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Factors affecting internal control activities in regular expenditures at the social insurance office of soc Trang province

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CHRONICLE	A B S T R A C T
Article history: Received: November 23, 2024 Received in revised format: Janu- ary 14, 2025 Accepted: March 27 2025 Available online: March 27, 2025 Keywords: Effectiveness Internal Control Social Insurance Office of Soc Trang Province	This study aims to rigorously examine and assess how various determinants influence internal control mechanisms associated with routine expenditures at the Social Insurance Office of Soc Trang Prov- ince. Using a quantitative method with 182 survey samples collected from civil servants and officials of the Social Insurance Office of Soc Trang Province, the data were validated through Cronbach's Alpha, Exploratory Factor Analysis (EFA), and multiple regression analysis. The findings demonstrate that five factors impact internal control, ranked by their significance: Control Activities, Monitoring Activities, Control Environment, Information and Communication, and Risk Assessment. Additionally, the author provides recommendations to improve the effectiveness of managing and utilizing regular expenditures at the unit.

1. Introduction

Internal control (IC) is a system of processes, regulations, and policies established by the management to achieve objectives related to operational effectiveness, accurate reporting, and legal compliance (GamageLow & Keving, 2018). In Vietnam, the IC system plays a crucial role in identifying and addressing risks, particularly in large financial management agencies such as Social Insurance (SI), where large funds are managed and complex benefit schemes are implemented. The necessity of IC and internal auditing (IA) is emphasized through legal regulations such as Decree 05/2019/ND-CP, ensuring transparency and accountability in management. The application of international best practices and monitoring of regular expenditures helps management identify errors and make appropriate decisions. This study, focusing on the Social Insurance Office of Soc Trang Province, examines the factors influencing IC in regular expenditures, aiming to support leadership in improving management processes.

2. Theoretical framework and hypotheses

2.1 Theoretical Framework

The internal control system (ICS) serves as a vital component of corporate governance by facilitating the control, prevention, and detection of fraud. According to various definitions from international organizations such as IFAC, AICPA, and COSO, ICS comprises policies and procedures intended to protect assets and guarantee the precision of financial data, improve operational efficiency, and ensure legal compliance. According to COSO's 1992 report and its 2013 update, ICS is a management-established process designed to achieve operational, reporting, and compliance objectives. ICS is not only a system but a continuous process, encompassing five components: control activities, control environment, information and communication, risk assessment, and monitoring.

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2.2 Relevant Studies

Studies on the ICS conducted by researchers worldwide have highlighted the importance and impact of its constituent elements in different contexts. Aziz et al. (2015) surveyed 109 employees from various ministries of the Malaysian government, revealing that ICS in the financial sector functions more effectively than in other sectors such as education, healthcare, and media. This underscores the importance of customizing ICS elements to fit the specific characteristics of each industry. Mary (2017) conducted research at the Mother and Child Hospital Akure in Nigeria, surveying 150 employees. The results indicated that ICS helps enhance the ability to prevent fraud and waste, as well as improving the efficiency and reliability of accounting data. Lagat and Okelo (2016) determined that in Kenya's Baringo County government, control and monitoring activities are vital for financial management, while the control environment and information communication had no significant impact. Zipporah (2015) analyzed manufacturing companies in Nairobi, Kenya, and found that the control environment, control activities, risk assessment, and information communication positively affected financial performance. However, monitoring had an inverse effect on Return on Assets. Gamage et al. (2014) applied the COSO framework to two Sri Lankan state-owned banks, finding that control environment, risk assessment, control activities, information communication, and monitoring enhance internal control system effectiveness. Babatunde and Dandago (2014) investigated capital project management in Nigeria's public sector, recommending rigorous adherence to ICS components to boost management efficiency and community benefits. Babatunde (2013) observed that ICS enhanced financial accountability in the Nigerian public sector and advised the enforcement of strict sanctions to improve system effectiveness.

