



Influencing of Enterprise Structure on Internal Control: The Case of Aquaculture Firms in Vietnam

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ABSTRACT

Internal control is designed for preventing potential risks, protecting assets and corporate information. Therefore, internal control is an indispensable management tool in the enterprise. This study is conducted to provide empirical evidence on the influencing of enterprise structure on internal control of aquaculture firms in Vietnam. The research sample covers 225 participants who working for aquaculture firms in Vietnam in the period of 2022. We used fix research method (quantitative and qualitative research method) through the SPSS software to analyse. The descriptive statistics, Cronbach's Alpha, EFA and correlation analysis results suggest that enterprise structure influence on internal control of aquaculture firms in Vietnam. Based on the research findings, the study offers a number of implications for aquaculture firms in Vietnam.

KEYWORDS: internal control; enterprise structure, influence; aquaculture firms; auditing

JEL CODES: M10, M40, M41, M42

INTRODUCTION

The aquaculture industry is one of Vietnam's spearhead economic sectors, which plays an important role in driving the country's integration into the global economy. However, aquaculture enterprises are being challenged with difficulties such as climate change, fluctuating price and input resources, technical barriers, protectionism of countries that they export to, and the shifts of the market, etc. To overcome such challenges, it is urgent that aquaculture enterprises improve the quality of their products, lower their prices, innovate their technologies, reinforce internal control, and optimize financial performance, etc.

At the beginning of 2019, Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) goes into effect for Vietnam. Besides the two new-generation multilateral Free Trade Agreements (FTA) that are CPTPP and EVFTA, other trade agreements are also expected to generate new tariff opportunities for aquaculture enterprises. CPTPP and FTA offer the Vietnamese aquaculture industry many benefits, as it can access cheaper services that assist production and expands the market. However, these opportunities are also accompanied by significant challenges such as: Technical barriers, protectionism of countries that they export to; issues related to workers; administrative regulations; issues related to the preservation and management of aquacultural resources - IUU (at EU and the US); unstable input resources, high

production costs, etc. These risks and challenges demand managers to install effective internal control, be informed of influential factors related to internal control in general, and the impacts of enterprise structure on internal control in particular, and they should make timely adjustments to deal with challenges and risks, so that internal control can be enhanced and improve business performance in order to maintain stable development for the enterprise.

Enterprise structure or organizational structure is defined as "a system used to define the hierarchy within an organization. Organizational structure decides the tasks, functions, duties of departments and whom they should report to. Structure is developed to define protocols for an enterprise, which aids the enterprise to accomplish its goals. Structure is fundamentally important to enterprises for several reasons: (i) Although an enterprise consists of different departments responsible for different tasks, they are aided towards a common goal of the enterprise; (ii) Every member of an enterprise has a role and contributes to the common goal of the enterprise; (iii) Assignment of duties for members of an enterprise ensures specialization of members in a specific area. The reasonable assignment will have an impact on the efficiency of the enterprise; (iv) An enterprise must have unity of leadership to ensure order in the enterprise. In addition, it helps encourages efforts and promotes the responsibility of members of enterprises, so that they can operate more efficiently and organized.

The remainder of this study is structured as follows. Section 2 reviews the suitable literature. Section 3 describes the model, data collection, and techniques employed in the conduct of the research. Section 4 sets out key results, while section 5 shows some discussions.

LITERATURE REVIEW

Internal control

In Vietnam today, firms are aware of the role of internal control (Do et al., 2021). In particular, 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.

The study of Tseng (2007), internal control was measured through the disclosed weaknesses of firms. With the use of the residual income model, Tseng (2007) pointed to weak internal controls in firms with low market value.

Internal control measures included the control environment, risk assessment, information systems, and control activities (Mary et al., 2014).

Internal control processes are designed and maintained by the management of a company to trust the accuracy of financial reporting, promote accountability, and achieve operational effectiveness and efficiency. Organisations disclose information on internal control to gain attention to the authenticity of financial statements to the stakeholders. In many organisations, risk oversight processes are immature, and they must be strengthened to achieve the strategic objectives. Budhathoki et al. (2020) highlighted that the markets respond negatively to internal control weaknesses. Rashid et al. (2021) found that internal control techniques aid in improving financial performance. Stanton (2012) suggests that internal control helps organisations to identify threats and diversify risks.

