**Int. j. adv. multidisc. res. stud.** 2023; 3(4):318-322

**Received:** 25-05-2023
**Accepted:** 05-07-2023

**International Journal of Advanced Multidisciplinary Research and Studies**

**ISSN: 2583-049X**

# Factors Affecting Financial Authority at Public Universities in Hanoi

**[1] Hoang Khanh Van, [2] Pham Thi Thanh Hoa, [3] Vu Thuy Duong**
[1, 2] University of Labour and Social Affairs, Hanoi, Vietnam
[3] Trade Union University, Hanoi, Vietnam

Corresponding Author: **Hoang Khanh Van**

**Abstract**
Implementing the financial autonomy mechanism has created opportunities for public universities in Hanoi to be proactive in financial and asset management. Thereby using the state budget thrifty and efficiently and increasing non-state budget revenues through diversifying non-business activities, production, and business. However, with the requirement of financial autonomy at public universities, many problems arise, from management mechanisms and policy systems to the creation and effective use of financial resources. The author collects data at 46 public universities, with the number of questionnaires distributed at 138 and the number of votes collected at 105, reaching 76%, and uses SPSS software to assess the influence of factors on financial autonomy at public universities in Hanoi. The results show that policy mechanisms, management capacity, lecturer qualifications, and facilities positively impact the level of financial autonomy. From there, the author proposes some solutions to improve the financial autonomy mechanism in the coming years for public universities in Hanoi.

**Keywords:** Public University, Financial Autonomy, Influencing Factors

## 1. Introduction

The education sector is implementing comprehensive renovation, especially at the university level, to train a qualified and capable workforce to meet the country's development requirements. Therefore, universities need to be centers of training, scientific research, technology transfer, and knowledge export. However, the brand name of a public university can only be created when the school builds a team of qualified and capable lecturers and spacious and modern facilities. This desire can only be solved when the schools have enough financial resources and a high degree of financial initiative.

Thus, in order for public universities to rise up and to well solve the goal of improving quality, it is necessary to perfect the financial autonomy mechanism in the direction of assigning the highest degree of autonomy to universities: The owner of human resources, revenue, and expenditure has the right to pay high salaries according to demand, quality of work, and objects of implementation to attract good cadres and lecturers who are enthusiastic about the profession. Schools are responsible for their own training products, scientific research, etc. Implementing the mechanisms of university autonomy in general and financial autonomy, in particular, has created opportunities for public universities in Hanoi to be proactive in financial and asset management. Thereby, universities use the state budget to allocate thriftily and efficiently and increase non-state budget revenues through diversifying non-business, production, and business activities. However, with the requirement of scale development and constantly improving the quality and efficiency of training and scientific research activities to better meet the requirements of learners and society, this poses more and more problems, from the management mechanism and the policy system to the creation and effective use of financial resources. Therefore, it is necessary to evaluate the influence of factors on the status of the financial autonomy mechanism at public universities in Hanoi, thereby proposing some solutions to improve the financial autonomy mechanism. The main issue in the near future is a matter of scientific and practical significance.

## 2. Research Overview on Factors Affecting Financial Autonomy at Public Universities

Luong Van Hai (2011) studies the role of the state in expanding the autonomy of public universities in Vietnam. Research has shown that university autonomy includes six basic areas: academic autonomy, financial autonomy, autonomy in organization and personnel, autonomy in enrollment and training, autonomy in educational scientific and technological activities, and autonomy in international relations. The study also identified two groups of factors affecting the autonomy of universities:

Input factors include Financial resources, Human resources, Enrollment resources, Society's need to learn with high quality, Social problems that arise that need the school's contribution to solving, and the ability to receive information from the environment at home and abroad.

The group of environmental factors of a university includes the macro-binding mechanism of the governing ministry; The macro-binding mechanism of ministries, provinces, and cities has the ability to affect schools; Public opinion towards the school and the ability to exchange, receive, and process information about foreign science and technology qualifications.

