

# A CRITICAL EVALUATION OF CONTINUOUS MONITORING OF CRITICAL FINANCIAL REPORTING CONTROLS: A CASE OF A NATIONAL PORT AUTHORITY IN AN EMERGING ECONOMY

**Celani John Nyide**

Department of Finance and Information Management, Durban University of Technology  
South Africa, E-mail: [nyidec@dut.ac.za](mailto:nyidec@dut.ac.za)

**Abstract:** Critical Financial Reporting Controls (CFRCs) are developed and implemented by entities to enhance and maintain sound financial reporting across all core financial processes. This entity in this case study performs CFRCs on a quarterly basis in selected regions. There seems to be a problem in some regions regarding continuous monitoring of the CFRCs. Senior management is aware of the quarterly monitoring of the critical financial reporting controls and the benefits of such reviews. However, relatively few senior managers have realised the value added by the continuous monitoring of the CFRCs. The approach used in this study was qualitative and exploratory in nature with a sample size of ten participants. The results show that even though the CFRCs are effective, there are critical control processes which are not value adding. Whilst the National Port Authority (NPA) embraces the continuous monitoring of critical financial reporting controls, the influence by senior management to junior management to override critical controls emerged as a key feature in this study.

**Key words:** Continuous Monitoring; Critical Financial Reporting Controls; Financial Controls; National Port Authority

## INTRODUCTION

Continuous monitoring of the critical financial reporting controls is increasingly becoming a potent elixir to enhance the overall control environment (Brown, 2018). National Port Authorities (NPAs) generally have in place many processes that are designed to ensure that people advocate a robust control environment (Parola, Satta, Penco & Profumo, 2013). The rationale behind strengthening the control environment within the organisation is to inculcate in people the culture of ethical commitment and technical competence. Continuous monitoring of the critical financial reporting controls is part of good governance and it reinforces investor confidence and thus lead to economic growth.

Business executives recognize the need to continuously monitor their business operations to limit their exposure to compliance and operational risk,

especially in this environment of accelerating change and complexity (Eisenbach, Haughwout, Hirtle, Kovner, Lucca, Plosner, 2015). Management instinctively understand that better monitoring means fewer surprises.

Cangemi (2012) posits that executives are responsible for keeping their organisation out of the headlines (reputational risk), boosting profits amidst increasing global competition (superior business performance and results), navigating continuously evolving compliance imperatives (regulatory risk), and improving the overall efficiency of their business operations (operational risk). The organisation under study, is not without its share of internal control breakdowns. This calls for management to set the tone at the top by communicating a positive view of control consciousness to employees within the organisation. Cascarino and van Esch (2012) assert that to ensure the effectiveness of the control process, the

control system must be monitored to assess the quality of the system's performance over time. Deficiencies must be reported directly to top management timeously. It may be argued that management alone, cannot influence a potent control environment within the organisation without effective internal communication with employees. People are what make the internal control work. While the responsibility for good internal control ultimately rests with management, all agency personnel play important roles.

### RESEARCH PROBLEM

The NPA under investigation in partners with its Internal Audit Unit (IAU) to monitor the risks and effectiveness of control measures on a regular basis so that the entity can react dynamically to changing conditions. The entity has, in recent years, been found wanting with regards to internal audit findings relating to the following financial reporting processes:

- Procure to pay;
- Financial Close Out Process;
- Payroll;
- Order to cash; and
- Fixed assets

Discussions are held with management to determine whether controls of the above critical financial reporting controls are functioning as intended and whether new risks have surfaced since the previous reviews. External Auditors ordinarily place reliance on the work performed by IAU on critical financial reporting controls on selected processes. There is therefore a need to establish the causes of the audit findings. It may therefore be argued that continuous monitoring is effective when it is able to send a signal to management that there is a breakdown which may lead to the inadequacy of the internal control, thus significantly affect the achievement of the organisation's objective.

