haruna, Member
Dr. Muhammad I. Yakasai, Member
Dr. Mahmud Sani, Member
Dr. Bashir Ali, Member
Dr Sanusi Gaya, Member
Malam Mijinyawa Sabo, Secretary

EDITORIAL ADVISERS

Prof. Dejo Abdurrahman
Prof. Mohammed Tabi'u
Prof. Macpherson Azuike
Prof. Abdulmumini Hassan Rafindadi
Prof. James Katende

ISSN: 2006-831X e-mail: bajisbuk@yahoo.com

Copyright © Bayero University, Kano, Nigeria 2009

Contents

| The Impact of Internal Control System on External Audit Fee Determination in Nigeria Francis Kehinde Emeni | on - 6 |
|---|-----------|
| Indigenous Classification, Characteristics and Uses of Soils in Four Agro-Ecologies of Semi-Arid Northeastern Nigeria Maharazu A. Yusuf | - 21 |
| A Survey of Farm Trees in Four Village Sites in Kano State (1994 - 2008) <i>Kabiru Ahmed</i> | - 37 |
| The Place of Language in the Nigerian School Curriculum: Laying Foundations for Effective Language Learning in Tertiary Institutions Isma'il A. Tsiga | - 52 |
| Canthal Dimensions of the Hausa Ethnic Group: A Study Conducted on Students at Bayero University, Kano <i>I. Y. Anas and M. S. Sagir</i> | - 72 |
| Politics, Language and Religion: A Cognitive Linguistic Study of Political Discourse in Kano State, Nigeria Rabi Abdulsalam Ibrahim | - 82 |
| Fuzzy Logic Control Of Power System Oscillations Ado Dan-Isa & Ibrahim Salisu Hassan | - 100 |
| The Bazawara: A Sociological Portrait Nu'uman Mohammed Habib | - 122 |

THE IMPACT OF INTERNAL CONTROL SYSTEM ON EXTERNAL AUDIT FEE DETERMINATION IN NIGERIA

Francis Kehinde Emeni

Department of Accounting University of Benin, Benin City

Abstract

This study is prompted by a desire to find out the impact of internal control system on external audit fee determination, based on the experience in Nigeria. The design and technique employed in data collection are cross – sectional survey research design and data collection from secondary source. The Ordinary Least Square (OLS) was used to estimate the independent variables (INAUDITC, INTAUOBJ, INTNATU) and analyse data collected. It was found that internal control system (in terms of quality/competence, objectivity and nature of work carried out within the system) is inversely related to external auditors' fee. Following from this finding, it is recommended that, the internal control system of corporate bodies should constantly be monitored by their managements for effective auditing. Also, external auditors should appropriately rely on their client's internal control system when making decisions on the extent of reliance on the internal control system and when determining their audit fee.

Introduction

Auditing standards permit external auditors to rely on the internal control system in performing financial statement audit (American Institute of Public Accountants (AICPA), 1997; and Public Company Accounting Oversight Board (PCAOB), 2007). It stands to reason that cost savings can be realized when external auditors are able to rely on a client's internal control system, and in a competitive audit market a large portion of these cost savings are likely to pass to the audit client in the form of lower external audit fees. Following from the above, this study aims at finding out if the internal control system in an organization determines the external audit fees in Nigeria. According to William and Emerson (1983), the internal control system of an organization to a large

extent determines the audit fees of an external auditor. If the internal control system of an organization is strong, the external auditors will have a shorter duration to work, and lower fees will be paid to the external auditors. But if the internal control system of an organization or a firm is weak, then the external auditor will have much work to do, for a longer duration and higher audit fees will be paid to the external auditor. Also, the higher the turnover of a company, the higher the professional fees charged by the external auditors.

Furthermore, William and Emerson (1983) opine that, internal control system is the record and summary of accounting data in an organization, which may be in the form of financial statements. The professional role of the independent external auditor is to express an opinion on the true and fair view of financial statements. In other words, the auditor is there to protect the interest of shareholders and other parties that make use of the financial statements in forming an informed decision. The auditor provides other services apart from auditing the internal control and accounting system of a firm, which include taxation, liquidation and receivership, forensic accounting and management advisory services. The fee charged for any of these services is not normally part of the audit fee charged. Audit fees relate to audit exercises, but when an auditor takes up non-audit services for its client, a separate fee called accountancy fee will be charged. This is because such functions are not normally part of the audit functions but are rather accounting functions (Izedonmi, 2000).

