Determinants of accounting choice of noncurrent assets at IFRS first adoption among Nigerian firms

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Abstract

This study examines the determinants of accounting choices for noncurrent assets by Nigerian firms at IFRS first adoption within the framework of positive accounting theory. Data were randomly collected from the annual reports of thirty firms that met the adoption target of 2012 and regression technique was used for the analysis. Firms’ size and ownership concentration are found as predictors of accounting choice for non-current assets. In addition, the firms mainly choose income increasing strategy by the predominant use of cost model and firms with higher ownership concentration tend to use more of fair value model than income increasing strategy.

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Keywords: Non-current assets; IFRS first adoption; accounting choice; positive accounting theory

1. Introduction

As Nigeria adopted IFRSs, firms listed on its stock exchange are to prepare their IFRSs based financial reports by December, 2012. IFRS 1, first time adoption provides exemptions and options for firms with respect to non-current assets measurement. Managers have the flexibility of using either cost model or fair value model for measuring property, plant and equipment (IAS 16), intangible assets (IAS 38) and investment property (IAS 40) during the first time IFRS adoption. The objective of IFRS 1 is to ensure that firm’s initial IFRS based financial...
statements contain high quality financial information that: is transparent and comparable across periods and/or firms generated at a cost not exceeding the benefits; and provides a fitting starting of IFRS reporting. According to Badertscher et al. (2012) under the information perspective of discretionarial accounting choice, managers make accounting choice based on the flexibility allowed within the accounting standards to improve the relevance, reliability and predictability of the information.

However, the choice of either option by managers to account for the noncurrent assets could be based on different motives, income increasing or income decreasing, which impacts differently on the financial position of the firms. According to Watts and Zimmerman (1986) and Fields et al. (2001), the availability of options for accounting choice may be of advantage due to the fact that options may not be exact alternatives from the perspective of efficient contracting. The fair value model could be used to report lower income since the method gives higher depreciation charges on the noncurrent assets. The cost model gives opportunity for managers to report increased income because the depreciation charge in the income statement is based on historical cost which is smaller compare to the other model under normal economic condition. Managers who are under pressure to report further income or intending to adopt an income increasing strategy for opportunistic motives will opt for the cost model. However, if the motive is to lessen the effect of political costs and debt covenants constraints they will opt for the fair value model. The motives behind the managers’ choices could be to provide relevant and reliable noncurrent asset information to users to enhance their ability to use accounting numbers for predicting future earnings and cash flows or for information signalling due to the information possession advantage, or to smooth earnings for bonus purposes, or to adjust the cost of capital by communicating private information on persistence of earnings. This multiplicity of motives behind managers’ accounting choices is explained by Positive Accounting Theory (PAT) under the bonus-plan, debt covenants, and political costs hypotheses (Watts and Zimmerman, 1986, 1990).

This study is motivated by the studies of Demaria and Dufour (2007) and Wawure et al. (2011). Demaria and Dufour used PAT to explain the accounting choices of noncurrent assets of French firms during first IFRS adoption but found that PAT could not explain the accounting choices of the firms. Wawure et al. found significant relationship between accounting choices and income strategy of Tanzanian firms but noted that the results could be induced by the longitudinal nature of the data and suggested the use of cross sectional data by future studies. Based on these, this study examines the determinants of accounting choice on noncurrent assets among firms in Nigeria using the cross sectional data at the first time IFRS adoption with a view to explaining the income strategy that emanates from the choices made. The remaining parts of the paper are organized as: review of the relevant literature is in part two; research method is presented in the third segment; results and discussions are presented in part four; and section five presents the conclusions of the study.

