International Journal of Latest Engineering and Management Research (IJLEMR)
ISSN: 2455-4847
www.ijlemr.com || Volume 05 - Issue 02 || February 2020 || PP. 01-12

Internal Control Systems and Financial Performance: Empirical Evidence from Vietnam

Nguyen Thi Le Ha[1,2]
[1]*International University, School of Business Administration,*
Quarter 6, Linh Trung Ward, Thu Duc District, Ho Chi Minh City, Vietnam
[2]*Vietnam National University, Ho Chi Minh City, Vietnam*

Abstract: The present study aims to investigate the association between internal control system and financial performance of enterprises in an emerging country, Vietnam. A sample of 336 firms was selected using a non-probability sampling method. Multiple regression statistics was utilized to analyze gathered data. The study used as dummies the control environment, risk assessment, control activities, information and communications, and monitoring to measure the level of effectiveness of internal control system of enterprises. On one hand, the financial performance was measured in terms of Return on Sales (ROS), Return on Equity (ROE), Return on Assets (ROA), and Assets Turnover. The study findings revealed that there is a significant association between internal control system and financial performance of enterprises in Vietnam.

Keywords: Internal Control, Internal Control System, Financial Performance, Vietnam.

I. INTRODUCTION

Internal control can be defined as a process, affected by an entity's board of directors, managements, and other personnel, designed to provide reasonable assurance regarding the achievement of the objectives (COSO). Business scandals related to high profile organizations have rocked the corporate world and become front-page news (Leonard and MacAdam, 2003). This has surprised consumer confidence in business leaders and the economy as well, creating concern about business ethics and governance. Therefore, corporate governance, in which internal controls as a crucial tool, has become increasingly important and captured the interest of people in the business world. Internal control system is not only crucial to maintaining the accounting and financial records of an organization but also vital to managing the whole entity. After the occurrence of a series of large corporate failures and scandals, internal control is increasingly an important and interested business issue.

In Vietnam, business scandals regarding three very big state-owned corporations including Vietnam National Shipbuilding Industry Group (Vinashin), Vietnam National Shipping Lines (Vinalines) and Vietnam Electricity (EVN) happened due to ineffective internal control systems(Nguyen, 2015). In fact, the case of the nation’s biggest shipbuilder, Vinashin, is the first graft scandal involving huge inefficient investments in a range of fields, resulting in a huge loss of nearly VND900 billion. In 2010, Vinashin owed nearly $4.5 billion worth of debt, a number equivalent to almost 5% of GDP. The state economic giant, Vinalines, is the next worst corporate scandal and is as severe as that of Vinashin. Due to Vinalines’ investment irregularities, the shipbuilder racked up losses of around $81 million, in 2009-2010. The government revealed that debt at Vinalines was $2.1 billion at the end of 2011, more than four times its equity of $452 million. Both Vinalines and Vinashin got involved in non-core business fields, executed ill-conceived investment plans, purchased old vessels and equipment and caused huge debts. However, the two conglomerates had not been brought to light until Government inspectors stepped in. The Saigon Times indicated that “Ministries represent the Government to supervise state-owned enterprises (SOE) but most of the officials responsible for the supervision role have little or no experience in business administration. They mostly rely on the reports the firms send them and, in some cases, they sit on the boards of SOEs but they have never detected problems. The Vinashin case is proof that SOEs could give wrong reports while government officials on SOEs’ boards fail to fulfill their responsibilities. The third corporate scandal is the case of Vietnam Electricity (EVN). As reported by government inspectors, EVN suffered losses due to dud investments of billions of dollars including in non-core areas. Furthermore, EVN included many unjustified expenses in calculating costs. The inspectors pointed out that as of 2011 EVN invested more than VND121 trillion (US$5.7 billion) in outside businesses including in non-core areas, or 150 percent off its chartered capital, but failed to make any profits on such businesses. EVN had unreported losses of VND2.19 trillion ($103.8 million). EVN violated the Ministry of Finance's regulations by investing more than its chartered capital in "outside businesses such as insurance, stock, and banking, and violated laws by holding more shares than allowed in companies in non-core industries. The government inspectors also mentioned that more than half of the investments were actually loans to 23 subsidiaries while EVN had borrowed the money, mostly from foreign creditors, with the government's guarantee. Many of EVN's subsidiaries also ended up suffering huge losses. In addition, EVN spent more than $23 million on a program to get master's degrees for 164 of its staff, but the degrees awarded by the US's Griggs University are not recognized by Vietnamese agencies. Besides, there were many unreasonable expenses presented in EVN's profit and loss account. In fact, an amount of nearly VND600 billion ($28.4 million) was spent on building houses, villas, tennis courts, swimming pools, and other facilities for EVN's staff accounted as administrative buildings for six thermal power plants in Quang Ninh, Hai Phong, Can Tho, and other provinces in Vietnam.