In Vietnam, studies related to the ICS have also yielded notable findings. Tran Van Tung and Ngo Ngoc Nguyen Thao (2020) conducted a survey at public service units in Ho Chi Minh City and identified six factors influencing the effectiveness of ICS, with control activities and information technology having the greatest impact. Nguyen Quoc Hung (2020) onducted an analysis at the Veterinary Supplies and Pharmaceuticals Production and Trading Joint Stock Company and found that control activities had the strongest effect ($\beta = 0.351$). Lam Minh Nhat (2019) concluded that the control environment was the most influential factor on ICS in small and medium-sized enterprises in Ho Chi Minh City. Luong Thi My Xuan (2019) indicated that at the Thoi Lai District Health Center, the factor of information and communication had the strongest influence ($\beta = 0.335$). Nguyen Thi Phuong Lan (2018) analyzed and identified the impact of business strategy and organizational culture on each component of the internal control system (ICS). Ngo Thi Thu Huong and Nguyen Thi Hoai An (2018) found that risk assessment was the most influential factor among the five key elements in public service units with income in Tuy Hoa City. Doan Thi Thao Nguyen (2018) highlighted the critical role of risk assessment in enhancing ICS effectiveness within Ho Chi Minh City's entertainment sector. Nguyen Thi Loan (2018) surveyed Vietnam's commercial banks, revealing that risk monitoring, control procedures, and information communication significantly enhance ICS effectiveness.

Insights from existing research suggest that information communication, control activities, and the control environment exert a decisive impact on ICS effectiveness. The studies have clarified the differences and similarities between organizations and countries, thereby providing practical suggestions for improving the ICS in specific contexts, such as the Social Insurance Office of Soc Trang Province.

2.3 Framework

Based on the COSO ICS framework, which includes elements such as control activities (CA), control environment (CE), information and communication (IC), risk assessment (RA), and monitoring (M), this study evaluates the effectiveness of the internal control system. At the Social Insurance Office of Soc Trang Province, the management of regular expenditure funds must comply with legal regulations; however, there are still gaps in the management of finances, budgets, and public assets, creating opportunities for corruption. Corruption behaviors are often related to violations of financial and budget management principles, such as misappropriation of funds, overstatement of asset values, or corruption through procurement. Investigations into ICS effectiveness in routine expenditure processes are well supported by the COSO 2013 five-component model, which also facilitates achievement of ICS objectives.

* Hypotheses:

H₁: Internal control over recurrent expenditures at the Social Insurance Office of Soc Trang Province is positively influenced by control activities.

H₂: Internal control over recurrent expenditures at the Social Insurance Office of Soc Trang Province is positively influenced by the control environment.

H₃: Internal control over recurrent expenditures at the Social Insurance Office of Soc Trang Province is positively influenced by information and communication.

H4: Internal control over recurrent expenditures at the Social Insurance Office of Soc Trang Province is positively influenced by risk assessment.





Fig. 1. Proposed Research Model

3. Research Method

The qualitative research was conducted through focus group discussion techniques and the examination of documents and texts to collect information. The objective of this method is to explore, clarify, and adjust the scales in the research model, ensuring their suitability to the actual context and alignment with the research objectives. Qualitative research plays an essential role in developing and refining measurement elements, contributing to the direction and enhancing the accuracy of the research model. Quantitative research aims to collect and analyze data through a convenient non-probability sampling method. Data was gathered using structured questionnaires, collecting information directly from survey participants.

The methods used include: Cronbach's Alpha measured scale reliability, while exploratory factor analysis extracted and clarified underlying factors. Pearson correlation analysis quantified variable associations, and multiple regression analysis delineated relationships between independent and dependent variables. Additionally, mean value testing was applied to compare data groups. The entire data analysis process was conducted with the support of SPSS software, ensuring accuracy and efficiency in statistical processing.

Research sample: In EFA analysis, Hair et al. (2006) recommend a minimum sample size of 150 (corresponding to 30 observed variables multiplied by 5. Meanwhile, Tabachnick and Fidell (2007) propose at least 106 participants for multiple regression, based on the $50 + 8 \times 7$ formula. To maintain sample representativeness and mitigate incomplete data, 182 participants were surveyed to ensure validity.

4. Research results

4.1 Descriptive statistics of the survey participants

Table 1

Summary of Descriptive Statistics for Survey Respondents.

Criteria		Quantity	Percentage (%)
Condon	Male	90	49.50
Genuer	Female	92	50.50
	Intermediate level	2	1.10
Educational healtenaund	College level	4	2.20
Educational Dackground	University degree	147	80.77
	Postgraduate	29	15.93
	Aged 21 to 29 years	6	3.30
A	Aged 30 to 34 years	55	30.22
Age	Aged 35 to 39 years	51	28.02
	Over 40 years old	Quantity90le90nediate level2ge level4vrsity degree147raduate2921 to 29 years630 to 34 years5535 to 39 years5140 years old70than 10 years2210 to 15 years6115 to 20 years64ars and above35	38.46
	Less than 10 years	22	12.09
Contonity	From 10 to 15 years	61	33.52
Semority	From 15 to 20 years	64	35.16
	20 years and above	35	19.23

