INTERNAL CONTROL IN SMALL AND MICROENTERPRISES IN THE VHEMBE DISTRICT, LIMPOPO PROVINCE, SOUTH AFRICA

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Abstract

The absence of robust internal control mechanisms has been cited as one of the contributing factors to most business failures 'internal control' is 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 effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. A major problem that companies face is that these objectives may not be met due to a miscellany of factors

The purpose of the study was to investigate the effectiveness of internal controls in SMEs in South Africa. Specifically, the study focuses on SMEs in the Vhembe District of the Limpopo Province. We use questionnaire to collect data pertaining to the five essential and interrelated components of internal control: control environment, risk assessment, information and communication, monitoring and control activities. The SPSS Statistical software was used to analyze the data. Chi-square statistical procedure was emloyed to establish the relationship between levels of internal controls among businesses by size of business and type of business in the Vhembe District.

The main findings of the study are : (i) that internal control practices among small business sector enterprises in the Vhembe District is low, with only 45 percent of firms surveyed having adequate internal controls systems in place; (ii) that the size of business in the sector studied determines the posssession of insurance cover (a major component of internal control).The policy implication of these findings is that there is need to encourage and support smll businesses to grow and expand in size in order to effectively employ internal

control measures, the lack of which is firmly established as a major cause of busiess failures around the world.

Keywords: COSO, Internal control, Small micro enterprises, South Africa, Vhembe District

Introduction

Controls protect weak people from temptation, strong people from opportunity and innocent people from suspicion' (IIA Magazine, August 1977).

The above quotation demonstrates that effective internal control plays a critical role not only in organizations, but also in the life of individuals. Kirsch (2002) defines control as a set of mechanisms designed in order to motivate individuals to attain desired objectives. Scott (1995) argues that controls are fundamental to all organizations because they provide a mechanism to align organizational goals and aspirations with employee's capabilities, activities and performance. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), a US voluntary private-sector organization, conducted a comprehensive study on control in organizations and the study resulted in the COSO report (1992). The COSO report defined '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 effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. The report notes that internal control can provide reasonable, not absolute, assurance that the objectives of an organization will be met. The concept of reasonable assurance implies a high degree of assurance, constrained by the costs and benefits of establishing incremental control procedures.

Internal controls are designed to provide reasonable assurance regarding the achievement of an organization's objectives in terms of effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. A major problem that organizations face is that these objectives may not be met due to a miscellany of factors. These include, but not limited to: 1) management override of internal control systems for the purposes of manipulating financial reporting, 2) collusion by personnel to overcome controls, 3) human error, and cost benefit considerations (Deshmukh, 2004). SMEs are the most vulnerable to fraudulent schemes, scams, employee embezzlement, pilferage, and other sundry crimes in the work place because they often do not have effective

internal control systems. It has further been established that poor internal controls account for 30 percent of small business failures in the USA.

This raises the need to revisit and examine the role of internal control in mitigating these challenges in SMEs. Owner/managers of small businesses hold the key to the fight against internal control failures and should demonstrate thorough understanding of the concept in order to maximise the business's value and minimise the risk of fraud, error and loss. Given the above background, the primary research problem addressed in the study is**:** to what extent do SMEs in South Africa comply with the principles of effective internal control systems?

The definition of small business varies from country to country. Various definitions have been provided based on varied criteria. Among the common criteria used are the number of employees, gross assets, turnover, and investment level. The most common definitional basis used is employment, with varying levels of upper and lower size limits. This study uses the definition of small business provided by the National Small Business Act (1996):

"a separate and distinct business entity, including cooperative enterprises and non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy".