A survey of 400 state-owned enterprises, including big state-owned conglomerates, conducted by the Central Institute for Economic Management shows that internal control in State-owned enterprises is loose because of the lack of transparency in information disclosure, an internal control regulation and effective external supervision as well. A review of 100 big listed enterprises in Vietnam carried out by the International Finance Corporation and the Global Corporation Governance Forum in cooperation with Vietnam's State Securities Commission points out that issues not ruled by law, consisting of those regarding external auditors and profits of stakeholders, are not paid attention to. These enterprises also have poor performance in disclosure and transparency. According to Nguyen, director of Vietnam CFO Club, financial management in Vietnamese enterprises is generally poor and not transparent due to the inadequate qualifications of management personnel and the lack of a good management reporting system. Moreover, there are shortcomings in the internal control system, risk management and standardization of financial management processes.

In general, as assessed by many experts, the majority of enterprises in Vietnam do not clearly understand not only the necessity and the benefits of an internal control system, but also how to basically design and implement an internal control system. Additionally, the control and monitoring activities often overlap each other. These activities are also one-sided and concentrate on financial ratios and operating results. The current study therefore aims to explore the current situation of internal control system and determines the effect of elements of internal control systems on the financial performance of enterprises in Vietnam, particularly in Thai Nguyen. This study has made several original contributions to the literature. The study is the first comprehensive investigation of the relationship between internal control and financial performance of enterprises in Vietnam, especially in Thai Nguyen. A very few researchers have studied the relationship between internal control and financial performance, but no researcher has studied this relationship in emerging countries such as Vietnam. Therefore, this study represents an important and significant contribution to the internal control literature in Vietnam in particular and in the world in general.To future researchers, the findings of the research as well as the limitations of the research can become research directions. Therefore, future researchers can find out the research gaps for future studies to enrich the knowledge of the field.

The remaining of the paper is presented as follows. The second section reviews the related literature on internal control system and financial performance of enterprises and develops the hypothesis. The third section describes research methodology including research design, sample and sampling method, measurement of variables and statistical treatment. The fourth section discusses the research findings. The concluding section is then mentioned.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section discusses the review of previous related literatures and studies. On the basis of the review, the hypotheses are developed.

1. Literature Review

There are a significant number of studies on internal controls and financial performance of firms in Kenya. In practice, Dickson and Glarys (2016) investigated the impact of internal controls on financial performance of water service providers in Kenya. The study included members of audit committee, financial managers, internal auditors, senior accountants in water service providers in Tana water service Board region in Kenya. The study indicated that there was a positive relationship between independent variables such as segregation of duty, cash reconciliation, inventory audits and cost management and dependent variable regarding financial performance. In this study, measures of financial performance were qualitative. Indeed, respondents rated their companies' financial performance by selecting from strongly agreement to strongly disagreement answers on 5-point Likert scale. Likewise, Maguand Kibata (2016) examined the relationship between internal control system reflected by control environment and control activities and financial performance of Kenya Farmers' Association Limited. Seventy-eight managers were included in the study. The study found that there was a positive relationship between internal control system and financial performance of Kenya Farmers' Association Limited. In the study, financial performance was also qualitatively measured as respondents assessed their companies' financial performance by choosing from strongly agreement to strongly disagreement answers on 5-point Likert scale. A study by Kinyua (2016) investigated the relationship between internal control systems and financial performance of companies quoted in the Nairobi Securities Exchange, Kenya. A sample of hundred and fifteen senior managers of companies was analyzed to examine the relationship. In the study, the independent variables consisted of internal control environment, internal audit function, risk management, internal control activities and corporate government control. The dependent variables included net profit, return on sales, return on equity, return on assets, asset turnover, debt financing and equity financing. The moderating variable is government policy. The research findings indicated that internal control system had a significant relationship with financial performance. Another study by Nyakundi et. al. (2014) tested the effect of internal control system on financial performance of small and medium sized enterprises in Kisumu city, Kenya. The total sample of one hundred and seventeen small and medium scale enterprises was targeted to collect the information on the relationship between internal control system and financial performance. The research evidence revealed that internal control systems significantly influence financial performance, especially profitability, of SMEs.