### AIM AND OBJECTIVES

#### Aim

The aim of this paper is to use a case of an NPA in an emerging economy, to explore management's perceptions

of continuous monitoring of the Critical Financial Reporting Controls. To achieve this objective, the following objectives have been set:

#### Objectives

- To determine management's perceptions of the continuous monitoring of the Critical Financial Reporting Controls at an NPA in an emerging economy.
- To explore the effectiveness of the continuous monitoring of the Critical Financial Reporting Controls at an NPA in an emerging economy.
- To make recommendations on how to improve the effectiveness of the Critical Financial Reporting Controls within the NPAs in emerging economies.

### LITERATURE REVIEW

#### Definition of key Terms

The key terms applicable to this study are defined below as follows:

#### *Continuous Monitoring*

Continuous monitoring enables management to continually review business processes for adherence to and deviations from their intended levels of performance and effectiveness (Cangemi, 2012). Continuous monitoring is viewed as an: "automated, ongoing process" that enables management to: Assess the effectiveness of controls and detect associated risk issues; Improve business processes and activities while adhering to ethical and compliance standards; Execute more timely quantitative and qualitative risk-related decisions; and Increase the cost-effectiveness of controls and monitoring through IT solutions (Cangemi, 2012). French (2014) states that continuous monitoring is a detective, preventive and even predictive data analytics-based feedback mechanism used by management to ensure that internal financial controls operate as designed and that business transactions are processed and prescribed. Continuous monitoring should be ongoing so that exceptions can be highlighted and dealt with closer to the event rather than a Quarter or Year End (Edmonds & Leece, 2017). For exceptions to be identified early,

continuous monitoring should be performed weekly or monthly, however, this is dependent on the objectives of the senior management. It may therefore be argued that continuous monitoring cannot be fully realised when testing of controls is performed manually. Automation is a pre-requisite for this level of monitoring given the amount of transactions daily across all locations where the entity has regional footprints (Farkas & Murthy, 2014).

### ***Critical Financial Reporting Controls (CFRC)***

CFRCs are controls that are regarded as key risk and are critical for the success or failure for the business (Dowdell, Herda & Notbohn, 2014). These CFRCs are industry-specific as they are applicable to the NPA under investigation. The objective of financial reporting processes is to prevent or eliminate key risks through identifying and mitigating or managing the underlying root causes of failures that could lead to financial misstatements. CFRCs are tools used to exercise Internal Controls over Financial Reporting (ICFRs), they are an internal control structure and a part of corporate governance (Kim & Zhang, 2014). Therefore, CRFC can be defined as a process designed to provide reasonable assurance regarding the achievement of the company's objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting; compliance with applicable laws and regulations (Hastuti, Ghozali & Yeyetta, 2016).

### **Internal control practices for improved financial reporting**

The goal of having a strong system of financial control is to promote the institution's ability to reach its objectives, providing reliable financial data, safeguarding assets and records, evaluating operational efficiency through budget, organizational control and encouraging adherence to prescribed policies and regulations (Wakiriba, Ngahu and Wangoki, 2014). Financial control activities refer to all policies and procedures adopted by the management of an entity to aid in achieving management objectives. Therefore, the financial control system provides assurance to the management of the reliability of accounting data employed in making decisions. Management make decisions which help formulate company policies. When

policies have been formulated, management ought to implement and communicate them to all company stakeholders and ensure that they are consistently adhered to. Padilla *et al.* (2012), as cited in Wakiriba *et al.* (2014) in their study on financial sustainability for non-profit organizations, state that effective financial management practices are essential in enhancing transparency, efficiency, accuracy, accountability which enable an organization to achieve its objectives. Dowdell *et al.* (2014) state that effective financial controls including the maintenance of proper accounting records help ensure that the institution is not unnecessarily exposed to financial risks and that the financial information is used only within the business. According to Hastuti *et al.* (2016), it is a general belief that properly instituted systems of financial controls improve the reporting process and give rise to reliable reports which enhance the accountability function of management of an entity. To substantiate the above assertions, Farkas and Murthy (2014) point out that all aspects of financial management in public sector organizations should operate in an environment where there is confidence in the veracity of the financial information being used. It may therefore be argued that the public sector requires robust systems of financial controls underpinned by adequate and effective combined assurance.

