



An Evaluation Of The Internal Control System Of Cash In Management And Growth Of Small Businesses In Kenya: A Case Of Nairobi Small Businesses

Dr. Julius Bichanga Miroga

Senior Lecture & post graduate coordinator, School of Business & Economics, Mount Kenya University.
P.O BOX 52255 CODE - 00100 GPO, NAIROBI, KENYA
E-mail: juliu_kirui2002@yahoo.com

ABSTRACT:

This study was conducted to evaluate the internal controls system of cash in the management and growth of the small businesses in Nairobi. The specific objectives of study were: To examine whether small businesses have effective and efficient internal control system for cash and to examine whether there is relationship between the age of an enterprise and the effectiveness of its system of the internal control of cash. The study used stratified random sampling method to select the sample size. The businesses were selected depending on their location such as Nairobi North, Nairobi South and the Central Business District. The study found that only 12.5% of the businesses have responsibilities for collection and deposit preparation functions adequately segregated from those for recording cash receipts and general ledger entries. The remaining 87.5% did not segregate the duties (table 4.1). This was the same case for responsibilities for cash receipts functions adequately segregated from those for cash disbursements as well as for responsibilities for disbursement preparation and disbursement approval functions adequately segregated from those for recording or entering cash disbursements information on the general ledger. The study

found that the age of a business has a positive influence on internal control on cash. About 77% of the variation in internal controls on cash is as a result of age of the business. Thus, the older the business, the stronger it's internal control on cash and vice versa. This analysis is shown in Table 1. The lower p-values show that the relationship is significant.

KEY WORDS: Effective and Efficient internal control system.

1.0 BACKGROUND OF THE STUDY

According to a World Bank report, small businesses are defined as enterprises that employ between eleven and fifty people at any given time (World Bank, 2003). The Committee of Sponsoring Organizations of The Tread way Commission (1992) defines internal control as "a process effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations; reliability of financial reporting; compliance with applicable laws and regulations."



According to Alvin et al. (2003), in a survey carried out by KPMG on fraud prevention and detection mechanisms on 5,000 firms in the US, it was found that the most effective fraud detection mechanism was detection through notification by employees. The second most effective fraud detection mechanism was detection by the use of internal controls.

Similarly, the American Institute of Certified Public Accountants (1987) argues that internal controls are often thought of as the primary defense against fraud. In addition, internal controls aid organizations in the following objectives: One, to safeguard the assets of the firm; two, to ensure the accuracy and reliability of accounting records and information; three, to promote efficiency and effectiveness in the firm's operations.

According to the National Commission on Fraudulent Financial Reporting (1987), for an internal control system to be considered effective, it should encompass preventive, detective, and corrective controls: Good internal controls make it difficult to conceal fraudulent activities in the organization.

Controls within an organization are meant to encourage efficient and effective use of its resources, including personnel, to optimize the company's goals. Another aspect of efficiency and effectiveness is accurate information for internal decision making. A variety of types of information is used for making critical business decisions. In addition, effective and efficient internal controls help in safeguarding assets and records of the company against theft, misuse or damage (Alvin et al. 2003).

Bronson et al (2006) argues that not only do internal controls aid to combat fraud but they also impact on the firm's financial performance. As a result, weak internal controls are positively related to poor financial performance and effective and efficient internal controls are positively related to superior financial performance. These authors concluded that holding other factors constant, evidence suggests that the system of internal control in place significantly impact on the financial performance of a business.

Although large businesses are more likely to experience economic crime, fraud has been found to be relatively more costly to small businesses. The damage caused by fraud costs the business heavily in terms of collateral damage, reputation damage and a decline in the credit rating of the business (Thomas and Gibson, 2003; PricewaterhouseCoopers, 2003).

According to a study carried out by the Association of Certified Fraud Examiners (2004), it was proved empirically that total losses emanating from fraud are 100 times greater in small firms than in large firms. Despite an alarming increase in incidents of fraudulent activities, many small businesses have not taken proactive measures to better their businesses fraud prevention and detection mechanisms. In addition, Thomas and Gibson argue that internal controls have not been accorded proper attention in small businesses (Thomas and Gibson, 2003).

Since investigating and detecting fraud is a challenging endeavor, many organizations are now opting for a more viable strategy of fighting fraud. This strategy involves investing in fraud prevention mechanisms (Wells, 2004). As the most basic preventive measure against fraud,



Loebbeck and Willingham (1989) developed a conceptual model to evaluate the possibility of occurrence of fraud in an organization. The researchers concluded that assessment of an organization's internal controls is significant in evaluating the possibility of the occurrence of fraud.

Similarly, Moyes and Baker (2003) conducted a study on fraud auditing techniques. They concluded that the most effective fraud audit techniques were those yielding evidence about the existence and the strengths of internal controls. Buijink et al. (1996) states that internal control systems should be seen as an area of priority by business managers and business owners. In addition, there is a need for more research approaches on fraud prevention whose findings will add to the current body of knowledge and equip business managers with better fraud prevention techniques.

