

FACTORS INFLUENCING THE ADOPTION OF MANAGEMENT ACCOUNTING IN VIETNAMESE CONSTRUCTION FIRMS

Lam Thi Hoang Hoanh¹, Pham Nhat Tuan^{2*}, Yan-Jie Yang³

Abstract – *The widespread reliance on management accounting globally aims to provide crucial insights to corporate executives, assist in-formed decision-making, and boost overall business operations. However, the application of management accounting principles differs in the Vietnamese industry sector. The objective of this study was to explore the impact of various factors on the usage of management accounting in Vietnamese construction firms. The Ordinary Least Squares (OLS) method was used to analyze data collected from a random survey of 212 firms. The findings revealed that company size, culture, and competitiveness significantly affect the adoption of management accounting in Vietnamese construction firms at levels of 0.08, 0.52, and 0.01, respectively. The study underscores the importance of promoting the adoption of management accounting practices to ensure the long-term growth and development of firms operating in the Vietnamese construction industry.*

Keywords: *construction firms, firm size, management accounting, ordinary least squares method, Vietnam.*

I. INTRODUCTION

Management accounting is widely regarded as a fundamental element that generates value for the sustainable development of businesses in developed nations. Management accounting has been formed and mentioned in the Accounting Law in Vietnam since 2003 [1]. However,

understanding and application of the adoption of management accounting and instructions on applying management accounting are still low. Most empirical studies on the use of management accounting in Vietnam either focus on general research across industries [2–4] or only on small and medium firms [5]. Few extensive studies have analyzed the impact of factors on the usage of management accounting in each industry [6, 7], especially in the construction industry in Vietnam. In addition, there is a growing need for resource optimization, financial stability, regulatory compliance, and strategic decision-making. By adopting management accounting, construction firms can improve their financial performance, competitiveness, and operational efficiency in the Vietnamese market. This study examines and analyzes the factors that impact the adoption of management accounting in Vietnamese construction firms. The construction industry has demonstrated strong business performance and will offer considerable growth prospects in the future years. From 2024 to 2030, this industry is expected to grow, driven by the need to maximize investment earnings. As a result, shareholders are urging firm managers to implement flexible and effective management practices.

Navigating such a dynamic environment requires the formulation of integrated short- and long-term strategies. These strategies rely significantly on cost management accounting data to enable fast, effective, and appropriate decision-making, maintaining the firm’s stability in an opportunity-rich but challenging economy. This approach will maximize business activity potential and promote social growth, environmental protection, and long-term economic development in Vietnam [2]. The study utilized the ordinary least squares method, drawing on data from a

¹Faculty of Accounting, Ton Duc Thang University, Vietnam

²PhD Student, College of Management, Yuan Ze University, Taiwan

³College of Management, Yuan Ze University, Taiwan

*Corresponding author: phamnhattuan@tdtu.edu.vn

Received date: 04th February 2024; Revised date: 06th June 2024; Accepted date: 07th June 2024

random survey of 212 firms. The results indicate that business size, organizational culture, and market competitiveness positively influence the adoption of management accounting practices.

II. LITERATURE REVIEW

A. Overview and hypothesis development

Previous studies were conducted according to different sizes and types of businesses, studied at different times with a relatively diverse number of samples and variables used, notably Vu et al. [7], Nguyen et al. [2], Huynh Tan Dung, Huynh Thi Thanh Thao [8], Albaddad [9], Kordlouie et al. [10], Huyen-Tram et al. [6], Eman et al. [11]. Some studies examine components and their impact on management accounting implementation across multiple provinces or, more widely, within an entire nation. Nguyen et al. [2] surveyed company managers, chief accountants, and accounting staff from 65 small and medium firms in Vietnam, using SPSS 25 software to run OLS regression to discover that control of management costs and accountant qualifications impact management accounting implementation. Huynh Tan Dung et al. [8] discovered that the state and accounting professional organizations, management policies, business characteristics, culture firm transformation, level of competition, employee training, and employee qualifications positively impact the implementation of management accounting. Similarly, Nguyen et al. [5] examined 238 firms in Hanoi and found comparable positivity with variables like CEO awareness of management accounting, levels of competition, firm size, age, and the leadership accounting level of management. Msomi et al. [12] found that environmental factors play a significant role in adopting management accounting in small and medium-sized manufacturing businesses in South Africa.

