



RESEARCH ARTICLE

Management Capacity and Financial Management of Non-Public Universities

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ABSTRACT

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The study aimed to show the impact of management capacity on the financial management of non-public universities in Hanoi and neighboring provinces. The study relied on a data collection tool. The questionnaire was designed based on the opinions of experts and the results of previous studies. A group of lecturers in the department of accounting and finance, staff of the accounting and finance department, heads of departments, specialized faculties, or boards of directors of non-public universities in Hanoi and neighboring provinces represented the population of the study. 250 questionnaires were distributed, and 185 were retrieved, representing a 74.00% response rate. SPSS was utilized for serving quantitative research methods. Multiple statistical techniques were employed for data analysis, including SPSS via the descriptive statistics, reliability analysis of scales through the Cronbach alpha coefficient, EFA analysis, and correlation analysis. The study's results indicate that management capacity positively affects the financial management of non-public universities. This study offers theoretical and practical implications for improving the financial management of non-public universities, thereby improving the quality of training. Based on this result, the study proposes some recommendations for nonpublic universities.

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1. INTRODUCTION

In Vietnam, non-public higher education can effectively and flexibly meet the requirements of learners and employers. Non-public universities include private, semi-public and private schools, operating mainly from non-state budget funds, attracting social resources for education, and complying with current laws in accordance with the Charter of Vietnamese Universities. After the development process, the system of non-public universities has always strived to overcome difficulties, finding ways to go and ways to operate, shouldering an important part of the country's higher education, and expanding opportunities for people to study at university and learn a trade.

In non-public universities, financial management plays a very important role in distributing and using financial resources for the right purposes to complete the tasks of non-public universities. These activities require non-public universities to define methods, tools and management principles to check and monitor the distribution and use of financial resources effectively. The improvement of financial management in non-public universities plays an important role, creating conditions for improving and innovating the financial management mechanism in general and in the field of higher education in particular.

In fact, most non-public universities do not receive state investment in infrastructure and are therefore subject to social supervision and competitive pressure. The rapid growth in scale and

diversification of the higher education system poses many new challenges for non-public universities.

Non-public universities are looking for ways to "survive," such as expanding non-formal training and developing joint training, which risks creating uncontrolled development. Therefore, there must be synchronous, comprehensive, drastic and breakthrough solutions to fundamentally and comprehensively innovate financial management in higher education, especially non-public universities, to meet the training needs and the demand for high-quality human resources in society.

It can be seen that the current financial management situation in non-public universities is somewhat no longer suitable for a rapidly developing and diverse higher education system. Therefore, to improve the efficiency of mobilizing, distributing and using financial resources for investment in the activities of non-public universities to meet the tasks of education, training and scientific research, there must be practical and synchronous financial management solutions.

2. LITERATURE REVIEW

Sheehan (1997) argues that the financial resources of educational institutions are very diverse, especially in the context of globalization. The financial resources of educational institutions can be formed from state funding, student tuition, and educational funding organizations.

Fieldes (2008) mentioned the contents of financial management, including: (i) the annual budget; (ii) expenses; (iii) unused funds in the fiscal year; (iv) income from non-government sources; and (v) tuition fees.

Nguyen (2008) analyzed the current status of financial management mechanisms in public universities through a number of contents: mechanisms for mobilizing financial resources and managing and using financial resources; asset management mechanisms; financial inspection and control mechanisms. The author also compared the advantages and disadvantages of financial management mechanisms between public and non-public universities. From there, the author proposed a number of solutions to improve the financial management mechanism for universities in Vietnam.

Financial management is the management of activities of mobilizing, allocating and using financial resources by means of a combination of various measures carried out on the basis of applying objective economic and financial laws in a manner suitable to the conditions of innovation and international integration of the country (Nguyen, 2015).

Truong (2017) studied the financial management of public universities under the Ministry of Education and Training in Ho Chi Minh City through analyzing and evaluating four contents: (i) management of funding sources, (ii) management of expenditures, (iii) management of distribution of financial performance results, (iv) management of additional income of officials and civil servants, and analyzing the system of financial management tools of public universities.

Tran (2012) believes that the management capacity of universities creates an environment that promotes changes in training, scientific research, and service activities of universities. When management capacity, training capacity, scientific research capacity, etc. are limited, it makes it difficult for universities to diversify their revenue sources, leading to a lack of readiness for financial autonomy (The Hampshire County Council, 2007).