The Act classifies small businesses into four main categories using three parameters: full-time employees, turnover, and asset value. Table 1 summarises the definition:

Table 1: Classification of small business enterprises

Enterprise Size	**Number of Employees**	**Annual Turnover (South African Rand)**	**Gross Assets, (Excluding Fixed Property)**
Medium	Fewer than 100 to 200,depending on Industry	Less than R4 million to R50 m depending upon Industry	Less than R2 m to R18 m depending on Industry
Small	Fewer than 50	Less than R2m to R25 m depending on Industry	Less than R2m to R4.5 m depending on Industry
Very Small	Fewer than 10 to 20 depending on Industry	Less than R200 000 to R500 000 depending on Industry	Less than R150 000 to R500 000 depending on Industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: Patricia Agupusi (2007)

The objectives of the study are to: 1) establish the level of, and nature of internal control among SMEs in the Vhembe District; 2) find out whether internal control systems differ among SMEs by sector of economic activity; 3) find out whether internal control

systems differ among SMEs by size; and 4) measure the effectiveness of internal controls in SMEs

Theoretical framework

According to COSO (1994) framework, five properly functioning internal control components lead to effective internal control. The five essential and interrelated components are: 1) fostering a favourable control environment, 2) conducting risk assessment, 3) providing for effective information and communication throughout the organization, 4) designing and implementing control activities in the form of policies and procedures, and 5) conducting ongoing monitoring of the effectiveness of control-related policies and procedures. The overall success of a system of IC is dependent on how effectively each of these elements functions and how well they are coordinated and integrated with each other (DiNapoli, 2008). According to COSO (1992), these five components of IC need to be present to conclude that IC is efficient. The five components are discussed in the following paragraphs.

Control Environment (CONEV)

The control environment sets the tone of an organization, influencing the control consciousness of all its employees. Control environment is pervasive because it affects (either positively or negatively) the entire organization and all other elements in the framework. It is the medium that spreads the organization's commitment to ethical and honest behavior, effective internal controls and proper financial reporting. The different elements of control environment are management's philosophy and operating style; the way in which management assigns authority and responsibility; the way management organizes and develops employees; and the attention and direction provided by the governing board.

Risk Assessment (RISK)

RA is the identification of factors or conditions that threaten the achievement of an entity's objectives and goals. It involves identifying risks to the effectiveness and efficiency of operations, reliability of financial reporting, and compliance with laws and regulations. Changes in personnel, new product lines, or rapid expansion are some of the factors that could affect an organization's risks.

Control Activities (CONACT)

Control Activities are the policies and procedures designed by management to help ensure that the entity's objectives and goals are not negatively impacted by internal and external risks. The COSO report identified a range of control activities including: approvals, authorizations, verifications, reconciliations, and reviews of operating performance, security of assets and segregation of duties.

Information and Communication (INFOC)

Information and communication is another element that flows through the entire internal control framework. Information is the vehicle by which control policies and procedures are introduced and reinforced and communication is the conduit by which employees become aware of management's commitment to internal controls. Both the control environment and information and communication connect all elements of the framework together. The executive summary to COSO states, "Pertinent information must be identified, captured and communicated in a form and timeframe that enables people to carry out their responsibilities. Information systems produce reports containing operational, financial and compliance-related information that make it possible to run and control the business." COSO also states that information must flow throughout the organization so that individuals understand their own roles in the internal control system and how their work relates to the work of others. As part of the information and communication system, it is important to inform all employees that control responsibilities are to be taken seriously. Each employee should understand his or her role in the internal control system, as well as how their individual activities relate to the work of others. Employees also need to know that they have a responsibility to communicate problems they notice in the performance of their duties.

Monitoring (MONI)

Monitoring determines whether or not policies and procedures designed and implemented by management are being conducted effectively by employees. Monitoring also helps ensure that significant control deficiencies are identified timely and rectified. Monitoring helps to identify these new risks and the need for new control procedures.

COSO (1994) further states that there are differences in internal control effectiveness in different firms possibly because of the way and manner in which they are implemented, controlled and monitored. The framework states that the effectiveness of internal control is a subjective judgment as to whether there is a reasonable assurance that the objectives of internal control are being met.

Owner/managers are the chosen observers of effectiveness in this study for three reasons: first, establishing, evaluating and supervising internal control is the responsibility of management (Krishnan 2005). Second, management has immediate and detailed insight into the operation of the internal control system (Changchit et al. 2001; COSO, 1994). Thirdly, many empirical studies have mainly concentrated on the views of external parties, such as external auditors, rather than management's perspective (Felix and Niles, 1988; Dirsmith and Haskins, 1991; Trotman, 1999), despite the first point above. O'Leary, Iselin and Sharma

(2006) (cited in Morehead, 2007), after reviewing the above studies, concluded that significant gaps existed in the internal control literature.