According to Wood (2007), companies that have internal auditors within the control system have a lower unexpected external audit fee (Wood, 2007). This may be attributable to the shorter time spent by the external auditor on the audit given effective internal auditors' contribution to the financial statements audit. Following from the foregoing, it should be noted in this study that wherever internal audit/audit committees' function is mentioned it should be taken to mean the internal control system function. This is because the internal auditor is part of the internal control system within a given organization. The remainder of the paper proceeds as follows: a section which reviews literature on the effect of internal control system on external audit fees comes immediately after the Introduction. Then a section that explains the data collection procedures and the measures used to capture the effect of internal control system and external audit fees follows. After this, the primary results are reported in the

result section, and then some recommendations are made before finally presenting the conclusions of the study.

Literature review

The Institute of Internal Auditors (IIA) (1995) and the American Institute of Certified Public Accountants (AICPA) (1997) submit that, internal and external auditors, concerned with audit costs and quality, may attempt to coordinate their activities throughout the year. In fact, both internal and external auditing standards encourage the two audit groups to coordinate their efforts related to completing the financial statements audit (coordination efforts can involve assigning specific audit work throughout the audit year to internal auditors based on their competence). Coordination has the potential to maximize the effectiveness of the internal auditors' contribution to the financial statements audit and increase overall audit efficiency and competences (Felix, Gramling and Maletta, 2001).

In this study, the quality or competence of the internal control system (INAUDITC) is taken to be the difference between the auditor's fees for the years 2006 and 2005 deflated by the year 2006 auditor's fees. This difference was used as a proxy for competence because competence is the level of skill needed to carry out a good audit assignment. Inadequate internal audit functions can lead to a failure to fully utilize the potential of the internal control system to contribute to the financial statements audit. Thus, we expect that:

 H_1 : There is a positive relationship between external auditors' fees and the quality of the internal control system.

Godwin and Yeo (2001) finds that audit partners and managers are of the opinion that the presence of an objective internal audit based on audit committees involvement in internal audit has little impact on the level of audit testing. But they also find that audit fees can be greater as a result of increased partner and manager time. In addition, they find inconclusive and conflicting results concerning complexity and risk-related audit fees and the existence of an objective audit committee. Stein, Simunic and O'Keefe (1994), using a sample drawn from top listed companies, finds significant positive association between audit fees and the existence of an objective internal audit given presence of audit committee. In this study, objectivity in the internal control system (INTAUOBJ)

was ascertained, using a dichotomous variable indicating whether the internal control system objectivity through the report of audit committee was undermined or not – if the internal control was being constantly and effectively monitored and stated in their report then, Yes = 1, and if not, No = 0.

A further reason for a positive relation between audit fees and internal control system objectivity is that an objective internal control system should reduce the threat of an external auditor's removal and, therefore, could strengthen the auditor's bargaining position during fee negotiations (Abbott, Parker, Peters and Raghunandan, 2003). Studies conducted by Roman and Wilson (1992); Collier and Gregory (1996); and Sharma (2003) have examined the impact of objective internal control system on external audit fees, given good audit committee presence and found evidence of higher size- related audit fees. This expectation generates the second hypothesis:

*H*₂: There is a positive relationship between external auditors' fees and objectivity of the internal control system.

According to Gist and Michaels (1995), empirical research documents the determinants of external audit fees in the market for audit services. While clients generally are concerned with controlling external audit costs and pricing, they also have an interest in obtaining the greatest benefit possible from their internal control system investments. Given the potential for the internal control system or internal and external auditors to serve as alternative monitoring mechanisms, both external auditors and their clients have inherent and control risks in the mix of internal and external audit costs expended on the external audit fees due to the protection of assets of the company by the internal auditor towards strengthening the external audit function (Wallace and Kreutzfeldt, 1995).

