

Internal Control System and Working Capital of Manufacturing Firms in Nigeria: An Empirical Review

Chukwuani Victoria Nnenna

Department of Accounting, Enugu State University of Science and Technology (ESUT), Enugu, Nigeria

Onyeka, Virginia Nnenna

Department of Accountancy, Enugu State University of Science and Technology (ESUT), Enugu, Nigeria

Nwankwo, Carol

Department of Accountancy, Enugu State University of Science and Technology (ESUT), Enugu, Nigeria

Abstract

The globalization of economies, technological advancements, complexity of business and allegations of fraudulent financial reporting have sharpened the ever-increasing attention to internal control in organizations. These developments have thus led to a continuous reflection of internal control and its importance in the development of firms. It is therefore against this background that this study's main objective is to examine the effect of internal control system on management of working capital resources of manufacturing firms in Nigeria. The descriptive survey design was adopted. The population of the study comprised of staff of 20 manufacturing firms in South East Nigeria. The Freud and Williams formula was used to determine a sample size of 246 respondents and the sample was distributed to manufacturing firms in South East Nigeria on equal basis. Data were collected using the questionnaire research instrument and interview guide. Results emanating from this study revealed that there is a significant relationship between internal control system and efficient management of working capital of manufacturing firms in Nigeria. Therefore, we conclude that effective internal control systems as observed from the findings of this paper are necessary in the effective management of working capital resources not only in Nigeria but also all over the world.

Keywords: Internal Control System, Working Capital, Manufacturing Firms, Nigeria

1.0 Introduction

As a concept, internal control is distinguished by its scope and its high level of the services offered. In the modern business world, the term internal control is being used to refer to two basic concepts: the internal control system and the internal control itself. The internal control system refers to an organized amalgamation of functions and procedures, within a complete system of controls established by the management and whose purpose is the successful function of the business (Cheung and Qiang, 2007).

The internal control system is all the methods and procedures followed by the management in order to ensure, to a great extent, as much successful cooperation as possible with the director of the company, the insurance of the capital, the prevention and the detection of fraud, as well as the early preparation of all the useful financial information. According to (Papadatou, 2005) the internal control system resembles the human nervous system which is spread throughout the business carrying orders and reactions to and from the management and it is directly linked to the organizational structure and the general rules of the business.

According to American Institute of Certified Public Accountant (AICPA) (1963) a system of internal control extends beyond those matters which relate directly to the functions of accounting and the financial statements. In addition, internal control is a systematic procedure which will lead to evaluate the degree of correlation between those established criteria and the real results of the business. Internal control, as defined from the APC (Auditing Practices Committee, 1980), is an independent examination and certification from an inspector appointed by the business to control the finances according to the legal framework established each time.

According to Miller and Bailey (1989) internal control is a systematic review and a subjective investigation of one element and encompasses the verification of the specific information as these are determined from the general practice. Thus, internal control helps the company to achieve its goals using a systematic approach of assessing the effectiveness of handling dangers. Internal control, as defined from the Hellenic Institute of Internal Auditors (H.I.I.A, 2004) is an independent, objective, adequately designed and organized procedure, which through the technical and the scientific approaches; assess how adequately the system of internal control functions. From the above definitions, it is clear that the internal control is not just a one-sided tool for

controlling the order and rightness of certain situations, but it is a method of detecting the value added up to a company, achieving the index of effectiveness and profitability of the company.

Besides, the purpose of this control is the intentional, the programmed and focused effect of the company on the current situation, so as this situation to be reformed in the future and become the one that ought to exist (Goodwin, 2004). The deviation between the already achieved and the programmed situation can also become possible through controlling the parameter of correct handling of danger situations.

Several problems militate against effective internal control system of organisational resources especially working capital of firms. The problems include poor accountability, backward economic development, ineffective legal punitive measures which leads to poor performance. The management of modern businesses therefore requires the investors to put their hard earned resources in a business that will yield the desired returns.

This is made possible by the fact that such business would operate by full adherence to the principles of good corporate governance. Some of such principles are that of internal control and fraud prevention. Aguolu (2009) sees error as an unintentional mistake. This may occur at any stage of the transaction of a business. Thus, today businesses face considerable difficulties and problems when they try to identify their strengths, assess their risk and manage uncertainties in its working capital resources.