In 1992, the Committee of Sponsoring Organisations (COSO) (COSO, 1992) framework broadened it to risk and internal control (Lakis & Giriūnas, 2012). 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.

Enterprise structure and internal control

Enterprise structure refers to an internal structure of roles, communications, power, and relationships.

According to Otley (1980) different types of structures require different systems of management information to perform efficiently. Jensen (1986) claims that the difference in demands of coordination and organizational management can result in the difference in the management systems. Organizational structure is one of the fundamental factors that affect the management system (Chenhall, 2003). When measuring different dimensions of organizational structure, there can be conflicting consequences of the internal control system (Jokipii, 2010).

According to Gupta et al. (1997), dimensions of organizational structure include (i) centralization, (ii) formalization, (iii) complexity, (iv) hierarchy of authority and specialization. Centralization refers to the focus of decision-making of the organization (Gupta et al., 1997), and can be measured by locating the level that make the decisions to be executed (Palmer & Dunford, 2001). Centralization affects supervision and management, i.e the lower the level of the decisions are made, the more supervision and control are required.

Jokipii (2010) bases research in Poland on the impact of organizational structure on internal control. The result shows that organizational structure does not have a significant impact on internal control.

Fauzi et al. (2011) study influential factors of management system in the context of hotels in Indonesia. The authors used secondary data from previous studies, conducted interviews with senior managers, and surveyed 273 questionnaires to hotel sales staff. The research results show that organizational structure significantly affects the management system.

METHODOLOGY

Choice of method and sample selection

We design mixed method both quantitative and qualitative to explain the influencing of enterprise structure on internal control in aquaculture firms in Vietnam.

To begin with qualitative method, we look at previous studies and conducted interview to identify one determinant that affect internal control in aquaculture firms in Vietnam. However, since their studies were based on the foreign experience, we try to propose an enhanced framework by synthesizing their insights, adjust, add observation variables to the questionnaires and apply it to the context of aquaculture firms in Vietnam.

Then, we use quantitative component included the use of questionnaires as inputs for EFA analysis and regression model to investigate the influences of each variable on internal control in aquaculture firms in Vietnam.

The selective sampling is participants to interviews and survey. The selection was based on the number of observation variables in which participants were involved in

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their daily working in aquaculture firms. Therefore, in our sample, 100% participants are employees in aquaculture firms in Vietnam. The fact of employee’s knowledge and skills ensured the survey results more reliable.

We conducted a questionnaire survey of 9 observation variables with a 5 - point Likert scale.

Independent variables are measured from 1 "without effect" to 5 "strongly".

Research model

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

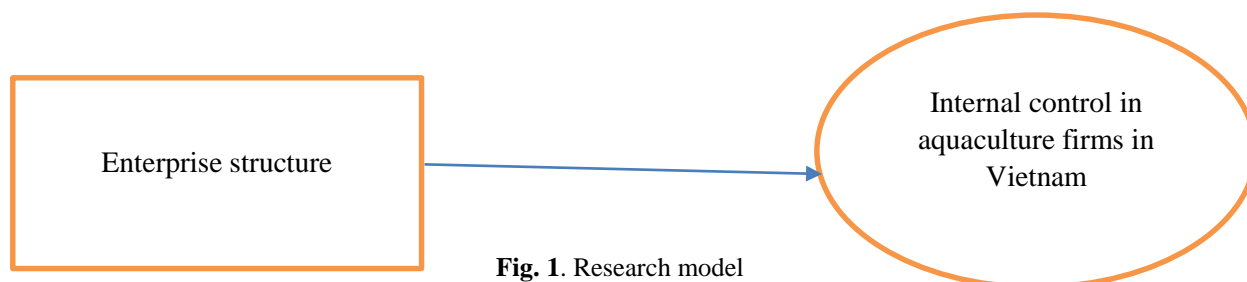


Fig. 1. Research model

Dependent variable: Internal control in aquaculture firms in Vietnam (KSNB), including 5 items (Nguyen, 2023).

Independent variables: There are 1 independent variables, including 9 items.

RESEARCH RESULTS

Cronbach’s Alpha

By using scale analysis, it can eliminate inconsonant variables and reduce errors in the research model. Therefore, only variables which have total correlation coefficients (Corrected Item – Total Correlation) greater than 0.3 and

Cronbach’s Alpha coefficients equal or greater than 0.6 are accepted (Hoang & Nguyen, 2008, Hair et al., 2010). By analyzing Cronbach’s Alpha analysis of determinants have an influence on internal control of aquaculture firms in Vietnam (1 determinants with 9 observed variables), the result is presented in Table 1. The result shows that, all Cronbach’s Alpha coefficients are above 0.6; all Corrected Item – Total Correlation of observed variables are above 0.3. Thus, all variables of research model are suitable for next analyses (Hair et al., 2010).