The reduction in fees may also be due to a lower assessment of audit risk resulting from internal audit involvement in strengthening internal control. In contrast to the findings of Felix, Gramling and Maletta (2001), the nature of work within the internal control system (INTNATU) was ascertained using a dichotomous variable to indicate whether there was an increase or decrease in auditors' fees for five (5) years, 2002, 2003, 2004, 2005 and 2006. If it increased, it meant that the external auditors performed more work, and if it

decreased or remained the same throughout the years, then the external auditors performed less non-audit work. Therefore, increases = 1, and decreases or constant = 0.

Carey, Hay and Knechel (2002) do not find a significant association between audit fees and the external auditors' assessment of the level of the nature of work within the internal control system. Furthermore, studies which focus only on the use of internal audit rather than the nature of work of the internal audit tend to find a positive association between audit fees and the existence of an effective internal control system. These findings suggest that most organisations may regard internal and external audit as complementary means of increasing the overall level of monitoring. In my opinion, this view is not acceptable because the internal auditor cannot perform some of the external auditor's work. However, this latter view is inconsistent with the broader role of internal audit, which in recent years has evolved from a narrow focus on control to embrace risk management and corporate governance (see Brody and Lowe, 2000). However, while there may be some substitution of internal audit for external audit work, the internal audit function is unlikely to be restricted to activities directly related to the external audit. It is expected therefore, that:

*H*₃: There is a positive relationship between external auditors' fees and nature of work performed within the internal control system.

Methodology

The research design adopted in this study is the cross-sectional survey of practicing auditors. This method is used because the object of study (auditors) is surveyed at a particular point in time. The population of the study is made up of the internal and external auditors in the 200 companies listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2006. The sample size is 105 companies listed on the Nigerian Stock Exchange. From the foregoing, the number of internal and external auditors contacted tallies with the number of companies sampled. That is, they are respectively 105 in number. The simple random sampling technique is used in this study by writing the names of all the 200 companies making up the population of study on pieces of paper separately and kept in a basket. Then 105 papers representing 105 companies were picked out of the lot. The data used in this study are from secondary sources, specifically from the NSE Fact Book, 2006 and annual reports of sampled companies (various issues). The Ordinary Least Square (OLS)

Bayero Journal of Interdisciplinary Studies 2(3) December 2009

technique, by way of regression analysis, is used to analyse and estimate the data collected in this study.

Model Specification:

The model to be regressed in this study is developed as follows:

EAF = f (INAUDITC, INTAUOBJ, INTNATU)

With the linear expression of the model being:

EAF = $\beta_0 + \beta_1$ INAUDITC + β_2 INTAUOBJ + β_3 INTNATU + U_1 .

 $\beta_0,\,\beta_1,\,\beta_2,$ and β_3 are parameters to be estimated.

The apriori expectation is to follow the line of:

 $\beta_1 > 0$, $\beta_2 > 0$, and $\beta_3 > 0$

Where,

EAF = External Audit Fees

INAUDITC = quality of the internal control system

INTAUOBJ = objectivity of the internal control system

INTNATU = nature of work performed within the internal control system

 $U_t = Error term.$

The independent variables are measured as stated below:

Quality of the Internal Control System (INAUDITC) is taken to be the difference between auditor's fees for the years, 2006 and 2005, deflated by year 2006 auditor's fees. This difference was used as a proxy for quality/competence because competence is the level of skill needed to carry out a good audit assignment. Objectivity of the Internal Control System (INTAUOBJ) is obtained using a dichotomous variable indicating whether the auditor's objectivity through the report of audit committee was undermined or not – if the internal control was being constantly and effectively monitored and stated in their report then, Yes = 1, and if not No = 0. The nature of work performed within the internal control system (INTNATU) is ascertained using a dichotomous variable indicating whether or not there is an increase or decrease in auditors' fees for five (5) years, namely, 2002, 2003, 2004, 2005 and 2006 on the average. If it increased, it meant that the external auditors performed more work, and if it decreased or remained the same throughout the years, then the external auditors performed less work. Therefore, increases = 1; and decreases or constant = 0.