Rumman et al. [13] used structural equation modeling to evaluate data from 520 questionnaires sent to Jordan's public sector to investigate the impact of various variables on adopting modern management accounting methods. The results showed that management accounting procedures

and the qualifications of accounting professionals were significantly correlated. The findings suggested that public sector practitioners could improve performance and encourage organizational change using contemporary management accounting techniques.

Huyen et al. [14] examined the relationship between institutional factors and four contingency factors, including the strength of the competitive market, participation of business owners, advanced technology, and the qualifications of accountants, and the implementation of a strategic management accounting system in manufacturing small and medium-sized enterprises (SMEs) in Vietnam. An online quantitative survey was conducted with 129 SMEs in the manufacturing sector in Vietnam. The results show that three factors, the strength of the competitive market, participation of business owners, and advanced technology, are positively significant for implementing strategic management accounting in manufacturing SMEs in Vietnam. Similarly, Nguyen et al. [15] also demonstrated that Vietnamese manufacturing businesses' application of strategic management accounting is positively impacted by factors such as firm size, level of competitiveness, organizational framework, technology, business strategy, and perception of market volatility. In addition, Quang Hung et al. [16] investigated the impact of competitor and customer orientation on the application of management accounting. Results from partial least squares structural equation modeling (PLS-SEM) using information gathered from top and mid-level managers in 279 big Vietnamese enterprises show that the adoption of management accounting systems is positively impacted by competition and customer orientation.

Prior studies have not examined the implementation of management accounting in construction firms despite this industry significantly impacting the economy. As a result, this study offers information that advances knowledge of how factors affect the implementation of management accounting in the context of construction firms in developing nations like Vietnam.

According to Vu et al. [7] and Le et al. [3], bigger companies frequently have more complicated resources and management systems than small businesses. As a result, the use of management accounting techniques and technologies in major corporations is growing [12]. According to Nguyen Thu Hien [4], Abdel-Kader et al. [17], Msomi et al. [12], Vu et al. [7], Albaddad et al. [9], the current trend of company size has a positive influence on the adoption of management accounting, this result is similar to Eman et al. [11], Huyen-Tram et al. [6], Nguyen et al. [5]. Therefore, the following hypothesis is proposed:

H1: The firm size positively influences the adoption of management accounting.

Firm culture refers to an organization's shared values, beliefs, and behavioral norms that guide employees' actions and interactions [18]. It is a crucial management tool for evaluating organizational success [18]. Studies by Erserim [19] and Le et al. [3] have shown that different types of organizational culture can positively influence the adoption of management accounting practices. Based on these findings, the following hypothesis is proposed in this study:

H2: There is a positive relationship between and firm culture and management accounting adoption.

Business management is a critical component of operating operations for company development [16]. However, key leaders' understanding of this issue in their units differs [20], resulting in various impacts on management accounting implementation [4]. Therefore, this study proposes the hypothesis:

H3: Firm leaders' awareness is related to management accounting adoption.

Information technology plays a crucial role in database management and the implementation of management accounting systems [6]. Therefore, conducting a needs assessment and equipping the unit with the necessary machinery and technology can significantly enhance the adoption of management accounting practices. Additionally, the widespread adoption of technology has been shown to influence decision-making processes

[10]. Based on these insights, the following hypothesis is proposed:

H4: Management accounting adoption benefits from advances in information technology.