Data collection and analysis

A questionnaire (comprising both structured and semi-structured questions) was constructed based on previous studies (Teketel and Berhanu, 2009) to collect data for the study from a sample of 31 small businesses, since the small business sector is the main focus of the study. The sampling method used for the selection of the sample was stratified sampling. The strata were businesses classified as Small, Very Small and Micro in the Vhembe District of Limpopo as defined in the *National Small Business Act (of 1996)*. From the data base of businesses registered in the Vhembe District Municipality about 9605 are classified as Small, Very Small or Micro business. Among these businesses, Very Small businesses constitue about 51 percent (4910) whilst Small and Micro enterprises comprise about 25 percent each of the small business sector enterprises in the municipality. Based on these proportions the sample selected for the questionnaire survey consisted of 14 Micro, 8 Very Small and 9 Small enterprises. The individuals selected for interview were those who had the most involvement in the financial activities of the SMEs, and these were mainly the managers of the selected enterprises.

The questionnaire captured information on business owner's understanding of internal control as well as the five elements of internal control: control environment, control activities, risk assessment, information and communication, and monitoring. The questionnaire asks respondents to give their opinions of the internal control elements and their application in their businesses on a scale from 1 to 5 (1 to a very high extent and 5 being to a very low extent).

Based on the sampling method employed above, the breakdown of the sampled enterprises by business type were as follows: 13 retail enterprises, 13 service-related businesses, 3 manufacturing entities, 1 IT-related business and 1 classified as other . Respondents were asked about the level or extent of internal control in their businesses by selecting among the following aspects of internal control, among the small, very small and micro enterprises in the rural Vhembe District of the Limpopo Province:

1. Presence of systems to prevent and detect fraud
2. Recording of all sales and purchase transactions and conducting daily reconciliation
3. Safeguarding of assets such as inventory, cash, equipment against theft/damage
4. Division of roles and responsibilities among employees
5. Using computer to facilitate their daily operations

6. Training of employees
7. Timely preparation of reliable financial and other information necessary for the smooth running of the business

Respondents who selected four or more of the seven aspects of the internal control were deemed to be having adequate internal controls while those who selected less than 4 (less than 50%) of the seven items are classified as not having adequate internal controls. The justification for using the 4/7 or higher ratio is that the 7 aspects of internal controls enumerated above constitute the essential elements of an efficient functioning internal controls system for a business in accordance with the COSO framework, and as such any enterprise using more than 50 percent (i.e. 4/7 or higher ratio) of these measures are operating closer to the international benchmark COSO.

Findings and discussion

This section reports the results of the data analysis. The presentation includes the distribution of the sampled businesses by size (measured by number of employees and by business type. Narratives of respondents'' practices of the elements of internal control (as defined by the COSO framework) as well as the results of statistical relationships based on Chi-square and Kruskal-Wallis tests. Frorm the 31 managers/owners of bushiness interviewed for the study 14 (45%) had by our definition adequate internal controls while 17 (55%) had inadequate internal controls.

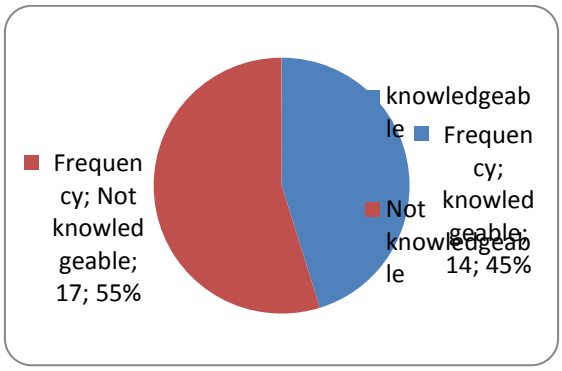

Figure 1: Adequacy of internal control

One of the main questions this study sought to answer is whether internal controls adequacy differ among SMEs by type of business? This question was analyzed using the chi-square test to assess whether there are differences in adequacy of internal controls based on whether the business is retail, services, manufacturing, IT or other businesses. Table 1 presents the cross-tabulation and accompanying chi-square test of the relationship between adequacy of internal controls and business type.

