Accounting and Auditing

Independent Auditor's Report: Messages Conveyed and Implications

Saher Aqel[1]

Abstract: Auditing plays a crucial role in the business environment by providing assurance services to the public so as to decrease information risk by increasing the reliability of financial information provided by the business entities. As the final product of the audit, the audit report is a way by which the auditor communicates with the public the findings of the audit process. The auditor's report is the only aspect of the work of auditor that can be available to the public. Thus, users are likely to assess the auditor's professionalism and competence by this report. The purpose of this study is to address the meaning and implication of the audit report in addition to a discussion of the messages perceived from the auditor's report. Differences in perceptions of the meaning of the auditor's report may exist between the auditors and users. Users may misperceive the nature and scope of the audit function and the level of assurance when they read the audit report

Keywords: Auditing; auditor's report; auditor's responsibilities

JEL Classification: M40; M42

1. Background

The auditor's report is the final step in the audit process. As the final product of the audit, the auditor report is a way by which the auditor communicates with the public the findings of the audit process. The auditor's report is the only aspect of the work of auditor that can be available to the users. Thus, users of the financial statements are likely to assess the auditor's professionalism and competence by this report. In addition, the legal responsibility of the auditor may be determined by the auditor's report. As a result, the auditor's report, it should clearly describe the auditor's work. In addition, there must be a common understanding of the terminologies used in the audit report.

International Standards on Auditing (ISA) requires external auditors to explain their responsibilities explicitly in the auditor's report. ISA 700 states that the

[1] Assistant Professor of Accounting, PhD, Head of the Accounting Department, Faculty of Business & Economics, AL-Quds University, East Jerusalem, Palestine, Address: PO box 51000, West Bank, Palestine, Corresponding author: saqel@econ.alquds.edu.

auditor's report shall include a section with the heading "Auditor's Responsibility." In this section, the auditor indicates that his/her responsibility is to express an opinion on the financial statements based on the audit and to obtain **reasonable assurance** about whether the financial statements are free **from material misstatements**". Thus, auditors are concerned with material misstatements, and are not responsible for the detection of misstatements that are not material to the financial statements. The intent is to indicate that the results are based on professional judgment and to point out that there may be some information risk associated with the audited financial statements (Elder et al. 2010).

Although auditors explain their responsibilities explicitly in the auditor's report users misunderstand the responsibilities of the auditors. Research conducted in different economic environments indicates that public believes that auditors are responsible for performing very wide range of duties. Many users believe that auditors are responsible for guaranteeing the accuracy of the financial statements, detecting minor theft of client's assets and detecting other illegal acts that indirectly affect the financial statements (Porter et al. 2008). Apparently, users lack understanding of the audit function and assume the external auditors to perform wide range of duties which are not of their responsibilities. The main purpose of this study is to address the meanings and implication of the audit report in addition to a discussion of the messages perceived from the auditor's report

The remainder of this paper is organized as follows: the second section addresses the meanings of the audit report, section three describes report on the responsibility of the auditors and entity's management, the fourth section report on the going concern, section five presents report on the internal control system and section six concludes.

2. Meanings of the Audit Report

Users of the audit report may misperceive the nature and scope of the audit function and the level of assurance provided by the auditor when they read the audit report. The users often assume audit to have a wider scope than it actually have (Gold et al. 2009). In addition, users of the financial statements might not correctly interpret some technical terms contained in the standard audit report such as "...present fairly…" in the opinion paragraph (McEnroe and Martens, 2001).

Until 1988, the (short form audit report) remained unchanged in the United States of America as well as in the other countries. The expanded audit report was adopted first in the United States of America in 1988. In the United Kingdom, the short form audit report was used prior to the adoption of the expended audit report in 1993. An example of the short form audit report that was used in the United

Kingdom before 1993 is presented in figure 1 (Porter et al. 2008, p. 551). It can be observed from this audit report that the short form report is so brief. It is composed only of two paragraphs (introductory and opinion paragraphs). In addition, the report did not explain the nature of the audit and did not indicate the responsibilities of the auditors and the entity's management. Furthermore, the report was titled as "report of the auditors" without using the word "independent" in the report title.

In the United States, the Commission on Auditors' Responsibilities (the Cohen Commission, 1978) found that the short form audit report was confusing to the users rather than informing them. The commission also noted that the users are unable to distinguish between the responsibilities of the auditors and those of the entity's management. The Cohen Commission also recommended that the audit report should be adjusted to describe more explicitly the role and responsibilities of the external auditors (Boyd et al. 2001). As a result of these shortcomings of the short form audit report, new auditing standards on audit report prescribing the use of an expanded audit report have been issued by; the American Institute of Certified Public Accountants (AICPA), the Auditing Practice Board (ABP; UK), Canadian Institute of Chartered Accountants (CICA), and the International Federation of Accountants (IFAC) since 1988. Unlike the short form audit report, the new expanded audit report includes (Porter et al. 2008):

- The use of the phrase "report of independent auditor" instead of " report of auditor",
- A brief description of the audit process,
- A statement explaining the respective responsibilities of the directors of audittee firm and auditors of the financial statements of the company,
- A statement that an audit is planned and performed in order to obtain sufficient appropriate evidence to provide reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or errors.

The International Auditing and Assurance standard Board's (IAASB) requirements for the format and contents of the audit report is organized in International Standards on Auditing (ISA) 700 "Forming an Opinion and Reporting on Financial Statements". In the revised version of the ISA 700, the IAASB intends to provide new wording and information contents of the audit report so as to explain the responsibilities of the external auditor and the entity's management. The purpose is to ensure that the users of the financial statements understand the nature and scope of the audit, the responsibilities of the auditors and entity's management, and the level of assurance that is provided by the auditor's opinion. An example of standard unqualified audit report as required by the revised ISA 700 (effective in or after 15 December, 2009) is presented in figure 2.