Result

The Ordinary Least Square (OLS) technique was used to estimate the coefficients of the model got by the study. The regression result is as stated in the table below:

Table 1: Research result compiled from the regression result

| Regressor | Coefficient | Standard Error | t-ratio | Probability |
|-----------|-------------|-------------------|---------|-------------|
| INPT | 446.3202 | 2007.7 | 0.2223 | 0.025 |
| INAUDITC | 73.7273 | 15.9710 | 4.6163 | 0.000 |
| INTAUOBJ | 3639.0 | 1615.0 | 2.2561 | 0.026 |
| INTNATU | 1870.5 | 2051.2 | 0.9119 | 0.364 |

$$R^2 = 0.23$$
 F (3, 101) = 10.3 DW-STAT. = 1.9

The equation form is as follows;

$$EAF = 446.3 + 73.7 \text{ INAUDITC} + 3639.0 \text{ INTAUOBJ} + 1870.5 \text{ INTNATU}$$

$$(0.22) \qquad (4.62) \qquad (2.26) \qquad (0.91)$$

The R² of 0.23 shows that about 23% of the total variations in external auditors' fees can be explained by the independent variables. The F value of 10.3 is very high when compared with the F critical value of 2.68, under the significance level of 5%. This shows that the F value passes its significant test, therefore there is a significant linear relationship between external auditors' fees and the independent variables used (INAUDITC, INTAUOBJ, INTNATU). The DW – Statistic of 1.9 shows the absence of auto correlation in the analysis. Thus, the error term agrees with the OLS assumptions.

All the variables are positively related to external auditor's fees but only internal auditor's competence and internal auditor's objectivity pass their t-test at the 5% level of significance by having values of 4.62 and 2.26, respectively. The t-value is 1.98 using the 2-tailed test. This, however, shows that quality/competence of the internal control system and objectivity of the internal control system are major determining factors that influence external auditor's fees in the client companies. In contrast, the nature of work performed within the internal control system fails its t-test at the given significance level of 5%. This shows that the nature of work performed within the internal control system of the client company has no significant influence on external auditor's fees.

Bayero Journal of Interdisciplinary Studies 2(3) December 2009

Discussion and Recommendations

Our findings that internal audit is positively related to external auditor's fees, that is, internal audit competence and objectivity, is inconsistent with the findings of Felix et al (2001), who reported a negative association between audit fees and the auditor's assessment of the level of internal audit contribution to the external audit. This is because a large internal audit function is likely to be engaged in a range of monitoring, governance and risk management activities that are much broader in scope and related to management functions, than those undertaken by the external auditor. It was also discovered in this study that the nature of work performed by an internal auditor is positively related to external auditors' fees. This finding is also in contrast to the work of other researchers like Carey et al (2002). Our finding has the implication that, there is an inverse relationship between effective internal control system and external audit fees.

In the light of the foregoing, it is recommended that:

- i. companies should focus their attention on internal auditing in order to reduce their external audit fees, and, thereby, save costs most of the time.
- ii. the internal control system of corporate bodies should constantly be monitored by their management for effective auditing; and
- iii. the external auditors should appropriately rely on the client's internal control system when making decisions on their extent of reliance on the internal control system and when determining their audit fee.

Conclusion

The empirical finding shows that in Nigeria, there is an inverse relationship between external auditors' fees and the quality of the internal control system. Furthermore, there is also an inverse relationship between external auditors' fees and objectivity of the internal control system. However, there is a positive but not significant relationship between external auditors' fees and internal auditors' nature of work performed. With these relationships, companies should focus on having an efficient and effective internal audit department not only to reduce external audit fees, but also to safeguard their assets and ensure adherence to management practices.