However, the study only mentions the factors without going into understanding and assessing the influence of these factors on the financial autonomy mechanism in public universities in Vietnam. Vu Thi Thanh Thuy and Vu Thi Anh Tuyet (2014) in their research on identifying macro and micro factors that affect the financial autonomy mechanism at universities. The group of macro factors includes legal policy and national situation. The group of micro-factors includes School's development strategy, training scale and field, assigned tasks and management level of leaders.

Tran Duc Can (2012) research on improving the financial autonomy mechanism of public universities in Vietnam. Research shows that the financial autonomy mechanism is evaluated through 6 criteria: effectiveness, efficiency, flexibility, fairness, organizational commitment, and community acceptance. And there are three factors affecting the financial autonomy mechanism which are: (1) Development goals of higher education; (2) Financial mechanisms and policies of the State; (3) Financial mechanism of each university.

Nguyen Chi Huong (2017) research on financial autonomy at the Ho Chi Minh National Academy of Politics. The study shows that the factors affecting the level of financial autonomy include: Management capacity, Policy mechanisms, Facilities, Staff qualifications, Functions and tasks, and Organizational apparatus. In which, the four factors: management capacity, policy mechanisms, facilities, and staff qualifications have a positive impact on the degree of financial autonomy with beta coefficients of 0.421, 0.156, 0.305, 0.220, the two factors of function, task and organizational structure have a negative influence on the degree of financial autonomy with beta coefficients of 0.277 and 0.093.

Research by Selin Arslanhan and Yaprak Kurtsal (2010) [6] examines how the lack of financial autonomy affects the innovation efficiency of universities in Turkey. The two men examined the relationship between the autonomy of universities and their competitiveness, thereby explaining the effectiveness of innovation based on the following conditions: (1) Ownership of facilities and equipment; (2) Ability to borrow capital; (3) Decide the budget expenditure according to the objectives; (4) Decide on the curriculum framework, structure and subject content; (5) Possibility to recruit and fire faculty; (6) Be proactive about salary levels; (7) Self-determination on enrollment size; (8) Self-determination of tuition fees.

Truong Tuan Linh and Nguyen Phuong Thao (2021) used descriptive statistics and comparative methods in their research to find out the current situation of financial autonomy at Viet Tri University of Industry and analyze it. The analysis of factors affecting the performance of financial autonomy at the school includes mechanisms and policies, financial management capacity, qualifications of staff, and facilities of the school. From that result, the author proposes four solutions to help the school improve its financial autonomy.

The above studies have only mentioned the financial autonomy mechanism as a progressive method of financial management, consistent with the trend toward autonomy and education reform. Studies on financial autonomy are often general, focusing a lot on mechanisms and policies and providing recommendations and overall solutions to improve the autonomy environment, build a roadmap, and improve the financial management capacity at universities. There have been no studies that delve into the factors affecting the willingness of public universities to be autonomous. Although Nguyen Chi Huong's research has deeply studied the influence of factors on the autonomy mechanism, the research only focused on 1 unit, the sample is small, and the study is not representative.

Through a review of studies on the factors affecting financial autonomy at public universities, the authors found that there have been no studies focusing on the factors affecting the autonomy mechanism at public universities in Hanoi. Therefore, the authors found a gap in their research. The author identified the following factors: Management capacity, Mechanisms and policies, Facilities, and Qualifications of staff.

## 3. Research Design

### 3.1 Research Methods

With the research objective of determining the factors affecting financial autonomy in public universities in Hanoi, the author uses quantitative research. The author analyzes the data on SPSS 22 software with the following tools: Testing the reliability of the scale using Cronbach's Alpha; EFA exploratory factor analysis; Correlation analysis; and regression analysis.

Currently, in Hanoi, there are 46 public universities, including 8 public universities under Hanoi National University and 38 public universities directly under State management agencies. The number of survey questionnaires distributed was 138, sent to 46 schools, and the number of votes collected was 105, reaching 76%. All receipts met the required information requirements. The number of variables in the study is 15, and the number of votes received meets the requirements of the research sample. Survey subjects include Managers, lecturers, and employees in public universities in Hanoi.