Several prior studies found that the expanded audit report has helped in enhancing the understandability of the audit function by the public. Hartherly et al. (1991) pointed out that the expanded audit report gives a fuller understanding of the scope, nature and limitations of the audit work. The study also indicated that the expanded audit report has two potential effects upon users' perceptions of the audit report. On the one hand, it influences the perceptions of financial statements users concerning the audit and the auditor's responsibilities. On the other hand, it induces a change in the perceptions of the auditor and makes him/her focus on what is required. Furthermore Koh and Woo (1998) indicated that the wording modifications in the expanded audit report have significantly changed by the public's perceptions of the audit. On contrast, other studies found that there are differences in the perceptions o auditors and users in relation to the meaning of the audit report. For example, the study of Gold et al. (2009) found that difference between the perceptions of users and auditors regarding the information provided in the auditor's report still exist. The study also found that the detailed explanations of the auditor and management responsibilities and the task and scope of the audit in the auditors report are not effective in reducing theses differences in perceptions between auditors and users and partially even have a detrimental effect.

Different perceptions of auditors and financial statement users of the audit report are related to three main issues contained in the audit report. These issues are report on the responsibility of the auditors and management, report on the going concern and report on the internal control system. These issues are presented in this section as below.

2.1. Report on the Responsibility of the Auditors and Entity's Management

The responsibility of the auditor and the entity's management is considered as major issues that cause the differences between the perceptions of users and the auditors in relation to the audit report. Users of the financial statements often assume auditors to provide an absolute level of assurance when they read the auditor's report. However, the auditor's opinion on the financial statement provides a "reasonable" level of assurance (Gold et al. 2009, p.4). The auditor's responsibility section in the audit report stated clearly that the responsibility of the auditor is to obtain reasonable assurance about whether the financial statements are free from material misstatement

In addition, surveys conducted in UK, Australia, Canada, and New Zealand indicated that significant number of users believe that auditors are responsible for preparing the financial statements of the client and are responsible for verifying every transactions of the entity. The surveys also pointed out that some users believe that the unqualified audit report signifies that the auditor guarantees that the financial statements are accurate and the entity is financially secure (Porter et al. 2008). However, the preparation of the financial statements is the responsibility of the entity's management as clearly stated in the auditor's report. In addition, the auditors are not responsible for verifying every transaction in the entity or guarantee the accuracy of the financial statements because the audit opinion on the financial statements provides reasonable (not absolute) level of assurance.

Nair and Rittenberg (1987) examined the understanding of the auditors and sophisticated users (bankers) of various type of audit reports in the US. The findings of the study indicated that bankers place greater responsibility for the correctness of the financial statements on auditors and less responsibility on the entity's management. In addition, Bailey et al. (1983) examined the perceptions of the audit report by two different groups (professionals and the less knowledgeable members of the public). The respondents of the two groups indicated that the short form audit reports are misunderstood by many users. The study also concluded that more knowledgeable readers of the audit report perceive the auditor as less responsible for the information in the financial statements than the management. The above mentioned two studies were conducted before introducing the expanded audit report. These results indicated clearly that there are different perceptions about the responsibilities of the auditors and those of the entity's management between auditors and the public.

Several studies also examined the perceptions of users of on the expanded audit report. Kelly & Mohrweis (1989) found that bankers and investors reading the new expanded audit report (under SAS 58) tended to agree that the entity's management is responsible for the preparation of the financial statements. The study of Miller et al. (1993) also found that bank loan officers who read an expanded auditor's report are better able to identify the responsibilities for the preparation of financial statements by both management and the independent auditor than can loan officers who read old audit reports. The study also concluded that users become more familiar with the messages conveyed in the auditor's report and their implications.

On the other hand, recent studies have indicated differences in the perceptions between users and auditors regarding the responsibilities of auditors and management as stated in the expanded audit report. The study of Chong and Pflugrath (2008) concluded that the expanded audit report did not reduce these differences in the perceptions between shareholders and auditors. Additionally, Gold et al. (2009) found that the detailed explanations of the auditor and management responsibilities and the task and scope of the audit in the auditors report are not effective in reducing this expectation gap.

Thus, the expanded audit report does not seem to be a sufficient solution to the gap between the public and auditors in relation to the auditor and management responsibilities as perceived from the audit report. Providing more detailed descriptions of the responsibilities of management and the auditor or by changing the wording of audit reports appear to be unsuccessful attempts to reduce this gap. Therefore, further recommendations are proposed by many researchers in order to reduce this gap in relation to the auditor and management responsibilities as perceived in the audit report. Among these suggested recommendations is to educate users about the contents of the audit report. Furthermore the re-ordering of the sections of the report by placing the opinion at the start of the report may be useful in reducing the audit report expectation gap and worthy of further research (Gold et al. 2009).

2.2. Report on the Going Concern

The entity's management normally prepares financial statements under the going concern assumption. The going concern assumption states that an entity will continue in operation for the foreseeable future. Hence, it is assumed that the entity has neither the intention nor the need to liquidate or curtail materially the scale of its operations. In this case, general purpose financial statements are prepared(ISA 570). When planning and performing the audit procedures and in the evaluation of the results of the audit, the auditor has the responsibility to evaluate whether the company is likely to continue as going concern. ISA 570 indicated that the auditor is responsible for obtaining sufficient appropriate audit evidence about the appropriateness of management's use of the going concern assumption in the preparation of the financial statements. The auditor should decide whether there is a material uncertainty about the entity's ability to continue as a going concern (ISA 570).