Working capital resources concern the ability of the business to finance its short term assets and liabilities. Such a strategy needs to be very carefully managed from a finance point-of-view. Hence, our paper fills this important gap by examining effective internal control system and its relationship with efficient management of working capital of manufacturing firms in Nigeria. The subsequent sections of this paper is divided in four sections. In section two, a review of related literature was conducted. In section three, the methodology used to achieve the objective was x-rayed. Section four contains the analysis while in section five we concluded and recommendation made.

2.0 Review of Literature

Compliance is concerned with adherence to rules, applicable laws and regulations, and internal policies and procedures (Reider, 2004). However, the purpose of control devices is to ensure a planned, systematic and orderly operation (Ratliff et al., 2008). Failure to comply with those controls jeopardises the coordinated efforts that such controls promote. In addition to determining compliance with those controls, internal auditors also review and evaluate the adequacy of policies, plans and procedures. This control is the most visible and physical design to protect the organization's assets.

Reider (2004) states that achieving the optimal balance between cost and results and this is related to one of the fundamental concepts of economics, namely "scarce resources", which simply means that there is a limited supply of resources to satisfy all wants. The accomplishment of established objectives and goals for operations or programmes is concerned with results and accomplishments achieved and the benefit provided by the controls (Reider, 2004). When evaluating the effectiveness of operations, the internal auditor should ask whether the activity is achieving its ultimate intended purpose. Ratliff et al. (2008) states that internal auditors play an important role in this area because of their broad perspective of the overall organisation and its internal control systems and this means that internal auditors are in a position to assess the overall direction in which the organisation is moving, thus, for instance, suppose that corporate management, with the guidance of the board of directors, has established a policy to maintain a long-term conservative stable image in order to develop long-term customer trust and loyalty. In that case, the internal auditors are in a position to point out the inconsistencies in the organisation's operations and the apparent conflict in development (Ratliff et al., 2008).

Woolf (2007) states that many organisations produce and keep up to date charts that depict the organisational hierarchy in linear terms, such charts have the advantage of indicating most departmental functions as well as identifying the staff responsible for executing them. Robertson (2002) states that the Committee of Sponsoring Organisation (COSO) report defines internal control as a process, affected by an entity's board of directors, management and other staff, and designed to provide reasonable assurance regarding the achievement of objectives in the following three categories: reliability of financial reporting; compliance with applicable laws and regulations and effectiveness and efficiency of operations From the above it is clear that in today's complex organisation environment, the role of internal control is of such importance that an organisation (especially an administrative unit) cannot operate effectively unless it has the four fundamental concepts of COSO in place (Robertson, 2002). Those concepts are process; people; reasonable assurance and category objectives.

Since internal control consists of those systems, procedures and activities that are used within an organisation to detect or prevent errors and to safeguard assets, it is clear that most internal controls are designed and used to prevent mistakes from occurring. It should be remembered that controls only work if employees follow them, and that almost all internal controls can be circumvented or nullified by negligence or complicity. For example, if a manager decides to steal, the natural control under his supervision can easily be bypassed (Milton, 2009).

There is a direct relationship between objectives and components of internal control system. The objectives of the internal control system are what an entity strives to achieve and the components represent what is needed to achieve the objectives. For example, financial data is part of the information and communication component that is needed to manage business operations, to develop reliable financial statements and to determine whether the entity complies with applicable laws.

At the same time effective internal control system are fundamental drivers toward earnings quality (Church and Schneider, 2008). In the same vein, effective internal control system has an essential role to play in a firm's success (Jokipii, 2010) in line with the above issue; effective internal control system could also play an important role in the effectiveness of internal auditors particularly at government. All of government should improve the effectiveness of internal control system, internal audit function and organization commitment because they improve good governance (Eko and Hariyanto, 2011) in addition, such effective internal control system can provide information to management about the entity's progress, or lack of progress toward the achievement of their objectives (Verdina, 2011).

Al-Twajjry et al (2004) also found that effectiveness of internal control system helps external auditors to rely on the work of internal auditors and thereby improve their effectiveness. Therefore, internal control systems are integral component of the management processes of a public sector which should be establish in order to provide reasonable assurance that the operations are carried out efficiently and effectively. Effective internal controls systems are essential to the effectiveness of local governments operation because it deals with the activities or procedures that are designed to provide reasonable assurance that operations are performing according to plan and these can also influence the effectiveness of internal audit. COSO also provides the basic principles representing the fundamental concepts of effective internal control in five components of the framework (Candrea, 2006).

