Internal Controls in the Retail Sector: A Case Study of a Leading Supermarket in Barbados

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Abstract

The literature over the last two decades has highlighted the increase in fraud and its devastating consequences for some companies worldwide. These company failures with disastrous effects for shareholders, employees and other stakeholders have brought into sharp focus the importance of internal controls. The aim of this paper is to examine the adequacy of the internal controls in place at a leading Barbadian supermarket as they relate to the company's cash operations, and detection and prevention of fraud. Information was obtained via a structured questionnaire which was completed by the company's Head Accountant in March 2012. The questionnaire covered the key aspects of internal controls including the control environment, risk assessment, monitoring, information and communication, and control activities. The research findings revealed that the internal control procedures utilized within the business are effective in safeguarding cash, and detecting and preventing employee fraud. However, for the future the Supermarket should strengthen the internal control system with the inclusion of a whistle-blowing mechanism and an employee assistance program. Further, the decision of the business to reward the ethical integrity of its employees is very commendable since this initiative will boost the morale of employees and engender a greater sense of loyalty.

Keywords: Barbados, Cash, Employee Fraud, Internal Controls, Supermarket, Whistle-blowing Mechanism

1. INTRODUCTION

The literature over the last two decades has highlighted the increase in fraud and its devastating consequences for some companies worldwide. According to the United Kingdom Audit Commission, fraud rose by approximately 38 percent in the first half of the 1990s [Tyler (1997) as cited in Owusu-Ansah et al. (2002)]. This increase has led to a corresponding expansion in the dollar value associated with fraud. For example, a study by the Association of Certified Fraud Examiners (ACFE) in the United States of America (USA) revealed that over a ten year period the cost associated with 2608 reported fraud cases totaled US$15 billion [Owusu-Ansah et al. (2002)]. In more comprehensive surveys ACFE reported that USA companies

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lost 6 percent of their revenues (amounting to approximately US$660 billion) and 7 percent of their revenues (amounting to approximately US$994 billion) to fraud in 2004 and 2008, respectively [ACFE (2004, 2008)]. With respect to employee theft alone, Walsh (2000) noted that billions of dollars are lost and stolen annually from businesses through this means. This escalation in fraudulent activities, resulting in some cases to company failure with disastrous effects for shareholders, employees and other stakeholders has brought into sharp focus the importance of internal controls for companies. Such controls not only minimize the incidence of fraud within companies, but also enable management to deal with rapidly changing economic and competitive environments, shifting customer demands and priorities, and restructuring for future growth. In effect, internal controls are utilized to keep the company on course toward profitability goals, achievement of its mission, and to minimize surprises along the way.

The aim of this paper is to examine the adequacy of internal controls in place at a leading Barbadian supermarket (hereafter termed the "Supermarket") as they relate to the company's cash operations, and detection and prevention of fraud. Fraud encompasses an array of irregularities and illegal acts characterized by intentional deception [Vanasco (1998)]. Research indicates that anyone within a company can commit fraud and fraud occurs when three conditions are present. First, when they are incentives and pressures to commit fraud; second, if the opportunity is presented for fraud to be committed and third, when an attitude exists that allows individuals to commit fraud (that is, they may rationalize their need to commit the acts). The Supermarket which is the subject of our case study was established in the small economy of Barbados in February, 1981 and has two outlets with a combined investment US$28 million and four hundred employees.

Despite the potential for fraud to undermine the profitability and survivability of businesses, there has surprisingly been limited research on fraud in the retail sector in developing countries, especially the Caribbean. Also, such research often overlooks the supermarket segment. Furthermore, there is no comprehensive study on the effectiveness of internal controls utilized by popular supermarkets in Barbados. Studies on Barbados have concentrated on the effectiveness of audit procedures in fraud detection [Alleyne and Howard (2005), Alleyne et al. (2010)]. This paper therefore seeks to extend the literature by examining the adequacy of internal controls in place at one of Barbados' leading supermarkets. In this connection, the paper will first describe and illustrate the internal control procedures for cash, and detecting and preventing fraud that exist at the Supermarket. Secondly, the paper will seek to determine whether these internal control procedures utilized within the business are effective in safeguarding cash, and detecting and preventing fraud.

Information was obtained via a structured questionnaire which was completed by the Head Accountant of the Supermarket. The questionnaire covered the key aspects of internal controls as identified by the Committee of Sponsoring organizations of the Treadway Commission (1992): control environment, risk assessment, monitoring, information and communication, and control activities.

The rest of the paper is divided into five sections: section 2 gives a review of the relevant literature; section 3 provides a detailed account of the methodology; section 4 presents the findings, whilst the discussion of the findings is the focus of section 5; a conclusion is then provided in the final section.

2. LITERATURE REVIEW

The accounting definition of internal controls refers to a company's system of checks and balances used to prevent loss and ensure adequate financial reporting. This view of internal controls was expanded by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 1992 report entitled *Internal Control – Integrated Framework.* The framework defines internal controls 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: 1) effectiveness and efficiency of operations, 2) reliability of financial reporting, and 3) compliance with applicable laws and regulations". The basic business objectives of an entity which include performance and profitability goals, and the safeguarding of resources are addressed in the first category. The second category refers to the preparation of reliable published financial statements, and complying with the specific laws and regulations which an entity is subject to is dealt with in the third category. The COSO view is therefore reflective of internal controls being a very important component of the menu of corporate governance mechanisms.