According to Haskins (1987), an organization's size has a direct impact on the kind of internal controls kept. For example, due to fewer numbers of employees in small businesses, it is difficult to establish adequate separation of duties. It would also be unreasonable to expect small businesses to have internal auditors. However, when various components of the internal control systems are analyzed, it becomes evident that most of the internal control components are applicable in both small and large enterprises. Haskins, 1987 recommends that internal controls in small businesses can be strengthened if the owner carries out the following duties: Signing of cheques only after carefully reviewing the supporting documents, reconciliation of the bank statements, approving credit, and writing off bad

debts only after proof has been given of real efforts having been made to collect the debts.

In addition, (Ge and McVay, 2005; Kinney et al. 1989; Geiger and Taylor 2003; and Krishnan, 2005) argue that the status of internal controls in place is not only affected by the size of the enterprise but also by the age of the enterprise, and the financial resources controlled by the enterprise. Ge and MacVay (2005) argue there is a positive correlation between older firms and effective internal controls. The older a firm is, the more experience it acquires and the better its system of internal control. Kinney et al. (1989) argue that the more resources a firm has, the more effective and efficient is its system of internal control. This is because of the fact that availability of resources warrant the organization to hire the services of auditors, consultants and skilled personnel who can improve the internal controls system in place.

1.1 STATEMENT OF THE PROBLEM

According to a US study by the Association of Certified Fraud Examiners (ACFE-2004), internal controls seem to be given little attention by operators of small businesses. This failure to design and implement effective internal controls has largely been attributed to limited resources that often make small businesses overlook the benefits of internal controls. In the ACFE study of businesses in the US which had reported cases of fraud, 48% of frauds occurred in small businesses and 93% of all frauds were related to asset misappropriation.

According to Marden et al. (1997), small businesses have limited monetary and personnel resources and the owner must be careful to protect



those resources. Effective internal controls will therefore help small businesses manage their resources and ensure operations are efficient and effective. Marden argues that, when it comes to small businesses, all frauds start with the owners. This happens when the owner becomes too trustful with his/ her employees or when the owner becomes too detached from the business.

Studies conducted in the US on internal controls in small businesses have shown that small businesses maintain ineffective and inefficient systems of internal control. These studies have indicated that there is a positive correlation between fewer resources controlled by an enterprise and ineffective internal control. In addition, these studies have also indicated that there is a correlation between the age of the enterprise and the nature of the system of internal control in place (Geiger and Taylor 2003; Krishnan 2005). Given that small businesses in the US have inefficient internal controls, it is highly likely that a similar situation occurs in Kenya. In addition, it is likely that small businesses in Kenya have experienced fraud as a consequence.

This study aims to establish the extent to which small business keep internal controls system for cash. This study will examine whether there is any correlation between the age of the business and the effectiveness of the system of internal control for cash.

2.0 LITERATURE REVIEW

2.1 EVOLUTION OF INTERNAL CONTROLS

Donald (2006) states that the internal control story goes back many decades beyond the Sarbanes-

Oxley Act (SOX). Donald narrates that earlier, internal control requirements were incoherent. This is because the internal control requirements were issued without specifications as to whose benefit those controls existed, and to what end. As a result, internal controls were only adopted to comply with the legal framework. Later, attention started shifting from purely a compliance issue to the benefits of keeping effective internal controls. Focus moved from state corporate law to federal law after the enactment of the Foreign Corrupt Practice Act (FCPA- 1977). Donald argues that this act added to the Securities and Exchange Act a specific requirement that public companies both maintain accurate books of accounts and implement a reasonable system of internal controls.

The Securities and Exchange Commission (SEC) (1976) main concern in the 1970's was about adequacy of internal controls and corporate accountability. This concern was as a consequence of the Watergate Scandal which elicited questions on transparency and accountability of corporate managers over assets, especially as it related to foreign and domestic bribery and illegal political campaign contributions. With more misbehavior publicized, congress responded with the FCPA. In 1979, with more accounting fraud cases coming into the public limelight, the SEC responded with a proposal which required that management evaluate and report on its internal controls. However, this proposal was later withdrawn.

Caremark (2001) states that the boards of directors were not entrusted with the responsibility of monitoring over the internal controls. However, the boards of directors were required to respond to signs of misrepresentations of true and fare view of the financial positions of their companies. This



came in the wake of increasing cases of financial misreporting especially among banking institutions.

According to Donald (2006), The Securities and Exchange Commission (SEC) continued to express concerns and proposed further evaluation in order to upgrade the quality of financial statements. In the mid 1980s, an aggressive SEC enforcement program focusing on management integrity ensued, and Chaired by newly departed SEC commissioner, which made a series of recommendations to address problems in the internal controls environment. In 1988 the SEC introduced again the requirement on management to evaluate and report on its internal controls. However, once again this proposal was not implemented. Instead, The Committee of Sponsoring Organizations of the Treadway Commission (COSO) committed to develop a private sector framework that would give more substance to what good internal controls should be came into being. Its report, *Internal Controls: an Integrated Framework*, was released in 1992, and now plays a significant role under the Sarbanes-Oxley.