(Source: SPSS Analysis Results, 2024)

The results in Table 1 indicate an almost even gender split among respondents, with 50.55% female and 49.45% male. Regarding

education level, participants were categorized into four groups: 1,10% with a secondary education level (2 individuals), 2,20% with a college education level (4 individuals), 80,77% with a university education level (147 individuals), and 15,93% with a postgraduate education level (29 individuals). The secondary and college-level groups were surveyed based on work experience, while the university and postgraduate groups mainly met standardization requirements for job positions and appointment planning. Regarding age, 3.30% were 21–29 years old, 30.22% were 30–34 years old, 28.02% were 35–39 years old, and 38.46% were 40 years or older. The work experience of the surveyed individuals was divided into four groups: 12,09% with less than 10 years of service (22 individuals), 33,52% with 10 to less than 15 years of service (61 individuals), 35,16% with 15 to less than 20 years or more were deemed to provide higher survey quality. Shorter-tenure staff still met the requirements, and most had passed the Social Insurance selection exam.

4.2 Testing the Reliability of the Scale

Cronbach's Alpha above 0.7 and item-total correlations exceeding 0.3 indicate acceptable reliability for the scale (Hoang Trong & Chu Nguyen Mong Ngoc, 2008).

Table 2

Reliability Test Findings for Measurement Scales in the Research Model

Variables	Number of Observe	d Overall Cronbach's	Variation in Item-	Cronbach's Alpha if	
	Variables	Alpha Coefficient	Total Correlation	Item Deleted	
Independent variable					
Control activities	5	0.802	0.496	0.714	
Control environment	6	0.825	0.548	0.766	
Information and communication	5	0.798	0.537	0.746	
Risk assessment	5	0.820	0.532	0.757	
Monitoring	5	0.847	0.567	0.802	
Dependent variable					
Internal Control Activities in Recurrent Expenditures	4	0.737	0.460	0.655	
Total	30	-	-	-	

(Source: SPSS Analysis Results, 2024)

In Table 2, Cronbach's Alpha analysis reveals that all constructs exceed 0.70, ranging from 0.737 to 0.847. No observed variables require removal to enhance reliability, and all item-total correlations surpass 0.30.

4.3 Results of Exploratory Factor Analysis

According to Nguyen Đinh Tho (2011), the exploratory factor analysis (EFA) method must satisfy the following criteria: $KMO \ge 0.5$ and a statistically significant Bartlett's test (p < 0.05) are required, with Eigenvalues ≥ 1.0 . Each observed variable's highest factor loading must be at least 0.5. Each observed variable must maintain a minimum difference of 0.3 between its highest factor loading and any other loading to preserve scale discriminant validity. The total extracted variance must reach or exceed 50%. Because the KMO coefficient (0.880) exceeds 0.5 and Bartlett's test significance (0.000) is below 0.05, both criteria are satisfied. Consequently, the EFA results are deemed appropriate.

Table 3

KMO and Bartlett's Test for Independent Variables

Kaiser-Meyer-Olkin		0.880
Approx. Chi-Square		2098.038
Bartlett's Test	df	325
	Sig.	0.000

(Source: SPSS Analysis Results, 2024)

All factors have Eigenvalues greater than 1, and the extracted variance of the factors is 59,091%, which exceeds the 50% threshold, as required (Anderson & Gerbing, 1988). Hence, 59.091% of the observed variable variation is accounted for by the five extracted factor groups. All observed variables, as shown in Table 4's rotated factor matrix, exhibit factor loadings above 0.5 and converge on a single factor. Hence, the measurement scale for the independent variables ensures both convergent and discriminant validity. The results of the factor rotation extraction formed five common factor groups, consistent with the proposed model, with no unexpected reordering or grouping. This demonstrates the reliability of the data set and the measurement scales in the research model, which are effectively applicable in practice. For the dependent variables and confirming EFA's suitability. The factor group has an Eigenvalue of 2.247 and accounts for 56.176% of the observed variation, exceeding the 50% threshold. Furthermore, the observed variables intended to measure the concept of satisfaction have very high loadings on the extracted factor (ranging from 0,697 to 0,786). All observed variables demonstrate loading coefficients exceeding 0.5. After performing the EFA analysis

with all the observed variables, the results yielded 5 independent factors and 1 dependent factor. The factor loadings all met the required threshold of being greater than 0.5, and no observed variable showed a factor loading difference between factors less than 0.3, indicating that these variables are meaningful.

