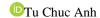# Studying the influence of factors on responsibility accounting organization in businesses: A case at thang long tobacco company limited

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Abstract

Management accounting (MA) in general and responsibility accounting (RA) in particular are tools used in the corporate governance process. The organization and application of these management tools are influenced by many factors. The article studies the factors affecting the organization of RA at Thang Long Tobacco Co. Ltd, a company operating in the field of manufacturing and trading tobacco products, including Introduction, Literature Review with the theoretical basis of RA and factors affecting the organization of RA in businesses, and Research material and method, Research results and discussions, and Conclusions. Research results show that the RA organization is most influenced by the cognitive factor of company administrators and least influenced by the factor of enterprise size.

Keywords: Factors effecting, RA, Responsibility accounting, Thang long tobacco.

1. Introduction

The tobacco industry has a long history worldwide, dating back to November 12, 1492, when Christopher Columbus's expedition discovered America in the Antilles Islands, called Tabaccos. By the 18th and 19th centuries, European and American countries completed the Industrial Revolution, with scientific and technological inventions promoting industrial production. The tobacco industry emerged and gained significant profits. Multinational tobacco corporations such as B.A.T, Philip Morris (USA), Japan Tobacco International (Japan), Imperial and Gallaher (UK), and Altadis Franco - Spanish Group (France-Spain) currently dominate the global market in tobacco cultivation, blending, cigarette manufacturing, specialized machinery, and all accessories related to tobacco production.

After World War II, countries that gained independence also paid attention to developing the tobacco industry, such as China, Indonesia, North Korea, India, the Philippines, Egypt, Pakistan, and Vietnam... In Vietnam, with numerous advantages in tobacco production and business conditions, the tobacco industry has initially achieved significant accomplishments, making a major contribution to the annual state budget.

However, in recent years, Vietnam's tobacco industry has faced many difficulties and challenges from a fluctuating business environment. During the period of global economic integration, fierce competition from foreign businesses with diverse tobacco products and advanced production technologies has increased. These competitors include major international brands. Consequently, Vietnamese tobacco companies need to develop strong strategies, utilize management tools effectively, and enable managers to make accurate and timely business decisions to ensure their survival and growth.

Facing those challenges, Vietnamese tobacco manufacturing and trading enterprises are making innovations to match the trend. To make sharp business decisions, managers need to have accurate, reliable, and timely information. At the same time, when businesses grow to a certain scale, they need to establish a management system to ensure their effective business operations, avoid being passive in situations, especially due to a lack of information for management, supervision, and administration. RA is one of the tools that helps business administrators solve that problem. RA not only provides information according to the responsibilities of the departments but also helps administrators effectively manage and control the operations of the departments as well as their own management responsibilities, contributing to achieving the business's set goals.

With the benefits that RA brings, researching the application of RA organizations in businesses in general and tobacco businesses in particular is one of the issues that needs to be addressed, for which research is needed. Researching factors that affect the organization of RA is necessary to assess the level of influence of factors on the organization of RA, helping businesses have orientations to solve and organize RA has become a useful tool in business management.

2. Literature Review

2.1. Theoretical Basis of RA and Factors Affecting the Organization of RA in Businesses

RA is a component of management accounting, formed on the basis of delegating authority and responsibility to managers of departments/activities within the enterprise. In the RA system, information about the financial and non-financial situation that managers of operating departments can control is collected and provided according to the scope of each department/activity, to evaluate the work efficiency of department/activity managers in implementing the overall goals of the business. The content of RA in businesses includes: the organization of responsibility centers with full control over their center's activities, such as management of costs, revenue, profits, and investments; preparing estimates at responsibility centers; evaluating responsibility center performance; and reporting of RA.

Accounting in general and RA in particular are tools to support administrators in leading and managing businesses to achieve set goals. Therefore, for an organization to effectively apply these tools, administrators must first be aware of their importance and benefits. At the same time, research by Tran [1] and Trang [2] also showed that owners highly appreciate the usefulness of MA technical tools and have an understanding of these tools, which will increase the need to apply them while accepting the cost of investment, thereby increasing the feasibility of organizations applying those tools. Research by authors Thu [3] and Oanh [4] also demonstrated the positive relationship between managers' awareness and the application of accounting tools such as personal accounting in businesses. From there, the author puts forward the following research hypothesis:

Hypothesis H_1: The awareness of business administrators positively affects the organization of RA in enterprises