Chebungwen and Kwasira (2014) conducted a study to test the effects of internal control on financial performance in tertiary training institutions in Kenya. A case study research method was employed. All sixty-eight employees of African Institute of Research and Development Studies were the target respondents. The research results revealed that there was a relationship between internal control and financial performance. The major limitation of the study is the generalization of the research results.

Douglas et. al. (2014) studied the effect of internal control system on financial performance of small and medium scale business enterprises in Kisumu City, Kenya. In the study, financial performance was measured by respondents'subjective assessment. The study findings presented that overall internal control systems significantly affected financial performance of small and medium scale business enterprises in Kisumu City. However, it seemed that there was no significant relationship between one dimension of internal control that is adherence to authorization procedures and financial performance of SMEs in Kisumu, Kenya. Mary et. al. (2014) examined the effects of internal control systems on financial performance of sugarcane outgrower companies in Kenya. All nine sugarcane outgrower companies were included in the study. In the study, internal control system was characterized by control environment, risk assessment process, information system and control activities. The results of the study indicated that internal control system has a significant impact on financial performance of sugarcane outgrower companies.

Tseng (2007) studied the relationship between internal control and financial performance, the relationship between enterprise risk management and financial performance. The researcher carried out a textual keyword search for public filings using 10kwizard.com. The total sample of five hundred and ninety-four firm-years with the disclosures of material weakness covering 2002 to 2005 was used to answer the first research question that is whether better internal control can enhance firm performance. The residual income model as the market valuation model was utilized to examine the relation between market value and firm with weak internal controls. The research results showed that better internal control implies better firm performance.

Khamis (2013) identified the contribution of internal control system to the financial performance of the financial institution, People's Bank of Zanzibar Limited. The total number of sixty respondents was included in the study. The research results indicated that there is a positive relationship between internal control and financial performance of the bank, especially People's Bank of Zanzibar Limited. The study has some limitations. One of the main limitations is that only People's Bank of Zanzibar Limited is the research unit in the study. Therefore, the generality of the research results is limited.

Dineshkumar and Kogulacumar (2013) studied the impact of internal control on system on the performance of the Sri Lanka Telecom limited. The sample of sixty employees of the company was selected. The findings of the study pointed out that there is a strong relationship between internal control system and organizational performance of the company. In addition, internal control of the Sri Lanka Telecom limited will lead to high organizational performance in the future. The main limitations of the study are a small sample size and only three variables such as accounting and auditing procedures, application of accounting and auditing rules and regulations, efficient use of resources in the internal control system included in the study. Similarly, Muraleetharan (2013) explored the relationship between control activities and performance of the organizations in Jaffna district, Sri Lanka. The total number of hundred and twenty employees in theorganizations was involved in the study. The research findings revealed that there is a positive association between control activities and organizational performance. In other words, the internal control has a significant impact on financial performance.

Mafiana (2013) investigated the relationship between internal control effectiveness and financial performance of the Nigerian banking industry. The data of the twenty-four commercial banks operating in Nigeria was collected to test the relationship between dependent and independent variables. The research findings showed that internal control effectiveness was positively related to financial performance. One of the main limitations of this study is a small sample size.

There has been no study on the relationship between internal control systems and financial performance of enterprises in Vietnam. The main purpose of the present study, therefore, is to discover the association between internal control systems and financial performance of enterprises in Vietnam, especially in Thai Nguyen.

2. Hypothesis Development

The arguments regarding to the relationship between internal control and financial performance described in the literature review lead to the below basic hypothesis

The first basic hypothesis relates to the relationship between internal control systems and financial performance of small and medium enterprises in Thai Nguyen Province

H1: There is no significant relationship between internal control systems and financial performance of small and medium enterprises in Thai Nguyen.

The specific hypothesizes for H01 are presented as the following

H1a: There is no significant relationship between control environment and financial performance of small and medium enterprises in Thai Nguyen.

H1b: There is no significant relationship between risk assessment and financial performance of small and medium enterprises in Thai Nguyen.

H1c: There is no significant relationship between control activities and financial performance of small and medium enterprises in Thai Nguyen.

H1d: There is no significant relationship between information and communication and financial performance of small and medium enterprises in Thai Nguyen.

H1e: There is no significant relationship between monitoring and financial performance of small and medium enterprises in Thai Nguyen.

III. RESEARCH METHODOLOGY

This section describes the research methodology that was utilized to conduct the study and collect necessary data. The section also presentsthe sample, sampling method and data analysis techniques used to analyze the research results. The study employed both descriptive and inferential statistics.