Caremark (2001) adds that the Sarbanes-Oxley Act imposes internal control obligations requiring the management to certify the accuracy of disclosures. In addition, company managers must also affirm that they are responsible for internal controls, they have designed such controls to ensure that material information is brought to their attention, they have evaluated its effectiveness in the last 90 days, they have presented their conclusions about its effectiveness, and they have discussed in the report any changes in internal controls during the period under review. Donald (2006) argues that evaluating internal controls of

different organizations' structures required that a benchmark with which to compare the effectiveness of a particular organization's internal controls be available, this benchmark has since then been proposed to be COSO's integrated framework.

Albridge and Colbert (1994) state that to complement COSO's integrated framework, Auditing Standard No.2 (AS-2) was promulgated by the Sarbanes-Oxley to regulate the public company audit process. This audit standard set a de facto standard requiring the management to evaluate both the breadth and depth of internal controls. According to Albridge and Colbert, AS-2 recommends that internal controls must provide reasonable assurance that there are no material weaknesses that could lead to material misstatements in the financial statements. AS-2 calls for both preventive and detective controls to counter the risk of material misstatements.

2.2 COMPONENTS OF INTERNAL CONTROLS

Empirical researches conducted by various authors agree on the following to be the components of internal controls: Control environment, risk assessment, control activities, communication and monitoring (Michael, 2004; Steven, 2000; Alvin, 2003, Kenneth, 2005; Raquel, 2005).

However, according to Zabihollah (1995), majority of the researchers on internal controls used or are reported to be referring to the Committee of Sponsoring Organizations of the Tradeway Commission (COSO) report on internal control integrated framework. This report emphasizes the importance of internal control in achieving an entity's objective and providing the

impetus for entities to refocus attention on their systems of internal Control in an attempt to ensure reliable financial reporting process. Thus, the COSO report is the benchmark for evaluating effective and efficient internal controls internal control.

According to the COSO report, the interrelated components of internal control must be present and functioning properly in order to have an effective internal control system. The interrelated components of internal controls include: the first component of internal control is the Control environment. This is the foundation of the other components of internal control. The control environment supports the other components of internal controls. The control environment consists of actions, policies and procedures that reflect the overall attitude of the top management towards internal controls. Proper internal control should be reinforced by the management by modeling the way on how the organization should be run based on the underlying policies and procedures. The Management should set a proper example through their day to day actions that will enable the junior staff to emulate them.

According to the COSO report, the control environment is supported by: Integrated ethical values which include management actions and policies to reduce or remove incentives and temptations that might lead to illegal, dishonest, or unethical acts. Integrity and ethical values can be reinforced through communication of the entities value and employees through policies, and statement of code of conducts which can be reinforced during hiring of new employees, seminars, forums etc. There should be commitment to competence through hiring of employees with appropriate skills and experiences

to be able to carry out their duties successfully. The management philosophy should be in such a way that they communicate clearly on the importance of internal control.

There should be an independent board of directors to oversee the actions of management. This board should be free of interference from both the internal and external sources. The board's audit committee should be a watchdog to ensure proper internal control are kept and updated from time to time. For efficient internal control environment, there should be proper assignment of authority and responsibilities. This might include assigning particular jobs to a particular employee so that he/she might be held accountable incase of misappropriation or misuse of assets.

The human resources department is also considered a critical component of the internal control environment. The human resources department should ensure that it screens its employees to ensure the organization recruits and retains trustworthy and honest employees.

The method in which personnel are hired, evaluated, trained, and promoted becomes an important aspect of the internal control system. Proper screening of employees during interviews will ensure that organizations hire people of good morals and values and who are likely to easily adapt to the underlying organizational values. For example, proper evaluation and compensation of employees brings about fairness in the organization because none of the employee will feel underappreciated hence they will not want to engage in activities like perpetrating fraud which will make them even with other employees.

The second component of internal control is risk assessment According to the COSO report (1992),

risk assessment entails proactive investigations and identification of both internal and external risks facing the organization. Risk assessment enables management to understand the risks the organization is exposed to and therefore react in a timely manner.

All business organizations regardless of their size, structure, or nature of the industry face a diversity of risks. This is because the business environment is dynamic and constantly prone to changes. Management of organizations should proactively conduct risk analyses so that they can spot likely risks and devise measures to mitigate them. Identifying and analyzing risks is therefore an important element of the internal control system. Failure to forecast risks and suggest possible remedies weakens an organization's internal control system.

The third component of internal control is the control activities. The COSO report (1992) defines control activities as "policies and procedures that help to ensure that necessary action are taken to address risks facing the organization." This report identifies three categories of control activities. These control activities include: operating controls, financial information controls, and compliance controls. Operating control activities include: segregation of duties, proper authorization of transactions, adequate documents and records, Physical control over assets and independent checks on performance.

Financial information control activities help to ensure reliable financial reporting process and safeguarding the entities assets. Compliance control activities are designed to ensure that the organization complies with applicable laws and

regulations. According to Alvin et al. (2003) there should be a proper separation of duties in the organization. This may include separation of custody of assets from accounting. Alvin et al. argues that a person who has custody of assets should not be permitted to account for them. This will help to counter the risk of him taking the assets and falsifying the financial statements to relieve him of the risk of being caught.