Research by Trang [2] has shown that enterprise size is one of the important factors affecting the application of management tools in general and MA and RA in particular in enterprises. In addition, Ahmad [5] research results have shown a proportional relationship between enterprise size and the application of decision support systems by administrators, specifically accounting information systems. Abdel-Kader and Luther [6] and Hoque and James [7] pointed out that the management system in larger-scale enterprises will be more complex, face more problems in management, so the amount of information needed will be greater, that is. is the role of RA From there, the author puts forward the following research hypothesis,

Hypothesis H2: Enterprise size positively affects the RA organization in enterprises

Management decentralization is a premise for building responsibility centers, associated with the need for managers of responsibility centers to proactively perform management roles, including planning, implementation, and evaluation, as well as pricing and control. Many domestic and foreign scientists believe that management decentralization is the premise for the formation of RA. Research by authors Abdel-Kader and Luther [6] and Anh [8] also showed a positive relationship between management decentralization and MA organization in enterprises. Senior managers must regularly monitor, inspect, analyze, and evaluate the results of all activities occurring in all departments of the enterprise to achieve the overall goals of the entire enterprise. At the same time, analyzing and evaluating the causes of completing or not completing the plan/estimate of each department. From there, consider the management responsibilities of each lower-level manager at the head of a department. Therefore, businesses need to have a system that specializes in providing information for inspection and evaluation of the performance of departments as well as the management capacity of administrators in the business, which is RA. When administrators are granted more authority in management, it means they have to take more responsibility, so the need to use information-providing tools such as personal audits will be greater. From there, hypothesis H3 is determined:

Hypothesis H3: Management decentralization positively affects RA organization in enterprises

When designing and operating any activity within an enterprise, administrators need to analyze the relationship between costs and benefits associated with organizing and managing an activity, project, or administrative tools. The costs that businesses must incur include construction costs, initial investments, and operating expenses: investment costs in technology and equipment; human resource training costs; consulting fees; and operational costs during the initial stages of implementation, among others. Research results by Tran [1] and Trang [2] have shown that if the cost of technology

investment to serve the organization of MA in enterprises or consulting costs required from experts is low, it will increase the feasibility of applying management accounting. Meanwhile, RA is one of the contents of MA, so hypothesis H4 is built as follows:

Hypothesis H4: Costs have a negative impact on RA organization in enterprises

Research by Haldma and Lääts [9] and Ismail and King [10] suggests that the qualifications and experience of accountants are related to the provision of accounting information, including information provided by accountants. Responsibility provision, which means that RA information will be received, processed, synthesized, and provided better when accounting staff have high professional qualifications. Research by Nyakuwanika et al. [11] and Thu [3] also emphasizes that the lack of training programs for MA staff is one of the factors hindering the implementation of RA in the unit; administrators and accounting staff who are well-trained in management knowledge and financial and accounting knowledge will have better conditions to apply RA than other units. Similarly, Ern et al. [12] study also showed that qualified accountants positively influence the application of MA systems in general and RA in particular. When accountants have professional qualifications, job skills, long-term experience, as well as an understanding of RA, the application of RA becomes more feasible and easier. Therefore, the fifth hypothesis is built as follows:

Hypothesis H5: The professional level of the accounting department positively affects the RA organization in the enterprises

2.2. Research Material and Method

To achieve the research goal, the author employs both qualitative and quantitative methods. Qualitative methods are used to identify groups of factors affecting the organization of RA at companies and branches under Thang Long Tobacco Co. Ltd. The quantitative research methods used in the study include Cronbach's Alpha reliability test, exploratory factor analysis (EFA), and KMO coefficient analysis based on primary data collected through surveys. The questionnaire was distributed directly and via email through the link docs.google.com/forms to administrators, accountants, and employees at the parent company, one branch, and three companies under Thang Long Tobacco Co. Ltd., including Thanh Hoa Tobacco Co. Ltd., Bac Son Tobacco Company Limited, Da Nang Tobacco Co. Ltd., and the company branch in Ho Chi Minh City. The number of questionnaires issued was 300, with 180 returned, of which 175 were valid for inclusion in the study. The collected data were analyzed using SPSS 22 software.

Table 1.
Summary of survey information.

	Units	Number of questionnaires distributed	Valid questionnaire number
1	Thang Long Tobacco Co.Ltd.	90	51
2	Thanh Hoa Tobacco Co. Ltd.	70	36
3	Bac Son Tobacco Co.Ltd.	50	35
4	Danang Tobacco Co. Ltd.	50	36
5	Company branch in Ho Chi Minh City	40	17
	Total	300	175

2.3. Research Model and Proposed Scale

Figure 1.
Research model.