Table 1: 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
Enterprise structure (CT): 0.934, N = 9				
CT1	32.28	25.088	.764	.926
CT2	32.20	24.890	.820	.923
CT3	32.28	25.013	.754	.927
CT4	32.18	24.718	.789	.924
CT5	32.17	25.480	.762	.926
CT6	32.05	25.515	.728	.928
CT7	32.11	25.935	.699	.930
CT8	32.02	25.437	.708	.929
CT9	32.18	25.415	.757	.926

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was conducted through Component Analysis and Varimax and the results has yield 9 attributes of independent variable.

The results of factor analysis in Table 3 show that $0.5 < KMO = 0.941 < 1$. Bartlett’s testimony shows sig. = 0.000

< 0.05 , which means variables in the whole are interrelated (Hair et al., 2010).

After implementing the rotation matrix, 1 determinant with factor load factor are greater than 0.5; Eigenvalues are greater than 1 and the variance explained is 65.630% (see table 3). These statistics demonstrate that research data analysis for factor discovery is appropriate.

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Through the quality assurance of the scale and the test of the EFA model, we have identified 1 determinant influencing

internal control of aquaculture firms in Vietnam (Hair et al., 2010).

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.941
Bartlett's Test of Sphericity	Approx. Chi-Square	1,389.499
	Df	36
	Sig.	0.000

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.907	65.630	65.630	5.907	65.630	65.630
2	0.694	7.709	73.339			
3	0.456	5.064	78.403			
4	0.401	4.458	82.861			
5	0.396	4.404	87.266			
6	0.369	4.097	91.363			
7	0.322	3.580	94.943			
8	0.246	2.730	97.674			
9	0.209	2.326	100.000			

Correlation Analysis

The results of the correlation matrix are indicated in Table 4. The correlation coefficients of enterprise structure 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., 2009).

Table 4: Correlations

		KSNB	CT
KSNB	Pearson Correlation	1	.758**
	Sig. (2-tailed)		0.000
	N	225	225
CT	Pearson Correlation	.758**	1
	Sig. (2-tailed)	0.000	
	N	225	225

DISCUSSION AND IMPLICATIONS

Internal control includes 5 attributes, all of which are rated with a score of 3.91 or higher. This can be due to several reasons: Internal control can promote objective supervision, discourage subjective decisions and prevent high-risk initiatives from being approved by managers that prefer a “quiet life” (Cohen et al., 2007; Shadab, 2008; Barger et al., 2010); Good internal control is often accompanied by a higher quality of information, and a good internal control can

also reduce financial constraints by improving the quality of financial reports and enhancing transparency, which can help lower the cost and increase their opportunities for better financial sources (Ogneva et al., 2007; Gordon & Wilford, 2012).

For enterprises to focus on production and business, it is important to promptly deliver and communicate decisions, because they have to go through many levels of management, and it is more difficult for subordinates to

provide feedbacks. Therefore, in mechanical enterprises, internal control can be adjusted more flexibly to enhance information and communication between different levels; their management environment is reinforced, in which all members must strictly adhere to the organization's procedures and objectives, hence more monitoring is required.

Enterprises with mechanical structure have higher complexity in their tasks and strict top-down control mechanisms: Top level managers issue all the decisions and lower management levels execute the order. These enterprises have clear policies and procedures and are strictly hierarchical. With this structure, instead of assigning tasks based on performance, tasks are fixed to the positions of employees. Therefore, aquaculture enterprises with higher centralization should enhance their information communication so that information is correctly and promptly delivered and interpreted by both management and departments; there should also be a strong management environment so that members strictly adhere to orders of management to achieve the objectives of the enterprise; higher centralization requires more supervision and management of lower levels employees.

Subjective factors are internal factors of enterprises. These factors have a strong influence on the structure of management. Moreover, these factors can be controlled and modified by enterprises according to their interests. These factors include: Qualifications of managers; impacts of old organizational structure; qualification and capacities of consulting departments; relations within the enterprise; objectives and directions of the enterprise.

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