For example, if the cashier receives cash and is responsible for data entry for receipts and sales, it is possible for the cashier to take the cash and fail to record sales. There should be separation of the authorization of transactions from the custody of related assets. A person who authorizes transaction should be separated from having control over the assets. The same person should not authorize the payment of a vendor invoice and also sign the check to authorize payment of the bill.

Power (1997) states that transactions should be properly authorized, authorization can either be general or specific. Under general authorization, it is important that management establishes policies and procedures that the organization will adhere to. This policies and procedures may include credit limit, and fixed reorder points for making acquisitions. Specific authorization can only be applied in individual identified transactions. Approvals are made on a case by case basis, comparison of quantities of inventories in hand to a master file or reorder point level should be carried out from time to time.

McMullen (1996) argues that there should also be a separation of information technologies duties from the user department to prevent potential overlaps of duties. McMullen argues that it is

imperative that companies separate major information technologies related functions from key user department functions. The responsibility for designing accounting software programs should be in the information technology department while the duties to update information in the computer system should be under the accounting system.

Kenneth (2005) states that all transactions carried out by the organization should be properly recorded and documented. For proper controls to be designed that will allow for an efficient monitoring of an audit trail there should be adequate records and documentation. As a result, both documents of original entry and records upon which transactions are entered are important. Inadequacy in maintenance of those documents brings about inefficient control.

These documents should be pre-numbered consequently to facilitate control of missing documents and enable faster tracking of these documents. These documents should be prepared as soon as the document is executed to reduce chances of misstatement accompanied with long intervals between transaction execution and preparation.

Kenneth argues that measures should be taken to ensure proper controls of assets. The management should ensure that assets are not left unprotected as this makes them vulnerable to theft or physical damage. Alvin et al. (2003) argues that it is important to ensure that information is only accessible to those individuals who deserve to access it. For this reason, passwords should be assigned to individual users and this password should be changed from time to time. Inventories should be kept in storerooms and a store clerk

assigned to protect the inventories from theft. Where the store is under the use of competent personnel this further reduces the chances that inventory could suffer obsolesce or expire without being noticed.

The fourth component of internal control is information and communication. According to the COSO report (1992), this component of internal control emphasizes on proper flow of information in the organization. Emphasis is made that communication should flow in all directions in an organization. Personnel who are affected by the internal control system should be educated on the various components of the internal control system, how the internal control system works and their roles to ensure that the organization maintains an effective internal control system.

The fifth and final component of internal control is monitoring. According to the COSO report (1992), this component of internal control requires that the internal control systems are monitored both on periodic and ongoing basis. This type of control oversees the other four controls mentioned. Internal controls are dynamic and change from time to time. There is a need for these controls to be reviewed from time to time. Without independent checks the personnel may ignore the control in place, override controls or intentionally fail to abide by the laid down procedures. Internal controls should be monitored by management to ensure that they are operating as intended and that they are modified when need arises. The duty of establishing criteria against which to monitor and evaluate the four mentioned component of internal controls is bestowed with the management. Deficiencies noted should be reported to the individual responsible for the function so that corrective measures can be taken.



2.3 RELATIONSHIP BETWEEN A FIRM'S AGE AND INTERNAL CONTROL

According to Ge and McVay (2005) the experience of the firm in terms of its time duration in business has been found to be positively correlated to efficient and effective internal controls. Young firms have been found to have less efficient systems of internal control. This has been due to the fact that their main focus is to survive and to be able to make profit in the foreseeable future. As a result, there is less emphasis on designing and operating effective and efficient systems of internal control.

Ge and McVay further argue that small businesses have less elaborate accounting procedures, attaches little values to ethical code of conducts, have inadequate separation of accounting duties and are unable to hire experienced staff to better their systems of internal control. On the other hand, Beasley et al. (2000) argue that older firms seem to have more effective and efficient internal controls. According to Beasley, as the firm continues to operate, employees become more experienced, and acquire more expertise though experience and formal training.

Similarly, Ge and Mcvay (2005) argue that as the firm grows the management becomes more sensitive to the system of internal control as the need to control the acquired assets becomes imperative. For example, as the firm experience high inventory turnover, it becomes imperative to have an elaborate system of control to track the day-to-day inventory transactions and ensure there is adequate supervision of both the incoming and outgoing inventories.

In addition, (Kinney and McDaniel 1989; Defond and Jiambalvo 1991) state that age is positively correlated with the growth of an enterprise. The more an enterprise grows the more an efficient and effective system of internal control is put in place. This is because as the firm grows, more assets are acquired and it becomes imperative for the firm to design and implement a more efficient and effective system of internal control to monitor the assets.

Defond and Jiambalvo further argue that as the firm grow, the proprietor finds it difficult to participate in all the day to day transactions of the business. This lack of participation in all the transactions of the business makes the proprietor to establish an efficient and effective system of internal control which will enable efficient and effective execution of transactions even in his absence.

Finally, (Frankel et al. 2002) found that older and bigger firms tend to have more resources to hire the services of internal auditors, business consultants and qualified and experienced personnel who improve the system of internal control. In contrast, small and young firms may not have the resources at their disposal to warrant engagement of the services of auditors, business consultants and qualified and experienced personnel.