1. Research Design

The research is basically a quantitative research as it deals with the measurements of the effectiveness of the internal control systems and the financial performance of enterprises in Thai Nguyen, Vietnam. The level of effectiveness is quantitatively measured in terms of control environment, risk assessment, control activities, information and communication, and monitoring. Meanwhile, the financial performance is measured in terms of Return on Sales (ROS), Return on Equity (ROE), Return on Assets (ROA), and Assets Turnover.

The research design is a co-relational. The co-relational design is applied to meet the requirement of the researchobjective which intends to explore the association between the effectiveness of internal control systems and financial performance of enterprises in Thai Nguyen.

2. Sample and Sampling Technique

Respondents are enterprises in Thai Nguyen, these enterprises employ fewer than 300 employees. A population is a group of individuals, objects or items from which sample are taken for measurement (Kombo and Tromp, 2011). Cooper and Schindler (2011) mention that population is the total collection of elements about which one wants to make inferences. The sample consisted of 370 target enterprises responding to the research questions related to the relationship between their internal control systems and their financial performance.

The research study employed non random sampling technique or convenient sampling method to collect the target data since information on internal control systems of enterprises is secret information and therefore the target respondents hesitate to disclose such secret and sensitive information, especially in Vietnam.Designed questionnaires were distributed to target enterprises based on the researcher's relationship. Each target enterprise was requested to assess their internal control system and financial performance indicated in the questionnaire. One respondent per enterprise answered the questions. Participated respondents are senior managers at the target enterprises.

3. Measurement of Variables

Dependent Variable

The current study investigates the impact of internal control system on financial performance of enterprises in Vietnam, particularly Thai Nguyen. The study, thus consists of one dependent variable that is financial performance. On the basis of previous studies' measurement of financial performance, this study measured enterprise financial performance using the following variables as return on sales, return on equity, return on assets, assets turnover. These indicators of profitability were both quantitatively and qualitatively measured.

Return on sales (ROS) equals net income after tax dividing by total sales. It expresses profit as a percentage of total sales

Return on equity (ROE) equals net income after tax dividing by average shareholders' equity. This ratio expresses the amount of net income after tax returned as a percentage of shareholders' equity

Return on assets (ROA) equals net income after tax dividing by average total assets. The ratio measures how efficient management is at using assets to generate earnings.

Asset turnover equals total net sales revenue dividing by average total assets. Asset turnover is a ratio that measures the efficiency of a company's use of its assets in generating sales revenue to the company

Independent Variables

Since the study explores the effect of internal control system on financial performance of enterprises, the independent variables comprise the five components of internal control system. These five independent variables are control environment, risk assessment, information and communication, control activities, and monitoring. These variables were measured by the items prescribed in the updated COSO 2013 on 5-point Likert scale from 1 to 5 point. The respondents were asked to assessment of enterprises' internal control systems by putting a checkmark on the item which best describe their opinions or by filling in the answer on the space provided.

Control Environment

The control environment sets the tone of the entity, pointing to the responsibility of directors and management at all levels of the entity in establishing a sound control environment throughout the whole entity. This component of internal control affects and inspires the ethical behavior and contributes to a favorable culture of integrity and responsibility. Effectively controlled entities set a positive "tone at the top" and established appropriate policies and procedures. Control environment is the foundation for all other elements of internal control to provide discipline and structure.

The updated COSO 2013 prescribed the principles representing the fundamental concepts associated with control environment component of internal control. The component covers (i) demonstrating commitment to integrity & ethical values, (ii) exercising oversight responsibility, (iii) establishing structure, authority and responsibility, (iv) demonstrating commitment to competence, and (v) enforcing accountability.

Risk Assessment

Management assesses risks as part of designing and operating the internal control system to minimize errors and irregularities. Management should put in place a set of procedures to identify, analyze and manage risks. Identifying a risk that is likely to affect an entity is the crucial first step to reducing or managing risks. Once risks are identified, management should assess the likelihood of their occurrence and the severity of any negative effects that may be experienced as a basis for determining how the risks should be managed.

According to the COSO 2013, the principles represent the basic concepts related to risk assessment. These principles include (i) coefficient suitable objectives, (ii) identifying and analyzing risk, (iii) assessing fraud risk, (iv) identifying and analyzing significant change.

Control Activities

Control activities are policies and procedures that management has established to support the achievement of the entity's objectives for operation, financial reporting or compliance. Management must decide how to respond to identified risk conditions. Management must first assess whether controlling a risk has a net benefit to the entity. If it is likely cost effective to reduce a risk, control activities are deployed to reduce the risk in question.