Though, Amudo and Inanga (2009) argued that the weakness of the COSO mechanism is failure to recognize Information Technology as one of the major control components of internal control system and Information Technology is very crucial to internal control framework. That is why most organizations today used Information Technology for authorization, initiation, recording and processing of transactions, because its ensures effectiveness of internal controls system and thereby making it six. At the same time advancements in technological have increased the importance placed on internal controls system (Rezaee et al, 2001). These components must be present and functioning effectively for any internal control system to achieve organizational objectives.

Several studies have been conducted research on internal control system but none of them study the impact of effective internal control system on internal audit effectiveness, particularly at local government level (Aikins 2011) for instance a study carried out by Eko and Hariyanto (2011) on the relationship between internal control system, internal audit, and organization commitment with good governance: Indonesian Case. The study consider government of Central Java province, Indonesia, consist of 35 districts with questionnaires and found that internal control system, internal audit, and organization commitment have positive significant relationship with the good governance.

Also the study carried out by Baltaci and Yilmaz (2006) on keeping an eye on sub national governments: Internal control and audit at local levels. Though the study is conceptual and found that internal control system and audit are the key components of public financial management systems for increasing efficiency and effectiveness in local government operations. In a related study carried out by Nilniyom and Chanthinok (2011) on accounting system innovation and stakeholder acceptance of Thai listed firms: Mediating internal control effectiveness used mailed survey and questionnaires for methodology. The result of the study reveals that internal control effectiveness has a positive relationship with stakeholder acceptance.

Feng et al (2009) also carried out a study on internal control and management guidance, used questionnaire and finally found that internal control quality has an economically significant effect on the accuracy of management guidance. Similarly, Aikins (2011) under take a research on an examination of government internal audits' role

in improving financial performance, in which he used the local government financial performance as dependent variable and independent variables of; the effects of years between audits, internal control adequacy, internal control system effectiveness, and evaluation of financial performance monitoring, used online survey, 387 audit department head and questionnaire for methodology. The research results indicate significant relationships between years between audits, internal control adequacy, internal control effectiveness and evaluation of financial performance monitoring on local government financial performance.

Internal control has the following characteristics: it is a process – not an end in itself, but a means to an end. This means that internal control is a dynamic function operating every day. It is operated by people. This means that an organisation may have policy manuals, procedures, forms, computer-controlled information and accounting and other features of control, but people make the system of internal control work at every level of management. Therefore, staff or management establish the objectives, put control mechanisms in place and operate them. It provides reasonable assurance. It can help to prevent and detect failures, but it cannot guarantee that they will never happen. It is not an absolute assurance. Because people operate the controls and breakdowns can occur.

It is therefore, against the foregoing that this study will sought to provide answer to the questions how far does effective internal control system has significant relationship with efficient management of working capital of manufacturing firms in Nigeria?

3.0 Methodology

This study is essentially investigative and explanatory in that it seeks to find the stakeholders perception on the relationship between effectiveness of internal control on working capital of Nigerian manufacturing firms. The population of this study is made up of the staff of quoted manufacturing firms in the South East of Nigeria who are up to supervisory level. This included those who have responsibility for ensuring effective internal control in the organisation as they get works done through others. The number however is infinite and an appropriate sample size was determined.

The accuracy of statistical inference based on sample depends on the adequacy of sample and sampling method. The problems of estimating the characteristics of a population would be very simple if the data were uniform and having the same pattern as the population. The Freud and Williams formula as cited in Nwabuokey (2001:76) was used to determine the sample size. The Freund and Williams formula as cited in Nwabuokey (2001:77) is given as:

$$n = \frac{Z^2 pq}{e^2}$$

Where:

- n = sample size
- p = percentage of positive response
- q = percentage of negative response
- e = margin of error
- Z = level of confidence

A pilot survey was conducted by the researcher, this was due to the infinite population of the study, with 20 copies of the questionnaire distributed twice to a random sample of the population in selected quoted manufacturing firms located in South East Nigeria. The pilot survey helped the researcher determine the sample size used in this study. To generate the p and q for the sample size formula, the participants in this pilot study were requested to give their general impression of internal control systems in their various organisations. Eighty (80) percent of the respondents returned positive rating, while twenty (20) percent gave negative rating.