Given the focus of the paper, the literature review will concentrate on the causes of employee fraud and the effectiveness of internal controls as they relate to detection and prevention of such fraud. Employee fraud can be direct or indirect. Direct fraud (misappropriation of assets) is where employees steal money or other property from their employers [Albrecht and Romney (1986)]. Conversely, indirect fraud involves employees taking bribes or kickbacks from vendors, customers and others outside the business to allow for the delivery of inferior goods, non-delivery of goods, lower sale prices or higher purchase prices [Albrecht et al. (2009)]. Employee fraud can be distinguished from management fraud (fraudulent financial reporting) which is when management seeks to manipulate reported profits or other assets by overstating assets and revenues or understating expenses and liabilities in order to embellish the financial statements [Statement on Auditing Standards No.82, Arens et al. (2008)]. The literature acknowledges that companies normally have internal controls, yet fraud is still committed. Thus, it is hypothesized that it is not the lack of controls but the overriding and ignoring of existing controls that allows most frauds to be perpetrated. The following literature review attempts to demonstrate and support the hypothesis.

Albrecht el al. (1994) identified the major contributory factors to individuals committing fraud. These influences (also referred to as the fraud triangle) are situational pressures, perceived opportunities and rationalizations. The origins of situational pressures are underpaid and overworked staff, excessive financial obligations and lifestyle. Perceived opportunities allow fraud to be committed because of poor internal controls or negligence. Rationalization is where the individual justifies the behaviour as being acceptable with seemingly plausible but false reasons [Moyes and Hasan (1996)].

Wells (2001) addressed the pertinent question: How do good people go bad? His findings revealed that fraud does not occur in isolation; all crime is a combination of motive and opportunity. The more dissatisfied the employee, the more likely he or she is to engage in criminal behaviour. Employees and executives who feel unfairly treated sometimes believe that they can right the scales by committing occupational fraud and abuse. Workplace conditions are therefore a major risk factor in predicting fraud. Additionally, a great majority of employees commit fraud to meet their financial obligations. Thus, employees faced with embarrassing financial difficulties pose a significant problem. Companies should therefore be mindful of disgruntled and financially strapped employees.

Moorthy et al. (2011) undertook research on the factors contributing to workplace theft behaviour of employees of supermarkets, hypermarkets and big retail business organizations in Malaysia. It was hypothesized that there are significant relationships between individual and organizational factors, and workplace theft behaviour. The results supported the hypothesis with individual variables such as need and opportunity, and organizational variables such as compensation and justice serving as predictors for the workplace theft behaviour of employees. If organizational decisions and managerial actions are deemed unfair or unjust, the affected employees experience feelings of anger, outrage and resentment, and may practice counterproductive employee behaviour like theft. The researchers therefore recommended strong internal controls to address the need and opportunity to commit fraud.

Arjoon (2008) addressed the issue of "Why do good people do bad things?" using a theoretical framework, the Continuum of Compromise (CoC). The CoC explains how over a period of time mild job frustrations develop into a pathological, materialistic attitude and behaviour that leads to devastating consequences. Specifically, unethical behaviour is likely to follow the path of a slippery slope, defined as a gradual decline in which no one event makes one aware that he or she is acting unethically. The majority of unethical behaviors are unintentional and ordinary, thus affecting everyone and providing support for unethical behavior when people unconsciously lower the bar over time through small changes in their ethical behavior. Factors that contribute toward the gradual decline down the slippery slope are presented in the article and fall under two types of rationalization: rotten apples (a person succumbs to the temptations inherent in the work environment), and rotten barrel (the work environment provides many opportunities to learn and develop patterns of deviant behaviour).

Arjoon contended that a strong corporate culture is a powerful influence that can signal what is acceptable behaviour. Thus, at the level of the organizational environment, it is important to build a culture of integrity and accountability through (1) incentives (rewards for ethical behaviour and consistent enforcement of appropriate disciplinary mechanisms for ethical violations), (2) systems to ensure the right ethical attitudes at the top and board involvement in ethics and compliance programs, and (3) attention to the cultural dynamics that adhere to overarching principles, including principles-driven codes. In particular, organizations can facilitate ethical behavior through ethical briefs for executives, whistle-blowing mechanisms for anonymous reporting, assistance and procedures for airing grievances, and ethics training in applying virtues to concrete situations. At the individual level employees, managers, and executives can emulate the behavior of moral exemplars and seek advice from someone who has consistently demonstrated good practical wisdom or judgment. In the final analysis, the level of morality in business lies in the formation of the individual's conscience. Ethical behavior depends on the individual's ability to recognize ethical issues and dilemmas, which is both a function of the organizational culture and the individual's stable character traits and dispositions.

