Journal of Economics and Sustainable Development www.iiste.org
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.4, No.8, 2013

Comprehensive Income and Social Cost Reporting as a Measure of Firms' Profitability and Corporate Image

OYADONGHA, kereotu. James (ACA)
Department of Finance and Accountancy,
Niger Delta University,
Wilberforce Island, PMB 071, Yenagoa, Bayelsa State, Nigeria.
Email: tupelo_ebi@yahoo.com

OGOUN, Stanley (PhD)
Department of Finance and Accountancy,
Niger Delta University,
Wilberforce Island, PMB 071, Yenagoa, Bayelsa State, Nigeria.
*Email: sko1200@yahoo.com

Abstract
In this study, the researchers try to investigate the relative ability of comprehensive income reporting and that of reporting a firms externalities as social cost in the final accounts affect the profitability and the corporate image of a firm. The study was conducted with ten selected companies registered with the Nigerian stock exchange for a period of twenty two years based on their annual financial reports and a questionnaire to gather inter-personal information on the issues raised. This study was informed by the fact that the FASB, in 2011 provided new guide lines on the implementation of the comprehensive income financial statements due to complains by stockholders on high cost of implementation and corporate reputation. In addition the researchers felt that if FASB find it necessary to introduce the comprehensive income accounting concept, then it was also necessary to look at comprehensive expense concept to include externalities cost as a write off cost to comprehensive income to determine the net income of a firm. The data collected was analysed with econometric view (E-view) system after presenting data with Microsoft excel 2007 model. The results revealed that comprehensive income reporting affects the profitability of a firm if measured with the reporting of the externalities and corporate image will improve substantially if firms follow such reports on a regular basis. The researchers recommended that firms should consistently present such reports in the annual financial statements.
Keywords: Comprehensive income, Social cost, Measure, Firm, Profitability and Corporate image

1. Introduction

Financial statements are the final product of the accounting process. Income statement provides data for various types of decisions. Income measurement and the determination of the financial position of an economic entity has always been a challenge for accounting standard setting bodies. The main purpose of financial reporting is to provide information for user groups, especially stockholders and creditors to assist them in making economic decisions. Financial statements (including notes) are the main instruments in conveying the annual performance information about an entity to the users of financial information.

Market efficiency is based on the theory of competition, in which prices are competitively set and decisions reflect available economic information. One type of economic information used to promote market efficiency is financial statements information. Financial analysts are a primary catalyst in gathering and disseminating such information. When economic information is difficult to locate or is not consistently presented among companies, analysts are unable to perform their role optimally and efficiency suffers (Ohlson, 1995; Maines and Mcdaniel, 2000, and Cahan, et al., 2000). Such a breakdown in efficiency affects the reliability and truthfulness of the statements especially when the social cost paid for by third parties is deliberately excluded or omitted in the reports. Comprehensive income statement is a measure of firm performance. The purpose of issuing this statement is to make firms to disclose certain elements of financial performance to help user groups of financial reports in making better financial performance evaluation. Also, comprehensive income as a basic financial statement, should report in detail all the recognized revenues and expenses of the firm. The focus of income statement is on the operating revenues and expenses. User groups of financial reports for decision–making require data related to all revenues and expenses (including gains and losses). Therefore, a basic financial statement to include such items and to show changes in owners' equity related to those items is necessary (Biddle and Choi, 2003; Kanagartnam, et al, 2004).

Financial Accounting Standards Board in 1997 issued the Statement of Financial Accounting Standard No. 130 (SFAS, 130), **reporting comprehensive income**. The statement requires the disclosure of both net income and more comprehensive measure of income for fiscal years beginning after December 15, 1997. Four items that are recorded as owners' equity under previous FASB pronouncements, under SFAS, 130 should be recorded in comprehensive income. These items are: adjustments to unrealized gains and losses on available-for-sale marketable securities (SFAS, 115), foreign currency translation adjustments (SFAS, 52), minimum required pension liability adjustments (SFAF, 87), and changes in market values of certain future contracts as hedges (SFAS, 80). According to Norwalk (2011), the Financial Accounting Standards Board (FASB) in 2011, made a change on the reporting model, which was an update to the standard with a view to defer updates on the classification of other comprehensive incomes. He said, the update defers the specific requirement to present items that are reclassified from accumulated other comprehensive income to net income separately with their respective components of net income and other comprehensive income. Earlier this year, the FASB issued Accounting Standards Update No. 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income. The Update was intended to increase the prominence of other comprehensive income in financial statements and help financial statement users better understand the cause of a company's change in financial position and results of operations. Stakeholders, however, recently raised concerns that new presentation requirements about the reclassification of items out of accumulated other comprehensive income would be costly for preparers and add unnecessary complexity to financial statements.