2.4 INTERNAL CONTROLS IN SMALL BUSINESSES

According to Millichamp (1986), in a situation whereby a small enterprise is owned and run by the owner, the owner controls the business and this makes the formal controls of less importance to the small business. However, as the business begin to grow and employ more people, the need

for internal control rises. Internal controls are particularly important in a small business when the owner does not participate in the day to day activities of the business.

In evaluating the design of controls in small enterprises, the auditor may discover the inadequacy of a control. However, this weakness of a control may not be a threat to the business if the owner's review compensates for an otherwise lack of a serious control. For example, a small business may not have adequate separation of duties surrounding cash. Perhaps one person deposits the cash and reconciles the bank statements. However, if the owner diligently reviews the daily summary of cash receipts, as well as the bank statements and reconciliation, the owner's review compensates for an otherwise lack of a serious control (Aldridge and Colbert, 1994).

In addition, Doyle at al. (2005) adds that irrespective of the size of the business, the basic principles of a sound internal control system do not change. A small business may not be able to apply them as strictly or to the same extent as a large business but this is no way distract from the principles the control is based on or the reason the controls are primarily needed to achieve a specific objective. In a small firm the owner should personally supervise or be directly involved with many of the checking functions described as being needed to ensure validity or accuracy in a transaction. In the case of cash receipt or payment the owner should be the sole authorizing manager for the daily banking or any check payment. The owner becomes the best internal control for safeguarding business assets.

2.5 INTERNAL CONTROLS ON CASH

When cash is received, it should be acknowledge by means of printed receipt which should have a counterfoil or a carbon receipt. The receipt should be consecutively numbered. The unused receipt should be cancelled and must not be detached from the counterfoil. No blank counterfoils should be accepted. As soon as cash is received, it should be entered in a rough cash book or dairy.

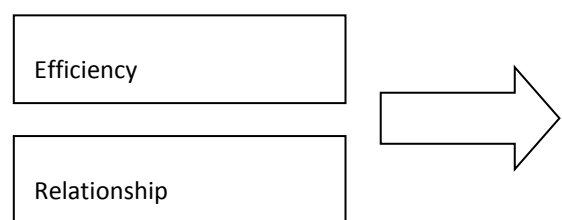
Remittances should be opened by cashier in the presence of a responsible officer. All cheques received should be crossed. Automatic tills or cash registers are very useful for checking receipts. All the receipts of the day should be deposited in the bank at the end of the day or the next morning. Bank reconciliation statement should be prepared frequently by the cashier and also by someone else. The cashier should not have any control over the ledgers.

Petty cash should be organized under the imprest system. The methods of recording the cash should be so organized that chances of misappropriation are reduced to a minimum. If travelers are permitted to collect money on behalf of the company, the issue of receipts by them and deposits of such moneys into the bank should be carefully controlled

2.7 CONCEPTUAL FRAMEWORK

Independent Variable

Dependent Variable



3.0 RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The research is exploratory in nature. In essence, exploratory studies are undertaken to better comprehend the nature of the problem since very few studies might have been considered in that area. Since not much has been done on this area, especially in Kenya, this design was deemed the best for the study.

3.2 POPULATION

The study's target population was small businesses operating in Nairobi. The study is guided by the National Social Security Fund (NSSF) register of businesses.

3.3 SAMPLE AND SAMPLING TECHNIQUE

The study used stratified random sampling method to select the sample size. The businesses were selected depending on their location such as Nairobi North, Nairobi South and the Central Business District as shown in the table below.

Table 3.1 Sample and Sampling Technique

Region	Population	Sample size	Percentage
Nairobi North	120	12	10%
Nairobi South	150	15	10%
Central Business District	125	13	10%
Total	395	40	10%

3.4 DATA COLLECTION METHODS

The study collected data through questionnaires method structured as a checklist. Checklists were prepared and questions posed to the small businesses managers. In order for the researchers to gain a deeper understanding of the internal controls systems in place, the researchers personally administered the questionnaires.

3.5 DATA ANALYSIS

In addressing the first objective of the study, the researchers used descriptive statistics: that is, data on the first objective were summarized and presented in the form of frequencies, and percentages. Then we used Pearson correlation coefficient to analyze the relationship between the age of a firm and its system of internal control on

cash. In this relationship, the independent variable was the age of a firm and the dependent variable was the strength of internal control system on cash. The researchers measured the number of internal control weaknesses by counting the number of components and subcomponents of internal control on cash that are not implemented in an organization.

4.0 DATA ANALYSIS AND FINDINGS

4.1 SEGREGATION OF DUTIES

The study found that only 12.5% of the businesses have responsibilities for collection and deposit preparation functions adequately segregated from those for recording cash receipts and general ledger entries. The remaining 87.5% did not segregate the duties (table 4.1). This was the same case for responsibilities for cash receipts functions adequately segregated from those for cash disbursements as well as for responsibilities for disbursement preparation and disbursement approval functions adequately segregated from those for recording or entering cash disbursements information on the general ledger.

The study also found that 25% of the businesses adequately segregated responsibilities for the

disbursement approval function from those for the disbursement, voucher preparation, and purchasing functions. 75% did not (table 4.1).

