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Influencing a Firm's External Environment on Internal Control in Commercial Firms in Hanoi

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Abstract

Internal control plays an important role in reducing risk and thereby helping businesses ensure the reliability of their financial statements and compliance with laws and government regulations (Rönkkö *et al.*, 2018; Spira & Page, 2003) ^[20, 21]. The State's documents have focused on the establishment of the supervisory board in joint-stock firms. Decree No. 5/2019/ND-CP of the Vietnam Government stipulates internal audit work in state agencies, public non-business units, and firms. This study was conducted to determine the firm's external environmental factors and their

influence on internal control in commercial companies in Hanoi, thereby proposing governance implications for the business leaders of these companies to improve internal control. The author uses mixed quantitative and qualitative research methods, of which quantitative research is the main one. Qualitative research is used to adjust the scale. Quantitative research is used to analyze, measure, and test the model. Research results have determined that firms' external environmental factors affect internal control in commercial enterprises in Hanoi.

Keywords: Internal Control, Firm's External Environmental, Influencing, Commercial Firm, Audit

JEL Classifications: M40, M41, M42

1. Introduction

Internal control plays an important role in reducing risk and thereby helping firms ensure the reliability of their financial statements and compliance with laws and government regulations (Rönkkö *et al.*, 2018; Spira & Page, 2003) ^[20, 21]. Internal controls play an important role in any firm since they help achieve both financial and non-financial performance. Internal controls are designed to minimize risks, protect assets, ensure reliable financial reporting, increase performance, and facilitate compliance (Bashaija, 2022) ^[2]. Although numerous studies have supported the significance of internal control to corporate performance (Chalmers *et al.*, 2018) ^[3], a review by Rönkkö *et al.* (2018) ^[20] reveals that nearly half of businesses do not voluntarily conduct internal control activities. The factors influencing the internal control operations of firms in various nations have thus been the subject of numerous research (Goodwin-Stewart & Kent, 2006; Jokipii, 2010) ^[8, 12].

In Vietnam, internal control is regulated in the accounting law No. 88/2015/QH13 (National Assembly, 2015, pages 18–19 ^[15]), according to which "internal control is the establishment and organization of the implementation of internal mechanisms, policies, processes, and regulations in accordance with the provisions of law in order to ensure timely prevention, detection, and handling of risks and meet requirements". The accounting unit must establish an internal control system within the unit to ensure that (i) the assets of the unit are guaranteed to be safe to avoid misuse and ineffectiveness; (ii) transactions are approved with proper authority and are fully recorded as a basis for the preparation and fair presentation of the financial statements. Besides, the State's documents have focused on the establishment of the supervisory board in joint-stock firms. Decree No. 5/2019/ND-CP of the Vietnam Government stipulates internal audit work in state agencies, public non-business units, and firms. The decree takes effect from April 1, 2019. According to this decree, firms are required to carry out internal audits, including listed firms. The decree also encourages other firms to carry out internal audit work.

Commercial firms play an important role in increasing income for workers, mobilizing social resources for investment, and developing localities. Because the business characteristics of commercial enterprises largely depend on the consumption factor of the population, commercial enterprises often concentrate in densely populated areas, of which Hanoi is a typical example. Commercial enterprises in Hanoi have had a strong development, contributing to the construction and development of Hanoi's

capital into the economic and political center of the country. However, besides commercial firms with good business results, there are still some commercial firms with poor business results, even after suffering continuous losses for many years. One of the reasons is that internal control has not been really concerned, so the effectiveness of internal control is not high.

For the above reasons, this study has both scientific and practical significance.

2. Literature Review

2.1 Internal Control

In 1992, the Committee of Sponsoring Organisations (COSO) framework broadened it to risk and internal control (Lakis & Giriūnas, 2012) ^[14]. Internal control is a comprehensive action embracing financial, operational, management, strategic and total quality management in an organisation. Mid-21st century was ridden by corporate scandals, which led to the Sarbanes-Oxley (SOX) Act of 2002. Section 404 of the SOX Act on evaluation for internal controls obliges management to install satisfactory internal control mechanisms for reliable monetary transaction reporting. Under Section 302 of the SOX Act on corporate responsibility, financial reports need to incorporate accreditations by the chief risk officers (CRO) that the reports are not distorted, and any defect in the internal control practices are conveyed to the audit committee.

Internal control is a process that includes: (i) setting standards that must be respected; (ii) comparing current performance with established objectives and standards; and (iii) developing and making the necessary adjustments to ensure that the expected performance of the business is achieved (Robbins & DeCenzo, 2001) ^[19]. Internal control involves many areas in an enterprise, such as strategic management, management processes, production, and business activities, with the ultimate aim of improving the overall efficiency of the enterprise (Vijayakumar & Nagaraja, 2012) ^[24].

Internal control in a firm consists of two parts: The first is internal control policies and procedures to ensure that management achieves the objectives of the enterprise. The second is the actual control process to ensure that the internal control mechanism is strictly and effectively implemented (Pham, 2013) ^[17].