Uzun and Szewezyk (2003) examined the effectiveness of internal and external monitoring in the prevention of fraud. It is hypothesized that the percentage of outside directors on the board is lower for firms where fraud is committed than a matched sample where fraud is not committed; also the percentage of independent directors on the board of directors is lower for fraud firms than non-fraud firms. The results corroborated both hypotheses, thereby indicating that board composition, board size and the structure of committees are important with regards to monitoring management. Having a higher percentage of outside and independent directors on the board and its committees enhances the board's effectiveness as a mechanism to monitor management, and thereby reduces the likelihood of management fraud.

Alleyne and Howard (2005) sought to ascertain the views of auditors and users of financial statements about the nature and extent of fraud, audit procedures utilized, and auditors' responsibility for uncovering fraud in Barbados since Enron. The nineteen auditors and twenty-four users participating in the study indicated, based on their experience, that the major reasons for individuals committing fraud were: moral values of the individuals; need to maintain an increasing social status; persons unhappy with their jobs; persons with drug and gambling addictions; persons with increasing indebtedness; individuals witnessing others doing it; and persons feeling that they would not be caught. Their findings also revealed that the expectation gap is wide, as auditors felt that the detection of fraud is management's responsibility while users and management disagreed. Further, the results indicated that fraud is not a major issue in Barbadian companies and those companies which have internal auditors, sound internal controls and effective audit committees are better equipped to deal with fraud detection and prevention. The evidence presented therefore supports the strongly-held view that internal controls play a key role in reducing the likelihood of fraud occurring in a company.

Coram et al. (2006), using the 2004 KPMG Fraud Survey, also observed the importance of the internal audit function in detecting fraud within organizations. In addition, their findings showed that having some insourcing is more effective in detecting and reporting fraud than completely outsourcing the audit function. However, Moyes and Hasan (1996) found that the degree of fraud detection was not dependent on the type of auditor, since both internal and external auditors have equal abilities to detect fraud. Studies have also found that auditing experience of auditors [Moyes (1996), Moyes and Hasan (1996)] and the size of an audit firm [Owusu-Ansah et al. (2002), Saheli et al. (2009)] are major factors in the detection of fraud. Firms with more experience in fraud detection and larger ones with superior technology, financial resources and technical expertise are better placed to uncover fraud.

Kajalo and Lindblom (2011) analyzed Finnish grocery retail entrepreneurs' perceptions of the effectiveness of formal and informal surveillance in reducing fraudulent activity among staff and customers. Respondents did not consider high-tech surveillance the most effective method to prevent fraud since even the most advanced technology may ignore fraudulent activity. Rather, a well organised security guard system and activity of the personnel were viewed as the most efficient ways for reducing fraud. In addition, the results emphasized the importance of the store environment, for example, clean and well-lit premises proved important in reducing crime in the retail stores.

Finally, Yayla (2011) examined the issue of computer abuse and fraud which are among the most common threats to information security within companies. The reasons behind computer fraud ranged from inadequate rewards and management controls to lax enforcement of disciplinary rules, while violations against hardware programs, data and computer services were identified as some of the possible computer abusing cases. Recommended effective deterrence against computer abuse and fraud involves increasing employees' intrinsic motivation, providing training for security tools, implementing security tools with high level of usability, adjusting time pressure and workload on employees, and increasing awareness among users and management. The use of analytical reviews, surprise audits, adequate reporting systems, proactive fraud policies and employee education were also deemed important in preventing computer abuse and fraud.

3. METHODOLOGY

Since the purpose of the paper is to determine the adequacy of the internal control system at the Supermarket as it relates to the company's cash operations, and detection and prevention of fraud, a non-experimental descriptive research design was used based on a written questionnaire. In a non-experimental descriptive research design the researcher is not required to become involved or intervene in a business' daily operations. The researcher primarily observes and compares the entity's information to previous information or literature. This approach simply describes 'what is' at a particular point in time with respect to the variables or conditions in a situation.

The investigation began with the identification of the elements necessary for the existence of an adequate internal control system for cash, and detection and prevention of fraud. A review of the literature relating to internal controls and fraud was undertaken and information was extracted from textbooks and internet articles to develop a questionnaire[1] (see Appendix). The questionnaire contained thirty (30)

[1] The sources of published works utilized for the construction of the questionnaire included:

- Albrecht, S., Albrecht, C., Albrecht, C. and Zimbelman, M. (2009) *Fraud Examination.* Canada: Nelson Education Ltd.
- Colero, L. *Five Questions that Corporate Directors Should Ask* (n.d.) Retrieved from http://www.ethics.ubc.ca/papers/invited/5questions.html
- Lindsay, H. (2006) *20 Questions Directors Should Ask About Risk* Retrieved from http://www.rmgb.ca/abstracts-directors-series/item12313.pdf
- Bishop, T. and Hydoski, F. (2009) *Corporate Resiliency.* Unites States of America: John Wiley & Sons, Inc.

questions and covered the five components of internal control: control environment, risk assessment, monitoring, information and communication, and control activities [COSO (1992)].