As a result of these concerns, the Board decided to reconsider whether it is necessary to require companies to present reclassification adjustments by component in both the statement where net income is presented and the statement where other comprehensive income is presented for both interim and annual financial statements. The Board did not defer the requirement to report comprehensive income either in a single continuous statement or in two separate but consecutive financial statements. To defer only those changes in Update 2011-05 that relate to the presentation of reclassification adjustments, the amendments in this Update supersede only those paragraphs that pertain to how and where reclassification adjustments are presented. While the Board is considering the operational concerns about the presentation requirements for classification adjustments, entities will continue to report reclassifications out of accumulated comprehensive income consistent with the presentation requirements in effect before Update 2011-05. The amendments are effective at the same time as the amendments in Update 2011-05. Therefore, the amendments in this Update are effective for public entities for fiscal years, and interim periods within those years, beginning after December 15, 2011. For nonpublic companies and not-for-profit organizations, the amendments in this Update are effective for fiscal years ending after December 15, 2012, and interim and annual periods thereafter.

The deficiency of this standard is that it fails to mention a comprehensive measurement of the income to be net off with expense variables. When an income is comprehensive, the variables to be written off ought to be comprehensive based on the marching concept and the duality of accounting. Economics had provided for this with the concept of marginal social cost. Marginal social cost is the cost imposed on third parties by a firm due to its externalities (Branco, and Rodrigues, 2007). The total cost to society as a whole for producing one further unit, or taking one further action, in an economy. This total cost of producing one extra unit of something is not simply the direct cost borne by the producer, but also must include the costs to the external environment and other stakeholders. It is expected that the negative externalities caused by production activities and the remedial actions taken by such companies are reasonably reported in the financial statements. Unfortunately, social accounting standards and laws are incompetent to enable corporations to efficiently, sufficiently and accurately provide socially valued information in the annual reports. This deficiency creates social information gap which the researchers wish to call "information disequilibrium" or "social accounting imbalance". Advocates of the "all-inclusive concept" argue that comprehensive income statement provide better measures of a firm's profitability than other summary income measures. On the other hand, those who advocate "current operating performance" view of income argue that net income without inclusion of extraordinary and nonrecurring items, got better ability to reflect the firm's future cash flows. For the above arguments see, Robinson (1991), Kanagartnam, et al, (2004), Arab and Radmehr (2003), Dhaliwal et al (1999), Smith and Reither (1996).

In this study the researchers examined comprehensive income measurement and the relevance of netting marginal social cost in the determination of net income as it affects the profitability of a firm. Some scholars argued that reporting social accounting will have a negative effect on their profitability. While, others were of the view that such reports will affect the corporate image of the firm (Appah, 2011). These claims have influenced the refusal of corporate bodies to implement social accounting practice in Nigeria (Owolabi, 2008). Hence, this study examined the compliance of Nigerian companies with comprehensive income reporting, social cost and externality disclosures with a view to identifying the effect of such practices on their profitability and corporate image.

1.1 Empirical Review

Table 1: Review of selected empirical studies

Authors	Methodology and sample	Main findings
Appah (2011)	Content and simple percentage analysis on 40 companies listed in the Nigerian stock exchange for a period of 2005 to 2007	i. Nigerian companies prefer to disclose social accounting in the director's report, chairman's report and notes to the accounts. ii. the most popular themes in the report are, human resources, community involvement and environmental effects
Ponnu and Okoth (2009)	Content analysis and chi-square of all the 54 listed companies in Nairobi stock exchange	Corporate social disclosure is given only a modest attention, based mainly on community involvement.
Owolabi (2008)	Content analysis on 20 listed companies in the Nigerian stock exchange, covering 10 sectors of the economy from 2002 to 2006.	i. 35% of companies show social disclosure in their annual reports. ii. Social information is disclosed by Multi-National Companies (MNCs) more than indigenous companies.
Kamla (2007)	Content analysis of 68 companies annual reports from Saudi Arabia, Oman, Kuwait, Syria, Jordan and Egypt.	i. Employee disclosure is more in the financial statements. ii. Environmental disclosure is low in Arab Countries.
Arab and Radmehr (2003)	Used a questionnaire obtain the opinion of Iranian different financial information users and academics on each item of comprehensive income. They also studied the necessity of reporting such items in separate reports.	Findings indicate that from the respondents' points of view, disclosure of different items of comprehensive income is required in external reporting, but they find it unnecessary to report each item in a separate report.
Mojtahed and Momeni (2003)	Used a questionnaire to investigate the effects of comprehensive income statement on users' decision-making.	Users of financial information use some measures for management efficiency, investment returns and future cash flows prediction, in their decision-making process. Disclosure of comprehensive income paves the way for evaluation of those measures.