However, this does not indicate that the auditor is responsible for evaluating the financial health or guarantees the financial viability of the company. The auditor cannot predict such future events or conditions. Therefore, the absence of any reference to uncertainty (regarding continued as a going concern) in an auditor's report cannot be viewed as a guarantee of the entity's ability to continue as a going concern (ISA 570).

The auditor's consideration of the going concern assumption may make him/her modify the type of the audit report according to the circumstances. When the auditor has doubts about the ability of the entity to continue as a going concern but the entity provides adequate disclosure about the matter in the financial statement, the auditor shall express an unmodified (unqualified) opinion and include an emphasis of matter paragraph in the auditor's report (ISA 570). If adequate disclosure about the matter in question is not made in the financial statements, the auditor shall express a qualified opinion or adverse opinion as appropriate. In addition, if the auditor decides that the management uses the going concern assumption in the financial statements in inappropriate way, the auditor shall express an adverse opinion (ISA 570).

Some of users expect that the auditor is responsible for providing them with an early warning of the business failure. If a business failure occurs and the financial statements are latter determined to have been misstated, the public may claim that the auditor was negligent even if the audit was conducted in conformity with auditing standards (Elder et al. 2010). In response to that, audit profession has made continuing efforts to assess and revise auditing standards in order to reduce or eliminate this misunderstanding of the audit report by users. For example, in 1988, the AICPA issued Statement on Auditing Standards (SAS) No. 59 “The Auditor's Consideration of an Entity's Ability to continue as a going concern”. SAS 59 was issued as a response to the criticism to the auditors as they did not take on enough responsibility for evaluating going concern. Several studies performed prior to SAS No. 59 indicated that more than half the companies entering bankruptcy did not receive a going-concern modified report in the period prior to bankruptcy (Guy and Sullivan, 1988). A question such as “how can a business fail shortly after receiving an unmodified audit report?” was raised by researchers and by the public.

In addition, the collapses of companies shortly after receiving an unmodified audit report still exist. For example, six of the ten largest companies that collapsed between 2001 and 2002 received unmodified auditor’s opinions. Four of these six companies (WorldCom, Enron, Global Crossing, and UAL Corp) were clients of Arthur Andersen (Nogler, 2008). This series of accounting scandals led to the issuance of the Sarbanes-Oxley Act (2002). Since that time, auditors are more likely to give a going-concern modified audit opinion for financially stressed companies. Sarbanes-Oxley Act does not include new arrangements for going concern. However, auditor’s behavior related to going-concern reporting changed in the post December 2001 period after the series of financial scandals for famous companies took place (Geiger et al. 2005).

Thus, the auditor’s decision concerning report on going concern is difficult. Auditors are likely to be in a conflicting position between the client and users of the financial statements. Errors in making such a decision will be costly to the auditor. If the auditor provides a going concern modification to a client and this client does not fail in future, the auditor may loss the client. In contrast, if the auditor decided not to provide a going concern modification to a client that is financially distressed, the auditor is likely to face lawsuits from creditor or stakeholder in addition to the negative impact on the reputation of the auditing firm.

2.3. Report on the Internal Control System

ISA 700 indicates clearly that the entity's management is responsible for establishing and maintaining an entity's internal control system. Auditors are responsible for obtaining an understanding of the entity and its environment, including the entity's internal control. ISA 315 requires that the auditor shall obtain an understanding of internal control relevant to the audit of the financial statements. This understanding of internal control assists the auditor in identifying types of potential misstatements in the financial statements and factors that affect the risks of material misstatement. In addition, this understanding assists the auditors in designing the nature, timing and extent of further audit procedures. In addition, Sarbanes Oxley Act requires the entity's management of all publicly held companies to issue an internal control report that explicitly accept responsibility for establishing and maintaining an adequate internal control structure and procedures for financial reporting. In addition, Sarbanes Oxley Act requires the auditor of the publicly held companies to report on the assessment made by the management about the effectiveness of the internal control

Prior research revealed that differences exist between the perceptions of auditors and the public about the report on the internal control. Research conducted in different countries indicated that users misunderstand the responsibilities of the auditors in relation to internal control. A study conducted by Fadzly and Ahmed (2004) in Malaysia pointed out that auditors and investors have significant different beliefs about the auditor's responsibility of internal control. In addition, the results of another studies conducted in Singapore (Best et al. 2001) and Egypt (Dixon and Woodhead, 2006) indicated that users of the financial statements believe that auditors are responsible for ensuring sound internal control in the company.

The differences between the perceptions between auditors and users in relation to reporting on internal control could be reduced by improving the report on internal control in the auditor's report. For example, the expanded audit report was able to reduce these differences. However, a study of Gist et al. (2004) concluded that auditors and users of the financial statements have different perceptions about internal control reporting required by SOX. Thus, the external auditor's report on internal control over financial reporting may broaden the differences between the perceptions of auditors and users in relation to reporting on internal control.

3. Conclusions

The auditor's report is the only aspect of the work of auditor that can be available to the public. Thus, users of the audit report are likely to assess the auditor's professionality and competence by this report. In addition, the legal responsibility of the auditor may be determined by the auditor's report. Because of this significance of the auditor's report, it should clearly describe the auditor's work. In addition, there must be a common understanding of the terminologies and phrases used in the audit report.