According to Nyakundi, Nyamita and Tinega (2014), organizations establish systems of internal control to help them achieve performance and organizational goals, prevent loss of resources, enable production of reliable reports and ensure compliance with laws and regulations. Mihaela and Lulian (2012) argue that the internal control is not only an accounting function, but it involves people and relations between them. It is an additional system that helps management to financial reporting. The internal control system can be viewed as dynamic and evolving. Internal control as management responsibility drives compliance with legislation in force, the decisions made by company management, ensures proper functioning of the internal activity, resource efficiency, prevents and controls potential risks. Thus, while the internal control is viewed as providing the reasonable assurance, that is, it cannot probably detect all errors in financial reporting. Mihaela and Lulian (2012) contend that an audited financial statement does not mean that there is no

distortion within, as auditors give reasonable assurance that financial statements reflect a fair and accurate view according to the reporting requirements. Auditors are also charged with the responsibility to give reasonable assurance to the users of the audited financial statements that the set of financial statement are not affected by material misstatement because of fraud or error. It may therefore be pointed out that internal control risk cannot be removed, but auditors, by virtue their experience can provide advice to management for improving it (Al-Zubi, Shaban & Hamdallah, 2014).

### **The importance of continuous monitoring of internal control processes**

Traditionally, financial reports were only produced on a periodic basis often months after the occurrence of the actual events they represent (Temitope, Olugbenga & Zaccheus, 2016). Warren (2008), as cited in aforementioned authors argued that traditional testing of controls of internal auditing has been performed on a historical and cyclical basis, long after business activities have taken place. Unmonitored controls tend to deteriorate over time. Monitoring, as defined in the (COSO, 2009) framework, is implemented to help ensure that internal control continues to operate effectively. Organizations may select from a wide variety of monitoring procedures, including but not limited to: periodic evaluation and testing of controls by internal audit; continuous monitoring programs built into information systems; analysis of, and appropriate follow-up on, operating reports or metrics that might identify anomalies indicative of a control failure; supervisory reviews of controls, such as reconciliation reviews as normal part of processing; self-assessments by boards and management regarding the tone they set in the organization and the effectiveness of their oversight functions; audit committee inquiries of internal and external auditors, and quality assurance reviews of the internal audit department (Rikhardsson & Dull, 2016). Charlton and Marx (2009) points out that organisations that adopt a continuous monitoring approach can increase the efficiency of compliance with controls and identify relevant issues on a timely basis. The authors further argue that continuous monitoring is the responsibility of management and aids management in meeting its fiduciary responsibilities.

Continuous monitoring enables management to continually review business processes for adherence to and deviations from their intended levels of performance and effectiveness (Deloitte, 2010). Continuous monitoring and the visibility it provides enable top-level management and key stakeholders to improve governance through ongoing evaluation of critical control factors (Rikhardsson & Dull, 2016). Continuous monitoring does not imply true, real-time, nonstop monitoring and reporting. Instead, it means implementing monitoring and oversight processes that provide a clear picture of security state at a given time, while also providing a mirror of control effectiveness over time (Cangemi, 2012).

### **The impact of ineffective internal controls on organisational performance**

The impact of ineffective internal controls has serious ramifications in terms of the reliability of the financial information to be used for decision-making. According to Feng, Li, McVay and Skaife (2014), many research studies document negative consequences of maintaining ineffective Internal Controls over Financial Reporting, such as lower earnings quality, higher cost of equity and debt, higher management and analyst forecast errors, and inefficient investments. Lambert, Leuz and Verrecchia (2007), as cited in Cheng, Goh and Kim (2014) expect ineffective internal control to have a negative effect on the firm's operational efficiency for two non-exclusive reasons. First, ineffective internal control leads to greater information risk, which increases agency problems and the likelihood of misappropriation of corporate resources by managers and other employees. In addition, ineffective internal control in the form of inadequate physical security, inadequate segregation of duties, and inadequate documentation further allows the misappropriation of resources by employees. Cheng *et al.* (2014) argue that the negative market reaction to the disclosure of material weaknesses, as documented in prior research is partly due to investors' concerns that material weaknesses can harm the firm's operational efficiency and hence future profitability.