University leaders with good management skills will positively influence financial management when the school implements the autonomy mechanism. Therefore, to effectively implement financial autonomy, the leadership team of public service units must have practical capacities such as: planning capacity; capacity to connect and mobilize resources; financial management capacity; ability to forecast development trends (Nguyen, 2017).

The organizational structure of the management apparatus also affects the process of financial autonomy in universities. The organizational structure of the management apparatus must be compact, flexible and effective to help financial autonomy activities be effective (Tran, 2012).

A team of highly qualified financial managers will advise university leaders on making appropriate financial decisions and organizing the effective implementation of those decisions (Truong, 2017).

Table 1: Attributes (components) of independent variable and dependent variable

Code	Description
Management capacity	
MC1	Management level of university leaders
MC2	University leaders' thinking and viewpoints
MC3	University leaders' awareness
MC4	Management structure
MC5	Qualifications of indirect teaching employees
Financial management	
FM1	Revenue management
FM2	Expense management
FM3	Financial performance management
FM4	Financial inspection, control and supervision

Source: Author's synthesis and expert opinion

3. METHODOLOGY

Sample selection

This paper uses a sample of non-public universities in Hanoi and neighboring provinces from 2023 to 2024. The criteria for the sample used in this paper are non-public universities that are doing educational. We narrowed down our sample to 185 respondents. They are lecturers in the department of accounting and finance, staff of the accounting and finance department, heads of departments, specialized faculties, or boards of directors of non-public universities. The common genders of respondents are female, accounting for 63.8%, while the remaining 67 are male, accounting for 36.2%. Among the respondents, 43.8% of the participants are lecturers, 35.7% of the participants are accountants or financial specialists, and the rest are heads of departments, specialized faculties, or boards of directors. Respondents have career seniority. Smaller than 5 years accounted for 22.2%; from 5 to 10 years accounted for 51.9%; and the remaining accounted for 25.9%.

Analysis tools

We use qualitative research methods and quantitative research methods. Quantitative research method through SPSS software with descriptive statistics, reliability analysis of scales through the Cronbach alpha coefficient, EFA analysis, and correlation analysis.

Research model

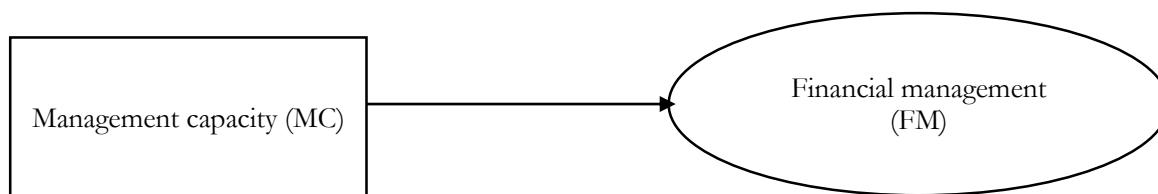


Figure 1: Research model

Management capacity (MC): Includes 5 observed variables (MC1, MC2, MC3, MC4 and MC5).

Financial management (FM): Includes 4 observed variables (FM1, FM2, FM3, and FM4).

RESULTS

Descriptive statistics

Table 2 indicates that the respondents agree with the independent variables (management capacity) and dependent variables (financial management) of non-public universities in Hanoi and neighboring provinces in Vietnam, where respectively five attributes and four attributes were average. All nine attributes were rated at an average of 2.778 or higher.

Table 2: Descriptive analysis of attributes

Code	N	Mini	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Management capacity (MC)									
MC1	185	1.0	5.0	2.962	.8746	.813	.179	.624	.355
MC2	185	1.0	5.0	3.076	.8752	-.542	.179	.062	.355
MC3	185	1.0	5.0	3.281	1.0092	-.621	.179	-.112	.355
MC4	185	1.0	5.0	2.778	.8658	-.113	.179	-.070	.355
MC5	185	1.0	5.0	3.222	1.0213	-.581	.179	-.181	.355
Valid N (listwise)	185			3.0638					
Financial management (FM)									
FM1	185	1.0	5.0	3.535	.7446	-1.239	.179	2.136	.355
FM2	185	1.0	5.0	3.200	.8129	-.567	.179	.497	.355
FM3	185	1.0	5.0	3.389	.7070	-.720	.179	1.450	.355
FM4	185	1.0	5.0	3.357	1.0333	-.491	.179	-.785	.355
Valid N (listwise)	185			3.3703					

Source: Prepared by the authors (2024) and SPSS software.