Several studies pointed out that the expanded audit report gives a fuller understanding of the scope, nature and limitations of the audit work and influences the perceptions of financial statements users concerning the audit and the auditor's responsibilities. On contrast, other studies found that there are still differences between perceptions of the auditors and users in relation to the meanings of the audit report. The detailed explanations of the auditor and management responsibilities and scope of the audit provided by the expanded audit report may have a detrimental effect. Different perceptions of auditors and users of the audit report are related to three main issues contained in the audit report. These issues are; report on the responsibility of the auditors and management, report on the going concern and report on the internal control system.

Actually, many users of audit report expect that auditors guarantee that audited financial statements were completely accurate and the auditor has performed one hundred percent audit for client whose financial statements received an unqualified audit report. This is due to public's lack of knowledge about auditor's responsibilities which is referred to as "knowledge gap" by Gowthorpe & Porter (2002).

The earlier discussion in this manuscript argues strongly for the significance of the messages conveyed and implications of the audit report for users and for the existence of a "gap" between users and auditors regarding the meanings of the audit report. This gap might be bridged by augmentation of the auditing, strengthening of the integrity auditors, and educating users on the nature and functions of audit. The entire issue of the users' perceptions of the audit report should subject to further research. The future research in this area should propose modifications on the existing audit report so as to reflect the actual audit work and to avoid misunderstanding of the report by users. Among these suggested modifications is the reordering of the sections of the report by placing the opinion at the start of the report may be useful in reducing the gap and providing information regarding materiality threshold in the auditors report.

4. References

Kelly, Anne S. & Mohrweis, Lawrence C. (1989). Bankers' and investors' perceptions of the auditor's role in financial statement reporting: The impact of SASNo. 58. *Auditing: A Journal of Practice & Theory*, Vol. 9, No. 1, pp. 87-97.

Bailey, K.E,; Bylinski, Joeph. H. & Shield., Michael D. (1983). Effects of audit report wording changes on the perceived message. *Journal of Accounting Research*, Vol. 21, No. 2, pp. 355-370.

Best, Peter J. Buckby, Sherrena, Tan, Clarice, (2001). Evidence of the Audit Expectation Gap in Singapore. *Managerial Auditing Journal*, Vol. 16, pp. 134-144.

Boyd, D. T., Boyd, S. C, Boyd, W. L, (2001). *The audit report: A misunderstanding gap between users and preparers, National Public Accountant*, http://connection.ebscohost.com/c/articles/3998774/audit-report-misunderstanding-gap-between-users-preparers.

Chong, Kar-Ming & Pflugrath, Gary (2008). Do Different Audit Report Formats Affect Shareholders' and Auditors' Perceptions? *International Journal of Auditing*, Vol. 12, pp. 221-241.

Dixon, R., Woodhead, A.D. & Soliman, M. (2006). An Investigation of the Expectation Gap in Egypt. *Managerial Auditing Journal*, Vol. 21, No. 3, pp. 293-302.

Elder Beasley, Arens, A.A. (2010). *Auditing and Assurance Services : An Integrated Approach*. 13th Edition, Prentice Hall, Upper Saddle River.

Fadzly, Mohamed Nazri & Ahmad, Zauwiyah (2004). Audit expectation gap: the case of Malaysia. *Managerial Auditing Journa*l,Vol. 19, No. 7, pp. 897-915.

Geiger, Marshall A., Raghunandan, K. & Rama, Dasaratha V. (2005). Recent Changes in the Association between Bankruptcies and Prior Audit Opinions. *Auditing: A Journal of Practice & Theory*. Vol. 14, No. 2, pp. 54-73.

Nogler, George E. (1995). The Resolution of the Auditor's going Concern Opinions. *Auditing: A Journal of Practice & Theory*, Vol. 14, No. 2, pp. 54-73.

Gist, Willie E., ClainGuy Mc, Shastri, Trimbak (2004). User Versus Auditor Perceptions of the Auditor's Report on Internal Control: Readability, Reliability and Auditor Legal Liability. *American Business Review*, Vol. 22, June, pp. 117-129.

Gold, Anna Gronewold, Ulfert Pott, Christiane (2012). Financial Statement Users' Perceptions of the IAASB's ISA 700 Unqualified Auditor's Report in Germany and the Netherlands. *Summary Report to the Auditing Standards Board, and the International Auditing and Assurance Standards Board*. New York. http://www.ifac.org/sites/default files/downloads/Study_4_ASB/ Report.pdf, 07/4/2014.

Gowthorpe, C., & Porter, B. (2002). *Audit expectation - Performance Gap in the United Kingdom in 1999 and Comparison with the Gap in New Zealand in 1989 and in 1999, Executive Summary*. The Institute of Chartered Accountants of Scotland, Retrieved from [http://www.icas.org.uk/site/cms/contentviewarticle.asp?article=3521] 10/5/2014.

Guy, Dan M., Sullivan, Jerry, D. (1988). The Expectation Gap Auditing Standards. *Journal of Accountancy*, Vol. 165, No. 4, pp. 36-44.

Hatherly, David Innes & John Brown Tom (1991). The expanded audit report – an empirical investigation. *Accounting and Business Research*, Vol 21, No. 84, pp. 311-319.

ISA 700, *Forming an Opinion and Reporting on Financial Statements*.

ISA 570, Going Concern.

Koh, Hian, Chye, Woo, E-Sah (1998). The Expectation Gap in Auditing. *Managerial Auditing Journal*, Vol. 1 3, No. 3, pp. 147-154.

Lee, T.H., Gloeck, J.D., Palaniappan, A.K. (2007). The Audit Expectation Gap: An Empirical Study in Malaysia. *The Southern African Journal of Accountability an Auditing Research*, Vol. 7, No. 1, pp. 1-15.