According to Skaife, Veenman, and Wangerin (2013), reliable financial reporting is an important mechanism used by firms to communicate credible information to

outsiders for their use in resource allocation decisions and in evaluating management's performance. On the other hand, Hogan and Wilkins (2008), as cited in Skaife *et al.* (2013) argue that when firms have ineffective ICFR, managers have more discretion over accounting estimates and methods due to the lack of formal policies and procedures that restrict managers' accounting choices. Feng, McVay and Skaife (2015) contend that effectiveness of ICFRs is also a function of resources, as firms with limited resources are more likely to under-invest in the systems and controls and to have staffing problems that lead to ineffective ICFR. According Darrough, Huang and Zur (2012), the quality of management's decisions might be reduced by ineffective controls. Feng *et al.* (2009), as cited in Darrough (2012) find that managers in firms with ineffective internal controls provide less accurate guidance. The afore-mentioned authors further argue that low-quality accounting information due to internal control weaknesses is a manifestation of underlying problems in the management and corporate governance of a firm. It may therefore be deduced that the following factors have an impact on the ineffective internal controls on organisational performance.

### **The effectiveness of internal controls on organisational performance**

According to Hastuti *et al.* (2016), the concept of the adequate confidence is that no system will be absolutely secured while the internal control system is run individually and the individuals possibly make mistakes. Mistakes or errors in financial statement, fraud, collusion or management override depend on the quality of the system created by the organization to secure the adequate confidence towards the financial statement. The afore-mentioned authors further argue that internal control towards the financial statement is deemed effective if it is preoccupied with the mechanism of the internal control within the organization, so that it can detect potential fraudulent financial statement. Deepak (2008), as cited in Nwannebuikwe and Nwadiakor (2016) views internal audit as an independent and objective assurance and consulting function designed to help an organization to achieve its objectives. Internal audit is part of the internal control system put in place by management of an organisation to ensure adherence to stipulated work

procedure and as aid to management. Bongani (2013) adds that internal control procedures help to place reliance on financial reporting, improves operational efficiency and effectiveness while at the same time ensuring compliance with regulations and laws.

Ayom (2013), as cited in Oppong, Owiredun, Abedana (2016) wholly agrees with this submission and expanded the conception that a sound and effective internal control over the administrative, operational, financial, procurement, systems and procedures contribute significantly to the success of organizations. Vijayakumar and Nagaraja (2012), as cited in Nwannebuikwe and Nwadiakor (2016) appear to be concerned more with the outcome of effective internal audit system which they argue helps in achieving performance, profitability and prevents loss of revenue particularly in public sectors. While Belay (2007), as cited in Nwannebuikwe and Nwadiakor (2016) believe attributes of effective internal control include organizational independence, a formal mandate (approved audit charter), unrestricted access, sufficient staff, existence of audit committee, stakeholder support, professional audit standards and unlimited scope. Nwannebuikwe *et al.* (2016) state that the internal audit's main objective is to evaluate effectiveness of financial and operational control, confirm compliance with the company policies, procedure, protect assets, verify the accuracy and consistency of organization's external and internal reports. According to Modibbo (2015), a well-designed and adequate internal control is the driving force behind the achievement of the organisation's objectives and accomplishment of its mission. It ensures the reliability of financial reporting and efficiency of operations and compliance with laws and regulations. An effective internal control is the cornerstone through which management make short/long term strategic financial and operational decisions.