References

- Abbott, L.J., Parker, S., Peters, G. F. and Raghunandan, K. (2003) "An Empirical Investigation of Audit Fees, Non-audit Fees, and Audit Committees", *Contemporary Accounting Research*, 20(2): 215 234.
- American Institute of Certified Public Accountants (1997) AICPA Professional Standards. Chicago: CCII Incorporated.
- Brody, R.G. and Lowe, D.G. (2000) "The New Role of the Internal Auditor Objectivity", *International Journal of Auditing*, 4(2):169-76.
- Carey, P., Hay, D.C. and Knechel, W.R. (2002) "The Relation Between External Audit Fees, Audit Committee Characteristics and Internal Audit", *Journal of Accounting Research*, 18(2): 94-109.
- Collier, P. and Gregory, A. (1996) "Audit Committee Effectiveness and the Audit Fee", *European Accounting Review*, 5: 177-198.
- Felix, W.L, Gramling, A.A., and Maletta, M. J. (2001) "The Contribution of Internal Audit as a Determinant of External Audit Fees and Factors Influencing this Contribution". *Institute of Internal Auditors*, pp. 86-110: Altamonte Spring.
- Gist, W.E. and Michaels, P. (1995) "Auditor Concentration and Pricing of Audit Services: Public Policy and Research Implications", *Advances in Public Interest Accounting*, 6: 233 271.
- Godwin, J. and Yeo, T. Y. (2001) "Two Factors Affecting Internal Audit Independence and Objectivity: Evidence from Singapore", *International Journal of Auditing*, 5(2): 107 125.
- Izedonmi, F.O. (2000) Introduction to Auditing. Benin City: Ambik Press.
- Public Company Accounting Oversight Board, PCAOB (2007) Final Report, 2001. Stanford: Public Company Accounting Oversight Board.
- Roman, K.K., and Wilson, E.R. (1992) "The Effects of Auditors' Change on Audit Fees: Tests of Price Cutting and Price Recovery", *The Accounting Review*, 62: 241–260.

- Stein, M.T., Simunic, D. A. and O'Keefe, T.B. (1994) "Industry Difference in the Production of Audit Services", *Auditing: A Journal of Practice and Theory*, 13(supplement).
- Wallace, W. A. and Kreutzfeldt, R. W. (1995) "The Relation of Inherent and Control Risks to Audit Adjustments", *Journal of Accounting, Auditing and Finance* (Summer): 459-484.
- William, C.T. and Emerson, O.H. (1983) Auditing Theory and Practices. London: Kent Publishing Company.
- Wood, D.A. (2007) "Does Internal Auditing Affect the External Audit Fees?", Journal of Accounting, Auditing and Finance, 18 (2): 240 – 257.

APPENDICES

Appendix I: Test Results

Diagnostic test

| R – Squared | .23370 | R - Bar | .021094 |
|-------------------------------|----------|-----------------------------------|---------|
| S.E. of Regression | 8228.7 | F - Stat. F (3,101) | 10.2672 |
| Mean of Dependent Variable | 6995.2 | S.D of Dependent Variable | 9263.5 |
| Residual Sum of Squares | 6.84E+09 | Equation Log- Likelihood | -1093.6 |
| Akaike Info. Criterion | -1097.6 | Schwarz Bayesian Criterion | -1102.9 |

| Test | LM version | F version |
|---------------------------|----------------------------|------------|
| A: Serial | CHSQ $(1) = .34778 [.555]$ | F(1,100) = |
| Correlation | | .33232 |
| | | [566] |
| B: Functional Form | CHSQ $(1) = .96901 [.325]$ | F(1,100) = |
| | | .93147 |
| | | [.337] |
| C: Normality | CHSQ (2) = 369.2011 [.000] | Not |
| | | applicable |
| D: | CHSQ $(1) = 7.3339$ [.007] | F(1,103) = |
| Heteroscedasticity | | 7.7344 |
| | | [.006] |

KEY:

A: Lagrange multiplier test of residual serial correlation.

B: Ramsey's Reset test using the square of the fitted values.

C: Based on a test of skewness and kurtosis of residuals.

D: Based on the regression of squared residuals on squared fitted values.

Bayero Journal of Interdisciplinary Studies 2(3) December 2009

Ordinary Least Squares Estimation Dependent variable is EXTAUD

105 observations used for estimation from 1 to 105

| Regressor | Coefficient | Standard Error | T-Ratio[Prob] |
|-----------|-------------|-------------------|---------------|
| INPT | 446.3202 | 2007.7 | .22230[.825] |
| INAUDITC | 73.7273 | 15.9710 | 4.6163[.000] |
| INTAUOBJ | 3639.0 | 1613.0 | 2.2561[.026] |
| INTNATU | 1870.5 | 2051.2 | .91188[.364] |