2. Literature review

2.1 Positive accounting theory

PAT has created avenue for significant accounting research. It began in the 1960s when Ball and Brown (1968) initiated the use of empirical finance methods for financial accounting research which led to the information perspective. According Watts and Zimmerman (1986) the information perspective gave much enlightenment on the use of accounting numbers for market analysis but could not provide explanations for accounting choices except for inventory valuation methods. A humble progress, in advancing the state of knowledge of PAT beyond what was known, has been made by accounting research to date (Holthausen & Leftwich, 1983; Watts & Zimmerman, 1990; Fields et al. 2001). Fields et al. (2001) posit that studies in the last two decades made inadequate progress in the expansion of knowledge and understanding of accounting choice due to constraints in research design and most of the research were replicated rather than extending the frontiers of PAT research and knowledge. PAT has been criticized for restricting the boundaries of accounting research by edging out normative accounting research although it is still useful for advancing accounting practice (Whittington, 1987; Sterling, 1990). For this, Sue (1997) argues that PAT has slim the scope of accounting research and thus, narrowed the focus and vision of accounting researchers. However, PAT has made significant contribution to accounting research especially with the adventure of information perspective and the mass of research in the area.
For instance, Bowen (1995) found that implicit claims between firms and stakeholders have significant power of explaining accounting choices on inventory and depreciation methods when studied alongside bonus plan, debt and leverage. Warfield et al. (1995) found that accounting choices of managers are partially restricted by managerial ownership and their results indicate a negative relationship between the two variables. Hand and Skantz (1998) found that parent firms make accounting choices for varied but economic based reasons, specifically, to curb the effects of high leverage which may cause financial distress and huge discretionary write-offs. Astami and Tower (2006) found that firms pursuing income-increasing accounting methods are characterized by low level of leverage, high level of ownership concentration, and high sets of investment opportunity. Waweru et al. (2011) found that firms’ size, internal financing, proportion of non-executive directors, and labour force are significant predictors of accounting choice. They found strong association between accounting choice and income strategy. Demaria and Dufour (2007) found that firm’s characteristics such as size, leverage, managerial ownership, industry type do not explain the accounting choices of French groups during IFRS first adoption. Research results from accounting choice studies are not inconsistent. One explanation could be that accounting choice deals more with behavioural attitude of managers than just choice of accounting approach which makes the results of accounting choice studies to remain a puzzle.

2.2 IFRS adoption

The increased call for internationally accepted financial information that is comparable and relevant for decision making is as result of the rapid growth of globalized business transactions. Firms understood the importance of IFRS reporting in generating cross border investment, corporate control and efficiency (Haller, 2002). The use of IFRS could also boost capital market development in the adopting nation. The benefits of adopting IFRS are highlighted in most IFRS research during the last decade. Some these benefits relate to improved comparability, relevance and transparency of financial reports (Haverals, 2007), creating a global business language worldwide (Jermakowicz, 2004), provision of adequate and comprehensive information to reduce information asymmetry (Djatej et al., 2009) and improvement in the functioning of capital markets (Schleicher et al., 2010). Pascan and Turcas (2012) found that the impact of first time IFRS adoption have different effect on firms depending on their sizes, industry type and nature of the adoption, either voluntary or mandatory. Notably, IFRS as principle-based standards provides accounting options which would further stimulate research in the area of accounting choice.

2.3 Development of research hypotheses

There are six (6) hypotheses developed to guide this study in the collection of data and analysis.

**Profit.** One of the basic motives for accounting choice by managers is to report higher profit especially where they have bonus schemes that are related to firm’s profitability. In such situation managers will make accounting choice that yields more income for their opportunistic motive. Managers will choose accounting methods that will shift future earnings to the present time for their benefit (Watts and Zimmerman, 1986; Fields et al., 2001) because profits are use for explicitly and implicitly compensation contracts (Astami & Tower, 2006). Thus,

\[ H_1: \text{Profit is a significant predictor of accounting choice for noncurrent assets at IFRS first adoption.} \]

**Size.** Large firms face political engagement than small firms because they have large amount of wealth accessible for taxed by governments and other stakeholders. This political pressure motivates the managers to make accounting choice that will reduce the value of their firm’s assets to reflect current prices (Watts and Zimmerman, 1986; Fields et al., 2001). This relationship is explained by Astami and Tower (2006) and Waweru et al. (2011) who found that size is positively related to accounting choice of firms. Thus:

\[ H_2: \text{Size significantly explains accounting choice for noncurrent assets at IFRS first adoption.} \]