Lin, Z Jin Chen, Feng (2004). An Empirical Study of Audit Expectation Gap in the People's Republic of China. *International Journal of Auditing*, Vol. 8, pp. 93-115.

McEnroe, John E, Martens, Stanley C. (2001). Auditors' and Investors' Perceptions of the Expectation Gap. *Accounting Horizons*, Vol. 15, No. 4, pp. 345-385.

Miller, Jeffrey R., Reed, Sarah, A., & Strawser, Robert H. (1993). Bank loan officers' perceptions of the new audit report. *Accounting Horizons*, Vol. 7, No. 1, pp. 39-52.

Nair, R.D. & Rittenberg, Larry E. (1987). Messages perceived from audit, review, and compilation reports: Extension to more diverse groups. *Auditing: A Journal of Practice & Theory*, Vol. 7, No. 1, pp. 15-38.

Nogler, George E. (2008). Going concern modifications, CPA firm size and the Enron effect. *Managerial Auditing Journal*, Vol. 23, No. 1, pp. 51-67.

Porter, Prenda, Simon, Jon Hathery, David (2008). *Principles of External Auditing*. 3rd Edition, John Wiley & Sons.

Raghunandan, K., Rama, D. V. (1995). Audit Reports for Companies in Financial Distress: Before and After SAS No. 59. *Auditing: A Journal of Practice & Theory*, Vol. 14, No. 1 Spring, pp. 50-63.

Sarbanes Oxley Act (2002).

Annexes

Annex 1. Example of Standard Unqualified Audit Report Used in the United Kingdom until 1993

Report of the auditors

To the members of the Peninsular and Oriental Steam Navigation Company

We have audited the accounts on the pages 27-49 in accordance with Auditing Standards.

In our opinion, the accounts give a true and fair view of the state of affairs at the Company and the Group at 31 December 1991and of the profit and cash flows of the Group for the year then ended and have been properly prepared in accordance with Companies Act 1985.

London KPMG Peat Marwick

24 March 1992 Chartered Accountants

Registered Auditor

Annex 2. Example of Standard Unqualified Audit Report as Required by ISA700

INDEPENDENT AUDITOR'S REPORT

[Appropriate Addressee]

Report on the Consolidated Financial Statements8

We have audited the accompanying consolidated financial statements of ABC Company and its subsidiaries, which comprise the consolidated statement of financial position as at December 31, 20X1, and the consolidated statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's9 Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards,1 and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on he auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation11 of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.12 An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, (or *give a true and fair view of*) the financial position of ABC Company and its subsidiaries as at December 31, 20X1, and (*of*) their financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards.

Report on Other Legal and Regulatory Requirements

[Form and content of this section of the auditor's report will vary depending on the nature of the auditor's other reporting responsibilities.]

[Auditor's signature]

[Date of the auditor's report]

[Auditor's address]

Environmental Cost Accounting Information and Strategic Business Decision in Nigeria

Ebipanipre Gabriel Mieseigha[1], Confidence Joel Ihenyen[2]

Abstract: This study aimed at examining environmental cost accounting information and strategic business decision in Nigeria. The general assumption that conventional cost accounting does not have the ability to provide absolute information for evaluating the environmental behaviour of an organization and its economic consequences has motivated this study. Towards achieving this, secondary data was employed and a linear model was specified. Findings indicated that environmental cost accounting information as it relates to strategic business decision is value-relevant. It was on this note that we recommended firms to constantly reposition their accounting system in order to provide information on environmental costs so that the true costs in an organization can be ascertained and properly allocated. Also, due attention should be paid to waste management costs, employee health costs, investment financing costs, compliance and environmental costs and all environmental related costs by manufacturing concerns since they influence strategic decision. Our study is one of those that have explored the issue of environmental cost accounting relevance in strategic business decision in the Nigerian context.

Keywords: Environmental Cost Accounting; Strategic Business Decision, Pricing Decision

JEL Classification: M40

1. Introduction

The environment where a business is positioned is one aspect that needs priority attention if the business must survive and continue to operate in order to maximize shareholders wealth. A major challenge facing business firms today is the deterioration of natural assets due to economic activities. Pramanil, Shiland Das (2007) opine that these deteriorations have reached an alarming level due to man's involvement in varied activities and in order to salvage business firms from this endemic situation, resources gradually flow out of the business and these resources (costs) are very relevant towards making strategic decisions. Thus, managers are under increased pressure not to only reduce such costs, but to also minimize

[1] Department of Accountancy, Faculty of Management Sciences, Nnamdi Azikiwe University, Address: Awka, Nigeria, Corresponding author: ebigabriel2007@yahoo.com.
[2] Department of Accountancy and Finance, Faculty of Management Sciences, Niger Delta University. Address: Wilberforce Island, Amassoma, Bayelsa State, Nigeria, E-mail: ebigabriel2007@yahoo.com.

AUDŒ, Vol. 10, no. 5, pp. 18-27

environmental impacts on their operations(Abiola and Ashamu, 2012).These impacts are expressed by business firms in monetary terms (Horngren, *et al*. 2000), hence bringing to limelight the field of 'Environmental Cost Accounting'. Environmental cost accounting is the branch of accounting responsible for the identification of environmental impacts and recording of the cost of all such resources deployed to manage environmentally related threats. In this paper, we investigated the relevance of environmental cost accounting information in making strategic decisions in Nigeria. Towards this end, this paper is divided into four (4) sections: review of extant literature, methodology, results and discussion and conclusion and recommendations.