R-Squared: .23370 R-Bar-Squared: .21094 S.E. of Regression: 8228.7

F-stat. F(3, 101) 10.2672[.000] Mean of Dependent Variable: 6995.2 S.D. of Dependent Variable: 9263.5 Residual Sum of Squares: 6.84E+09 Equation Log-likelihood: -1093.6 Akaike Info. Criterion: -1097.6 Schwarz Bayesian Criterion: -1102.9

DW-statistic: 1.8829

Diagnostic Tests

| Test Statistics | LM Version | F Version |
|------------------------|-------------------------|--------------------------|
| A:Serial Correlation | CHSQ(1)= .34778[.555] | F(1, 100)= .33232[.566] |
| B:Functional Form | CHSQ(1)= .96901[.325] | F(1, 100)= .93147[.337] |
| C:Normality | CHSQ(2)=369.2011[.000] | Not applicable |
| D:Heteroscedasticity | CHSQ(1)= 7.3339[.007] | F(1, 103)= 7.7344[.006] |

KEY:

- A: Lagrange multiplier test of residual serial correlation
- B: Ramsey's RESET test using the square of the fitted values
- C: Based on a test of skewness and kurtosis of residuals
- D: Based on the regression of squared residuals on squared fitted values

Appendix II

DATA USED TO RUN THE REGRESSION

| S/N | NAMES OF LISTED COMPANY'S IN NIGERIA STOCK EXCHANGE (NSE) AS AT 31 ST DECEMBER, 2006 | EXTERNAL AUDITOR'S FEES AS AT 2006 N'000 | INTERNAL AUDITOR'S COMPETENCE % | INTERNAL AUDITOR'S OBJECTIVITY | INTERNAL AUDITOR'S NATURE OF WORK PERFORMED |
|------|--|---|---------------------------------------|--------------------------------------|---|
| 1 | . AG LEVENTIS (NIGERIA) PLC | 7741 | 22.28 | 0 | 1 LIGITINED |
| 2 | JOHN HOLT PLC | 12 | 20.00 | 0 | 0 |
| 3 | PETERSON ZOCHONIS IND.(PZ) | 10600 | 23.73 | 0 | 1 |
| 4 | SCOA (NIGERIA) PLC | 2500 | 25.00 | 0 | 1 |
| . 5 | UACN PLC | 6000 | 33.33 | 1 | 1 |
| 6. | UNILEVER NIGERIA PLC | 21500 | 77.93 | 1 | 1 |
| •7 | COSTAIN WEST AFRICA PLC | 3200 | 33.33 | 1 | 0 |
| 8 | CUTIX PLC | 660 | 20.00 | 0 | 1 |
| 9 | ADSWTCH PLC | 300 | 16.66 | 0 | - 1 |
| 10 | 7-UP BOTTLING COMPANY PLC | 7500 | 15.38 | 1 | 1 |
| 11 | FLOUR MILLS NIGERIA PLC | 18000 | 36.66 | 0 | 1 |