**Leverage.** According to the debt hypothesis, firms reaching covenant violation would make accounting choice that would increase its assets value, decrease the debt ratio and avoid possible covenant violation (Haw et al.,
1991; Defond & Jiambalvo, 1994) although Sweeney (1994) and DeAngelo et al. (1994) could not confirm this representation. Fields et al. (2001) stated that although definitive inferences cannot be deducted on the impact of debt covenants on accounting choice, there is certainly a significant amount of data that suggest a relation between accounting choice and debt covenants. Hence I hypothesized that,

\( H_3 \) Leverage is a significant predictor of accounting choice for noncurrent assets at IFRS first adoption.

Ownership Concentration. The extent of ownership dilution influences managers accounting choice (Waweru et al., 2011). A Firm with more disperse ownership structure tend to choose accounting method that increases its reported income (Astami & Tower, 2006). This implies that ownership structure influences the required rate of firm’s return. Hence,

\( H_4 \) Ownership concentration significantly explains accounting choice for noncurrent assets at first IFRS application.

Board Composition. Firms with higher proportion of non-executive directors on their boards are expected to have effective corporate governance control to check the opportunistic behaviour of managers. According to Cornett et al. (2009) boards dominated by non-executive directors are likely in a better position to monitor and control managers. Substantial empirical evidence has supported this hypothesis. They protect the interest of shareholders in occasions when there is an agency problem (Xie et al., 2003) and could determine the accounting choices of managers (Lee et al., 1992). Hence:

\( H_5 \) Proportion of non-executive directors on firm’s board significantly explains accounting choices for non-current assets during IFRS first adoption.

3. Methodology

Cross sectional data for the dependent and explanatory variables were collected from the annual financial reports of thirty (30) firms at first adoption. The firms were randomly selected based on the availability of their annual reports and compliance with IFRS reporting deadline. The following model is used for the estimation:

\[
COI = a_0 + b_1 \text{PRT} - b_2 \text{SZE} + b_3 \text{LEV} + b_4 \text{ONC} + b_5 \text{BOC} + \epsilon
\]

The data collected were in respect of the explanatory variables in the model: size, proxied by the natural logarithm of total assets; PRT is measured by ROA (Astami and Tower, 2006); LEV is proxied by equity/debt ratio; ONC represents the number of block-holders with shareholding of 5% and more (Wawure et al., 2011); and BOC is measured by the ratio of non-executive on boards of firms (Cornett et al., 2009). The COI is composite variable for firms’ accounting choice (1=fair value, 0=historical cost). It is the average scores earned by firms on each category noncurrent asset.

4. Results and discussions

The findings of the study (Table 1) indicate that the firms mainly used the cost model for measuring the noncurrent assets: up to 86.7% chose it PP&E, 83.3% for Intangible Assets and 76.7% for Investment Property. For the fair value model, only 13.3% chose it for PP&E, 16.7% for Intangible Assets and 23.3% for Investment Property. On the overall, 82.2% of the firms chose the cost model for noncurrent assets accounting at IFRS first adoption while 17.8% chose the fair value method. This implies that the firms used income increasing strategy. Additionally, the findings (Table 2) show that SZE is a significant (p-value=0.008) predictor of the firms accounting choice for noncurrent assets and are positively related. This result supports hypothesis 1. This result is consistent with the findings of Wuwere et al. (2011); but inconsistent with the results of Missonier (2004) who found negative relationship; and those of Astami & Tower (2006) and Demaria & Dufuor (2007) who found no relationship. This positive relationship contradicts the arguments of Watts and Zimmerman (1986) that big sized firms would choose accounting methods that defer reported earnings to future periods in order to reduce political costs.