From the result of the pilot study, the p (0.8) and the q (0.2) were generated. At $\alpha = 0.05$ (margin of error), $Z = 1.96$. Thus, we had:

$$\begin{aligned} n &= \frac{(1.96)^2(0.8)(0.2)}{(.05)^2} = \frac{3.8416(0.16)}{.0025} = \frac{0.6147}{.0025} \\ &= 245.86 \\ &= \mathbf{246} \end{aligned}$$

Thus, the total sample size for this study was two hundred and forty-six (246)

Our papers main constructs were to examine the relationship between internal control system and working capital of Manufacturing Firms in Nigeria. The questionnaires used were measured through the use of Likert-scale questionnaire. The basic scale design therefore consisted of a Likert- scale with five scale points. The Pearson Product Moments Correlation Coefficient was used to test Hypothesis.

4.0 Analysis

This section deals with the test of our paper’s hypothesis. Four steps were utilized in the exercise. The steps involved first, restating the hypotheses in Null and Alternate forms; second, stating the decision rules; third, interpreting the results of the estimated models; and fourthly, using the decision criteria to accept or reject the null/ alternate hypotheses as relevant.

Step One: Restatement of Hypothesis in Null and Alternate Form

Ho: There is no significant relationship between internal control systems and efficient management of working capital of manufacturing firms in Nigeria

Ha: There is a significant relationship between internal control system and efficient management of working capital of manufacturing firms in Nigeria

Step Two: Decision Rule

1. Accept Ha and reject Ho where p-value less than 0.05.
2. Accept Ho and reject Ha where p-value greater than 0.05

Step Three: Interpretation of Result (Estimated Model Results)

Table 1 SPSS Pearson Moment Correlation Results

	There is no significant relationship between internal control systems and efficient management of working capital of manufacturing firms in Nigeria
Correlation Coefficient	.935(**)
Sig. (2-tailed)	.000
N	225

Source: SPSS Results

From table 1, the result reveals that from the perception of respondents that there is a significant relationship between internal control systems and efficient management of working capital of manufacturing firms in Nigeria (correlation coefficient (R) = 0.935). This was further supported by p-value = 0.00 < 0.05.

Step Four: Decision

The alternate hypothesis is accepted while the null hypothesis rejected, thus indicating that there is a significant relationship between internal control systems and efficient management of working capital of manufacturing firms in Nigeria.

5.0 Conclusion and Recommendation

Internal control is an integral part of an organization’s governance system and ability to manage risk, which is understood, effected, and actively monitored by the governing body, management, and other personnel is to take

advantage of the opportunities and to counter the threats to achieving the organization's objectives. Internal control is a crucial aspect of an organization's governance system and ability to manage risk, and is fundamental to supporting the achievement of an organization's objectives and creating, enhancing, and protecting stakeholder value. High-profile organizational failures typically lead to the imposition of additional rules and requirements, as well as to subsequent time-consuming and costly compliance efforts.

Internal control is often perceived and treated as a compliance requirement, rather than as an enabler of improved organizational performance. Effective internal control can help organizations improve their performance by enabling them to take on additional opportunities and challenges in a more controlled way. Therefore, there is a need to have a better understanding of how organizational performance relates to effective risk management and the role and effectiveness of internal control.

Organizations always face uncertainty in achieving their strategic, operational, and other objectives. However, they can decide the level of risk they wish to be exposed to in the pursuit of those objectives. Proper risk assessment and internal control assist organizations in making informed decisions about the level of risk that they want to take, and implementing the necessary controls, in pursuit of the organizations' objectives. However, risks should not be taken without an explicit understanding of their potential consequences for achieving an organization's objectives. Therefore, decision makers require relevant and reliable information, produced through the internal control system, to effectively implement and execute their strategic and operational plans. Therefore, this study concludes that effective internal control systems as observed from the findings of this paper are necessary in the effective management of working capital resources not only in Nigeria but also all over the world. This study therefore recommends that there should be a link achievement of the organization's internal control objectives to individual performance objectives. Each person within the organization should be held accountable for the achievement of assigned internal control objectives. This will increase the relationship between internal control system and efficient management of working capital of manufacturing firms in Nigeria.