### **RESEARCH METHODOLOGY**

For this study, qualitative research method was adopted. The adoption of qualitative research method was influenced by the research problem which seeks to explore management perceptions of continuous monitoring of the critical financial reporting controls at an NPA in an emerging economy. The nature of the problem for this

study cannot be quantified and identified. It is for this reason that in-depth open-ended interviews, discussions, analysis and interpretation were utilised. The continuous monitoring of the critical financial reporting controls resides with management in the Finance Department at the investigated entity. Therefore, purposive sampling was deemed appropriate for this study since one’s judgement was used when selecting the participants (Creswell, 2015).CFRCs is a process owned by various process owners across five divisions within the entity. In-depth interviews were conducted with ten individual participants who are the competency leaders of this critical process from 18 April 2017 to 04 May 2017. According to Creswell (2015), a sample size of between 3 to 10 participants for phenomenology studies is recommended. All participants

requested their names and positions not to be identified. To ascertain reliability, this study used a myriad of resources to augment the reliability of information provided by the participants (Tracy, 2013). This study relied on the data collected through interviews and internal audit, Operations committee (OPCO) and Executive committee (EXCO) reports and Standard Operating Procedures (SOPs) to ensure construct validity of information.

**FINDINGS**

The results are analysed in terms of the study themes and objectives that were set for this study. Table 1 shows the theme, objectives and interview questions that were used in this study.

**Table 1**  
**Themes, objectives and research questions**

<i>Themes</i>	<i>Objectives</i>	<i>Interview questions</i>
Management perceptions of the continuous monitoring of CFRCs.	To determine management’s perceptions of the continuous monitoring of Critical Financial Reporting Controls	What are the management perceptions of the continuous monitoring of Critical Financial Reporting Controls at NPA?
Effectiveness of the continuous monitoring of CFRCs	To explore the effectiveness of the continuous monitoring of the Critical Financial Reporting Controls at an NPA in an emerging economy.	Do you think that continuous monitoring of Critical Financial Reporting controls is effective at NPA?  What effective follow-up procedures are in place at NPA to ensure that appropriate action is taken in response to changes in risk and control assessments?

The results are thus discussed in the following section according to the themes developed and research objectives:

**Theme 1. Management perceptions of the continuous monitoring of CFRCs**

The participants were asked “what are the management perceptions of the continuous monitoring of Critical Financial Reporting Controls at NPA”? The results show that the all participants hold the same view as to the importance of the continuous monitoring of critical financial reporting controls. This is evidenced by their verbatim responses which emanated from the in-depth interviews conducted. The participants do agree that continuous monitoring of critical financial reporting

controls is well received by management and they take pride in making sure that the critical controls are effective. However, one participant believes that there could be some improvements in the way they are monitored. “Currently it relies solely on the participant’s ratings at either 1, 2 or 3. Rating 3 being effective and that is purely based on management’s perceptions. So, I can rate my controls as 3 and then they go through for finalisation as all 3. Whether that is a truth or not, I do not know if people (management) is checking these things.” Participant. Temitope et al. (2016) argue that continuous monitoring in effect helps management with the timely identification of errors, fraud, and creation of a stronger internal control environment across the enterprise. Therefore, the results indicate that most participants show a universal understanding of the importance of the continuous monitoring of critical financial reporting

controls. Most participants agree that continuous monitoring “*is part of the review that gets done in terms of how CFRC processes work and to see the adequacy thereof*”. Agca (2006), as cited in Temitope *et al.* (2016) points out that continuous audit has a reducing effect on audit fees paid to the auditors, travel and accommodation expenses, however, such financial benefit requires high structural expenses.