The findings also showed that ONC is a significant (p-value =0.017) predictor of the firms accounting choice for the noncurrent assets at IFRS first adoption and negatively related. This result supports hypothesis 3 and consistent with findings of Bowen (1995) and Astami & Tower (2006) but contradicts Wawure et al. (2011) who
found positive relationship. The remaining variables; LEV, PRT and BOC are not significant (p-values: 0.823, 0.111, & 0.252 respectively) predictors of firms’ accounting choice for noncurrent assets during IFRS 1 application and thus, hypotheses 2, 4 and 5 are not supported. This result is consistent with those of Astami and Tower (2006) in the Asia Pacific region Demaria and Dufour (2007) in French firms and contradicts Wawere et al. (2011) in Tanzania.

Table 1. Analysis of Firms Choices

| Options         | PP&E (IAS 16) | IA (IAS 38) | IP (IAS 40) | Total N (%) |
|-----------------|---------------|-------------|-------------|-------------|
|                 | N | % | N | % | N | % | N | % | N | (%) |
| Fair Value Model| 4 | 13.3 | 5 | 16.7 | 7 | 23.3 | 16 | (17.8) |
| Cost Model      | 30 | 100 | 30 | 100 | 30 | 100 | 90 | (100) |

*Entry under column N represents number of firms

Table 2. Coefficients

| Variables | Predicted Sign | Coefficients | Sig  | t    | Beta  | VIF |
|-----------|----------------|--------------|------|------|-------|-----|
| (Constant)| (-)            | -1.518       | 0.029| -2.323| -2.323| 1.074|
| SZE       | (-)            | 2.178        | 0.008| 2.893| 0.803| 1.074|
| PRT       | (+)            | -0.785       | 0.111| -1.653| -0.785| 1.074|
| LEV       | (+)            | -0.010       | 0.832| -2.14 | -0.010| 1.229|
| ONC       | (-)            | -0.401       | 0.017| -2.570| -0.401| 1.148|
| BOC       | (-)            | 0.286        | 2.525| 1.174| 0.286| 1.301|
| Adjusted R²| 0.386          |              |      |      |       |     |
| F-Value   | 3.016          |              |      |      |       |     |

5. Conclusions

Firms in Nigeria pursue income increasing strategy with regards to measurement the non-current assets during IFRS transition. Firms with bigger size and high level of ownership concentration tend to choose income decreasing, fair value model, for measuring their noncurrent assets. This set of accounting choices are ‘ex-ante’ because the managers are restricted by contracting parties for ‘efficiency’ reasons thus, maximize the value of the firms. The results of this study is limited to accounting choices of non-current assets accounting during IFRS adoption and do not explain the aggregate accounting choices of Nigerian firms.

References

Astami, E.W. & Tower, G. (2006). Accounting-policy choice and firm characteristics in the Asia Pacific region: An international empirical test of Costly Contracting Theory. The International Journal of Accounting, 41: 1–21.
Badertscher, B.A., Collins, D.W. & Lys T.Z. (2012). Discretionary accounting choices and predictive ability of accruals with respect to future cash flows. Journal of Accounting and Economics, 53: 330-352.
Ball, R. & Brown, P. (1986). An empirical evaluation of accounting income numbers. Journal of Accounting Research, (Autumn) 159-178.
Bowen, R.M, DuCharme, L. & Shores, D. (1995). Stakeholders’ implicit claims and accounting method choice. Journal of Accounting and Economics, 20: 225-295.
Cornett, M. M., McNutt, J. J. & Tehrani, H. (2009). Corporate governance and earnings management at large U.S. bank holding companies, Journal of Corporate Finance 15: 412-430.
DeAngelo, H., DeAngelo, L., & Skinner, D.J., (1994). Accounting choice in troubled companies. Journal of Accounting and Economics, 17: 113–143.
DeFond, M.L., & Jiambalvo, J., (1994). Debt covenant violation and manipulation of accruals. Journal of Accounting and Economics, 17, 145–176.
Demaria, S. & Dufour, D. (2007). First time adoption of IFRS, Fair value option, Conservatism: Evidences from French listed companies. 30 ème colloque de l’EAA, Portugal: Lisbon.
Djatej, A. et al. (2009). An investigation of the comparative impact of degree of implementation of IFRS upon the public and private information quality of East and West European firms. Advances in Accounting, Incorporating Advances in International Accounting, 25: 208-215.
Fields, T. D., Lys, T. Z. & Vincent, L. (2001). Empirical research on accounting choice. Journal of Accounting and Economics, 31: 255–307.
Haller, A. (2002). Financial accounting developments in the European Union: past events and future prospects. European Accounting Review, 11(1): 153-190.
Hand, J.R.M., & Skantz, T.R. (1998). The economic determinants of accounting choices: The unique case of equity carve-outs under SAB 51. *Journal of Accounting and Economics*, 24, 175-203.