Charles (2011) ^[5] conducted a study to evaluate the internal control of commercial banks in Nigeria based on five components according to the COSO report and proposed six research hypotheses.

Sultana and Haque (2011) ^[23] argue that an assessment of internal control in an enterprise is necessary to determine the ability to ensure that business activities are carried out in accordance with the set objectives.

In Vietnam, some recent studies show that internal control has a positive impact on the operation of enterprises, such as: internal control increases the transparency of enterprises' financial statements (Pham, 2019) ^[18]; encouraging private enterprise innovation in Vietnam (Le *et al.*, 2022) ^[15]; internal control including five components has a significant impact on financial performance, and components of the control environment, risk assessment, control activities, and communications have direct positive effects on non-financial performance. Monitoring activities have no impact on non-financial metrics (Nguyen *et al.*, 2023) ^[16].

2.2 Firm's External Environment and Internal Control

According to Khandwalla (1972) ^[13], the components of the external environment include (i) complexity, (ii) diversity, (iii) opposition, and (iv) chaos. According to Storey and Sykes (1996) ^[22], formal control systems should be applied to small firms because the external environmental uncertainty they encounter will be much greater than that of large firms face-to-face.

There are many research opportunities to examine factors affecting management control systems in volatile environments (Chenhall, 2003) ^[4]. Gul and Chia (1994) ^[9] assert that organizations with high external environmental instability will be more dependent on internal control, possibly because the control system becomes more important when instability is high.

When the uncertainty of the environment is high, the organization will manage more carefully, monitor the output more closely, and select employees more carefully. The higher the degree of instability, the more information processing is required (Young *et al.*, 2001) ^[25].

The research results of Auzair (2011) ^[1] and Dropulic (2013) ^[7] both confirm that the organization's perception of the instability of the external environment affects the administrative control system but does not affect the administrative control system much.

3. Methodology

3.1 Qualitative Research

This study is done to adjust the scale. The author has interviewed five people who are heads or deputy heads of the internal control departments of commercial enterprises in Hanoi, and the author also interviewed three lecturers with expertise in auditing and internal control. The results have 1 statement on the "commercial business technology" scale, 1 statement on the "actions of commercial service providers" scale, and 6 scales are adjusted from the results of previous studies are preserved, thereby making it easier for readers to understand.

3.2 Quantitative Research

Research Sample and Data Collection Method

The survey subjects are employees working in the accounting department, the internal control department, and the heads and deputy heads of other departments in commercial enterprises in Hanoi. The sample was selected by convenience method, with 225 valid questionnaires obtained. Respondents either directly fill out the questionnaire and immediately return it to the surveyor or respond online. The implementation period is from August 2022 to October 2022.

Data Processing

The order to conduct data analysis is as follows: Prepare information, sample descriptive statistics, and evaluate the reliability of the scale by Cronbach's alpha coefficient. Cronbach's alpha is 0.6 or higher, and the correlation coefficient of the total variable is greater than or equal to 0.3. Exploratory factor analysis (EFA): Using the method of factor extraction, Principle Component Analysis (PCA) with Varimax perpendicular rotation, select factors according to eigenvalue criteria. The Barlett test must have p less than 5% ($p < 5\%$), KMO between 0 and 1, and Pearson correlation analysis.

3.3 Research Model

From the above analysis, inheriting the results of previous studies, we design a research model (Fig 1).

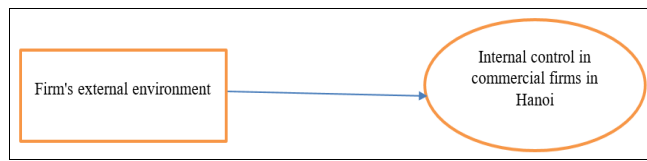


Fig 1: Research model

Dependent Variable: Internal control in firms in Vietnam (KSNB), including 5 items (COSO, 1992).

Independent Variables: There are 1 independent variables, including 8 items.

4. Research Results

4.1 Descriptive Statistics

The data in Table 1 illustrate that the respondents rate the influence of the firm's external environment on internal control quite highly, according to which the firm's external environment includes eight important variables. Surveys (attributes) are given a score of 3.6 or higher on a 5-point Likert scale.

Table 1: Descriptive Analysis of attributes of firm's external environment

Firm's external environment (BN)	N	Minimum	Maximum	Mean	Std. Deviation
BN1	225	2.0	5.0	3.60	.695
BN2	225	2.0	5.0	4.00	.816
BN3	225	2.0	5.0	4.12	.776
BN4	225	2.0	5.0	4.13	.766
BN5	225	2.0	5.0	4.08	.760
BN6	225	2.0	5.0	3.72	.661
BN7	225	2.0	5.0	3.91	.741
BN8	225	2.0	5.0	3.88	.747
Valid N (listwise)	225			3.93	

4.2 Cronbach's Alpha

By using scale analysis, it can eliminate inconsonant variables and reduce errors in the research model. Therefore, only variables that have total correlation coefficients (Corrected Item-Total Correlation) greater than 0.3 and Cronbach's alpha coefficients equal to or greater than 0.6 are accepted (Hoang & Nguyen, 2008; Hair *et al.*, 2010) [11, 10]. By analyzing Cronbach's alpha analysis of a firm's external environment's influence on internal control of commercial firms in Hanoi, the result is presented in Table 2. The result shows that all Cronbach's alpha coefficients are above 0.6, and all corrected item-total correlations of

observed variables are above 0.3. Thus, all variables of the research model are suitable for the next analyses (Hair *et al.*, 2010) [10].