## **Theme 2. Effectiveness of the continuous monitoring of CFRCs**

The study finds that 90% of participants agree that the continuous monitoring of critical financial reporting controls is effective at the entity being investigated. This was after a question was posed “do you think that continuous monitoring of Critical Financial Reporting controls is effective at NPA”? However, one Participant, representing 10%, argued that “*In terms of the effectiveness, if we have rated controls less than 3, I would not say it is totally effective; I would probably say, if I were to give it a rating scale in terms of percentage, it is sitting between 80% and 90%*”. This argument is based on one participant’s experiences with regards to Control Self-Assessments (CSAs) within Finance space in terms of the effectiveness of the CFRCs. According to Temitope *et al.* (2016:59), the key to continuous monitoring is that the process should be owned and performed by management, as part of its responsibility to implement and maintain effective control systems. It can, therefore, be concluded that continuous monitoring of the critical financial reporting controls is effective. The effectiveness of the critical controls is evidenced by the quarterly CFRC audit reports which have been in the “satisfactory space” for the last three consecutive years.

The participants were also asked “what effective follow-up procedures are in place at NPA to ensure that appropriate action is taken in response to changes in risk and control assessments?” The study found that 80% of the participants accede to the statement that effective follow-up procedures are in place. The participants share the same view that “*when we have a change in risks and control assessments, the Internal Control Champion keeps track of the issues and follows up on them*”. Participant no.10, added that “*as Internal Control, we monthly, follow up with management*

*regarding their findings*”. The study also reveals that 20% of the participants are not sure whether effective follow up procedures are in place. They do not know how issues relating control breakdown are escalated to senior management. Risks are the happenings that threaten the achievement of objectives. So, management should ensure each risk is assessed and handled properly to achieve its objectives (Gamage, 2014).

## **Summary of key findings**

It can be concluded under Theme 1 that senior management and management interviewed in this case study embrace the continuous monitoring of critical financial reporting controls in Finance Department, Internal Control Division, Enterprise Risk Management Division, Information Technology Division, and Human Resources Division. There was a general response by the participants that management embed the critical financial reporting controls and assess risks on material misstatements, errors, or omissions in the financial statements. It is through the embedment of the continuous monitoring of critical financial reporting controls that many management points and housekeeping issues have come down.

It can also be concluded under Theme 2 that there is effective continuous monitoring of the critical financial reporting controls at the investigated NPA. This is evidenced by the “satisfactory” quarterly audit reports. There is, however, a need for improvement in terms of how Transnet Port Terminals can fully utilise SAP Governance, Risk and Compliance system to automate all the processes with a view to making the system more effective and efficient. In terms of decision making, two participants argued that “*is it difficult to pin point where the decisions are made and proactivity can end up with you being in trouble. So, it is better not to make a decision*”.

## **LIMITATIONS**

A single-case study design was used in this research to enable the researcher to have an insight of the subject under investigation. In cases where there were no other cases available to benchmark against, the researcher adopted the single-case design. A single-case design is subject to criticism because it lacks robustness and the

ability to provide a generalising conclusion in instances where the events are not prevalent. Attempts were made to minimise limitations by acquiring the information from multiple sources to enhance and support the previous results and to show numerous sources of evidence through replication.

Moreover, this study was limited to only 10 managers who participated. In-depth interviews were used as the primary source of data collection. It was, therefore inevitable that subjectivity could occur and result in potential bias. The researcher made a concerted effort to maintain consistency during the in-depth interviews. The factual accuracy of management perceptions in this study were confirmed by management after the recorded interviews which were later followed by the coding process.

### IMPLICATIONS

This study acknowledges that the management of the investigated entity embrace in mind and appearance the continuous monitoring of the CFRCs. However, there is no scientific evidence to demonstrate that the research of this nature has ever been conducted within the National Ports Authorities. It can be concluded that, for management to have a reasonable assurance on the level of adequacy of the design and effectiveness of critical controls within the entities' financial reporting processes in response to the significant changes in risk profile, there is a need for continuous (full automation) of CFRCs.