Businesses must create excellent brands to attract more customers. To accomplish this, the organization must increase service quality. According to Eman et al. [11] and Ahmad et al. [21], a company's competitive edge is driven by numerous diverse aspects that form a higher, differentiated value and justify limited resources accordingly by allocating information. As a result, the following hypothesis is proposed in this study:

H5: The use of management accounting is influenced positively by market competitiveness.

B. Cost-benefit theory

Since management accounting aims to support an organization's management demands, every company has unique needs regarding management accounting systems and the technical tools used to apply them. The investment costs for adopting management accounting and the advantages that management accounting information provides to the organization are two ways that the theory of the cost-benefit relationship influences the application of management accounting. This theory is applied to explain the cost factors of adopting management accounting, the firm size that affects the adoption of management accounting, and the competitive advantage of firms [3, 20].

C. Contingency theory

An organization's structure is not complete without management accounting. Management accounting is updated and modified following contingency theory to consider modifications to the enterprise's internal and external operational environments and organizational culture. This theory also explains how firm size, culture, and information technology use impact management accounting adoption [20, 21].

III. RESEARCH METHODS

Data for this study were collected through survey questionnaires, either completed in person or distributed via email, Zalo, or Facebook to respondents from small and medium-sized construction enterprises (SMEs) across various provinces and cities in Vietnam from June to September 2023. The selection of survey participants was guided by several specific principles to ensure the data's relevance, accuracy, and quality.

First, respondents were selected based on their direct involvement in management or accounting functions within their respective firms. This criterion ensured that the participants possessed the necessary knowledge and practical experience to provide valuable insights into management accounting practices. By focusing on individuals with roles such as accountants, chief accountants, deputy directors, and deputy general directors of finance, the study aimed to gather responses from those with substantial expertise in the area under investigation. Second, the study targeted small and medium-sized enterprises (SMEs) in the construction sector. This focus was essential because SMEs in this industry often face unique challenges and opportunities compared to larger firms, particularly when adopting management accounting systems. These firms' smaller scale and limited resources present distinctive barriers and opportunities that may not apply to larger organizations, making this a crucial aspect of the study's focus. In addition, participants were selected from diverse geographic regions across Vietnam to capture regional variations in industry practices. This was an important factor in the study design, as it allowed the research to reflect the country's varied economic conditions and regulatory environments. Given that Vietnam is home to a wide range of local economic and cultural contexts, including differences in infrastructure, local government regulations, and regional development priorities, such regional variations were expected to influence the adoption and implementation of management accounting practices. Finally, the study prioritized respondents with substantial experience in the construction

industry, ensuring that the data collected would be credible and relevant. Respondents were required to have a minimum level of expertise and practical experience of 3 years to ensure that their insights could contribute meaningfully to the study's objectives.

In addition, this research develops a series of inquiries that examine the impact of specific elements on the uptake of management accounting, including firm size, firm culture, perception, technology, and competitiveness. A Likert 5-point scale with the following features is used to assess the use of management accounting: Very good, Good, Average, Not good, and Weak. After invalid survey samples were eliminated, the final sample for the study consisted of 212 observations. Next, a test of the scale's reliability, and exploratory factor analysis (EFA) was conducted. The results are presented in detail in Table 1.

According to Msomi et al. [12] and Van et al. [22], the proposed research model follows Model (1).

$$POS_i = \alpha + \beta_1 SIZ_i + \beta_2 CUL_i + \beta_3 PER_i + \beta_4 IFO_i + \beta_5 MAR_i + \epsilon \quad (1)$$

Where: POS_i is the adoption of management accounting, SIZ_i (firm size), CUL_i (culture), PER_i (perception), IFO_i (technology), and MAR_i (competition).

This study employed Ordinary Least Squares (OLS) regression to examine the factors influencing the adoption of management accounting in Vietnamese construction enterprises. OLS was chosen for its versatility, interpretability, computational efficiency, and robustness in handling various data types, making it a reliable and appropriate method for this analysis [2, 4]. The definitions and measurements of variables are presented in detail in Table 2.