1.1.2 Methodology and Materials

This study took a little deviation from content analysis with a questionnaire to evaluate the effect of comprehensive income and externalities reporting on corporate profitability and image. Primary data was generated through the administration of questionnaires to evaluate the impact. Data for the study was collected via a structured self-administered questionnaire (Babbie, 1990) to One hundred and fifty respondents made up of management and accounting staff from ten (10) companies listed in the Nigerian stock exchange. Secondary data was based on the annual reports of the companies for a period of twenty two (22) years, from 1990 to 2011.

The study was conducted between 16^{th} of May 2012 to October 9^{th} 2012. The Yaro Yamen model was used to determine the sample size. A total of one hundred and forty four questionnaires were completed and used for the analysis representing ninety six (96%) percent. The modeled questionnaire was pre-tested, using three (3) companies. A reliability and internal consistency test was done on data collected using Cronbach Alpha and Pearson product moment correlation coefficient. The test showed that the questionnaire was reliable and consistent at 0. 6320. and 0.741. Excel was used to transform the data into analyzable format, after which the least square regression was used with econometric view (E-View) software as explained by Gujarati and Porter (2009) that the ordinary least square regression analysis shows the direction of cause and affect between the regressand and the regressor variables.

The ordinary least square was guided by the following models.

Y = f(x)------------------------------(1)

Where x means the factors that affect profitability (prof) and corporate image (coim) by corporate beings

Y = f(X1, X2,) ------ (2)

Where X1 = comprehensive income reporting (cio), X2 = reporting externalities (rest),

prof = a0 + a1cio + a2rest + e ------- (3)

coim = a0 + a1cio + a2rest + e ---------- (4)

A priori expectation of the linear function is as below

cio/prof > 0;rest/prof > 0; and cio/coim > 0; rest/coim > 0;

a1 and a2, are the co-efficient of the regression and a is the intercept of the regression and e is the error term, capturing other explanatory variables not included in the model.

[1]

[2] 1.1.3 Hypotheses Testing

Test of hypothesis one: Relationship between profitability and comprehensive income

Table 2: E-view analysis result

Dependent Variable: PROF
Method: Least Squares
Date: 10/18/12 Time: 22:57
Sample: 1990 2011
Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	37.39572	6.536225	5.721303	0.0000
CIO	0.863585	0.265914	3.247607	0.0042
REST	-0.421416	0.264111	-1.595601	0.1271

R-squared	0.448423	Mean dependent var	54.86364
Adjusted R-squared	0.390362	S.D. dependent var	12.82221
S.E. of regression	10.01149	Akaike info criterion	7.571468
Sum squared resid	1904.369	Schwarz criterion	7.720247
Log likelihood	-80.28615	F-statistic	7.723347
Durbin-Watson stat	0.987309	Prob(F-statistic)	0.003510

Source researchers E-view print out 2012

R-Square test

From table 2, the computed value of E-View is 45% for R-Square and 40% of adjusted R-Square meaning that comprehensive income repotting (cio) and reporting externalities (Rest) explains 45% and 40% of the change in profitability of a firm while other variables excluded in the model affect 55% and 60% of changes in profitability of a firm. This percentage effect is significant because a 40% change in profitability can alter the survival status of a firm.

Coefficient test (Best of fitness)

From table 2 above, the analysis shows that a 1% improvement in reporting comprehensive income will lead to an 86% change in profitability. While a 1% fall in the practice of reporting externalities will lead to a change in the profitability of a firm by 42%.