In terms of adequately segregating responsibilities for entries in the cash receipt and disbursement records from those for general ledger entries, the study found that 35% of the businesses did so while 65% did not.

Further, the study found that responsibilities for preparing and approving bank account reconciliations were adequately segregated from those for other cash receipt or disbursement functions in 12.5% of the firms. This aspect was not applicable in 20% of the firms while the remaining 67.5% did not adequately segregate the responsibilities for preparing and approving bank account reconciliations from those for other cash receipt or disbursement functions.

The study also found that segregation of duties principle is maintained within processing activities in only 10% of the businesses. This question did not apply to 65% of the businesses while 25% of the firms did not maintain this principle within the processing activities.

Table 4.1: Segregation of Duties

Control	Yes (%)	No (%)
Responsibilities for collection and deposit preparation functions are adequately segregated from those for recording cash receipts and general ledger entries	12.5	87.5

Are responsibilities for cash receipts functions adequately segregated from those for cash disbursements?	12.5	87.5
Are responsibilities for disbursement preparation and disbursement approval functions adequately segregated from those for recording or entering cash disbursements information on the general ledger?	12.5	87.5
Are responsibilities for the disbursement approval function adequately segregated from those for the disbursement, voucher preparation, and purchasing functions?	25	75
Are responsibilities for entries in the cash receipt and disbursement records adequately segregated from those for general ledger entries?	35	65
Are responsibilities for preparing and approving bank account reconciliations adequately segregated from those for other cash receipt or disbursement functions?	12.5	67.5
Is the segregation of duties principle maintained within processing activities?	10	25

4.2 PROCEDURAL CONTROLS

The study found that 15% of the businesses timely deposit all receipts. 85% of the businesses do not. Further, only 5% of the businesses surveyed have put up controls at each collection location, to assure timely deposit and accurate recording of collections (table 4.2). This is done by having a secure area provided for processing and safeguarding incoming cash receipts where access is only by authorized personnel. All the firms surveyed reported that they had safes or locks for keeping cash and such areas are protected and only the authorized staff can access.

On the disbursement of cash procedures, the study found that most of the controls on disbursement

are not followed. Since the businesses are small, only one person, mostly the owner, signs the cheques. Thus, there are no procedures providing for immediate notification, as applicable, to banks, when warrant or check signers leave the unit or are otherwise no longer authorized to sign.

All the business surveyed do not pay using facsimile hence no limits are set on amounts payable by facsimile signature. But 60% of the businesses reported that they have controls to ensure each cash disbursement is properly vouchered and approved by the proper authorities before the disbursement occurs.

The study also found that most of the custody procedures do not provide for maintenance of controls over the supply of unused and voided



warrants or checks, proper authorization of bank accounts, periodic reviews of and formal reauthorization of depositories, or maintenance of separate bank accounts for each fund, or if not adequate, adequate fund control over pooled cash. However, 75% of the firms reported that they keep controls and physical safeguards on petty cash funds.

The procedures for detail accounting include procedures ensuring collections and disbursements are recorded accurately and promptly in the correct fund or account in 60% of

the firms while procedures for authorizing and recording inter-bank and inter-fund transfers and providing for proper accounting for those transactions were present in only 15% of the firms.

The study found that 50% of the businesses perform review and approval of all reconciliations and investigation of unusual reconciling items by an official not responsible for receipts and disbursements, including recording evidence of the review and approval, by signing the reconciliation as illustrated in table 4.2 below...

Table 4.2: Procedural Controls

Control	Yes (%)	No (%)
Timely deposit of receipts	15	85
Put up controls at each collection location, to assure timely deposit and accurate recording of collections	5	95
have controls to ensure each cash disbursement is properly vouchered and approved by the proper authorities before the disbursement occurs	60	40
Keep controls and physical safeguards on petty cash funds	75	25
disbursements are recorded accurately and promptly in the correct fund or account	60	40
procedures for authorizing and recording inter-bank and inter-fund transfers and providing for proper accounting for those transactions were present	15	85
perform review and approval of all reconciliations and investigation of unusual reconciling items by an official not responsible for receipts and disbursements, including recording	50	50



evidence of the review and approval, by signing the reconciliation

4.3 RELATIONSHIP BETWEEN AGE AND INTERNAL CONTROL ON CASH

The study found that the age of a business has a positive influence on internal control on cash. About 77% of the variation in internal controls on cash is as a result of age of the business. Thus, the older the business, the stronger it's internal control on cash and vice versa. This analysis is shown in Table 1. The lower p-values show that the relationship is significant.

Table 3: Regression results for internal control system on Cash vs. age

Predictor	Coefficient	SE Coefficients	T	P
Constant	7.7496	0.5546	13.97	0.000
Age	-0.8014	0.1880	4.26	0.000

S=1.00047 R-Sq=78.6% R-Sq (adj) =77.0%

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

The study found that a few businesses have responsibilities for collection and deposit preparation functions adequately segregated from those for recording cash receipts and general ledger entries. This was the same case for responsibilities for cash receipts functions adequately segregated from those for cash disbursements as well as for responsibilities for disbursement preparation and disbursement approval functions adequately segregated from those for recording or entering cash disbursements information on the general ledger.