As presented by the updated COSO 2013, the principles associated with the control activities component that management use to assess the effectiveness of internal control system are (i) to select and develop control activities, (ii) to select and develop general controls over technology, (iii) to deploys through policies and procedures.

Information and Communication

The presence of effective information and communication system is a key component of a strong internal control structure. Internal control system can rarely be effective unless an entity has adequate information for managing potential risks on a timely basis. The information and communication component of internal control means that important, relevant, accurate and timely information is identified, obtained and made available to proper persons in the entity. Well-functioning information and communication systems generate better decision making by managers, more engaged employees and fewer problems. Effective communication and information system also help the entity comply with laws and regulations. Information must flow throughout the organization if internal control is effective. In a high functioning system of internal control, relevant, accurate and timely information relating to every other component of internal control of the COSO framework is communicated up, down and across an entity.

The updated COSO 2013 introduced the principles representing the fundamental concepts related to information and communication component of internal control. These principles are (i) to use relevant information, (ii) to communicate internally and (iii) to communicate externally.

Monitoring

The final component of internal control is monitoring. It is the process that deals with assessment of the effectiveness of internal control. Monitoring activities are designed to provide information to management about whether internal controls are operating as intended and if internal control are modified as appropriate for changes in conditions. Monitoring activities can be performed on an ongoing basis or on periodic evaluations of performance over a period of time.

The COSO 2013 describes the principles representing the basic concepts associated with monitoring component. The principles consist of(i) conducting ongoing and or separate evaluations and (ii) evaluating and communicating deficiencies.

4. Statistical Treatment

The study utilized statistical treatment method to analyze data, in which, some qualitative and quantitative criteria such as: type of the industry, size of enterprises in term of number of employees, year of operations, form of ownership which will be processed through frequency or distributed percentage. The necessary data was gathered,checked and coded. Descriptive statistics such as frequencies and percentages were employed to interpret data. Correlation was used to examine the impact of internal control elements on financial performance of enterprises. The following regression model was used to examine the relationship between the independent variables and dependent variable.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \square$$

Where:

$\beta_1, \beta_2, \beta_3, \beta_4,$ and β_5 are the regression coefficients or change included in Y by each X

Y: Financial performance
β_0: Constant or intercept
X_1: Control environment
X_2: Risk Assessment
X_3: Information and communication
X_4: Control activities
X_5: Monitoring
ε: Error or Residual term

IV. RESULTS AND DISCUSSION

This section presents analysis and interpretation of collected data. The study utilized variety of statistical approaches including descriptive and inferential statistics to explore the current situation of internal control systems of enterprises in Thai Nguyen and examine the effect of internal control systems on financial performance of enterprises in Thai Nguyen. All constructs were adopted from pre-existing scales discovered in the academic literature.

1. Profile of the Respondents

Response Rate

There were 370 questionnaires that were administered on the respondents and 336 of them were answered and returned. This represent 90,81 % response rate which was sufficient for the research.

Type of Industry

Enterprise industry was divided into four groups. Manufacturing enterprise is the first group. Trade enterprise is the next group. Service enterprise is the third group. Other enterprise is the last group of industry. Table 4.1 presents industry classification of participated enterprises as follows.According to the table 4.1, the business sector of respondent enterprises is very much diversified. Among the industry, manufacturing enterprises accounted for the highest proportion, 47.02%. In manufacturing, construction is the industry that accounted for the highest percentage. Trading enterprises accounted for 38.99%. Service enterprises accounted for 12.50% and other industry enterprises such as agriculture accounted for the lowest percentage, 1.49%.

Table 4.1 Type of Industry

Industry Classification	Frequency	Percentage
Manufacturing	158	47.02
Trade	131	38.99
Service	42	12.50
Others	5	1.49
Total	336	100

Size of Enterprise

The below table describes the size of participated enterprises. Sizes of enterprise were classified into four main groups. The first group includes enterprises with less than 50 employees. The second group is enterprises with 50 employees to 100 employees. The third group consists of enterprises with 101 employees to 250 employees. The last group is enterprises with more than 250 employees.