Table 4

Rotated Factor Matrix of Independent Variables

N-	Observed Versiehls	Factor				
INO.	Observed variable	1	2	3	4	5
1	CE2	0.847				
2	CE4	0.659				
3	CE5	0.641				
4	CE1	0.630				
5	CE3	0.617				
6	CE6	0.613				
7	MO2		0.810			
8	MO3		0.736			
9	MO5		0.713			
10	MO4		0.685			
11	MO1		0.622			
12	IC5			0.723		
13	IC2			0.684		
14	IC4			0.639		
15	IC3			0.630		
16	IC1			0.624		
17	CA3				0.848	
18	CA5				0.675	
19	CA4				0.650	
20	CA1				0.638	
21	CA2				0.615	
22	RA3					0.779
23	RA2					0.707
24	RA1					0.655
25	RA5					0.654
26	RA4					0.639
Eigenvalue coeffi	cient	8.714	1.942	1.784	1.495	1.428
Extracted varian	ce (%)	33.516	7.471	6.863	5.752	5.491
Total Extracted V	ariance %			59.091		
Significance				0.000		
Kaiser-Mever-Ol	kin			0.880		

(Source: SPSS Analysis Results, 2024)

Therefore, they can be included in the next step of analysis. Before conducting correlation and regression analysis, representative variables for each factor group were created.

4.4 Pearson Correlation Analysis

The appropriateness of incorporating the independent variable components into the regression model was evaluated through the application of Pearson correlation analysis.

Table 5

Results of Pearson Correlation Analysis

		IC	CE	MO	IC	CA	RA
	Pearson Correlation	1	0.664**	0.714^{**}	0.657**	0.691**	0.625**
IC	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	182	182	182	182	182	182
	Pearson Correlation	0.664**	1	0.512**	0.456**	0.483**	0.446^{**}
CE	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000
	N	182	182	182	182	182	182
	Pearson Correlation	0.714**	0.512**	1	0.523**	0.450^{**}	0.480^{**}
MO	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000
	Ν	182	182	182	182	182	182
	Pearson Correlation	0.657**	0.456**	0.523**	1	0.467^{**}	0.543**
IC	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000
	N	182	182	182	182	182	182
	Pearson Correlation	0.691**	0.483**	0.450^{**}	0.467^{**}	1	0.475**
CA	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000
	Ν	182	182	182	182	182	182
RA	Pearson Correlation	0.625**	0.446^{**}	0.480^{**}	0.543**	0.475**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	182	182	182	182	182	182

**. Correlation is significant at the 0.01 level (2-tailed).

(Source: SPSS Analysis Results, 2024)

Each correlation coefficient measures the reciprocal linkage between two variables. Larger coefficients correspond to more robust interactions, while smaller coefficients reflect weaker associations. Additionally, Positive correlation coefficients (r > 0) identify direct associations between the variable pairs. In contrast, negative coefficients reflect an inverse connection between the two variables. Pearson correlation analysis confirms that all independent variables display statistically significant associations with the dependent variable at the 1% threshold, with the variable Monitoring having the highest Pearson coefficient (0,714) and the variable Risk Assessment having the lowest (0,625). This reflects the linear relationships necessary for regression analysis. The independent variables also exhibit a relatively strong correlation with each other (Pearson coefficient > 0,4) at the 1% significance level. Therefore, the author will perform a multicollinearity test in the regression analysis step using the variance inflation factor.

4.5 Multiple regression analysis

4.5.1 Assessing the Goodness of Fit in the Multiple Regression Model

The regression analysis yields an R^2 value of 0.776, indicating that 77.6% of the variability in Internal Control Activities for Recurrent Expenditures can be explained by the model's independent variables, while the remaining 32.4% is attributable to factors beyond the model's scope and random error.