It was also found that a few small businesses adequately segregated responsibilities for the

disbursement approval function from those for the disbursement, voucher preparation, and purchasing functions. In terms of adequately segregating responsibilities for entries in the cash receipt and disbursement records from those for general ledger entries, the study found that only some of the businesses did so. Responsibilities for preparing and approving bank account reconciliations were adequately segregated from those for other cash receipt or disbursement functions in very few firms.

The study also found that segregation of duties principle is maintained within processing activities in very few businesses. On the procedural controls, the study found that most of the businesses did not keep good procedural controls. The study found that very few businesses timely deposit all receipts. Further, a few businesses surveyed have put up controls at each collection location, to assure timely deposit and

accurate recording of collections. All the firms surveyed reported that they had safes or locks for keeping cash and such areas are protected and only the authorized staff can access.

On the disbursement of cash procedures, the study found that most of the controls on disbursement are not followed. There are no procedures providing for immediate notification, as applicable, to banks, when warrant or check signers leave the unit or are otherwise no longer authorized to sign.

All the business surveyed do not pay using facsimile hence no limits are set on amounts payable by facsimile signature. But a larger portion of the businesses reported that they have controls to ensure each cash disbursement is properly vouchered and approved by the proper authorities before the disbursement occurs.

The study also found that most of the custody procedures do not provide for maintenance of controls over the supply of unused and voided warrants or checks, proper authorization of bank accounts, periodic reviews of and formal reauthorization of depositories, or maintenance of separate bank accounts for each fund, or if not adequate, adequate fund control over pooled cash.

The procedures for detail accounting include procedures ensuring collections and disbursements are recorded accurately and promptly in the correct fund or account in most of the firms while procedures for authorizing and recording inter-bank and inter-fund transfers and providing for proper accounting for those transactions were present in very few firms.

The study found that half of the businesses perform review and approval of all reconciliations

and investigation of unusual reconciling items by an official not responsible for receipts and disbursements, including recording evidence of the review and approval, by signing the reconciliation.

The study also found that the age of a business has a positive influence on internal control on cash. 77% of the variation in internal controls on cash is as a result of age of the business. Thus, the older the business, the stronger its internal control on cash and vice versa.

5.2 CONCLUSIONS

Most of the small businesses in Nairobi do not maintain good internal control systems on cash. Most of them lack proper segmentation of activities related to cash as well as the procedures related to receipt or disbursement of cash.

Those businesses that had been in the business longer than others however showed significantly better internal controls on cash. From the regression analysis performed, the study concludes that the age of a business has a positive influence on the strength of its internal control on cash.

5.3 RECOMMENDATIONS

The study recommends that small businesses establish stronger internal controls on cash as this is a critical area in business. Failure to have stronger internal controls on cash can be disastrous to the businesses in terms of more frauds from the employees.

REFERENCES



Ashton, R. 1974, 'An experimental study of internal control judgments', *Journal of Accounting Research*, Vol. 12, no.1, pp. 1143-1157

Aldridge, A & Colbert, L. 1994, 'Management's report on internal control, and the accountant's response', *Managerial Auditing Journal*, Vol. 9. no.7, pp. 27-38

Alvin, A., Randal A & Mark, B. 2003, *Auditing and assurance services: An integrated approach*, Prentice Hall Publishers, New Jersey, pp. 269-295.

American Institute of Certified Public Accountants 1987, *Professional Standards*, New York. vol. 1, pp. 30-35.

American Institute of Certified Public Accountants 1988, 'Consideration of the internal control structure in a financial statement audit', *Statement of Auditing Standards 55*, New York.

American Institute of Certified Public Accountants 1993, 'Use of COSO criteria over SAS 55 preferred for SSAE 2 Engagements', *The CPA Letter*, New York. Vol. 73, no. 7

Association of Certified Fraud Examiners. 2004, *Report to the nation: Occupational fraud and abuse*, viewed 2 March 2008, <http://www.your-call.com.au/information//documents//CFE2004.pdf>

Andersen, S. 2004. 'Despite more rigorous compliance programs, corporate fraud still strives.' *Corporate Legal Times*, pp. 1-6.

Beasley, M., Carcello, J., Hermanson, D & Lapides, P. 2000, 'fraudulent financial reporting: Consideration of industry traits and corporate

governance mechanisms', *Accounting Horizons*, Vol. 14, no. 4, pp. 441-454

Bronson, N., Carcello, V & Raghunandan, K. 2006, 'Firm characteristics and voluntary management reports on internal control', *Auditing: A Journal of Practice and Theory*, Vol. 25, no.2, pp.25-39.

Buijink, W., Maijoor, S & Meuwissen, R. 1996, 'The role, position, and liability of the statutory auditor within the European union', *Journal of Contemporary Accounting Research*, Vol. 15, no.3, pp. 385-404

Caremark, E. & Melvin E. 2001. 'The Board of Directors and Internal Controls', *Corporate Law*, Prentice Hall Publishers, New Jersey

Committee of Sponsoring Organizations of the Treadway Commission 1992, *Internal Control Integrated Framework*, viewed 12 December 2007, available at: <http://www.wikipedia.org/coso>

Defond, M & Jiambavlo, J. 1991, 'Incidence and circumstances of accounting errors', *The Accounting Review*, Vol. 66, no. 3, pp. 643-655.