The control environment is considered the foundation for all other components of internal control, providing discipline and structure and influencing the control consciousness of the organization. According to Bishop and Hydoski (2009 p.67), "the control environment is a crucial element of anti-fraud and anti-corruption strategies. A strong control environment sets an appropriate tone for the company's attitude toward unethical behavior, including fraud. A strong control environment fosters a culture of honesty. It also includes a clearly written code of ethics and conduct, a confidential reporting mechanism such as a whistle-blower hotline or helpline, suitable employee training, and a system for responding meaningfully when control deficiencies are pointed out and allegations of fraud are raised." The five questions in this component of the questionnaire were designed to address such issues.

Risk assessment involves the identification and analysis of risks by management in order to achieve predetermined objectives [Biegelman and Bartow (2006 p.53)]. The questions in the second component of the questionnaire sought to examine whether the Supermarket has put in place risk management mechanisms to identify risks and assess their potential impact on the achievement of the business' objectives.

Monitoring involves assessing the quality and effectiveness of the organization's internal control process overtime. Biegelman and Bartow (2006 p.53), remarked that monitoring "encompasses external oversight of internal controls by management and independent auditors outside the process to determine the quality of the program and compliance". The questions in this component were designed to discover whether the Supermarket has established mechanisms for the ongoing monitoring of ordinary business activities.

Information and Communication by management is essential for all employees to become aware of their control responsibilities and their requirement to support them [Biegelman and Bartow (2006)]. The questions in the fourth component of the questionnaire inquired into whether the Supermarket has implemented appropriate controls with regards to communicating with employees and getting information to them in a form and timeframe that is useful.

Control activities are policies, procedures and practices to ensure that management objectives and risk mitigation are achieved [Biegelman and Bartow (2006)]. The Committee of Sponsoring Organizations of the Treadway Commission (1992) emphasized the desirability of integrating control activities with risk assessment. The questions in the final component of the questionnaire were designed to address whether the Supermarket's control activities assist the business in managing or reducing its risks.

Data were collected through the use of the written questionnaire which was completed by the Head Accountant of the business in March 2012. A face to face interview was also conducted with the Head Accountant during the same month. Most of the questions requested either a Yes or No response in addition to an example to support each response. "Yes" responses indicated the presence of a strong control; however, "No" responses indicated the absence of a strong control or the need for strengthening. The questionnaire was chosen as the data collection instrument because of the ease with which it can be administered. Also, through the use of questionnaires large amounts of data can be collected quickly and it is straightforward to quantify the results, determine correlations and employ multivariate analysis to look for causes [Haralambos and Holborn (2004)]. Furthermore, comparative analysis and replication (repeating the questionnaire) are easy, rendering the results reliable. Questionnaires are therefore an appropriate and widely used method for evaluating internal control systems.

However, questionnaires have a number of limitations. Even though they are relatively quick and easy to interpret, their format makes it difficult for the complex issues and opinions to be assessed, particularly with a questionnaire that consists of closed-ended questions. In addition, the coding of open-ended data distorts the distinct answers given by individuals [Haralambos and Holborn (2004)].

Furthermore, respondents left to themselves may be non-committal about answering questions and thus lie and treat the issues lightly.

4. FINDINGS

4.1: Control Environment

This is the first component of the questionnaire and it comprises five questions. Four questions received a 'Yes' response and the other (Question 4) a negative response.

Written policies and procedures have been established to govern cash receipts and cash disbursements. At the Supermarket all items are paid for either by cash or a cash equivalent. With regard to cash receipts, all funds declared are reconciled by a daily sales report. Everything that is collected and made from the deposit slip is banked. The business' accountant then ensures that everything is accounted for through the reconciliation of a banker's float.

With regard to cash disbursements, when bills are submitted they are first approved. In some instances the business waits on the suppliers since they may send other items. However, at the end of the month all payments are made. The payments are tabulated and invoices verified. It was confirmed during the interview that all accounting activities are conducted under the supervision of a knowledgeable accounting supervisor. Only the most suitable individuals are selected to supervise accounting activities, and all processes throughout the business are conducted under a 'best practice services' system. Moreover, the organization has a code of ethical conduct that is communicated to all employees. However, specific details of the code depend on the department involved. For instance, an accountant is not allowed to disclose the business' bank account figures, and all cashiers must be honest. Further, all cash collected by the cashiers must be declared. Everyone in the business should be aware of the code of ethical conduct because it is included in their job description. The job description clearly defines in writing what each individual's job entails and the roles and responsibility of everyone is clearly communicated to them. The Supermarket has implemented training programs to teach personnel about the nature of fraud.

The Supermarket has not implemented a whistle-blowing hotline. A whistle-blowing system can be defined as a response mechanism that makes it easy for employees and others to report questionable activities. According to Banisar (2006 p.4), whistle blowing is "an act of free speech, an anti-corruption tool and an internal management dispute mechanism". However, despite the absence a whistle-blowing hotline, supervisory staff is very experienced and usually able to identify fraudulent activities. Personnel can also freely and confidentially report to any director, manager or supervisor if they believe fraud is taking place. All reported matters are investigated to assess the validity of the allegation and, if the claim is true, the individual is dismissed. It was confirmed that recently one of the cashiers reported a suspected case of employee fraud, and after no trace was found that the individual had paid for the items in their possession the employee was relieved of his position.