2. Review of Extant Literature

There is an apparent lack of awareness and understanding of the magnitude of environmental costs in business operations. The conventional management/cost accounting practices do not provide adequate information for environmental management purposes in a world where environmental concern as well as environmental related costs, revenues and benefits are on the increase (Abiola and Ashamu, 2012). Welford (1998) notes that the poor state of awareness or due care of the environment and the resultant damages are increasingly altering the opinions of stakeholders on the capability of firms, these on the long run can influence the survival and profitability of business firms. The importance of environmental cost accounting is on the increase not only for strategic business decision in the area of product pricing decision, outsourcing, but also for all routine management activities such as environmental reporting, cost allocation, control and performance evaluation (Burritt, *et al*, 2002).

The failure to include environmental costs in financial analysis has the effect of sending wrong signals to managers, shareholders and making process improvement, product mix, pricing, capital budgeting, and other routine decisions complicated. When environmental costs are not adequately allocated, cross-subsidization occurs between products (Graff *et al*, 1998). Graff, *et al* (1998) view environmental cost accounting as accounting for the costs of impacts incurred by society, an organization, or an individual resulting from activities that affects environmental quality.

Over the years, substantial efforts and resources have been deplored to ensure that the natural environment is not treated as a free good. Accounting has become more concerned with achieving new goals such as measuring and evaluating potential or actual environmental impacts on organizations (Tapamg, *et al*, 2012; Bassey, *et al*, 2013).The conventional accounting system does not provide absolute information for evaluating the environmental behaviour of an organization and its economic consequences. Environmental cost accounting information is of high relevance in making strategic business decisions. Environmental cost accounting aids managers in making strategic business decisions in the area of process and product pricing design, performance evaluation, capital investment decisions and costing determinations (UNDSD, 2001).

In this manner, potentially hidden environmental costs are identified and separated from the general costs; this enable the managers in determining the true cost of a particular product or process and the proportion that are actually environmentally driven costs (UNDSD, 2001).Consequently, environmental accounting notifies corporate stakeholders of environmental costs, and creates a platform for key players to identify possible ways of reducing or avoiding those costs while at the same time improving environmental quality. All these are directed towards enhancing accurate assessment of costs and benefits of environmental preservation measures of firms and provide a framework for organizations to identify and account for past, present and future environmental costs to support managerial decision making, control and public disclosure (Schaltegger & Burritt, 2000; KPMG and UNEP, 2006). Ditz, *et al*, (1995) opine that environmental costs can be substantial, ranging from five to twenty percents of the total cost of business. The view above supports the argument that environmental cost is very relevant in decision making since such a large percentage of business resources cannot be undermined in any strategic decisions.

According to Gale and Stokoe (2001), environmental accounting describes, measures and reports on the allocation of environmental resources, costs, expenditures and risks to various industry groups, to specific firms, or within firms to specific department, projects, activities or processes. They added that the traditional accounting system hides environmental costs in many ways and the broad approach to calculate full environmental costs is by distinguishing between internal costs (those borne by the organization) and external costs (those passed on to the society, e.g. environmental and health costs). They view internal environmental costs of business firms as a function of direct, indirect, and contingent costs, embedded with such things as remediation or restoration costs, waste management costs or other compliance and environmental management costs, these costs can be estimated and allocated using the management costing models that are available to the organization. External costs are costs of environmental damages external to an firm, these costs can be monetized by economic methods that determine the maximum amount that people will be willing to pay in order to avoid damage, or the minimum amount of compensation that they would accept to incur it, while contingent or intangible environmental costs are cost that may arise in the future to impact on the operations of the organization, it falls into both internal and external cost categories and include changes in product quality as a result of regulatory changes that affects material inputs, methods of productions or allowable emissions, an unforeseen liability or remediation cost, employees health and satisfaction, customers perception and relationship costs; and investment financing costs or the ability to raise capital.

Effective business decisions depend strongly on relevant and true cost information. On this note, Gale and Stokoe (2001) stressed that activity-based costing as strategic cost management techniques can generate true cost. The Society of Management Accountants of Canada (1997), distinguishes between traditional cost accounting and activity-based costing (ABC), in their view, traditional cost accounting allocate cost based on the attributes of a single unit, allocation vary directly with the number of units produced while the ABC system focuses on the activities required for producing each product or providing each service. The Environmental Protection Agency, (1995) notes that activity-based costing is a means of creating a system that ultimately directs an organization’s costs to the products and services that required these costs to be inquired, with ABC, overhead costs are traced to products and services by identifying the resources, activities, and their costs and quantity for producing output. ABC is the best costing technique for environmental cost accounting since environmental cost are based on individual activity and the true cost of each activity can be determine.

In addition, the quality of environmental cost information is enhanced by providing environmental cost data that is more relevant for strategic decision making. Environmental cost/management accounting information is relevant for decision making such that it performs essential roles in internal decision making in the area of product/process related decision making, investment projects decision making and correct product costing (Vasanth, *et al*, 2012).Whilst acknowledging that there are scanty empirical literatures in this area of environmental cost accounting for strategic business decision, our study is among the first to investigate the relevance of environmental cost accounting information and strategic business decision in Nigeria.