Table 4.2 Size of Enterprise

Size of enterprise (number of employee)	Frequency	Percentage
Less than 50	86	25.60
50-100	167	49.70
101-250	59	17.57
More than 250	24	7.14
Total	336	100

In terms of size of enterprise, it is indicated that respondent enterprises had less than 250 employees, which is classified as small and medium sized enterprises. The majority of participated enterprises employs between 50 and 100 employees, this group accounted for the highest proportion, 49.70%. The next group consists of enterprises that employ fewer than 50 employees, accounted for 25.60%. The third group includes enterprises that employ between 101 and 250 employees, accounted for 17.57%. The last group comprises enterprises that employ more than 250 employees, this group accounted for the lowest proportion, 7.14%. The above information about size of participated enterprises is reasonable since small and medium sized enterprises in Vietnam in general and in Thai Nguyen in particular account for more than 90% of the total number of enterprises. It is noted that according to Vietnam criteria of classifying size of enterprises, trading and service enterprises that employ more than 50 employees are large-sized enterprises. There are many trading and service enterprises included in the research sample.

Ownership Form

Ownership forms of enterprise wereclassified into four groups. The first group of ownership form is limited companies. The next group of ownership form comprises of joint stock companies. The third group of ownership form includes state-owned enterprises. The last group of ownership form is private enterprises. The ownership form of participated enterprises is presented in table 4.3. as the followings.

Table 4.3 Ownership of Enterprise

Ownership form	Frequency	Percentage
Limited Companies	214	63.69
Joint Stock Companies	79	23.51
State-Owned Enterprises	25	7.44
Private Enterprises	18	5.36
Total	336	100

In terms of ownership form, limited companies accounted for the highest proportion, 63.69%. The second group is joint stock companies that accounted for 23.51%. The third group is state-owned enterprises accounting for 7.44%. Private enterprises accounted for the lowest percentage, 5.36%.

Length of Enterprise Operation

Length of business operation were divided into three groups. The first group is enterprises with less than 4 years of operations. The next group comprises of enterprises with 4 years of operations to 10 years of operations. The last group includes enterprises with more than 10 years of operations. The following table 4.4 presents length of business operation of participated enterprises

Table 4.4 Length of Enterprise Operation

Length of Operation	Frequency	Percentage
Less than 4 years	14	4.17
4 – 10 years	194	57.87
More than 10 years	128	37.96
Total	336	100

The result shows that there is only 4.17% of respondent enterprises with less than 4 years of operation. The majority of respondent enterprises with between 4 and 10 years of operation accounted for the highest proportion, 57.87%. Enterprises with more than 10 years of operations accounted for a significant percentage, 37.96%.

2. Data Reliability and Validity

Data Reliability

Cronbach alpha's reliability coefficient is a relevant measure of variance attribute to subjects and variance attributable to the interaction between subjects and items. The research used Cronbach's alpha as a measure of internal reliability. There are different reports about the acceptable value of Cronbach alpha's coefficient ranging from .65 to .95; Cronbach alpha's reliability coefficient that are less than 0.5 are usually unacceptable. The results of Cronbach alpha's reliability coefficient the study was from .65 and higher than .65.

Data Validity

In order to ensure that the research instruments gather the expected data, the questionnaire was validated before it was delivered to the target respondents. Pilot test was utilized to find out if there were questions having been revised

Verbal interpretation of the scale used to measure the perception of respondents on internal control systems and financial performance of enterprises in Thai Nguyen in the research is described in the following table

Table 4.5 Interpretation of Ratings and Weighted Mean

Scale	Range Interval	Verbal Interpretation
5	4.20 – 5.00	Strongly Agree
4	3.40 – 4.19	Agree
3	2.60 – 3.39	Neutral
2	1.80 – 2.59	Disagree
1	1.00 – 1.79	Strongly Disagree

The following part analyzed the association between internal control systems and financial performance of enterprises in Thai Nguyen, Vietnam.

3. Internal Control Systems and Financial Performance of Enterprise

In order to test the proposed hypotheses, the researcher utilized regression coefficient (beta β) with the test criteria is that the study should reject the null hypothesis H0 if $\beta \neq 0$ and p-value < α, otherwise fail to reject H0

Control Environment and Financial Performance

Data on the relationship between control environment and financial performance of SMEs in Thai Nguyen is showed in the tables as follows. The study results indicate that there is a significant positive linear relationship between control environment and financial performance of enterprises in Thai Nguyen. Actually, with β = .290 and p-value is .000 < .05, the study therefore rejects the null hypothesis H01a and concludes that control environment had significant effect on financial performance of enterprises in Thai Nguyen.

Risk Assessment and Financial Performance

The result of processed data on the relationship between risk assessment and financial performance of enterprises s in Thai Nguyen is indicated in the below tables.