4.2: Risk Assessment

This is the second component of the questionnaire and consist of five questions all of which received a 'Yes' response.

The Supermarket has established the short-term and long-term objectives of the business, identified the risks, prioritized its risks and taken the necessary precautions to manage these risks. The major risk relating to cash management is fraud. Most risks in the business relate to the cashier's acceptance of cash and cheques. During the interview it was confirmed that since the start of the recession there has been an increase in fraudulent return cheques. Thus, individuals who have previously provided fraudulent cheques to the business are flagged upon attempting to repeat the offence. Also, procedures are implemented to ensure that cashiers are unable to state the incorrect price of an item purchased for resale and retain extra money for themselves. To manage the risks of any cashier committing fraud, all of them are required at the beginning of their work shift to complete a cashier declaration form. This shows all the money that cashiers started with at the beginning of their shift. A supervisor verifies and then signs the form which is then reexamined by a different member of staff who is involved in the cash function. Everything is reviewed with the money in the cashier's till. Furthermore, all cashiers are issued with a code book and only those individuals working in the back office can insert prices. Finally, deposit slips are also utilized by the accountant of the business to ensure that the bank's and business' figures are similar.

The Supermarket updates its fraud and corruption risk assessment policies and procedures accordingly if any weaknesses are identified with regards to the business' operations. The fraud and corruption risk assessment measures include consideration of internal and external risk factors. In the interview it was stated that the biggest contributor to the occurrence of fraud at the supermarket is pressure. Although the cashiers of the business are fairly well paid by national standards, they encounter significant pressure as a result of mandatory financial commitments and other obligations. The business has implemented procedures to eliminate opportunities for personnel to commit fraud. Such procedures include physical safeguards, segregation of duties, independent checks, system of authorizations and the usage of documents and records.

4.3: Monitoring

This is the third component of the questionnaire. It comprises five questions with all receiving a 'Yes' response.

Cash control systems are routinely evaluated to ensure efficiency. Whenever there are doubts pertaining to any aspect of the cash control system, reviews are conducted. Cash on hand can be randomly compared to recorded amounts and investigations undertaken if discrepancies are found. Also, since the business is a private company it is examined once every year by external auditors to ensure the effectiveness of the cash control systems in existence, and the business' audit committee has oversight of monitoring activities. All senior staff is responsible for managing the internal audit of the company, and this is conducted from various points within the supermarket such as the management team situated on the ground floor, and the accounts department and banking unit on the second floor. The accountant also conducts routine evaluations to conclude whether cash transactions, records and reconciliations meet organizational expectations. The internal audit function is helped by the fact that some persons holding senior management positions have intimate knowledge of the company's operation due to their lengthy tenure.

The Supermarket is managed by a Board of Directors consisting six members, one of whom is an outside director. Of the remaining five Directors four are immediate family members, essentially making the supermarket a family business. The other Board member is a long-serving worker at the company. All members have the requisite education and experience regionally and internationally to make a significant contribution to the deliberations of the Board. Directors also have strong established relationships with many individuals and companies within and outside of the supermarket sector. Members of the board ensure that they are apprised of the most important risks and that appropriate risk management measures are employed. In addition, the members are able to commit the time necessary to responsibly fulfill their roles within the organization, and they have an effective working partnership with management in developing and reviewing corporate strategy.

4.4: Information and Communication

This component of the questionnaire consists of four questions which all received a 'Yes' response.

Monthly bank reconciliations are conducted at the Supermarket; however, management also performs bank reconciliations on a daily basis. The bank's reconciliation and the business' reconciliation may differ depending on when cheques are cashed by the suppliers of the business. In addition, the Supermarket has an organized chain of command that allows all personnel to effectively communicate with each other. For instance, line staff can communicate with all individuals above them in the hierarchy. This organized chain of command also gives line staff the option to freely address concerns of suspected improprieties directly to senior management rather than their departmental heads.

Also, each department receives the information it needs from internal and external sources in a form and timeframe that is appropriate. The Supermarket conducts regular staff and management meetings. The business also obtains regular information about the taxation system, key legal areas and the market in which it operates. All managers at the Supermarket have controlling responsibilities, such as conducting performance evaluations and taking necessary action to minimize inefficiencies. All information received by each department is reviewed by the managers to identify and evaluate the Supermarket's internal strengths and weaknesses in order to effectively formulate and choose among alternative strategies.

4.5: Control Activities

This is the final component of the questionnaire, comprising eleven questions all of which received a 'Yes' response except one (Question 5).

There are sufficient employees at the Supermarket to facilitate segregation of duties in each department. Segregation of duties allows the authorization, processing, cheque signing, recording of cash disbursement transactions and bank reconciliation functions to be undertaken by different individuals. Cheques are signed only after the authorized signer has verified that the cheques are properly completed. The business' bank reconciliations have to be verified and reported to senior management. The financial officer of the Supermarket is responsible for managing the financial risks of the business. The Human Resources Department is responsible for re-evaluating the payroll after the payroll clerk to determine if any major differences exist. Employee overtime must also be approved by the Human Resources Department. Cheques with substantial amounts are approved by the Director, Managing Director and the Human Resources Manager. Ultimately, all financial statements and transactions that occur in the business are reviewed by the Head of the Ownership Group and other family members. They make it their responsibility to assess and verify all accounts. In addition, receipt forms are all sequentially pre-numbered to establish accountability for each specific cash collection transaction regardless of its source. Each item available for purchase in the business has a bar code, and all inventory purchased for resale is stored in areas with limited access.