### RECOMMENDATIONS FOR FUTURE RESEARCH

A qualitative approach was used in this study as the nature of the problem could be not be quantified and identified. It is therefore suggested that a mixed research approach be explored to provide a detailed evaluation of the continuous monitoring of CFRCs. A longitudinal case study approach can also be employed for future research to explore how and where decisions are made within NPAs. It was not crystal clear to management whether decisions regarding policies and standard operating procedures' changes are made. This approach would help provide a detailed understanding of how decisions pertaining to the policies and procedures pertaining to

the effectiveness continuous monitoring of the CFRCs is made to arrest prevailing confusion to the interviewed managers. The approach may also be used for future research to investigate why compliance to controls is perceived as slowing down.

### CONCLUSION

The findings of this study have elicited further research on the effectiveness of the continuous monitoring of critical financial reporting controls to enhance and maintain sound financial reporting across all core financial processes. This study revealed that management fully embeds the CFRCs and assesses risks on material misstatements, errors, and omissions in the financial statements. This study therefore widens the scope of identifying measures that will help automate controls to eliminate inaccuracies, prevent fraud, errors and financial misstatements in the financial reporting processes. It can therefore be concluded that continuous monitoring should be owned and performed by management without fail to maintain effective control system which provides management with timely and more reliable information for decision-making.

### REFERENCES

- Al-Zubi, Z., Shaban, O.S. and Hamdallah, M.E. (2014). The Extent of Employee's Compliance to the Internal Control System on the Reliability and Creditability of Financial Statements. *Journal of Scientific Research & Reports*.3 (7): 939 – 952.
- Bongani, N. (2013). Application of Internal Controls in NGOs: Evidence from Zimbabwe. *Journal of Finance and Accounting*, 1 (2), 39 – 47.
- Brown, A. (2018). The financial reporting of the National Fisheries Corporation of Tuvalu: The case for alternative indigenous reporting mechanisms. *Marine Policy*, 88: 93 – 100.
- Cangemi, M.P. (2012). Internal Audit's Role in Continuous Monitoring. *The EDP Audit, Control, and Security Newsletter*, 41 (4): 1 – 8.
- Cascarino, R. and van Esch, S. (2007). *Internal Auditing: An Integrated Approach*. Second Edition. Juta and Co. Ltd.
- Charlton, G. and Marx, B. (2009). An investigation into the impact of continuous auditing on external auditors of