### 3.2 Scale, Research Hypothesis, and Research Model

Inheriting from previous theoretical studies, the proposed hypotheses are:

*Hypothesis 1: Policy mechanism has a positive impact on financial autonomy*

Over the past time, the financial mechanism for public non-business units in general or public universities, in particular, has been implemented according to Decree No. 60/2021/ND-CP dated June 21, 2021 of the Government. The Government stipulates the financial autonomy mechanism for public non-business units. Divide these units into 4 groups including:

1. Public universities cover their own recurrent and investment expenses
2. Public universities self-finance recurrent expenses
3. Public universities cover part of their recurrent expenses
4. Public universities with regular expenditures guaranteed by the State budget

The Decree stipulates the financial autonomy and self-responsibility of groups regarding financial resources, autonomous and non-autonomous recurrent expenditures, and distribution of financial results.

Pursuant to the Law on Prices dated June 20, 2012, which took effect on January 1, 2013, the new Decree has specific regulations on public service prices and fees, which, clearly stipulates how to determine the price of public services. Public enterprises do not use state budget funds and public administrative service prices use state budget funds. Accordingly, by the end of 2021, the roadmap for calculating public service fees will be basically completed using the state budget; the price that fully calculates salary costs, direct expenses, management costs and depreciation expenses of fixed assets, and other expenses as prescribed by law on prices.

*Hypothesis 2: Management capacity of unit leaders has a positive impact on financial autonomy*

The leader's capacity and vision is also an important factor related to the implementation of autonomy in each unit. The transition to autonomy changes the scope, capacity and management responsibilities of management levels. This process of change is essentially a transition from managing operations and monitoring the performance of tasks assigned by superiors to actively developing the unit to achieve the set goals. Management in terms of financial autonomy includes the scope of management of the necessary competencies for the manager and the manager's responsibilities.

*Hypothesis 3: The capacity of staff and lecturers has a positive impact on financial autonomy*

The endogenous capacity of public non-business units in the field of education is the staff-lecturers, and facilities... necessary for teaching, learning, and scientific research. The teaching staff needs to have sufficient quantity, quality, ensure the ratio, iwhichs a key factor creating the development of the school; A team of qualified teaching and administrative staff for the school to operate well.

*Hypothesis 4: Facilities have a positive impact on financial autonomy*

It is difficult for public non-business units to achieve financial autonomy in the context of limited facilities. If the unit is autonomous in terms of enrollment or recruitment, it must ensure the minimum facilities to have enough lecture halls, dormitories, working and study equipment, the Library should be equipped to provide adequate learning materials for learners; thereby increasing revenue, taking the initiative in arranging expenditures and ensuring spending efficiency. For that, schools need to be given autonomy, especially financial autonomy.

The dependent variable “Financial autonomy” is expressed through self-guaranteed recurrent expenditure: A/B x 100%. With A, including state budget ordering or bidding for public non-business services using the state budget; Recurring expenses according to the tasks assigned by the State; Scientific and technological regular expenses; Earningcareer; Fees for leaving expenses; Another fall. B include: Recurring expenditures assigned to autonomy, excluding expenditures on provision of public non-business services without the use of the state budget. The authors have converted the level of % into a 5-level Likert scale: level 1 (self-assurance of recurrent expenditure < 10%); level 2 (10% < self-guaranteed recurrent expenditure < 30%); level 3 (30% < self-guaranteed recurrent expenditure < 70%); level 4 (70% < self-guaranteed recurrent expenditure < 100%); level 1 (self-guaranteed recurrent expenditure = 100%).

The scales of this study are inherited by Nguyen Chi Huong (2017), Tran Duc Can (2012), Vu Thi Thanh Thuy, Vu Thi Anh Tuyet (2014), Michael Mitsopoulos and Theodore Pelagidis (2008), Selin Arslanan and Yaprak Kurtsal (2010) [6]. Details of the scale are shown in Table 1. The questions apply a 5-point Likert scale: 1- Strongly disagree; 2 - Disagree, 3 - Neutral, 4 - Agree, 5- Strongly Agree.