Haverals, J. (2007). IAS/IFRS in Belgium: Quantitative analysis of the impact on the tax burden of companies. *Journal of International Accounting, Auditing and Taxation*, 16, 69-89.

Haw, I.-M., Jung, K., & Lilien, S.B. (1991). Overfunded defined benefit pension plan settlements without asset reversion. *Journal of Accounting and Economics*, 14, 295-320.

Holthausen, R., & Leftwich, R., 1983. The economic consequences of accounting choice: implications of costly contracting and monitoring. *Journal of Accounting and Economics*, 5, 77-117.

Jermakowicz, E. K. (2004). Effects of Adoption of International Financial Reporting Standards in Belgium: The Evidence from BEL-20 Companies. *Accounting in Europe*, 1 (1): 51-70.

Lee, C.I., Rosenstein, S., & Davidson, W.N., (1992). Board composition and shareholder wealth. The case of management buyouts. *Financial Management*, 21: 58-72.

Missonier-Piera, F. (2004). Economic determinants of multiple accounting method choices in a Swiss context. *Journal of International Financial Management and Accounting*, 15 (2): 119-44.

Pascan, I. & Turcas, M. (2012). Measuring the impact of first-time adoption of International Financial Reporting Standards on the performance of Romanian listed entities. *Procedia Economics and Finance*, 3: 211-216.

Roberts, R.W. (1992). Determinants of corporate social responsibility disclosure: an application of stakeholder theory. *Accounting, Organizations and Society*, 17(6): 595–612.

Schleicher, T. et al., (2010). IFRS adoption in Europe and investment-cash flow sensitivity: Outsider versus insider economies. *The International Journal of Accounting*, 45: 143-168.

Simons, R., (2000). *Performance measurement and control systems for implementing strategy*. Prentice Hall, Upper Saddle River, NJ.

Sterling, R. R. (1990). Positive accounting: An assessment. *Abacus*, 26: 97-135.

Sue, M. (1997). Comments on positive accounting theory: A necessarily blinkered view. *Accounting Forum*, 21:73-80.

Sweeney, A.P., (1994). Debt-covenant violations and managers accounting responses. *Journal of Accounting and Economics*, 17, 281–308.

Van Tendelloo, B. & Vanstraelen, A. (2005). Earnings Management under German GAAP versus IFRS. *European Accounting Review*, 14(1): 155-180.

Warfield, T.D., Wild, J.J. & Wild, K.L. (1995). Managerial ownership, accounting choices and informativeness of earnings. *Journal of Accounting and Economics*, 20: 61-91.

Watts, R.L., Zimmerman, J.L., (1986). *Positive Accounting Theory*. Prentice-Hall, Englewood Cliffs, NJ.

Watts, R.L., Zimmerman, J.L., (1990). Positive accounting theory: a ten year perspective. *The Accounting Review*, 65, 131–156.

Waweru, N.M., Ntui, P.P. & Mangena, M. (2011). Determinants of different accounting methods choice in Tanzania A positive accounting theory approach. *Journal of Accounting in Emerging Economies*, 1(2): 144-159

Whittington, G. (1987). Positive accounting: A review article. *Accounting and Business Research*, 17, 327-336.

Xie, B., Davidson III, W. N. & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9: 295-316.