Table 6

Evaluation of the Regression Model's Goodness of Fit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.881ª	0.776	0.769	0.27462	1.803
				(So	urce: SPSS Analysis Results, 2024)

4.5.2 Multivariate Regression Model Analysis

Table 7

Findings from the Multivariate Regression Analysis				
		Standardized		
Model	Unstandardized Coefficients	Coefficients		

Model	Unstandardized Coefficients		Coefficients	efficients t		Collinearity Statistics	
	В	Std. Error	Beta	-	0	Tolerance	VIF
(Constant)	-1.281	0.220		-5.819	0.000		
CE	0.256	0.053	0.218	4.843	0.000	0.628	1.593
MO	0.324	0.049	0.307	6.651	0.000	0.597	1.674
IC	0.203	0.052	0.182	3.892	0.000	0.581	1.721
CA	0.385	0.058	0.295	6.620	0.000	0.642	1.556
RA	0.160	0.052	0.141	3.074	0.002	0.604	1.656
							$1 \cdot n + 1 \cdot 101 $

(Source: SPSS Analysis Results, 2024)

An examination of the regression coefficients confirms that the tested multiple regression model demonstrates statistical significance. All independent variables have a Sig. value < 0,05, indicating that the regression coefficients are accepted and have a positive impact (positive β) on internal control activities over recurrent expenditure. Specifically, the β coefficients for Control Environment (0.256), Monitoring (0.324), Information and Communication (0.203), Control Activities (0.385), and Risk Assessment (0.160) are all positive, meaning that for every 1-point increase in these factors, internal control activities over recurrent expenditure also increase accordingly.

The standardized regression equation is as follows:

Internal Control Activities in Recurrent Expenditures = -1,281 + 0,256 x Control environment + 0,324 x Monitoring + 0,203 x Information and communication + 0,385 x Control activities + 0,160 x Risk assessment

5. Conclusion and managerial implications

5.1 Conclusion

This study identified five factors influencing internal control (IC) activities over recurrent expenditure at the Provincial Social Insurance Office, namely: Control Activities, Monitoring, Control Environment, Information and Communication, and Risk Assessment. Analysis of 182 valid survey responses indicates a robust measurement scale, as evidenced by a Cronbach's Alpha exceeding 0.6. Furthermore, factor analysis and multiple regression demonstrate varying levels of influence among the factors, with Control Activities exerting the greatest effect ($\beta = 0.385$). The study affirms the importance of effective IC activities in enhancing management efficiency, ensuring regulatory compliance, and safeguarding assets at the Provincial Social Insurance Office. The involvement of leadership, officials, and employees in internal control is a crucial factor in achieving the organization's

operational objectives.

5.2 Managerial implications

Drawing on the study's results, the author outlines a series of management recommendations to strengthen the internal control system at the Soc Trang Provincial Social Insurance Office, prioritized as follows:

5.2.1 Control Activities

It is essential to establish and regularly update regulations and operational procedures to implement control activities effectively, ensuring alignment with the unit's actual conditions. Control activities should be diverse and comprehensive, while ensuring that information is securely stored, kept confidential, and only disclosed when necessary, subject to leadership approval. Priority should be given to increasing staff awareness and deepening personnel expertise, while concurrently employing information technology to enhance both the efficiency and reliability of control operations.

5.2.2 Monitoring Activities

In order to maintain the effectiveness of the ICS, close supervision is required throughout the operational process, from individuals to procedures. The management board must maintain stable and effective monitoring activities and ensure that the monitoring department is sufficiently competent and responsible. Regular evaluations should be conducted, and clear accountability should be established in the event of errors. The Provincial Social Insurance Office needs to strengthen the inspection and auditing team, provide ongoing training, establish inspection regulations, and implement reward and penalty mechanisms to promptly address issues within the ICS.

5.2.3 Control Environment

Establishing a robust control environment should emphasize ethical values and integrity, enabling civil servants, public employees, and workers to actively contribute to building a strong and effective internal control system. A common code of conduct should be developed to prevent negative and unlawful behaviors, alongside the concretization of ethical principles in operations. Leaders and managers must set an example by adhering to regulations and promoting positive values. Emphasis should also be placed on training and attracting personnel with the necessary expertise and skills, supported by clear and transparent recruitment policies. Granting autonomy in recruitment processes and clearly defining responsibilities for each department will help ensure efficient and cost-effective task execution.

5.2.4 Information and Communication

Within the ISC, internal control procedures must be designed to ensure the prompt and accurate gathering and handling of information. The Social Insurance sector has made significant investments in technology, including centralized document management systems, reporting systems, and electronic accounting systems to support operational management. Information is processed promptly, with timely responses to incorrect or misleading data. The Social Insurance Office of Soc Trang Province should diversify communication methods and enhance the application of information technology to create a scientific reporting system, ensuring that information reaches the intended recipients quickly and comprehensively. Clear regulations should be established regarding the provision of information between departments and external parties.