IV. RESULTS AND DISCUSSION

Table 3 shows that the average level of management accounting adoption is 4.65, with the POS ranging from a minimum of 4.0 to a maximum of 5.0, indicating that construction firms effectively utilize management accounting to enhance organizational performance. In comparison, Le et al.

Table 1: Scale test for reliability and EFA

| Factor | Variable | Factor Loading | Total variable correlation | Cronbach's Alpha | Results |
|--------|----------|----------------|----------------------------|------------------|---|
| POS | POS1 | 0.767 | 0.586 | 0.763 | Significant: 0.000 KMO: 0.663 Eigenvalues: 2.578 Total variable correlation: 51.556% |
| | POS2 | 0.742 | 0.512 | | |
| | POS3 | 0.738 | 0.565 | | |
| | POS4 | 0.707 | 0.439 | | |
| | POS5 | 0.627 | 0.561 | | |
| SIZ | SIZ1 | 0.905 | 0.714 | 0.702 | Sig: 0.000 KMO: 0.752 Eigenvalues: 1.791 Total variable correlation: 77.064% |
| | SIZ2 | 0.829 | 0.326 | | |
| | SIZ3 | 0.608 | 0.555 | | |
| CUL | CUL1 | 0.985 | 0.962 | 0.980 | |
| | CUL2 | 0.984 | 0.962 | | |
| PER | PER1 | 0.962 | 0.908 | 0.965 | |
| | PER2 | 0.930 | 0.867 | | |
| | PER3 | 0.920 | 0.907 | | |
| | PER4 | 0.911 | 0.971 | | |
| IFO | IFO1 | 0.955 | 0.935 | 0.935 | |
| | IFO2 | 0.951 | 0.833 | | |
| | IFO3 | 0.879 | 0.944 | | |
| | IFO4 | 0.760 | 0.687 | | |
| MAC | MAR1 | 0.905 | 0.467 | 0.782 | |
| | MAR2 | 0.793 | 0.379 | | |
| | MAR3 | 0.743 | 0.630 | | |
| | MAR4 | 0.669 | 0.765 | | |
| | MAR5 | 0.510 | 0.606 | | |

[3] report an adoption level of approximately 3.5 for firms in the manufacturing and commercial services sectors in Vietnam, suggesting that the construction sector has achieved higher levels of management accounting implementation. These findings highlight that management accounting is increasingly considered a critical foundation for firms aiming for sustainable growth.

Table 4 demonstrates that the model ensures ‘no multicollinearity phenomenon occurs’ because the correlation coefficients are all less than 0.5 and VIF 2 is more than 1.

Table 5 shows that the significance value for SIZ is 0.06, below the 10% threshold, and the beta coefficient for SIZ is 0.08, indicating a positive relationship with the POS variable. This suggests that construction firms develop more complex construction and management systems as they grow. Consequently, the need for management accounting increases, expanding systems and procedures that reinforce implementing man-

agement accounting practices. These findings align with the results of Vu et al. [7], Msomi et al. [12], and Nguyen Thu Hien [4] and are consistent with the principles of cost and contingency theory. Thus, hypothesis H1 is supported.

Table 5 demonstrates that firm culture is positively related to adopting management accounting. Nguyen Thu Hien [4] and Huyen-Tram et al. [6] had similar results. Corporations strive for smooth functioning and departmental coordination. As a result, businesses frequently establish the firm’s cultural basis and always cooperate and share work to implement plans, comply with laws, and strive towards business goals, which helps increase the efficiency of applying management accounting. So, hypothesis H2 is accepted.