Table 2.
Proposed scale

	Variable	Scale
1	Administrator's perception	(1) NTNQT1. Administrators have knowledge of RA. (2) NTNQT2. Administrators realize the benefits of organizing RA; (3) NTNQT3. Administrators need to organize RA. (4) NTNQT4. Administrators accept costs for organizing and operating RA
2	Enterprise size	(1) QMDN1. Asset value of the enterprise. (2) QMDN2. Number of employees; (3) QMDN3. Annual revenue of the enterprise
3	Management decentralization in enterprises	(1) PCQL1. Enterprises have decentralized management of product/service development (2) PCQL2. Enterprises have decentralized management of human resources (3) PCQL3. Enterprises have decentralized management regarding the pricing of selling products (4) PCQL4. Enterprises have decentralized management of asset purchases (5) PCQL5. Enterprises have decentralized management of product/service distribution
4	Cost of the RA organization	(1) CP1. Initial organizational costs; (2) CP2. Regular operating costs.
5	Professional qualifications of accountants	(1) TDKT1. Qualified accounting staff; (2) TĐKT 2. Accounting staff with working experience; (3) TĐKT 3. Accounting staff are proficient in their job skills; (4) TĐKT 4. Accounting staff have knowledge of RA
6	Organizing RA at Thang Long Tobacco Co. Ltd.	(1) KTTN1. The company has organized and classified RA. (2) KTTN2. The company has developed an estimate to organize the reception, processing, analysis and provision of information according to responsibility centers. (3) KTTN3. The company has established criteria to evaluate the effectiveness of responsibility centers (4) KTTN4. The company has built a responsibility reporting system

3. Research Results and Discussion

3.1. Test The Reliability of the Scale

According to the research model, the system of organizational factors for RA in the company includes five groups of factors: administrator's perception factors (including four aspects); enterprise size factors (including five aspects); management decentralization factors (including five aspects); the cost factors of RA organization (including two aspects); and the group of enterprise scale factors (three aspects). The reliability coefficients of the Cronbach Alpha scale for each group of factors are as follows: administrator's perception factor: 0.716; accounting professional qualification factor: 0.807; management decentralization factor: 0.796; responsible accounting organization cost factor: 0.702; enterprise size factor: 0.726; and RA organization factor: 0.907. The tests indicate that these groups of factors are reliable and suitable for inclusion in the analysis.

Table 1.
Reliability Statistics.

TT	Variables	Cronbach's Alpha	N of Items
1	Administrator's perception	0.716	4
2	Enterprise size	0.726	3
3	Management decentralization in enterprises	0.796	5
4	Cost of RA organization	0.702	2
5	Professional qualifications of accountants	0.807	4
6	Organizing RA at Thang Long Tobacco Co. Ltd.	0.907	4

3.2. Exploratory Factor Analysis

Analysis of the KMO index (Keiser-Meyer-Olkin) is an indicator used to assess the suitability of factor analysis, reaching 0.845 with a significance level of Sig=0.000, indicating that the application of exploratory factor analysis here is entirely appropriate.

Table 4.
KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.845
Bartlett's Test of Sphericity	Approx. Chi-Square	1717.069
	Df	253
	Sig.	0.000

Table 5.
Rotated Component Matrix[a].

	Component					
	1	2	3	4	5	6
TĐKT3	0.750					
TĐKT1	0.729					
TĐKT2	0.726					
TĐKT4	0.611					
PCQL2		0.758				
PCQL1		0.749				
PCQL4		0.747				
PCQL5		0.734				
PCQL3		0.581				
KTTN4			0.821			
KTTN3			0.806			
KTTN2			0.717			
KTTN1			0.708			
NTQL3				0.737		
NTQL4				0.711		
NTQL2				0.702		
NTQL1				0.608	0.443	
QMDN3					0.768	
QMDN1					0.738	
QMDN2					0.701	
CP2						0.855
CP1						0.771

Note: Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The results of the Rotated Component Matrix analysis show that there are five factors with Eigenvalues greater than 1, indicating that the research model is influenced by five factors. The factor analysis is based on Varimax rotation, and the communality standard is set at ≥0.5. The factor loadings meet the selection criteria, and all variables have a positive relationship with the research aspect.