Cronbach alpha

To evaluate the internal reliability of the scales, we rely on the Cronbach alpha coefficient. The statistical results in Table 3 show that Cronbach alpha values in the range of 0.771 to 0.866 are higher than the significance level of 0.7 (Nunnally & Bernstein, 1994), confirming the reliability of the scale used in the study. All observed variables on the scales have an item-total correlation greater than 0.3. Therefore, the scales all meet the requirements, thus qualifying for exploratory factor analysis (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 3: Results of Cronbach’s alpha testing of attributes and item-total statistics

MC				
Cronbach’s Alpha		N of Items		
.869		5		
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach’s Alpha if Item Deleted
MC1	12.357	10.176	.589	.865
MC2	12.243	10.196	.585	.866
MC3	12.038	8.493	.802	.812
MC4	12.541	9.804	.678	.845
MC5	12.097	8.360	.817	.807
FM				
Cronbach’s Alpha		N of Items		
.842		4		
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach’s Alpha if Item Deleted
FM1	9.946	4.584	.755	.771
FM2	10.281	4.616	.649	.810
FM3	10.092	5.084	.615	.826
FM4	10.124	3.588	.738	.783

Source: Prepared by the authors (2024) and SPSS software.

EFA analysis

Next, tables 4, 5, and 6 show that exploratory factor analysis (EFA) was conducted through component analysis and variance.

The results of Bartlett's test examining the hypothesis of correlation between observed variables show that the KMO index, respectively, is 0.844 and 0.776, greater than 0.5 (>0.5); the extracted variance, respectively, is 65.635% and 68.825% (>50%), which means that these 5 and 4 observed variables explain 65.635% and 68.825% of the variation in the data. Bartlett's test is statistically significant (Sig. < 0.05). Therefore, it can be concluded that the indicators in the study meet EFA analysis standards (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

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 five components of management capacity and four components of the financial management of non-public universities (Hoang & Chu, 2008; Hair et al., 2014).

Table 4: KMO and Bartlett's test

MC		KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.844
Bartlett's Test of Sphericity	Approx. Chi-Square		466.001
	Df		10
	Sig.		.000
FM		KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.776
Bartlett's Test of Sphericity	Approx. Chi-Square		328.146
	Df		6
	Sig.		.000

Source: Prepared by the authors (2024) and SPSS software.

Table 5: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
MC						
1	3.282	65.635	65.635	3.282	65.635	65.635
2	.635	12.697	78.332			
3	.484	9.684	88.017			
4	.417	8.332	96.349			
5	.183	3.651	100.000			
FM						
1	2.753	68.825	68.825	2.753	68.825	68.825
2	.567	14.172	82.997			
3	.441	11.028	94.025			
4	.239	5.975	100.000			
Extraction Method: Principal Component Analysis.						

Source: Prepared by the authors (2024) and SPSS software.

Table 6: Component matrix^a

	Component
MC	1
MC5	.898
MC3	.889
MC4	.799
MC1	.725
MC2	.721

FM	Component
	1
FM4	.868
FM1	.868
FM2	.803
FM3	.776

Source: Prepared by the authors (2024) and SPSS software.

4.4. Correlation analysis

The results of the correlation matrix are indicated in Table 7. The correlation coefficients of management capacity with the financial management of non-public universities are greater than 0, reflecting a positive relationship. In addition, the values of sig. are smaller than 0.05, which means that all variables are interrelated (Hair, Black, Babin, & Anderson, 2009).

Thus, there is basis to conclude about the influence of management capacity on financial management of non-public universities (the possibility of independent variation affecting the dependent variable in the regression will be higher). However, to increase reliability, future research should expand on independent variables that affect the financial management of non-public universities in addition to management capacity. In addition, future studies should also expand the sample size and spatial scope to increase the reliability of the research results.