3. Methodology

Eierle and Wolfgang (2013) stress that decision making and analysis of cause and effect relationship requires very specific models and sound accounting information. With this in mind, our empirical model institutes a linear relationship between environmental cost accounting information and strategic decision. The environmental cost accounting information are the remediation or restoration costs, waste management costs, compliance and environmental management costs, employees health and satisfaction costs, customers-perception and relationship costs and investment financing costs associated with business firms. Strategic decision is that which revolves around the many aspect of strategic decision such as process and product pricing design, performance evaluation amongst others. In line with the above, a linear model of environmental cost accounting information and strategic decision is given below:

$$y_t \quad = \quad a_0 + a_1\beta_1 + a_2\beta_2 + a_3\beta_3 + a_4\beta_4 + \ldots.. U_t$$

Where $y_t$is the dependent variable (Strategic Decision proxied by Product Pricing Decision) and U_t the error term. $\beta_1, \beta_2, \beta_3, \beta_4,\ldots$are the regression coefficients with unknown values to be estimated; Environmental Cost Accounting Information (Waste Management Costs, Employee Health Costs, Investment Financing Costs and Compliance and Environmental Costs) are the independent variables. A-Priori Expectation is such that β>0 (i=1 - …n). The data used covered the period 2008 through 2013 for 20 manufacturing firms in Nigeria. The model to be estimated in this paper is thus stated explicitly as below:

$STRATDEC = b_0 + \beta_1 WMC + \beta_2 EHC + \beta_3 IFC + b_4 CEC + U_t$

Where:

STRATDEC = Strategic decision (proxied as product pricing decision)

WMC = Waste Management Costs

EHC = Employee Health Costs

IFC = Investment Financing Costs

CEC = Compliance and Environmental Costs

The analysis was done in order of precedence: correlation analysis: to measure the degree of linear association between the independent and dependent variables; analysis of variance tests; goodness of fit test through R^2 and test of statistical significance concludes this section.

4. Results & Discussion

The results and discussion are presented in order of precedence as below:

a. Correlation Analysis

Table 1. Correlation for Waste Management Costs &Strategic Decision

Pearson Correlation			Variance Inflator Factor (VIF)	Tolerance Level (TL)
Zero	Partial	Part		
.720	.810	.774	1.000	1.000

Source: SPSS Regression Output

Table 1 above revealed that there is a positive relationship between waste management costs and strategic decision with value (Zero: .720, Partial: .810 and Part: .774) correlations respectively. The VIF and TL values are 1.000 and 1.000 respectively suggesting that there is multicollinearity between waste management costs and strategic decision given that the VIF and TL values are closer to 1.

Table 2. Correlation for Employee Health Costs &Strategic Decision

Pearson Correlation			Variance Inflator Factor (VIF)	Tolerance Level (TL)
Zero	Partial	Part		
.814	.713	.810	1.065	1.071

Source: Output from OLS Regression

Table 2 above revealed that there is a positive relationship between employee health costs and strategic decision with value (Zero: .814, Partial: .713 and Part: .810) correlations respectively. The VIF and TL values are 1.065 and 1.071 respectively suggesting that there is multicollinearity between employee health costs and strategic decision given that the VIF and TL values are closer to 1.

Table 3. Correlation for Investment Financing Costs &Strategic Decision

Pearson Correlation			Variance Inflator Factor (VIF)	Tolerance Level (TL)
Zero	Partial	Part		
.714	.860	.765	1.014	1.023

Source: SPSS Regression Output

Table 3 above revealed that there is positive relationship between investment financing costs and strategic decision with value (Zero: .714, Partial: .860 and Part: .765) correlations respectively. The VIF and TL values are 1.014 and 1.023 respectively suggesting that there is multicollinearity between investment financing costs and strategic decision given that the VIF and TL values are closer to 1.

Table 4. Correlation for Compliance and Environmental Costs &Strategic Decision

Pearson Correlation			Variance Inflator Factor (VIF)	Tolerance Level (TL)
Zero	Partial	Part		
.912	.815	.732	1.099	1.055

Source: SPSS Regression Output

Table 4 above revealed that there is a positive relationship between compliance and environmental costs and strategic decision with value (Zero: .912, Partial: .815 and Part: .732) correlations respectively. The VIF and TL values are 1.099 and 1.055 respectively suggesting that there is multicollinearity between compliance and environmental costs and strategic decision given that the VIF and TL values are closer to 1.

b. Analysis of Variance Tests

This section provides the analysis of variance (ANOVA) results

Table 5. ANOVA Result (Goodness of Fit Statistic)

Model	Sum of Squares	Df	Mean Square	F.	Sig.
1 Regression	672169651.369	2	168042412.842	154.714	.000[b]
Residual	79853535.263	18	3071289.818		
Total	752023186.632	20			

Source: SPSS Regression Output

a. Predictors: (Constant), WMC, EHC, IFC, CEC

b. Dependent Variable: STRATDEC

Table 5 summarizes the information about the variation of the dependent variable explained by the existing model and the residual that indicates the variation of the dependent variable that are not captured by the model. It can be observed that the independent variables give a significant effect on the dependent variable, where f-value is 154.714 with a p-value of less than 0.05 (i.e. $p<0.000$) indicating that, overall, the model is significantly good enough in explaining the variation in the dependent variable. To ensure the statistical adequacy of the model, the goodness of fit can also be measured by the square of the correlation coefficient also called R^2.

c. Goodness of fit test through R^2

This section provides the goodness of fit test through the R^2

Table 6. Goodness of fit through R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.845[a]	.794	.777	1752.5095771

Source: SPSS Regression Output

a. Predictors: (Constant), WMC, EHC, IFC, CEC

As shown in table 6 above, adjusted $R^2$is .777, indicating that the independent variables in the model are explaining 78% variation on the dependent variables. Thus, we can understand that the model is providing a good fit to the data.

d. Test of Statistical Significance

This section reports the test of statistical significance of the variables used in the study