At the Supermarket all cash on hand is held in a secured area where there is password and restricted access until it is deposited. The password combination is frequently altered. At the end of each working day all cash is collected and taken to the secured area where only the individuals with the password combination have access. Also, policies requiring mandatory vacations are implemented within the business. The duties of all personnel on vacation are therefore performed by another staff member during their absence.

It was stated during the interview that the business over the years decided to reduce its hiring of part-time workers; also, the organization has replaced its "punched card" system with a "fingerprint biometric time clock" system which allows for more accurate recording of work times.

The Supermarket has taken steps to ensure that employees consistently register correct prices when checking customer groceries. These include enhanced surveillance through the installation of additional cameras and greater assistance from floor supervisors.

To prevent and detect employee embezzlement the organization now requires employees to place their belongings in a room outside of the Supermarket. If any employee wishes to purchase an item in the Supermarket they must make the purchase when their shift has ended. In the past employees could make purchases and keep the items in the store, but this is not the case anymore. Also, in the past the business rarely verified the references which applicants had written on their curriculum vitae. However, mindful that individuals sometimes include references that are false, random calls are made to those persons listed by the applicant. Background checks are conducted by The Human Resource Department to assess the history of the applicants' previous jobs and the authenticity of the listed references.

The Supermarket currently does not have any implemented procedures which facilitate rewarding the ethical integrity of its employees. However, it was confirmed in the interview that during the recent business management meetings, matters pertaining to the benefits of rewarding employees was the focus of discussion. The meetings resulted in the framing of a plan which is being enhanced as more information is provided by senior staff. Considering that the company relies heavily upon the morality of its workers, the plan of rewarding the ethical integrity of its employees will be actualized in the near future.

Moreover, during the interview it was affirmed that customer fraud was prevalent at the supermarket since the recession. Therefore, the additional cameras installed in key areas of the Supermarket allow customer activity to be observed. In addition, there is strong surveillance by the supervisors placed at the front of the store to watch customer and cashier activity to prevent fraudulent activities. Also, security guards are placed within the business in order to watch customer activity. These guards are allowed to be attired in a similar fashion to the customers shopping within the business. They use cell phones instead of radios so their cover would not be revealed.

5. DISCUSSION

The Supermarket has recognized that a key element of a business is having a "tone at the top" that fosters ethical behavior. The business has implemented simple yet straightforward ways to set the right tone. The organization has a code of ethical conduct that is known by all employees, and written policies and procedures governing cash receipts and cash disbursements. The USA Securities and Exchange Commission's final rule defines code of ethics as "written standards that are reasonably designed to deter wrongdoing." The code and the written policies and procedures are both indispensable to the Supermarket as they provide all employees with guidance on acceptable behavior relating to common areas of risk such as fraud, kickbacks or secret commissions, and general employee conduct. According to Bishop and Hydoski (2009 p.77), "training reinforces the company's ethical values and anti-fraud control environment". The Supermarket has knowledgeably actualized formal training programs for everyone in the business to guarantee efficient operations.

Research published in February 2011 by G4S Security, the United Kingdom's leading security company, revealed that 1 in 10 retail employees has committed fraud or failed to report fraud committed by employees against their employers in the last twelve months. Despite one of the Supermarket's cashiers recently reporting that another employee was stealing, based on the research by G4S Security it can be presumed that the number of employees who steal items from the Supermarket, and personnel who witness such activities and fail to report the culprit, undeniably exceeds the one case that was reported to management. Albrecht et al. (2009) found that in most fraud cases individuals suspected or knew that fraud was occurring but were afraid to come forward with information or didn't know how to reveal the information. Therefore, organizations must have programs and procedures in place through which employees can report fraud to management. This allows management to prevent fraud before it becomes very detrimental to the organization, as well as ease the pressure on the employee who has seen the fraud and wanted to reveal the truth without their identities being known. Although the Supermarket has a competent supervisory staff and employees who can candidly report to those at higher levels of the hierarchy, the absence of a formal whistle-blower hotline or helpline can be considered an area of deficiency in the internal control system. Thus, the introduction of a whistle-blowing system can significantly strengthen operations at the Supermarket. Such a recommendation accords with Arjoon (2008) who stated that one of the ways organizations can facilitate ethical behaviour is through whistle-blowing mechanisms for anonymous reporting.

The finding that pressure is the biggest contributor to the occurrence of fraud at the Supermarket is consistent with the findings by Moorthy et al. (2011). The Supermarket has recognized that if the opportunity is present, individuals faced with significant financial pressure will commit fraud. Thus, the business is wise to periodically revise its fraud and corruption risk assessment policies and procedures to ensure their efficiency in eliminating opportunities for personnel to commit fraud.