F. statistic test

From table 2, the computed value is 7.7233 while the tabulated value is 3.49 (at Ni = 2 and N2 = 22). Since the computed is more than the tabulated, the overall null hypothesis is rejected and the alternative is accepted that there is a significant relationship between profitability of a firm and the reporting of comprehensive income and externalities by a firm, with a Probability of 0.00351 is significant to reject the null hypothesis.

T.stat. probability test.

The probability of comprehensive income to profitability not related is 0.0042 and reporting externalities to profitability is 0.1271, which is significant in the existence of a relationship in the model, hence the null hypothesis is rejected and the alternative that there is a significance relationship between profitability, comprehensive income and reporting externalities is accepted.

Durbin-watson stat. test

With N=22 and k= 2, the tabulated value is 1.147 to 1.541. Since the calculated value from table 2 is 0.98309, there is presence of positive first order serial correlation in the model, so the results of the model cannot be generalized. This is due to the few numbers of the independent variables in the model.

Test of hypothesis two: Relationship between corporate image and comprehensive income reporting and reporting externalities.

Table 3: E-view analysis result

Dependent Variable: COIN
Method: Least Squares
Date: 10/18/12 Time: 23:09
Sample: 1990 2011
Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.19154	8.750925	1.850266	0.0799
CIO	0.790122	0.356015	2.219348	0.0388
REST	0.011698	0.353602	0.033082	0.9740

R-squared	0.489560	Mean dependent var	49.45455
Adjusted R-squared	0.435830	S.D. dependent var	17.84517
S.E. of regression	13.40373	Akaike info criterion	8.155067
Sum squared resid	3413.541	Schwarz criterion	8.303846
Log likelihood	-86.70574	F-statistic	9.111410
Durbin-Watson stat	1.422606	Prob(F-statistic)	0.001681

Source: Researchers E-view print out 2012

R-Square test

From table 3, the computed value of E-View is 49% for R-Square and 44% of adjusted R-Square meaning that comprehensive income repotting (cio) and reporting externalities (Rest) explains 49% and 44% of the change in profitability of a firm, while other variables excluded in the model affect 51% and 56% of changes in profitability of a firm. This percentage effect is significant because a 44% change in profitability can alter the solvency status of a firm.

Coefficient test (Best of fitness)

From table 3 above, the analysis shows that a 1% improvement in reporting comprehensive income will lead to a 79% improvement in the corporate image of a firm. While a 1% increase in the practice of reporting externalities will lead to a 1% improvement in the corporate image of a firm.

F. statistic test

From table 3, the computed value is 9.11141 while the tabulated value is 3.49 (at Ni = 2 and N2 = 22). Since the computed value is more than the tabulated vale, the overall null hypothesis is rejected and the alternative is accepted that there is a significant relationship between the corporate image of a firm and the reporting of comprehensive income and externalities by a firm, with a Probability of 0.00168 which is significant to reject the null hypothesis.

T. statistics probability test

The probability of comprehensive income to corporate image not related is 0.0388 and reporting externalities to corporate image is 0.9740, which is significant in the existence of a relationship in the model, hence the null hypothesis is rejected and the alternative that there is a significant relationship between corporate image, comprehensive income and reporting externalities is accepted as shown in table 3.

Durbin-watson stat. test

With N=22 and k= 2, the tabulated value is 1.147 to 1.541. Since the calculated value from table 3 is 1,422606, the presence or absence of positive first order serial correlation in the model is inconclusive, so the results of the model cannot be generalized. This is due to the few numbers of the independent variables in the model.

1.1.4 Conclusion and Recommendations

The researchers investigated the effect of comprehensive income and externalities cost in financial statements on a firms' profitability and corporate image using data obtained from ten selected companies listed in the Nigerian Stock Exchange (NSE). Primary and secondary data were collected via a self administered questionnaire and annual financial statements from 1990 to 2011. The study revealed that comprehensive income and social cost (externalities) report is related to a firm's profitability and corporate image positively. The study also indicated that most Nigerian companies do not comply with the comprehensive income statement report and only a few even reports on externality intervention cost without information on the actual externality cost generated for the society to bear.

The researchers recommended that organizations should consistently report their comprehensive income and externality cost on the environment to improve their corporate image and profitability. This will improve the value of the business in the stock market and also improve its share value with better wealth maximization for shareholders. However as indicated in the Durbin-Waston test, further studies can be conducted with additional variables to improve the generalizability of the findings of this current study.