Table 7. Regression Results for Dependent and Independent Variables

Variables	Coefficients	t-statistic	Prob.
Constant	1154.858	.780	.433
WMC	.024	.375	.711
EHC	.563	2.204	.037
IFC	.563	2.147	.041
CEC	.939	9.911	.000

Durbin Watson: 1.027

Source: SPSS Regression Output

As shown in table 7 above, of the four variables tested, WMC (p-value = .0711), EHC (p-value = .037), IFC (p-value = .041) and CEC (p-value = .000) were statistically significant at 5 percent or lower. The result also showed that Waste Management Costs (WMC) has a coefficient of .024 and it is significant at 5% level. This implies that waste management costs have a positive relationship with strategic decision (proxied by product pricing decision). Employee Health Costs (EHC) has a coefficient of .563. The positive significance of the coefficient is a clear indication that employee health costs increases product pricing. Investment Financing Costs (IFC) significantly affects strategic decision at 5% level of accuracy. It is a major finding that investment financing costs affects strategic decision (product pricing). Another interesting finding is that Compliance and Environmental Costs (CEC) has a positive relationship with strategic decision. The value of compliance and environmental costs has a coefficient of .563 and it is significant at 5% level. This implies that a unit increase in the compliance and environmental costs will result to 0.563 unit decreases in product pricing vice-versa. The Durbin Watson (Dw) test with value 1.027 shows support for the presence of first order serial correlation in the model since d_l<DW<du 1.236<1.54.

5. Conclusion and Recommendations

This paper examined the relevance of environmental cost accounting information and strategic business decision in Nigeria using data from the manufacturing sector during the period 2008 through 2013. The outcome of the result suggests that waste management costs, employee health costs, investment financing costs and compliance and environmental costs have positive relationship with strategic decision. This implies that environmental costs accounting information is value relevant in making strategic business decision. Thus, it was recommended that firms should constantly reposition their accounting system in order to provide information on environmental costs so that the true costs in an organization can be ascertained and properly allocated. Also, due attention should be paid to waste management costs, employee health costs, investment financing costs, compliance and environmental costs and all environmental related costs by manufacturing concerns since they influence strategic decision.

6. References

Abiola, J.O. & Ashamu, S.O. (2012). Environmental Management Accounting Practice in Nigeria: National Petroleum Corporation (NNPC). *European Scientific Journal,* Vol. 8(9):76-93.

Bassey, E.B.; Sunday, O.E & Okon, E.E (2013). The impact of Environmental Accounting and Reporting on organizational performance of selected oil and gas companies in the Niger Delta Region of Nigeria. *Research Journal of Finance and Accounting,* Vol. 4(3):57-73.

Burritt, R.L., Halim, T. and Schaltegger, S. (2002). Towards a Comprehensive Framework for Environmental Management Accounting- Links between Business Actors and Environmental Management Accounting Tools. *Australian Accounting Review,* Vol. 12(2): 39-50.

Ditz, Daryl; Janet Ranganathan & Darryl Banks R. eds. (1995). *Green Ledgers: Case Studies in Corporate Environmental Accounting.* Washington World Resource Institute.

Eierle, B., Wolfgang, S. (2013). The role of management as a user of accounting information: implications for standard setting. *Journal of Accounting and Management Information Systems,* Vol. 4(3):112-122.

EPA (1995). *Environmental Cost Accounting for Capital Budgeting: A Benchmark Survey of Management Accountants.* United States, EPA, Washington, D.C.

EPA, (1996). *Valuing Potential Environmental Liability for Managerial Decision-making: A Review of Available Techniques*. United States Environmental Protection Agency, Office of Pollution Prevention and Toxic, Washington.

Gale, Robert J.P. & Peter K. Stokoe (2001). Environmental Cost Accounting and Business Strategy. In Chris Madu (Ed.) *Handbook of Environmentally Conscious Manufacturing* (Kluwer Academic Publishers).

Graff, R.G.; Reiskin E.D. & Whitebidwell A.L.K. (1998). *Snapshots of environmental cost accounting.* A report to US EPA environmental accounting project, Boston, Tellus Institute.

KPMG, United Nations Environment Programme (UNEP) (2006). *Carrots and Sticks for Starters'. Current Trends and Approaches in Voluntary and Mandatory Standards for Sustainability Reporting.* Parktown: KPMG.

Schaltegger, S., & Burritt, R. (2000). *Contemporary Environmental Accounting: Issues, Concepts and Practices*. Sheffield. UK: Greenleaf Publishing.

SMAC (1997). *Accounting for Sustainable Development: A Business Perspective.* The Society of Management Accountants of Canada, Hamilton, Ontario.

Tapang, A.T., Bassey, B.E. & Bessong, P.K. (2012). Environmental activities and its implications on the profitability of oil companies in Nigeria. *International Journal of Physical and Social Sciences,* 2(3), pp. 285-302.

Pramanik, A. K., Shil, O. H. & Das, A.B. (2007). *Environmental accounting and reporting*. New Delhi: Deep publication PVT Ltd.

UNDSD, (2001). *Environmental Management Accounting, Procedures and Principles*. United Nations, New York.

Vasanth, V.; Selvam, M.; Lingaraja, K., Karpagam, V.; & Gaya, T. (2012). Environmental Management Accounting - A Decision Making tool. *International Journal of Management,* Vol. 3(3): 144-151.

Welford, R. (1998). "*Environmental Issues and Corporate Environmental Management" 1-12 in Welford R. (eds),* Corporate Environmental Management 1: System and Strategies. Earth Scans Publication Ltd, London.