**Table 1:** Scale description table

| S. No | Factor | Code | No. Variables |
|---|---|---|---|
| 1 | Policy mechanism (complete; synchronous; timely; appropriate) | PM | 4 |
| 2 | Managerial capacity (dynamism; connectivity; financial management; problem solving) | MC | 4 |
| 3 | Facilities (equipment; structural works; auxiliary works) | FA | 3 |
| 4 | Competence and qualifications of lecturers (Quality of lecturers; enthusiasm for work; knowledge of information) | QL | 3 |
| 5 | Financial autonomy | FI | 1 |

## 4. Results

### 4.1 Evaluate the Reliability of the Scale

**Table 2:** Reliability Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Cronbach's Alpha =.799 | | | | |
| PM1 | 11.85 | 2.650 | .643 | .733 |
| PM2 | 11.77 | 2.813 | .533 | .785 |
| PM3 | 11.80 | 2.565 | .624 | .742 |
| PM4 | 11.72 | 2.625 | .647 | .731 |
| Cronbach's Alpha =.719 | | | | |
| MC1 | 10.78 | 1.596 | .514 | .654 |
| MC2 | 10.96 | 1.383 | .588 | .605 |
| MC3 | 10.94 | 1.574 | .510 | .655 |
| MC4 | 10.89 | 1.698 | .420 | .706 |
| Cronbach's Alpha =.771 | | | | |
| FA1 | 6.71 | .725 | .622 | .675 |
| FA2 | 6.74 | .904 | .511 | .789 |
| FA3 | 6.68 | .721 | .695 | .588 |
| Cronbach's Alpha =.784 | | | | |
| QL1 | 7.30 | .945 | .538 | .794 |
| QL2 | 7.44 | .806 | .709 | .609 |
| QL3 | 7.35 | .846 | .626 | .703 |

The analysis results of the groups of factors, mechanisms, policies, management capacity of leaders, facilities, and capacity of lecturers show that Cronbach's Alpha coefficient of the scale is 0.799, 0.719, 0.771, and 0.784. These coefficients are all greater than 0.6, and the correlation coefficients of the total variables of the observed variables on the scale are all greater than 0.3. Therefore, all observed variables are accepted and will be used in the next factor analysis.

### 4.2 Exploratory Factor Analysis

The author put four factors into the EFA analysis to analyze the convergent and discriminant values of these factors. According to the data in Table 3, the coefficient KMO =

0.674 > 0.5 proves that the study has enough observed variables to constitute a factor. The significance level Sig.=0.000<0.05 shows that the Barlett test is statistically significant and that the analysis of factors is appropriate.

**Table 3:** KMO and Bartlett's Test

| | | |
|---|---|---|
| **Kaiser-Meyer-Olkin Measure of Sampling Adequacy.** | | .674 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 544.402 |
| | df | 91 |
| | Sig. | .000 |

**Table 4:** Rotated Component Matrix[a]

| | **Component** | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| PM4 | .815 | | | |
| PM3 | .809 | | | |
| PM1 | .789 | | | |
| PM2 | .664 | | | |
| QL2 | | .865 | | |
| QL3 | | .827 | | |
| QL1 | | .747 | | |
| FA3 | | | .829 | |
| FA1 | | | .810 | |
| FA2 | | | .778 | |
| MC2 | | | | .763 |
| MC1 | | | | .760 |
| MC3 | | | | .711 |
| MC4 | | | | .686 |