- the four largest banks in South Africa. *South African Journal of Accounting Research*, 23 (1): 45 – 65.
- Cheng, Q., Goh, B.W., and Kim, J.B. (2014). Internal Control and Operational Efficiency. 2015 Canadian Academic Accounting Association (CAAA) Annual Conference. Available at SSRN: <https://ssrn.com/abstract=2275753>.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2009). Guidance on Monitoring Internal Control Systems. [Online]. Available from: [https://www.coso.org/Documents/COSO\\_Guidance\\_On\\_Monitoring\\_Intro\\_online1\\_002.pdf](https://www.coso.org/Documents/COSO_Guidance_On_Monitoring_Intro_online1_002.pdf). [Accessed 12/09/2016].
- Cresswell, J. W. (2014). *Educational Research: Planning, Conducting and Evaluating Quantitative, and Qualitative Research*. Fourth Edition. Pearson. New York.
- Darrrough, M., Huang, R. and Zur, E. (2012). *Internal Control Weaknesses in the Market for Corporate Control: Disclosure vs. Propensity*. Baruch College, City University of New York.
- Deloitte (2010). Continuous monitoring and continuous auditing: From idea to implementation. [Online]. Available from: <https://www2.deloitte.com/content/dam/Deloitte/ny/Documents/audit/Monitoreo%20continuo%20y%20auditoria%20continua.pdf>. [Accessed 18/10/2016].
- Dowdell, T.D., Herda, D.N., and Notbohn, M.A. (2014). Do management reports on internal control over financial reporting improve financial reporting? *Research in Accounting Regulation*, 26: 104 – 109.
- Edmonds, J.E. and Leece, R.D. (2017). An investigation of the effectiveness of the division of corporate finance as a monitor of financial reporting. *Research in Accounting Regulation*, 29: 44–51.
- Eisenbach, T., Haughwout, A., Hirtle, B., Kovner, A., Lucca, D., and Plosner, M. (2015). Supervising Large, Complex Financial Companies: What Do Supervisors Do? *Federal Reserve Bank of New York Staff Reports*, JEL classification: G21, G28, 729: 1 – 41.
- Farkas, M. and Murthy, U.S. (2014). Nonprofessional investors' perceptions of the incremental value of continuous auditing and continuous controls monitoring: An experimental investigation. *International Journal of Accounting Information Systems*, 15: 102–121.
- Feng, M., Li, C., McVay, S.E. and Skaife, H. (2015). Does Ineffective Internal Control over Financial Reporting affect a Firm's Operations? Evidence from Firms' Inventory Management. *The Accounting Review*, 90 (2), 529 – 557.
- Gamage, C.T., Lock, K.L. and Fernando, A.A.J. (2014). A Proposed Research Framework: Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 1 (5): 25 – 44.
- Hastuti, T.W., Ghozali, I. and Yuyetta E.N. (2016). The Effect of International Financial Reporting Standards on the Real Earnings Management and Internal Control Structure as a Moderating Variable. *International Journal of Economics and Financial Issues*, 6(4): 1807 – 1814.
- Kim, J. and Zhang, L. (2014). Financial Reporting Opacity and Expected Crash Risk: Evidence from Implied Volatility Smirks. *Contemporary Accounting Research*. 31 (3): 851 – 875.
- Mihaela, D. and Lulian, S. (2012). Internal Control and the Impact on Corporate Governance, in Romanian Listed Companies. *Journal of Eastern Europe Research in Business & Economics*, 1 – 10.
- Modibbo, S.A. (2015). Impact of Internal Audit on the Effectiveness of Internal Control System of Tertiary Education Institutions in Adamawa State Nigeria. *International Journal of Humanities Social Sciences and Education*, 2: 140 – 156.
- Nwannebuike, U.S. and Nwadiolor, E.O. (2016). Evaluation of Effectiveness of Internal Audit in the Nigerian Public Sector. *European Journal of Business, Economics and Accountancy*, 4 (3): 44 – 58.
- Nyakundi, D.O., Nyamita, M.O., and Tinega, T.M. (2014). Effect of Internal Control Systems on Financial Performance of Small and Medium Scale Business Enterprises in Kisumu City, Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1(11): 719 – 734.
- Oppong, M., Owiredu, A., Abedana, V.N. and Asante, E. (2016). The Impact of Internal Control on the Performance of Faith-Based NGOs in Accra. *Research Journal of Finance and Accounting*, 7 (12): 2222 – 2847.
- Parola, F., Satta, G., Penco, L. and Profumo, G. (2013). Emerging Port Authority communication strategies: Assessing the determinants of disclosure in the annual report. *Research in Transportation Business & Management*, 8: 134–147.
- Rikhardsson, P. and Dull, P. (2016). An exploratory study of the adoption, application and impacts of continuous auditing technologies in small businesses. *International Journal of Accounting Information Systems*, 20: 26– 37.
- Skaife, H.A., Veenman, D. and Wangerin, D. (2013). Internal Control over Financial Reporting and Managerial Rent

- Extraction: Evidence from the Profitability of Insider Trading. *Journal of Accounting and Economics*, 55 (1): 91 – 110.
- Temitope, A.O., Olugbenga, O.M. and Zaccheaus, S.A. (2016). Achievement of Assurance, Monitoring and Risk Assessment through Continuous Auditing for Effective and Efficient Management. *European Journal of Business, Economics and Accountancy*, 4 (1): 55 – 67.
- Tracy, S.J. (2013). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*. Chichester, West Sussex, UK: Wiley-Blackwell.
- Wakiriba, J.W., Ngahu, S. and Wagoki, J. (2014). Effects of Financial Controls on Financial Management in Kenya's Public Sector: A Case of National Government Departments in Mirangine Sub-County, Nyandarua County. *Journal of Business and Management*, 16 (10): 105 – 115.