5.2.5 Risk Assessment

The study reveals that risk assessment has not been given adequate attention, particularly in identifying potential risks during task execution. In the future, the management board should regularly identify and analyze risks and evaluate their impact on recurrent expenditure tasks. Preventive measures should be implemented to mitigate risks, and task performance should be evaluated with accountability tied to both individual and collective achievements through rewards and disciplinary actions. The management board must make prudent decisions, set clear objectives, and assign responsibilities explicitly to individuals and organizations. Enhancing awareness and improving the risk identification capabilities of civil servants, public employees, and workers is crucial, along with strengthening supervision and control to limit risks to acceptable levels.

References

Aziz, M., Said, J., & Alam, M. M. (2015). Assessment of the practices of internal control system in the public sectors of Malaysia. Aziz, MAA, Said, J., and Alam, MM, 43-62.

Babatunde, S. A. (2013). The effects of adoption of accrual-based budgeting on transparency and accountability in the Nigerian public sector. *International journal of governmental financial management*, 8(1), 38-49.

Babatunde, S. A., & Dandago, K. I. (2014). Internal control system deficiency and capital project mismanagement in the Nigeria public sector, *Procedia social and Behavioural Science*, 164.

COSO, (1992). Internal control - Integrated framework, last retrieved on May 15th 2024, from

8

http://www.developmentwork.net/projects/risk-management-standards/ 137- coso-1992- internal-control-integratedframework.

- COSO, (2013). The 2013 Internal Control Integrated Framework. [Online] Availabile at https://assets.kpmg/content/dam/kpmg/pdf/2024/05/2750-New-COSO-2013-Framework-WHITEPAPER-V4.pdf
- Doan Thi Thao Nguyen (2018). Factors Affecting the Effectiveness of Internal Control Systems in Selected Entertainment Companies in Ho Chi Minh City. Master's Thesis in Economics, University of Economics Ho Chi Minh City.
- Gamage, C. T., Lock, K. L., & Fernando, A. A. J. (2014). A proposed research framework: Effectiveness of internal control system in state commercial banks in Sri Lanka. *International Journal of scientific research and innovative technology*, 1(5), 25-44.
- GamageLow, C. T., & Keving, L. T. (2018). Impact of internal control components and effectiveness of internal control system with the moderating effect of corporate governance of peoples' bank in Sri Lanka. *International Journal of Accounting and Taxation*, 6(2), 64-71.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis (Vol. 6).
- Hoang Trong, & Chu Nguyen Mong Ngoc. (2007). Data Analysis for Research with SPSS. Hong Duc Publishing House.
- IFAC, (2012). Evaluating and Improving Internal Control in Oganizations, Journal of Accounting.
- Lagat, C., & Okelo, C. (2016). Effect of internal control systems on financial management in Baringo county government, Kenya. *Journal of Economics Finance and Accounting*, 3(1).
- Lam Minh Nhat (2019). The Impact of Components on the Effectiveness of Internal Control Systems in Small and Medium Enterprises in Ho Chi Minh City. Master's Thesis in Economics, University of Economics Ho Chi Minh City.
- Luong Thi My Xuan (2019). Improving the Internal Control System at Thoi Lai District Medical Center, Can Tho City. Master's Thesis in Economics, Tay Do University.
- Mary, A. I. (2017). Impact of effective internal control in the management of mother and child Hospital Akure, Ondo State. *Journal of Finance and Accounting*, 5(1), 61-73.
- Ngo Thi Thu Huong, & Nguyen Thi Hoai An (2018). Factors Influencing the Effectiveness of Internal Control Systems in Revenue-Generating Public Units in Tuy Hoa City, Phu Yen Province. *Journal of Economics and Technology*, 26(6), 57-67.
- Nguyen Quoc Hung (2020). Factors Affecting the Effectiveness of the Internal Control System at the Veterinary Medicine and Materials Production and Trading Joint Stock Company. *Master's Thesis in Accounting, Tay Do University.*
- Nguyen Thi Loan (2018). Factors Affecting the Effectiveness of Internal Control Systems in Credit Activities at Vietnamese Commercial Banks. *Journal of Science, Ho Chi Minh City Open University*, 63(6), 105-121.
- Nguyen Thi Phuong Lan (2018). A Study on Factors Affecting the Internal Control System in Vietnamese Joint-Stock Companies. Doctoral Dissertation in Economics, National Economics University.

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). Using multivariate statistics (Vol. 6, pp. 497-516). Boston, MA: pearson. Tran Van Tung, & Ngo Ngoc Nguyen Thao (2021). Factors Affecting the Effectiveness of Internal Control Systems in Public

Service Units. Review of Finance, 749(2), 68-70



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