From the data presented in these tables, it is concluded that that there is a statically significant positive linear relationship between risk assessment and financial performance of enterprises in Thai Nguyen. In fact, the β = .163 and p-value is .006 < .05 demonstrate that the study should reject the null hypothesis H01b and conclude that risk assessment had significant effect on financial performance of enterprises in Thai Nguyen, Vietnam.

Control Activities and Financial Performance

Based on the following processed data and the research results, it is obviously that there is a significant relationship between control activities and financial performance of enterprises in Thai Nguyen. In reality, $\beta = .190$ and p-value = $.002 < .05$ show that the null hypothesis H01c should be rejected. Therefore, the study findings point out that control activities had significant impact on financial performance of enterprises in Thai Nguyen.

Information and Communication and Financial Performance

The results of the study demonstrate that there is a significant relationship between information and communication and financial performance of SMEs in Thai Nguyen. In practice, from the regression results $\beta = .142$ and p-value = $.031 < .05$, the study rejects the null hypothesis H01d and deduces that information and communication had statistically positive effect on financial performance of enterprises in Thai Nguyen.

Monitoring and Financial Performance

To determine the relationship between monitoring and financial performance of enterprises in Thai Nguyen, the collected data was processed and the study findings reveal that there is a significant relationship between monitoring and financial performance of enterprises in Thai Nguyen. In actual fact, since $\beta = .170$ and p-value = $.009 < .05$, the study rejects the null hypothesis H01e and infers that monitoring had a statistically significant positive effect on financial performance of enterprises in Thai Nguyen.

The result of the relationship between internal control systems and financial performance of enterprises in Thai Nguyen is presented in the following table 4.6. The research results show that all five components including control environment, risk assessment, control activities, information and communication and monitoring of internal control system had statistically positive significant impact on financial performance.

Table 4.6 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
1 (Constant)	-.214	.086		.013
Control Environment	.317	.078	.290	.000
Risk Assessment	.198	.072	.163	.006
Control Activities	.200	.065	.190	.002
Information and Communication	.157	.073	.142	.031
Monitoring	.186	.071	.170	.009

a. Dependent Variable: FP

The table below presents the results of ANOVA analysis of the relationship between internal control systems and financial performance of enterprises in Thai Nguyen.

Table 4.7 ANOVA

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	93.961	5	18.792	373.927	.000[a]
Residual	16.585	330	.050		
Total	110.546	335			

a. Predictors: (Constant), Control Environment, Risk Assessment, Control Activities, Monitoring, Information and Communication

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	93.961	5	18.792	373.927	.000[a]
Residual	16.585	330	.050		
Total	110.546	335			

b. Dependent Variable: FP

The above processed ANOVA results point out that internal control system had overall positive significant effect on financial performance. The regression results with p-value = .000 < .05 also indicate that at individual level, there was a significant positive linear relationship between internal control system and financial performance of enterprises in Thai Nguyen.

Processed data of model summary is described as the following table

Table 4.8 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.922[a]	.850	.848	.22418	1.567

a. Predictors: (Constant), MO, CA, RA, IC, CE

b. Dependent Variable: FP

Note:

b. MO: Control Environment, RA: Risk Assessment, CA: Control Activities, MO: Monitoring, IC: Information and Communication

c. FP:Financial Performance

The preceding data implies that there is a positive relationship between internal control system and financial performance of enterprises in Thai Nguyen. The result of data processing demonstrates that adjusted R^2 of .848 means 84.0% of the variation of the dependent factor on internal control system of enterprises in Thai Nguyen can be explained by the independent variables including control environment, risk assessment, control activities, information and communication and monitoring, in the model.

The following regression model demonstrates the relationship between the dependent variable that is financial performance, and independent variables control environment, risk assessment, control activities, information and communication and monitoring.

$Y = .013 + .290 X_1 + .163 X_2 + .190 X_3 + .142 X_4 + .170 X_5$

Where:

.029, .163, .190, .142, .170 are the regression coefficients or change included in Y by each X

Y: Financial performance

.013: Constant or intercept

X_1: Control environment

X_2 Risk Assessment

X_3 Information and communication

X_4 Control activities – Independent variable

X_5 Monitoring – Independent variable

ε Error or Residual term

V. CONCLUSION

The study examined the relationship between internal control systems and financial performance of enterprises in Thai Nguyen. The objectives of the study are to investigate the relationship between internal control environment, risk assessment, control activities, information and communication, monitoring and financial performance. The sample consisted of senior managers in 336 enterprises in Thai Nguyen. The collected data was analysed using both qualitative and quantitative approach.Multi-regression models were applied to test if control environment, risk assessment, control activities, information and communication, monitoring have any effect on financial performance. The research results indicated that all factors regarding control environment, risk assessment, control activities, information and communication, monitoring had a significant relationship with financial performance. The findings of the study suggest that internal control systems particularly control environment, risk assessment, control activities, information and communication, monitoring are significant areas that managers of enterprises in Thai Nguyen should give great attention to in order to enhance their financial performance. The findings of this study support the findings of previous researchers. The study finds out the key determinants such as control environment, risk assessment, control activities, information and communication, monitoring of internal control system which should be strengthened by the management of enterprises.