The results of the studies undertaken by Alleyne and Howard (2005) and Coram et al. (2006) indicated that companies which have internal auditors, sound internal controls and effective audit committees are better equipped to deal with fraud prevention and detection. The Supermarket's audit committee comprising senior staff is responsible for managing the internal audit function of the company. Although professionals were not employed specifically to undertake internal auditing activities, the business' competent senior employees are the ones examining, evaluating and monitoring the adequacy and effectiveness of internal controls. Since some of the senior members have been with the company for a long period, they would have been able to develop many useful business skills and increase their knowledge of the Supermarket's operations. Such is extremely valuable to the business. Not only can long-serving members assist in taking the business to the next level, but they can effectively transfer their knowledge to other senior members who have been with the business for a shorter period through extensive personal contact and trust.

Uzun and Szewczyk (2003) in their study reported that having a higher percentage of outside and independent directors on the board and board committees will increase the board's effectiveness as a monitor of management. Thus, grounded in their study it can be concluded that the Supermarket should increase its number of outside directors. Such directors can indeed facilitate the clarification of the business' goals and roles. However, Steinberg and Bromilow (2000 p.11), stated that "with the most possible exception of strategy development, the topic most discussed at the board level today is risk". In spite of the Supermarket having only one outside director, all board members have recognized that risk management is crucial as they oversee all key risks and seek to identify, manage and monitor risk. Nonetheless, it is argued that sometimes a board is ineffective because it is simply too small in number. Larger boards provide greater diversity of skills and thus can better restrict the opportunistic behavioural tendencies of management [Forbes and Milliken (1999)] and provide opportunities for adequate representation of stakeholder groups [Van den Berghe and De Ridder (2002)].

Conversely, others have argued that large boards increase behavioural problems [Lipson and Lorsch (1992)], negatively impact organization, cohesion and communication [Forbes and Milliken (1999)] and create large coordination and process problems [Jensen (1993)]. Even though the Supermarket's board comprises only six members, the business has progressed steadily as it recently relocated and expanded its operations. The size of the Supermarket's board has proven to be correct since members bring the requisite knowledge, abilities and skills to the table in a group small enough to act cohesively.

The Supermarket has no deficiencies in its information and communication controls. Important information about the business' operations are identified and reported regularly to the relevant personnel in a form and timeframe that permits them to perform their duties adequately. Convening regular staff and management meetings is an appropriate measure utilized by the business as it guarantees that all employees are routinely updated of relevant information that affects the business' activities. Communicating effectively and sharing information is vital to any successful business since it facilitates a business' growth and progress. The Supermarket is knowledgeable of this and ensures that all employees of the business are notified of internal and external factors which can hinder the business' overall performance.

The Supermarket has internal controls in place with regard to its Control Activities. Arjoon (2008) noted that unethical behaviour will result when the work environment provides many opportunities to learn and develop patterns of deviant behaviour. The Supermarket is very cognizant of this and knowingly utilizes physical safeguards to protect its cash from being stolen, permits only authorized persons to perform certain tasks and ensures periodic cash counts and supervisor reviews. The business' requirement of mandatory vacations is also an effective strategy since it can result in the discovery of illegal activity if someone who is committing fraud is on vacation and another employee is assigned their duties. Segregation of duties involves dividing a task into two parts so that one person does not have complete control of the task. Albrecht et al. (2009) stated that three critical functions business owners should either set up as segregated duties or always do themselves include writing cheques, making bank deposits and reconciling bank statements. The Supermarket has adequately sought to eliminate opportunities for unethical behaviour by assuring that these three critical functions are in fact segregated; in addition, the Head of the Ownership Group and family members ensuring the validity of all accounts is a very wise system of operations.

Another interesting finding was in relation to the utilization of a "fingerprint biometric time clock" system. This internal control activity is invaluable since it can eliminate the possibility of payroll fraud. The system prevents employees from attempting to change their hours worked in order to obtain a higher salary.

The Supermarket's requirement that employees' belongings remain on the outside is an appropriate way of managing direct fraud. This internal control procedure will help reduce cash register disbursement fraud as well as merchandise fraud. In addition, a zero-tolerance policy for employees registering incorrect prices when checking the customers' groceries is also commendable. Further, the Supermarket's policy of effectively screening applicants prior to them being employed is very important in mitigating internal fraud. Background checks assist the job selection process and ensure employment of only legitimate and honest candidates without a criminal history.

Although the Supermarket has sought to prevent fraud by hiring honest people and providing fraud awareness training, the business has realized that good people can do bad things when they are appropriately motivated. Thus, the business has acknowledged that if it wants all of its employees to be ethical, it must make ethical behaviour rewarding. As many of the business' employees will encounter various financial pressures especially during this current period of economic downturn, the decision of senior staff to implement procedures which reward the ethical integrity of its employees is prudent. The presence of a rewards system will strongly encourage all employees to act in the best interest of the business and work hard to accomplish specific business objectives. Without strong reinforcements pressure to perform can easily be interpreted as pressure to lie, cheat and steal.