ACKNOWLEDGEMENT

The researchers wish to acknowledge the Nigerian Stock Exchange for the annual financial reports of the ten companies studied and for their response to the questionnaires. The companies are; Nigerian Television Authority, Arik Air, Aero Contractors, First Bank of Nigeria, Guaranty Trust Bank, Dangote Group, John Holt Plc, Julius Berger Nigeria, Shell and Total.

References

Appah, E (2011). A Study of Social Accounting Disclosure in the Annual Reports of Nigerian Companies: *Asian Journal of Business Management*. Vol 3, no 3 pg145 – 151.

Arab, M. Y. M. and Radmehr, K. (2003). A Survey of the Significance and Necessity of Comprehensive Income Statement in Iran. *Iranian Accounting and Auditing Review* 31, pp.51-73.

Babbie, E. (1990). *Survey Research Methods*. Belmont, California: Wadsworth.

Biddle, G. C. and J. Choi, (2003). Is Comprehensive Income useful? *Working papers under Review.* Hong Kong University of Science & Technology, Hong Kong.

Branco, E. C. E. and L Rodrigues, (2007). Issues in Corporate Social and Environmental Reporting Research, an Overview. *Issues in Social and Environmental Accounting* 1 (1) 77 – 90

Cahan, S. F.; M. C.Stephen, L. G.Paul, and David, R. U. (2000). Value Relevance of Mandated Comprehensive Income Disclosures. *Journal of Business Finance and Accounting* (27:9 & 10), pp. 1273-1303.

Dhaliwal D., K.R. Subramanyam, and R. Trezevant, (1999). Is Comprehensive Income Superior to Net Income as a Measure of firm Performance? *Journal of Accounting and Economics*, 26, pp. 43-97.

Financial Accounting Standards Board, (1985).*Statement of Financial Accounting Concepts No. 6: Elements of Financial Statements* (Norwalk, CT: Financial Accounting Foundation).

Financial Accounting Standards Board,(1997). *Statement of Financial Accounting Standard No. 130: Reporting Comprehensive Income.*Financial Accounting Standards Board, Norwalk, CT.

Gujarati, N. D and D. C. Porter, (2009). *Basic Econometrics* (fifth edition). New York, McGraw – Hill, International Edition.

Kamla, R. (2007). *Critically Appreciating Social Accounting and Reporting in the Arab Middle East: A Post Colonial Perspective*. Advance International Accounting, 20: 155 – 177.

Kanagaretnam, K., R. Mathieu, and Mohammed, S. (2004). Usefulness of Comprehensive Income Reporting in Canada. *Working Papers*, McMaster University.

Maines, L. A. and L. S. Mcdaniel, (2000). Effects of Comprehensive Income Characteristics on Nonprofessional Investors` Judgments: The Role of financial Statement presentation format. *Accounting Review*, 75 (April), pp. 179-207.

Mojtahed, Z. V. and M. Momeni, (2003). The Effect of the Comprehensive Income Statement on the Decisions of the Financial Statement Users: Views & Perspectives. *Iranian Accounting and Auditing Review,* 31, pp. 75-96.

Norwalk, C.T. (2011). The Financial Accounting Standards Board (FASB) today issued Accounting Standards Update No. 2011-12, Comprehensive Income (Topic 220): Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05.

Ohlson, J., (1995). Earnings, Book values, and Dividends in Security Valuation. *Contemporary Accounting Research (Spring)*, pp. 661-86.

Owolabi, A. (2008). Environmental Disclosure in Annual Reports: The Nigerian Perspective. *Paper presented at the 2nd Italian Conference on Social and Environmental Research,* Rimini, 17 – 19 September, 2008.www.riviate.paviauniversitypress-t/index.php/ea/article/dpowload/433/489.

Ponnu C. H. and O. A.Okoth, (2009). Corporate Social Responsibility Disclosure in Kenya; The Nairobi Stock Exchange. *African Journal of Business Management* 3(10): 601 – 608

Robinson L. E. (1991).The Time Has Come to Report Comprehensive Income. *Accounting Horizons* 5(June), pp. 107-112.

Smith P. A. and C. L. Reither, (1996). Comprehensive Income and the Effect of Reporting It. *Financial Analysts Journal*, 52, pp. 14-20.