References

- Aguolu, O. (2009). Designing an Effective Internal Audit Group. *Association of Accountancy Bodies in West Africa*, 1(4), 60-76.
- Aikins, S. K. (2011). An examination of Government Internal Audits' Role in Improving Financial Performance. *Public Finance and Management*, 11(4), 306-337.
- Al-Twajjry, A. A. M., Brierley, J. A. & Gwilliam, D. R. (2004). An Examination of the Relationship between Internal and External Audit in the Saudi Arabian Corporate Sector. *Managerial Auditing Journal*, 19(7), 929 -944.
- American Institute of Certified Public Accountants (AICPA) (2002). *Statement on Auditing Standards No. 99: Consideration of Fraud in a Financial Statement Audit*. New York: AICPA
- Amudo, A. & Inanga, E. L. (2009). Evaluation of Internal Control Systems: A case Study from Ghana. *International Research Journal of Finance and Economics*, 3, 124 -144.
- Baltaci, M. & Yilmaz, S. (2006). Keeping an eye on Subnational Governments: Internal control and audit at local levels. *World Bank Institute Washington*
- Candrea, P. J. (2006). Controlling internal controls. *Public Administration Review*, 66(3), 463-465.
- Cheung, T.C. & Qiang, C. (2007). Internal audit at Guangdong Nuclear Power Joint Venture Company Limited. *Managerial Auditing Journal*, 12(4): 219-226
- Church, B. K. & Schneider, A. (2008). The effect of auditors' internal control opinions on loan decisions. *Journal of Accounting and Public Policy*, 27, 1-18.
- Eko, S. & Hariyanto, E. (2011). Relationship between Internal Control, Internal Audit, and Organization Commitment with Good Governance: Indonesian Case. *Managerial Auditing Journal*, 32(5): 6-13
- Feng, M., Li, C. & McVay, S. (2009). Internal control and management guidance. *Journal of Accounting and Economics*, 48, 190-209
- Goodwin J.T. (2004). The use of Internal Audit by Australian Companies. *Managerial Auditing Journal*, 21(1): 81-101.
- Hellenic Institute of Internal Auditors (2004). *Internal Control System*. (Available at [http://www.hiia.gr/Assessed on 12/05/15](http://www.hiia.gr/Assessed%20on%2012/05/15))
- Jokipii, A. (2010). Determinants and consequences of internal control in firms: a contingency theory based analysis. *Journal of Management Governance*, 14, 115-144.
- Miller, M.A & Bailley L.P. (1989), *Comprehensive GAAS Guide 1989*. London: Harcourt Brace Jovanovich
- Milton, S.F. (2009). *An Internal Auditor's Manual and Guide*. USA: Prentice- Hall.

- Nilniyom, P. & Chanthinok, K. (2011). Accounting System Innovation and Stakeholder Acceptance of Thai listed Firms: Mediating Internal Control Effectiveness. *Review of Business Research*, 11, 26 – 37.
- Nwabuokei, P.O. (2001), *Fundamental of Statistics*, Enugu, Chuka Printing Company Ltd
- Papaatou, T. (2005). *Internal and external control of Joint Stock Companies*. Greece: Wiley Blackwell
- Ratliff, R.L., Wallace, W.A., Loebbecke, J.K. & McFarland, W.G. (2008). *Internal auditing principles and techniques*. USA: The Institute of Internal Auditors, Inc.
- Reider, H.R. (2004). *The complete guide to operational auditing*. USA: John Wiley & Sons, Inc.
- Rezaee, Z., Elam, R. & Sharbatoghlie, A. (2001). Continuous auditing: The Audit of the Future. *Managerial Auditing Journal*, 16(3), 150-158.
- Robertson, J.C. (2002). *Fraud examination for managers and auditors*. USA: Viesca Books
- Rumelt, R. P. (1997). *Toward a Strategic Theory of the Firm*: Oxford: Oxford University Press.
- Verdina, G. (2011). Risk management as a tool for securing Internal Control in the process of study program implementation at Higher Education Institutions. *Economics and management*, 16, 987- 991.
- Woolf, E. (2007). *Auditing Today*. Europe: Prentice-Hall.