Table 2: Results of analysis of Determinants Confidence of Scales in the Model

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Internal control (KSNB): 0.888, N = 5				
KSNB-MTKS	14.7022	5.460	.726	.865
KSNB-RR	14.9822	5.250	.702	.873
KSNB-KS	14.8089	5.637	.729	.864
KSNB-TT	14.6978	5.721	.740	.863
KSNB-GS	14.8000	5.455	.762	.857
Firm's external environment (BN): 0.934, N = 8				
BN1	27.84	18.492	.863	.916
BN2	27.43	18.050	.782	.921
BN3	27.32	18.424	.766	.923
BN4	27.31	18.606	.748	.924
BN5	27.35	18.675	.743	.924
BN6	27.72	19.399	.738	.925
BN7	27.53	18.866	.732	.925
BN8	27.55	18.731	.749	.924

4.3 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was conducted through component analysis and variance, and the results yielded eight attributes of independent variables. The results of factor analysis in Table 3 show that $0.5 < KMO = 0.901 < 1$. Bartlett's testimony shows $sig. = 0.000 < 0.05$, which means variables in the whole are interrelated.

After implementing the rotation matrix, 1 determinant with a load factor greater than 0.5, eigenvalues greater than 1, and the variance explained is 68.031% (see table 4). These statistics demonstrate that research data analysis for factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified one determinant influencing the internal control of commercial firms in Hanoi (Hair *et al.*, 2010) [10].

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.901
Bartlett's Test of Sphericity	Approx. Chi-Square	1,305.868
	Df	28
	Sig.	0.000

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.442	68.031	68.031	5.442	68.031	68.031
2	0.548	6.855	74.886			
3	0.478	5.979	80.865			
4	0.422	5.281	86.145			
5	0.395	4.943	91.088			
6	0.358	4.478	95.566			
7	0.187	2.339	97.905			
8	0.168	2.095	100.000			

Table 5: Component Matrix^a

	Component
	1
BN1	0.903
BN2	0.837
BN3	0.825
BN8	0.813
BN4	0.811
BN5	0.806
BN6	0.804
BN7	0.795

4.4 Correlation Analysis

The results of the correlation matrix are indicated in Table 6. The correlation coefficients of firm's external environment with one dependent variable is greater than 0 reflecting a positive relationship. In addition, values of sig. are less than 0.05 which means that all variables are interrelated (Hair *et al.*, 2010) ^[10].

Table 6: Correlations

		KSNB	BN
KSNB	Pearson Correlation	1	.705**
	Sig. (2-tailed)		0.000
	N	225	225
BN	Pearson Correlation	.705**	1
	Sig. (2-tailed)	0.000	
	N	225	225

5. Discussion and Implications

Studying the factors affecting internal control in enterprises has important policy implications because it provides useful information to help researchers and regulators gain a better understanding of practical activities. In addition, it is also one of the references for commercial firms to make effective decisions.

The external environment of the enterprise has an influence on internal control through the evaluation of the survey subjects. In the external environment, businesses must always face pressures such as legal regulations, state policies, labor supply, globalization, the country's economic situation, industrial development trends information technology, epidemics. Factors outside the business usually cause difficulties for enterprises in collecting sufficient information or the control mechanism cannot keep up, leading to laxity and difficulties for the enterprise's management's handling. If the external environment of the enterprise is not stable, it is necessary to have internal control to increase reliability. Therefore, if internal control is considered in the direction of strengthening information and communication activities, such as ensuring certainty in the decisions of the administrator, the administrator will be more cautious through close supervision. This will help managers make more informed decisions.

The economic situation of the world and Vietnam has changed a lot under the impact of the epidemic, especially the COVID-19 pandemic. In addition, enterprises implement digital transformation, and the influence of the 4.0 revolution has affected the business model and internal control of enterprises. In addition, the scarcity of high-quality labor resources, especially information technology human resources, also affects commercial firms. Therefore, commercial firms need to be aware of changes in products and services to meet the diverse needs of consumers. The

more unstable the external environment, the more businesses need to be aware of the need to collect and process large amounts of information, especially the lack of information on product evaluation, customers, competitors, domestic and foreign policymaking, and business technology development trends. Therefore, it will bring many potential risks to enterprises. Therefore, internal control needs to design a strong increase in information and communication components, risk assessment, and control activities with carefully and closely designed processes to help reduce environmental instability, thereby realizing the enterprise's objectives.

Large corporations and government organizations should develop propaganda strategies, and they should also assist and motivate small businesses to conduct internal control activities.

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