The increase in fraud at the supermarket since the recession resulted in the Supermarket engaging in precautionary measures resembling those stated by Kajalo and Lindblom (2011). In their study respondents viewed security guards and activity of the personnel as the most effective ways for reducing shoplifting in their stores. The Supermarket has recognized that cameras can reduce fraud and installed additional cameras in key areas. However, even the most advanced technology may ignore fraudulent activity. At the Supermarket security guards are therefore allowed to wear regular clothes like an ordinary customer shopping within the business. Plain-clothed security guards can be hard to detect. The presence of vigilant supervisors and well-trained security guards on the floor can greatly assist in detecting shoplifters.

5. CONCLUSION

Fraud is prevalent in the supermarket sector and can be committed by anyone. Undesirable behavior of customers, staff or management in an environment where internal controls can be overridden or easily ignored will significantly increase the incidence of fraud in any company operating in the supermarket sector. Thus, given the potential for fraud to undermine the profitability and survivability of businesses it is vitally important that the system of internal controls is comprehensive, respected by all company personnel and scrupulously applied to ensure maximum effectiveness.

The internal control procedures utilized within the Supermarket are effective in safeguarding cash, and detecting and preventing employee fraud. However, for the future the Supermarket should strengthen the current internal control system with the inclusion of a formal whistle-blowing mechanism and an employee assistance program. A whistle-blowing mechanism will definitely deter fraudulent activity since it provides an easy, non-obligatory way for employees to monitor each other and report suspected fraud. The prolonged economic recession has placed financial and other pressures on employees which can lead to an increase in fraudulent behavior. Thus, a carefully managed employee assistance program will certainly allow employees who feel pressured to voice their concerns and obtain requisite assistance, thereby minimizing the occurrence of fraudulent activity.

Further, the decision of the business to reward the ethical integrity of its employees is very commendable since this initiative will greatly strengthen the business' operations as employees will feel appreciated and justly rewarded for their work. Such a scheme will also boost the morale of employees and engender a greater sense of loyalty.

This preliminary research has underscored the need for more research on fraud in the retail sector of Barbados. Greater understanding of the nature and extent of fraudulent activities in the sector would contribute immensely to the design of appropriate measures to deal decisively with this undesirable behaviour.

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APPENDIX

Questionnaire: Study on Internal Controls

Control Environment

1) Have written policies and procedures been developed and put in place governing cash receipts and cash disbursements? Yes ___ No ____
2) Does the organization have a code of ethics that is known by all employees? Yes ___ No ___
3) Are there any training programs implemented to teach employees about the nature of fraud? Yes__ No ____
4) Is there a confidential reporting mechanism such as a whistle-blower hotline or helpline implemented within the business that allows all employees to report fraud if they believe it is taking place? Yes ____ No ____
5) Is there a system for responding meaningfully when control deficiencies are pointed out and allegations of fraud are raised? Yes ___ No ____

Risk Assessment

1) Have the risks related to cash management been identified? Yes ___ No____
2) Have the risks been prioritized? Yes ____ No _____
3) Have strategies for managing important risks related to cash been established and implemented? Yes ___ No ____
4) Do you update your fraud and corruption risk assessment at least annually?
   Yes ___ No ____
5) Does your fraud and corruption risk assessment include consideration of internal and external risk factors (including pressures or incentives, rationalizations or attitudes, and opportunities)?

Monitoring

1) Does the audit committee have oversight of monitoring activities? Yes ___
No ____
2) Is the internal audit group adequate for the size, complexity and risk profile of the company?
3) Who is on the board of directors? Do these individuals on the company's board of directors have the right background for the company? What is the percentage of outside and independent directors on the company's board of directors?
4) Do you routinely evaluate the effectiveness of the business' cash control systems?
5) Has adequate attention been paid to employing the detection strategies available?

Information and Communication

1) Are monthly bank reconciliations conducted? Yes ____ No ____
2) Is there a way for employees to communicate suspected improprieties up stream through someone other than a direct superior? Yes ___ No ____
3) Does each department get the information it needs from internal and external sources in a form and timeframe that is useful? Yes ____ No ____
4) Does each department receive relevant information that measures its performance (information that tells the department whether it is achieving its operations, financial reporting, and compliance objectives)? Yes___No ______

Control Activities

1) Is staffing sufficient in each department to promote segregation of duties?
2) Are bank reconciliations independently verified by a financial officer or his designee?
3) Are sequentially pre numbered or computer generated receipt forms used to establish accountability for each cash collection transaction regardless of its source?
4) What systems are in place to prevent employee embezzlement?
5) Does the business reward the ethical integrity of its employees? Yes ___
No ____
6) How does the business ensure that employees comply with organizational decisions and managerial actions, and that these decisions are deemed just and fair to all?
7) Is cash on hand held in a secured area until deposit? Yes ____ No _____
8) Is there a policy requiring mandatory vacations during which another staff member performs the duties of the staff member on vacation? Yes ____
No _____
9) What systems are in place to prevent customers from leaving the supermarket without paying for their items, paying too little or getting too much from the organization through deception?
10) What controls are in place to ensure that management does not manipulate the financial statements to make the business look better than it is? Yes ___
No _____
11) What controls are in place in the business to ensure that its suppliers do not overbill or provide lower quality or fewer goods than agreed upon?