Similarly, according to the research of Eman et al. [11] and AhMad et al. [21], market competitiveness has been positive with the adoption of management accounting. As a result, hypothesis H5 is acknowledged and explained

Table 2: Definitions and measurements of variables

| | Variable | Series name | Researcher(s) |
|-----------------------|-----------------------------------|---|--|
| Dependent variable | | | |
| POS | Adoption of management accounting | Adoption of management accounting is measured includes 05 observed variables: cost management accounting techniques (POS1), project management accounting techniques (POS2), management accounting techniques for performance evaluation (POS3), decision-making process management accounting technical support (POS4), and strategic management accounting technical support (POS5). | Mbali et al. [11], Van et al. [22], Nguyen Thu Hien [4], Nguyen et al. [5] |
| Independent variables | | | |
| SIZ | Firm size | Firm size is measured by the revenue of the firm (SIZ1), the number of employees of the firm (SIZ2), and the number of departments of the firm (SIZ3). | Nguyen Thu Hien [4], Abdel-Kader et al. [17], Mbali et al. [11], Van et al. [22] |
| CUL | Firm culture | Firm culture includes two observed variables: support from managers for employees in the firm (CUL1), and mutual support from employees in firm departments (CUL2) | Nguyen Thu Hien [4], Huynh Tan Dung et al. [8] |
| PER | Perception of firm managers | Perception of firm managers includes 4 observed variables: High appreciation of the usefulness of management accounting technical tools (PER1), understanding of the tools of management accounting (PER2), knowledge of adopting management accounting (PER3), and acceptance of high costs in investing in adopting management accounting (PER4) | Nguyen et al. [15], Nguyen Thu Hien [4] |
| IFO | Information technology techniques | Information technology techniques are measured, including the level of technology used in the firm's operating system (IFO1), the level of technology used in the firm's product/service production techniques (IFOT2); the level of computer application in the firm's accounting information system (IFOT3) and the appropriate level of software supporting accounting work and other activities in the firm (IFO4). | Vu et al. [7], Kordlouie et al. [10] |
| MAR | Market competitiveness | Market competitiveness includes competition intensity of competitors (MAR1), competition intensity of distribution channels (MAR2), competition intensity of revenue market share (MAR3), competition level of competitors in the same segment (MAR4), and price competition (MARC5). | Huyen et al. [14], Nguyen et al. [15], AhMad et al. [21] |

Table 3: Descriptive statistics

| | N | Min | Max | Mean | Standard deviation |
|-----|-----|------|------|--------|--------------------|
| POS | 212 | 4.00 | 5.00 | 4.6594 | 0.33846 |
| SIZ | 212 | 4.00 | 5.00 | 4.2909 | 0.35960 |
| CUL | 212 | 2.00 | 4.00 | 3.1085 | 0.48924 |
| PER | 212 | 2.00 | 4.00 | 3.4222 | 0.49687 |
| IFO | 212 | 2.00 | 4.00 | 3.7606 | 0.57614 |
| MAR | 212 | 3.00 | 5.00 | 4.1434 | 0.45437 |

Table 4: Correlation coefficients

| Variable | SIZ | CUL | PER | IFO | MAR | VIF |
|----------|--------|-------|--------|---------|-----|------|
| SIZ | 1 | | | | | 1.03 |
| CUL | -0.05 | 1 | | | | 1.00 |
| PER | -0.06 | -0.00 | 1 | | | 1.16 |
| IFO | -0.13* | -0.04 | 0.37** | 1 | | 1.22 |
| MAR | 0.10 | -0.03 | -0.12 | -0.22** | 1 | 1.06 |

Note: *, **, ***: significance at 0.1, 0.05, 0.01

as the increasing degree of competition necessitates organizations to improve their abilities and knowledge of corporate governance while also building stronger brands than their competitors.

When management accounting is implemented, proper resource allocation will improve.