| 12 | NORTHERN NIG FLOUR MILLS | 2500 | 0 | 1 | 0 |
| 13 | NIGERIA BOTTLING COMPANY . | 18400 | 9.23 | 1 | 1 |
| 14 | IBTC PLC. | 35000 | 283.37 | 1 | 1 |
| 15 | AFRI BANK NIGERIA PLC. | 26700 | 65.00 | i | 1 |
| 16 | ECOCORP PLC. | 1300 | 55.55 | 1 | 1 |
| 17 | EVANS MEDICAL PLC. | 8500 | 6.25 | 1 | 1 |
| 18 | GLAXO SMITHLINE CONSUMER | 10800 | 40.00 | 1 | 1 |
| 19 | WEMA BANK PLC. | 23000 | 73.33 | 1 | 1 |
| 20 | MAY AND BAKER NIGER IA PLC. | 3500 | 50.00 | i | 1 |
| 21 | NEIMETH INT. PHARM, PLC. | 1500 | 41.66 | 0 | 1 |
| 22 | PHARMA-DEKO PLC. | 1400 | 14.81 | 0 | 1 |
| 23 . | ALUMINIUM EXTRUSION IND. | 1300 | 20.00 | 1 | i |
| 24 | LASACO ASSURANCE PLC. | 2000 | 66.66 | 0 | 1 |
| 25 | FIRST ALUMINIUM NIGERIA PLC. | 4400 | 10.00 | 1 | |
| 26 | BOC GASES PLC. | 4400 | 34.06 | 0 | i |
| 27 | NEM INSURANCE PLC. | 3000 | 50.00 | 0 | i |
| 28 | TRIPPLE GEE AND COMPANY | 750 | 25.00 | 0 | i |
| 29 | NIGERIAN ENAMEL WARE PLC. | 2200 | 10.00 | 0 | i |
| 30 | UTC NIGERIA PLC. | 2400 | 0 | 1 | 0 |
| 31 | MORISON INDUSTRIES PLC. | 1400 | 23.07 | 0 | 1 |
| 32 | STACO INSURANCE PLC. | 2000 | 116.66 | 0 | 1 |
| 33 | PRESTIGE ASSURANCE PLC. | 1750 | 15.62 · | 0 | |
| 34 | LINKAGE ASSURANCE PLC. | 7500 | 306.25 | 0 | 1 |
| . 35 | ARM DISCOVERY FUND | 1500 | 41.66 | 0 | 1 |
| 36 | ECOBANK Plc | 35000 | 265.00 | 1 | 1 |
| 37 | ACCESS BANK | 21000 | 53.84 | 1 | 1 |
| 38 | DIAMOND BANK | 3800 | 137.50 | 1 | 1 |
| 39 | UNITED BANK FOR AFRICA | 75 | 93.22 | 0 | 1 |
| 40 | DANGOTE SUGAR REFINERY | 7000 | 28.57 | . 0 | 1 |
| 41 | BEYOND DRUGS PLC. | 3000 | 41.66 | 1 | 1 |
| 42 | GUARANTY TRUST BANK PLC. | 36000 | 54.54 | 1 | 1 |
| 43 | VITAFOAM (NIGERIA) PLC. | 6000 | 14.28 | 0 | I |
| 44 | CHELLARAMS PLC. | 1700 | 6.25 | ĵ | 1 |
| 45 | CFAO (NIGERIA) PLC. | 7000 | 4.32 | 0 | |
| 46 | JULIUS BERGER (NIGERIA) PLC. | 8000 | 4.59 | 1 | 0 |
| 47 | SMART PRODUCTS (NIGERIA) | 105 | . 0 | 1 | 0 |
| 48 | VONO PRODUCTS PLC. | 1000 | 0 | 1 | 0 |