**Table 5:** Total Variance Explained

| **Component** | **Initial Eigenvalues** | | | **Extraction Sums of Squared Loadings** | | |
|---|---|---|---|---|---|---|
| | **Total** | **% of Variance** | **Cumulative %** | **Total** | **% of Variance** | **Cumulative %** |
| 1 | 3.240 | 23.143 | 23.143 | 3.240 | 23.143 | 23.143 |
| 2 | 2.571 | 18.365 | 41.507 | 2.571 | 18.365 | 41.507 |
| 3 | 1.922 | 13.728 | 55.235 | 1.922 | 13.728 | 55.235 |
| 4 | 1.750 | 12.501 | 67.736 | 1.750 | 12.501 | 67.736 |
| 5 | .762 | 5.440 | 73.176 | | | |
| 6 | .740 | 5.282 | 78.458 | | | |
| 7 | .629 | 4.495 | 82.953 | | | |
| 8 | .484 | 3.459 | 86.412 | | | |
| 9 | .410 | 2.928 | 89.340 | | | |
| 10 | .397 | 2.838 | 92.179 | | | |
| 11 | .348 | 2.486 | 94.665 | | | |
| 12 | .317 | 2.267 | 96.931 | | | |
| 13 | .228 | 1.625 | 98.556 | | | |
| 14 | .202 | 1.444 | 100.000 | | | |

Results of EFA analysis with standard Eigenvalues > 1, 4 factors were extracted with a total variance of 67.736 % (>50%). All factor loading factors > 0.5. The variables all satisfy the convergent and discriminant values, so the scales have high values to evaluate the corresponding variables.

## 4.3 Multivariate Regression Analysis

### Correlation Analysis

The results of the Pearson correlation test between the 4 independent variables PM, FA, MC, and QL with the dependent variable are all less than 0.05. Thus, there is a linear relationship between these independent variables and the dependent variable FI.

**Table 6:** Correlations

| | | **FI** | **PM** | **FA** | **MC** | **QL** |
|---|---|---|---|---|---|---|
| FI | Pearson Correlation | 1 | .608** | .299** | .356** | .354** |
| | Sig. (2-tailed) | | .000 | .002 | .000 | .000 |
| | N | 105 | 105 | 105 | 105 | 105 |
| PM | Pearson Correlation | .608** | 1 | -.109 | .131 | .277** |
| | Sig. (2-tailed) | .000 | | .269 | .183 | .004 |
| | N | 105 | 105 | 105 | 105 | 105 |
| FA | Pearson Correlation | .299** | -.109 | 1 | .098 | .102 |
| | Sig. (2-tailed) | .002 | .269 | | .322 | .301 |
| | N | 105 | 105 | 105 | 105 | 105 |
| MC | Pearson Correlation | .356** | .131 | .098 | 1 | .161 |
| | Sig. (2-tailed) | .000 | .183 | .322 | | .101 |
| | N | 105 | 105 | 105 | 105 | 105 |
| QL | Pearson Correlation | .354** | .277** | .102 | .161 | 1 |
| | Sig. (2-tailed) | .000 | .004 | .301 | .101 | |
| | N | 105 | 105 | 105 | 105 | 105 |

### Regression Analysis

The results of the calculated regression analysis are shown in Table 7. The adjusted coefficient of determination R square = 0.559 shows that the independent variables explain 55.9% of the variation of the dependent variable. The results of Table 7 also give Durbin–Watson values to evaluate the phenomenon of first-order series autocorrelation. The value DW = 2,040, is in the range of 1.5 to 2.5, so the results do not violate the assumption of first-order series autocorrelation. The ANOVA table gives the results of the F test to evaluate the hypothesis of fit of the regression model. The F-test sig value is 0.000 < 0.05, so the regression model is suitable. The Coefficients table shows that the VIF coefficient is < 2, so there is no multicollinearity phenomenon. Thus, it can be concluded that the model fits the actual data.

**Table 7:** Regression analysis results
Model Summary[b]

| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** | **Durbin-Watson** |
|---|---|---|---|---|---|
| 1 | .759[a] | .576 | .559 | .346 | 2.040 |

ANOVA[a]

| **Model** | | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
|---|---|---|---|---|---|---|
| 1 | Regression | 16.250 | 4 | 4.062 | 33.913 | .000[b] |
| | Residual | 11.979 | 100 | .120 | | |
| | Total | 28.229 | 104 | | | |

Coefficients[a]

| **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
|---|---|---|---|---|---|---|
| | | **B** | **Std. Error** | **Beta** | | |
| 1 | (Constant) | -1.724 | .490 | | -3.519 | .001 |
| | PM | .574 | .068 | .580 | 8.421 | .000 |
| | FA | .407 | .083 | .328 | 4.929 | .000 |
| | MC | .298 | .087 | .228 | 3.422 | .001 |
| | QL | .145 | .081 | .123 | 1.789 | .077 |