Table 7: Correlations

		Financial management	Management capacity
Financial management	Pearson Correlation	1	0.530**
	Sig. (2-tailed)		0.000
	N	185	185
Management capacity	Pearson Correlation	0.530**	1
	Sig. (2-tailed)	0.000	
	N	185	185

Source: Prepared by the authors (2024) and SPSS software.

DISCUSSION

Management capacity is one of the important factors in promoting development, especially in the financial management of non-public universities. It is impossible to grant equal autonomy to all educational institutions, but it must be based on the autonomy capacity of each school. The capacity of each school is demonstrated through its training capacity, scientific research, international cooperation and transfer of scientific and technological applications.

Among the components of the university's organizational structure, the finance department is one of the important departments that directly affects the financial management of non-public universities. Because the finance department manages most of the university's revenue and expenditure activities. However, some financial-related activities are not only managed and decided by the finance department. During the operation, some other departments in the management apparatus play an advisory role to the unit head to make appropriate decisions. Therefore, the weakness of one department will affect the effectiveness of the implementation of the financial management mechanism of the remaining departments.

The qualifications of indirect teaching staff also affect the financial management of non-public universities. Qualified indirect teaching staff will help the university operate training activities effectively. In the management apparatus, the number of this team needs to be compact but knowledgeable about training activities. In particular, the team doing financial management must be able to develop, organize and implement financial plans, guide spending, monitor and supervise implementation to help the university manage finances effectively. In addition, the service and management team plays a very important role in transforming the university's management mechanism from an administrative management style to a quality and effective management style.

People are always the central factor in all activities. The subjective perception of management agencies and individuals with authority when building and implementing mechanisms are factors that directly affect the management mechanism. In reality, the shortcomings and obstacles in financial management activities can be identified more clearly by no one than the management agencies and managers. Therefore, the awareness and qualifications of those participating in building the mechanism are particularly important factors, directly determining the success or failure when putting the mechanism on paper into practice. A good mechanism, but when put into practice, if the senior manager does not have the knowledge, experience, skills and motivation, will also make the implementation of the mechanism difficult and problematic. Therefore, the senior management department of non-public universities with capacity, qualifications and responsibility will build appropriate financial management mechanisms and policies and provide effective financial management solutions.

The thinking and viewpoints of higher education managers, especially the board of directors and school councils in non-public universities, have an impact on financial management for non-public higher education in the context of integration, digital technology and development. In addition, the capacity of the management entity will determine its real role in operating financial management. This is an important factor determining the quality and effectiveness of financial management. The organizational structure must be compact, flexible and effective; the leadership thinking of all levels of management must follow the market economy and be dynamic and creative. The capacity of the leadership and financial management teams in non-public universities will contribute to determining the effectiveness of financial management operations.

IMPLICATIONS

Non-public universities should complete the decentralization of financial management. The decentralization of financial management should aim at the following goals: Promoting the dynamism, creativity, autonomy, and self-responsibility of departments (offices, faculties) to best serve the task of improving professional capacity, improving the quality and efficiency of office staff and lecturers. Ensuring centralized and unified management, improving effectiveness and efficiency in managing and using financial resources. Clarifying the authority and responsibility, resources and tasks of departments (offices, faculties) in managing and using financial resources and properly resolving financial relationships between departments (offices, faculties).

Non-public universities should improve their organizational structure and enhance the effectiveness of financial management, thereby continuing to promote, assign, decentralize, and grant autonomy and self-responsibility for performing tasks and organizing the apparatus and number of employees to the finance department. Clearly define the authority and responsibility of the head in financial management and administration; have a mechanism to monitor and inspect the implementation of the authority of the head. Review and rearrange the organizational structure and management system towards enhancing the professionalism of the financial management department, including capacity, qualifications, and ethical qualities, ensuring inheritance and development. Develop a plan to develop a team of financial managers with the capacity commensurate with their roles and positions; regularly train and improve the professional skills of financial managers to promptly update new policies and regulations on financial management. Send employees to attend training courses, and at the same time create conditions, arrange time, and support funding for employees to have the opportunity to study at a higher level to improve their professional qualifications. Encourage financial managers to participate in foreign language, information technology, and digital transformation to meet the increasing requirements of financial management. Complete the work process on finance and accounting; ensure unified management and promote the combined strength of non-public universities. Standardize and make transparent the work of planning, appointing, recruiting, and training financial managers in the finance and accounting department.

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