Donald, C. 2006, 'Internal controls after Sarbanes-Oxley: Revisiting corporate Law's Duty of care as responsibility for systems', *A Journal of Practice and Theory*, Vol. 2, pp. 3-6.

Doyle, J., Ge, W & McVay, S. 2005, 'Determinants of material weaknesses in internal control over financial reporting and the implications for earning quality', *Accounting Horizons*, Vol 4. no. 2 pp. 27-38.



Eisenhardt, K. 1985, 'Control: organization and economic approaches', *Journal of Management Science*, Vol. 32, no.2, pp. 134-149.

Frankel, R., Johnson, M & Nelson, K. 2002, 'The relation between auditor's fees for nonaudit services and earnings management', *The Accounting Review*, Vol. 77, no. 2, pp. 71-105

Ge, W & McVay, S. 2005, 'The disclosure of material weaknesses in internal control after Sarbanes –Oxley Act', *Accounting Horizons*, Vol. 19, no. 3, pp.137-158

Geiger, M & Taylor, P. 2003, 'CEO and CFO certification of financial information', *Accounting Horizons*, Vol. 17, no. 4, pp. 357-341.

Haskins, M. 1987, 'Client control environment: an examination of auditors' Perception', *The Accounting Review*, Vol. 62, no.3, pp. 542-563.

Kenneth, R. 2005, 'Caroline's candy shop: An in-class role –play of the revenue cycle', *Journal of Information Systems*, Vol. 19, no.1, pp. 131-154.

Kinney, W., and McDaniel, L. 1989, 'Characteristics of firms correcting previously reported quarterly earnings', *Journal of accounting and Economics*, Vol. 11, no. 1, pp. 71-73

Krishnan, J. 2005, 'Audit committee quality and internal control: An empirical analysis',

The Accounting Review, Vol. 80, no. 2, pp. 649-675.

Loebbeck, K., Eining, M & Willingham, J. 1989, 'Auditors experience with material irregularities: frequency, nature and detect-ability', *Auditing: A Journal of Practice and Theory*, vol. 9, pp. 1-28.

Marden, E., Holstrum, L & Schneider, L. 1997, 'Control environment Condition and the interaction between control risk account type, and Management's assertions', *Auditing: A Journal of Practice and Theory*, Vol.16, no.1, pp. 51-68.

Maijoor, S. 2000, 'The internal control explosion', *International Journal of Auditing*, Vol. 4, pp. 101-109.

Merchant, K. 1998, *Modern Management Control Systems*, Prentice Hall Publishers, New Jersey

McMullen, D., Raghunandan. K & Rama, D. 1996, 'Internal control reports and Financial reporting problems', *Accounting Horizons*, Vol. 10, no. 4, pp. 67-75.

Millichamp, H. 1986, *An instructional manual for accounting student*, Guernsey press, Guernsey.

Mock, J & Turner, J. 1981, 'internal accounting control evaluation and auditor judgment', *Audit Research Monograph*, no.3, pp. 12-17.

Moyes, G & Baker, C. 2003, 'Auditor's belief about the fraud detection effectiveness of standard audit procedures', *Journal of Forensic Accounting*, vol. 5. no.2, pp. 199-216

Michael, J. 2004, 'How to comply with Sarbanes Oxley Section 404: Assessing the effectiveness of internal controls', *Audit Research Monograph*, no.3, pp. 60-61.

National Commission on Fraudulent Financial Reporting 1987, *Report of the national Commission on fraudulent financial reporting (Treadway report)*, viewed 1 March2008, <http://www.nccg.ru/en/site.xp/05705303056124.html>



Ogola, J. 1994, *Company Law*. (2nd ed). English Press, Nairobi.

Power, M. 1997, *The audit society: Rituals of verification*, Oxford University Press.

Pathak, J. 2005, 'Risk management, internal controls and organizational vulnerabilities',

Managerial Auditing Journal, Vol. 20, no.6, pp. 569-577.

Power, M. 1998, *The Audit Implosion: Regulating Risk from the Inside*, Oxford University Press.

PricewaterhouseCoopers 2003, *Global Economic Crime Survey*, Viewed 10 October 2007, <http://www.pwc.ch/user-content/editor/files/pub/adv/pwc-economic-crime-survey-ch-07-e.pdf>

Raquel, M., Rebecca, S & Kimberly, G. 2005, 'Internal controls and the state and local tax function.' *Journal of State Taxation*, Vol. 1, no.2, pp. 53-64.

Securities and Exchange Commission 1976, Report on questionable payments and practice, viewed 2 March 2008, <http://www.sec.gov/testimony/testarchive/1998/tsty/98.txt>

Silverstone, H & Sheetz, M. 2007, *Forensic accounting and fraud investigations for non-expert*, (2nd ed), Wiley, New Jersey.

Steven, M. 2000, 'The internal control explosion', *International Journal of Auditing*, emerald publishing group, Vol. 4, pp. 101-109