The results in Table 7 show that the values in column Sig. All <5% show that 4 independent variables have a statistically significant impact on the dependent variable. The relationship between the variables is shown by the following equation:

FI = 0.580 * PM + 0.328 * FA + 0.228 * MC +0.123*QL

## 5. Conclusion

The results of the Pearson correlation test and the calculated regression analysis accepted 4 hypotheses. ***Policy mechanism has a positive impact on financial autonomy***: the results of regression analysis show that Sig.=0.000 (<0.05), there is a positive relationship between policy mechanism and financial autonomy. The author's research results on this factor show that this factor has the strongest influence on the financial autonomy of universities ($\beta$ = 0.580). This is completely consistent with the fact that when the policy mechanism is positive, supporting financial autonomy, it creates favorable conditions for universities to build a financial autonomy system in their units. ***The leadership's management capacity has a positive impact on financial autonomy***: the leader's capacity and vision is also important factor related to the implementation of autonomy in each unit. Research results show that when management capacity increases by 1 unit, it will increase financial autonomy by 0.228 units. ***The capacity of staff and lecturers has a positive impact on financial autonomy:*** The endogenous capacity of public non-business units in the field of education is the staff - lecturers, facilities... necessary for teaching, learning and scientific research. Research results show that when the capacity of lecturers increases by 1 unit, the level of financial autonomy will increase by 0.123 units. ***Facilities have a positive impact on financial autonomy***: It is difficult for public non-business units to achieve financial autonomy in the context of limited facilities. The research results show that when the physical facilities increase by 1 unit, the financial autonomy will increase by 0.328 units.

With the insights drawn from the above research results, in order to contribute to increasing the level of autonomy in public universities in Hanoi, the author proposes a number of solutions as follows: (1) Implement synchronously and fully all regulations and policies of the State, including sanctions and regulations promoting financial autonomy. These are the bases for public universities in Hanoi to actively develop and implement solutions to increase revenue as well as increase autonomy and self-responsibility for public universities in the fields of education, organizational structure, staffing, and finance on the basis of reducing relevant regulatory barriers. (2) Decentralization creates motivation for subordinate units to manage according to output results. Output-based financial management mainly aims to clearly define the responsibilities of decentralized agencies competent to carry out financial activities and be proactive in choosing operational solutions to optimize performance. Optimize the allocated budget for the best output quality. (3) In order for the financial management under the autonomy mechanism to be fully effective and practical in each unit, it is necessary for the staff, officials, and employees to grasp the benefits of the new mechanism as well as its impact on each employee and the whole unit. Thereby creating an environment and motivation to encourage the unit and employees to bring into full play their talents and intelligence to provide increased quality services. Therefore, universities need to continue to propagate and raise awareness among their staff, officials, and employees to better understand the policy of autonomy, including autonomy in financial management. (4) Focus on investing in improving facilities in training units, aiming to improve teaching and learning conditions.

## 6. References


1. Government, Decree No. 60/2021/ND-CP dated June 21, 2021 stipulating the autonomy mechanism of public non-business units, 2021.
2. Linh TT, Thao NP. Analysis of factors affecting financial authority at University TNU. Journal of Science and Technology. 2021; 226(8):218-223.
3. Luong VH. The role of the state in expanding the autonomy of Vietnamese public universities (Doctoral dissertation, National Economics University), 2008.
4. Nguyen CH. Financial autonomy at the Ho Chi Minh National Academy of Politics, 2017.
5. Tran DC. Completing the financial autonomy mechanism of public universities in Vietnam (Doctoral Dissertation, National Economics University), 2012.
6. Selin Arslanhan, Yaprak Kurtsal. How does the lack of autonomy across universities affect the innovation performance of Turkey?, TEPAV Policy Note, 2010.
7. Vu TT, Vu TAT. Determining the conditions for financial autonomy at Vietnamese public universities, Development Economics Review. 2014; 202(2).