| 49 | BERGER PAINTS PLC. | 4255 | 13.87 | 1 | 1 |
|-----|---|-------|---------|-----|----|
| 50 | BHN PLC. | 1200 | 20.00 | () | 1 |
| 51 | AIICO INSURANCE PLC. | 8500 | 12.50 | 1 | 1 |
| 52 | OCEANIC BANK INT.PLC. | 60000 | 125.00 | 1 | 1 |
| 53 | CAPPA AND D'ALBERTO PLC. | 3000 | 25.00 | 0 | 1 |
| 54 | NIGERIA INTL DEBT FUND PLC. | 700 | 10.00 | 1 | 1 |
| 55 | NIGERIA ROPES PLC. | 450 | 12.50 | 1 | 1 |
| 56 | FIRST BANK OF NIGERIA PLC. | 36 | 31.25 | 1 | |
| 57 | AVON CROWN AND CONTAINERS | 1500 | 25.00 | 0 | () |
| 58 | BETA GLASS CO. PLC. | 7480 | 21.76 | 1 | 1 |
| 59 | GREIF NIGERIA PLC. | 1800 | 0 | 0 | 0 |
| 60 | NAMPAK NIGERIA PLC. | 5000 | 5.26 | 0 | 0 |
| 61 | CONTINENTAL REINSURANCE | 5000 | 42.85 | 1 | 1 |
| 62 | STANDARD ALLIANCE INS. | 2500 | 66,66 | 1 | 1 |
| 63 | MUTUAL BENEFITS ASSURANCE | 2500 | 20.00 | 1 | 1 |
| 64 | NEM INSURANCE PLC. | 3000 | 50.00 | 1 | 1 |
| 65 | CONOIL PLC | 14000 | 59.09 | . 0 | 1 |
| 66 | ETERNA OIL AND GAS CO. PLC. | 4000 | 48.27 | 0 | 1 |
| 67 | OANDO PLC. | 18500 | 43.33 | 0 | 0 |
| 68 | TEXACO (NIGERIA) PLC. | 7400 | 3.67 | 1 | 1 |
| 69 | TOTAL (NIGERIA) PLC. | 15000 | 33.33 | 0 | 1 |
| 70 | INCAR (NIGERIA) PLC. | 720 | 29.33 | 0 | () |
| 71 | NIGER INSURANCE PLC. | 7500 | 112.50 | 0 | 1 |
| 72 | LAW UNION AND ROCK INS. | 2500 | 70.00 | 0 | 1 |
| 73 | CONSOLIDATED HALLMARK INS. | 1500 | 41.66 | 1 | 1 |
| 74 | W.A. PORTLAND CEMENT | 16500 | 32.14 | I | 0 |
| 75 | ASHAKA CEMENT PLC. | 12000 | 75.00 | 0 | 1 |
| 76 | CRUSADER INSURANCE | 5400 | 53.33 | 1 | 1 |
| 77 | DN MEYER | 2500 | 25.00 | 1 | 1 |
| 78 | IPWA | 650 | 45.45 | 1 | () |
| 79 | NIGERIA GERMAN CHEMICALS | 3000 | 17.85 | | 1 |
| 80 | OKOMU OIL | 3500 | . 40.00 | 0 | 0 |
| 81 | PREMIER PAINTS PLC. | 450 | 64.00 | 1 | 1 |
| 82 | NCR (NIGERIA) PLC. | 2000 | 15.00 | 1 | 1 |
| 83 | THOMAS WYATT NIGERIA PLC. | 750 | 25.21 | 0 | 1 |
| 84 | CEMENT COY OF NORTHERN | 1200 | 140.00 | 1 | 0 |
| 85 | R.T BRISCOE (NIGERIA) PLC. | 5500 | 62.50 | 1 | 1 |
| | | 5000 | 100.00 | 1 | 1 |
| 86 | PRESCO PLC. | 8349 | 15.98 | 0 | 0 |
| 87 | MOBIL OIL NIGERIA PLC. UACN PROPERTY DEV. | 6300 | 7,142 | 1 | 1 |
| 89 | GUINNESS NIGERIA PLC. | 14375 | 35.00 | 0 | 1 |
| | | 3800 | 14.73 | 1 | 1 |
| 90 | LONGMAN NIGERIA PLC. | 1000 | 0 | 0 | 0 |
| | ACADEMY PRESS PLC. | | | 1 | 1 |
| 92 | NIGERIAN BREWERIES PLC. | 20133 | 31.68 | 0 | 0 |
| 93 | UNIVERSITY PRESS PLC. | 1000 | 0 | 1 | 0 |
| 94 | IKEJA HOTEL PLC | 3000 | 40.00 | 0 | 1 |
| 95 | DUNLOP NIGERIA PLC | 6500 | | | + |
| 96 | JULI PLC | 250 | 26.08 | 0 | 1 |
| 97 | INTERNATIONAL BREWERIES | 14500 | 3.57 | 0 | 1 |
| 98 | TRAN-NATIONWIDE EXPRESS | 1000 | 25.00 | | 1 |
| 99 | ROYAL EXCHANGE ASSURANCE | 5000 | 25.00 | 1 | 1 |
| 100 | BENUE CEMENT COMPANY PLC. | 4200 | 63.33 | 0 | 1 |
| 101 | CAP (CHEM/ ALLIED PRODUCT) | 7000 | 14.28 | 1 | 1 |
| 102 | THE TOURIST COMPANY | 2000 | 16.66 | 0 | 1 |
| 103 | CORNERSTONE INSURANCE PLC. | 1500 | 32.03 | 0 | 0 |
| | NESTLE NIGERIA PLC. | 14800 | | | 1 |

Source: Annual reports of companies sampled, 2006 and Probit analysis