Table 1 : Cross tabulation of awareness of Internal Control and business type

		Awareness of Internal Control		
		Not knowledgeable	knowledgeable	Total
Business type	Retail	7	6	13
	Services	7	6	13
	Manufg	1	2	3
	IT	1	0	1
	Others	1	0	1
Total		17	14	31

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.218	4	.696
Likelihood Ratio	2.976	4	.562
Linear-by-Linear Association	1.006	1	.316
N of Valid Cases	31		

The row labeled **Pearson Chi square** contains the conventional Chi-square statistic, with its level of significance ($\alpha = 0.05$). It can be concluded from the large p-value ($p > 0.05$), that there is no association between type of business and the level of adequacy of internal controls. This confirms the fact that issues regarding internal controls remain the same irrespective of the nature of business.

We extended the analysis to look at the relationship between the size of business and insurance cover (a major element of internal control). Table 3 shows the cross-tabulation and the chi-square test results of the association between size of business and insurance cover.

Table 3: Cross tabulation: Size of business and insurance Cover

		Insurance Cover		
		Yes	No	Total
Size of business	Micro	6	8	14
	Very small	6	2	8
	Small	8	1	9
Total		20	11	31

Test: Chi-Square

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.238	2	.027
Likelihood Ratio	7.557	2	.023
Linear-by-Linear Association	5.791	1	.016
N of Valid Cases	31		

The row labeled **Pearson Chi square** contains the conventional Chi-square statistic, with its level of significance ($\alpha = 0.05$). It can be concluded from the smallness of the p-value ($p < 0.05$), that there is a significant association between having insurance cover and the size of business.. Thus, the size of one's business usually determines the possession of insurance cover. This situation is usually due to the argument that, for the businesses covered in this study, (relatively larger) small businesses (compared to very small and micro enterprises) are able to afford insurance cover and also that the risks of possible loss due to fire, theft and other unforeseen disasters are relatively higher.

This study also sought to assess the extent to which businesses make on-going evaluations to determine whether internal controls are functioning? The responses from the business surveyed broken down by level of adequacy of internal controls and the associated Kruskal-Wallis test are presented on table 4.

Table 4 : Kruskal-Wallis test – Adequacy of internal control and monitoring of internal control systems

Adequacy of Internal Controls		N	Mean Rank
Monitoring of Internal Control Systems	adequate	17	16.78
	inadequate	14	14.92
	Total	31	

The relationship between businesses adherence to monitoring internal control functions by level of adequacy of internal controls was assessed. Business adherence to monitoring internal control functions was rated from Very High extent (1), High Extent (2), Some extent (3), Low Extent (4) and Very Low Extent (5). ***The lower the mean ranking, the higher the level of adherence to monitoring of internal control systems.*** The Rank table above, indicates that businesses with adequate internal control systems were more likely to monitor internal control functions than those with inadequate controls

Test Statistics

Chi-Square	.550
Df	1
Asymp. Sig.	.054

The Kruskal Wallis test indicates that the difference between the monitoring levels by knowledge is significant (at the .05 level of significance). Thus as one would expect business owners with adequate internal control measures in place were more likely to monitor whether internal control activities are functioning.

Conclusion

Using the definition of adequacy of internal control adopted for this study, internal control practices among small business sector enterprises in the Vhembe District are low, with only 45 percent of the surveyed enterprises having adequate internal control systems in place. As to whether internal control awareness varies among business types, chi-square tests indicates that there is no association between business type and the level of awareness of internal control. This confirms the fact that issues in internal control remain the same irrespective of the nature of the business.

Our results also revealed that for the businesses covered in the study, the size of the business determines the possession of insurance cover. Thus a major factor that determines the effectiveness (or adequacy) of internal control systems in a business is the size of that business.

With regard to the extent to which businesses surveyed made *on-going evaluations to determine whether internal controls are functioning*, our statistical analysis revealed that business owners who have adequate internal control were more likely to monitor whether internal control activities are functioning properly.

The policy implication of these findings is that there is need to encourage and support small businesses to grow and expand in size in order to effectively employ internal control measures, the lack of which is firmly established as a major cause of busiess failures around the world.

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