Regardless of the sector such as public, private, not-for-profit within which they serve or the business sizes like small, medium, large which they are, all managers must strive to (i) operate effectively and efficiently, (ii) produce reliable external financial reports, and (iii) comply with applicable laws and regulations. The financial crisis clearly demonstrated that as economies and markets become increasingly globalized, the issues that arise in those economies and markets also need to be considered in the global context, particularly when it comes to risk. A strong internal control system is vital to strengthening of the governance of organizations and supporting to the achievement of the organization's objectives and goals. There are no standardized control systems. The choice of a form of the internal control system depends on the complexity of the organization's structure, its legal form, the size of the organization, features of the industry in which the organization operates, managerial attitude to the issue of internal control. Every organization is unique and internal control system must be tailored to the organization to meet the unique characteristics, circumstances and requirements of the organization.

REFERENCES

[1]. D. Leonard andR. McAdam, Corporate social responsibility. Quality Progress, 36(10), 2003, 27 – 33.

[2]. Nguyen T.L.H., Internal control and the state of internal control in selected Vietnamese enterprises. *ICECH2015 - International Conference on Emerging Challenges: Managing to Success*, 1(1), 2015, 189-195.

[3]. K. N. Dickson and B. Glarys (2016). "Effect of internal controls on financial performance of water companies in Kenya (a case of water companies in Tana water services Board)", *American Journal of Finance*,1(1), 2016, 11-28.

[4]. . K. Magu and P. Kibata, "Influence of internal control systems on financial performance of Kenya Farmers' Association limited", *International Journal of Economics, Commerce and Management*, 4(4), 2016, 783-800.

[5]. J. K. Kinyua, *Effect of internal control systems on financial performance of companies quoted in the Nairobi securities exchange*, doctoral diss, Jomo Kenyatta University of Agriculture and Technology, Kenya, 2016.

[6]. D. O. Nyakundi, M. O.Nyamita and T. M. Tinega, Effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu city, kenya. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 2014, 719-734.

[7]. N. Chebungwen and J. Kwasira, An assessment of internal control system on financial performance in tertiary training institutions in Kenya: acase study of African Institute of Research and Development Studies, *International Journal of Science and Research*, 3(3), 2014, 571-573.

[8]. O. N. Douglas., O. N Micah., and M. T. Tom), "Effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City, Kenya", *International Journal of Social Sciences and Entrepreneurship*, 1(11), 2014, 1-15

[9]. M. Mary, O. Albert and J. Byaruhanga, Effects of internal control systems on financial performance of sugarcane outgrower companies in Kenya, *Journal of Business and Management*, 16(12), 2014, 62-73.

[10]. Tseng, C. Y., Internal control, enterprise risk management, and firm performance, doctoral diss.,University of Maryland, USA, 2007.

[11]. A. H. Khamis, Contribution of internal control system to the financial performance of financial institution. A case of people‟s bank of Zanzibar Ltd., doctoral diss., Mzumbe University, Tanzania, 2013.

[12]. S. Dineshkumar, and P. Kogulacumar, Internal control system and its impact on the performance of the Sri Lanka Telecom Limited in Jaffna District. *International Journal of Advanced Computer Technology*, 2(6), (2012), 56–64.

[13]. P. Muraleetharan, Control activities and performance of organizations (special reference in Jaffna District), *International Journal of Marketing, Financial Services & Management Research*, 2(4), 2013, 10-16.

[14]. E. A. Mafiana, *Examining the relationships between internal control effectiveness and financial performance in the Nigerian banking industry*, doctoral diss., Walden University, 2013.

[15]. D. K. Kombo and D. L. A. Tromp, *Proposal and thesis writing: An Introduction*, Paulines Publications Africa, 2011.
[16]. D. R. Cooper and P. S. Schindler, *Business research methods*, New York, McGraw-Hill/Irwin, 2011.
[17]. COSO, *Internal control—integrated frame work executive summary*, The Committee of Sponsoring Organizations of the Treadway Commission, 2013, 1-8.