3.3. Regression Analysis

The results of regression analysis show that the adjusted R2 value (R square) is 0.501 > 50%, meaning that the research results have a variation of about 50.1%, and Sig = 0.00 is appropriate. Table 6 shows the value of the Durbin-Watson coefficient as 1.926, which is within the range greater than 1 and less than 3. This value indicates that there is no correlation between variables and no multicollinearity, as confirmed by the F test. gives the result Sig = 0.00 < 0.05, the Coefficents table has VIF coefficients < 10.Through the regression results in Table 6, we get the following equation:

$$Y = 0.286NTQL + 0.267TĐKT + 0.276PCQL – 0.182CP + 0.138QMDN$$

Table 6.

Results of regression analysis Model Summary[b].

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.717[a]	0.514	.501	0.55525	0.514	38.512	5	182	0.000	1.926

Note: a. Predictors: (Constant), QMDN, TĐKT, PCQL, CP, NTQL

b. Dependent Variable: KTTN

Table 7.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.221	0.363		.607	0.544		
	NTQL	0.264	0.052	0.286	5.049	0.000	0.830	1.204
	TĐKT	0.278	0.060	0.267	4.641	0.000	0.805	1.242
	PCQL	0.309	0.062	0.276	4.960	0.000	0.865	1.156
	CP	-0.161	0.049	-0.182	-3.289	0.001	0.875	1.143
	QMDN	0.158	0.063	0.138	2.502	0.013	0.876	1.142

3.4. Discussions

Research results show that the group of factors related to the Administrator's perception has the greatest impact on the organization of RA in Thang Long Tobacco Co. Ltd, indicating that to improve the feasibility of organizing RA in the company, it is essential to raise awareness among administrators regarding the application of RA and the benefits it offers to management. Therefore, it is necessary to strengthen the implementation of measures to assist administrators at Thang Long Tobacco Co. Ltd and at four affiliated companies and branches in understanding how to organize RA and the associated benefits. The benefits that RA provides, as well as the conditions necessary for organizing responsibility accounting at the company, should also be emphasized.

Simultaneously, regression results have shown a positive relationship between the professional qualification of accountants and the RA organization at the company. The second most significant influence indicates that when the accounting department possesses high qualifications, extensive work experience, proficiency in job skills, and a thorough understanding of RA, it will promote the organization of RA in Thang Long Tobacco Co. Ltd. At that time, the application of RA will bring greater efficiency in performing the functions and roles of accountants, helping to provide scientific accounting information according to each RA so that department administrators can accurately evaluate performance and implement timely adjustment plans to serve the accomplishment of the overall goals of the entire company. For Thang Long Tobacco Co. Ltd., with the operations of affiliated companies and branches, this requires synchronization of expertise and management of accountants in all units; thus, organizing and operating RA will be more feasible and effective. Additionally, when the accounting department has the capacity and professional knowledge, it will advise administrators on how to organize and operate RA, helping them resolve issues quickly and promptly in establishing and operating RA in the company.

At Thang Long Tobacco Co. Ltd, the RA organization and management decentralization have a relatively clear relationship. When centers are decentralized to organize activities such as product research and development, consumption, human resources, and investment, RA organizations become more feasible because this forms the basis for creating responsible centers. This decentralization needs to be consistent from top to bottom, from the parent company to its affiliated units, as well as decentralization within each affiliated unit, to help the RA organization operate more systematically and with greater consistency.

Research results show that enterprise size is the final factor that positively impacts the organization of RA, which is completely consistent with the results of previous studies. The larger the enterprise size, the higher the information required for management, thus increasing the need for an RA organization, which is of greater concern to business administrators.

For Thang Long Tobacco Co. Ltd, a large-scale enterprise with total assets as of December 31, 2023, of more than VND 7,500 billion, operating under the parent company-subsidiary model. The results of this study are entirely consistent.

Among the factors affecting the organization of RA at Thang Long Tobacco Co. Ltd, the cost factor is negatively related. The costs of investing in technology to support the organization of RA, consulting from experts on organizing RA, and training human resources are the main barriers to implementing the organization of accounting responsibility. These higher costs reduce the feasibility of applying RA, especially in the current period of intense competition in the tobacco industry. Therefore, considering the relationship between costs and benefits is an important issue that Thang Long Tobacco Co. Ltd needs to address.

4. Conclusions

This research was conducted at Thang Long Tobacco Co. Ltd and 04 affiliated companies and branches, so the research results are not representative of all tobacco manufacturing and trading enterprises, as well as Vietnamese businesses. In addition, there are still factors outside the proposed model that can affect the organization of RA in enterprises, such as spatial factors, production and business characteristics of the enterprise, and the type of facility. ownership, elements of local legal policies. These limitations need to be further researched and clarified, opening up new results in subsequent research.

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