Table 5: Multivariate regression results

| | Beta | t | Sig. |
|------------------------|---------|--------|------|
| (Constant) | 2.68 | 8.74 | 0.00 |
| SIZ | 0.08* | 1.86 | 0.06 |
| CUL | 0.52*** | 16.69 | 0.00 |
| PER | -0.00 | -0.024 | 0.80 |
| IFO | -0.01 | -0.37 | 0.70 |
| MAR | 0.01* | 1.45 | 0.06 |
| R ² | 0.76 | | 0.00 |
| R ² -adjust | 0.57 | | 0.00 |

Note: Y: Adoption of management accounting;
*, **, *** significance at 0.1, 0.05, 0.01

In addition, Table 5 demonstrates that the variables of managers’ perception and information technology have no statistical significance in adopting management accounting. Therefore, conclusions regarding the influence of perception and information technology on management accounting applications cannot be drawn. This could be due to organizations failing to pay attention or believing that the expenses outweigh the benefits of implementing management accounting. As a result, hypotheses H3 and H4 are rejected.

Finally, Table 5 also indicated that the R2 and R2-adjust values are 0.76 and 0.57, respectively, suggesting that the independent variables explain 76% and 57% of the variance in the dependent variable.

V. CONCLUSION

This study investigates the factors influencing the adoption of management accounting in Vietnamese construction firms. The findings reveal that firm size, organizational culture, and market competitiveness positively affect the adoption of management accounting within this sector. The paper recommends several strategies for managing Vietnamese construction firms based on these results. First, firms should tailor their management accounting adoption to their size, with larger firms implementing comprehensive systems that include advanced analytics capabilities. Second, firms must establish clear regulations to foster a corporate culture that encourages adherence to these rules while promoting collaboration between operational and accounting management

teams. Finally, policymakers should focus on enhancing market competitiveness by developing efficient resource management processes and investing in research and development to drive product innovation and improve customer service quality.

However, the study has some limitations including potential errors during the sample survey and data processing, and the impact of additional factors, such as corporate strategy and the quality of accounting staff, were not fully explored. Future research can address these limitations by conducting more in-depth studies.

REFERENCES

[1] The National Assembly. *Accounting Law [Luật Kế toán]*. Hanoi: The National Assembly. Decision No: 03/2003/QH11, 2003.

[2] Nguyen CT, Nguyen TD, Ngo HT. Factors affecting the application of cost management accounting: evidence from small and medium enterprises in Vietnam. *The Journal of Asian Finance, Economics, and Business*. 2022;9(4): 185–190.

[3] Le T, Bui T, Tran T, Nguyen Q. Factors affecting the application of management accounting in Vietnamese enterprises. *Uncertain Supply Chain Management*. 2020;8(2): 403–422. <https://doi.org/10.5267/j.uscm.2019.10.003>.

[4] Nguyen Thu Hien. Applying management accounting in enterprises: The affecting factors and their impacts on business efficiency [Vận dụng kế toán quản trị trong doanh nghiệp: các nhân tố tác động và ảnh hưởng của nó đến hiệu quả kinh doanh]. *Journal of Economics and Development [Tạp chí Kinh tế & Phát triển]*. 2019;268(10): 51–60.

[5] Nguyen N, Nguyen T, Chu T, Nguyen D. Factors affecting the application of management accounting in small and medium enterprises in Hanoi, Vietnam. *Management Science Letters*. 2019;9(12): 2039–2050. <https://doi.org/10.5267/j.msl.2019.7.002>.

[6] Huyen-Tram NT, Toan PN. Factors affecting the application of environmental management accounting in construction companies in Ho Chi Minh City. In: *Proceedings 2018 4th International Conference on Green Technology and Sustainable Development*. IEEE; 2018. p.487–492.

[7] Vu TKA, Dam BH, Van Ha TT. Factors affecting the application of strategy management accounting in Vietnamese logistics enterprises. *Journal of Distribution Science [유통과학연구]*. 2022;20(1): 27–39. <https://doi.org/10.15722/jds.20.01.202201.27>.

- [8] Huynh Tan Dung, Huynh Thi Thanh Thao. Factors affecting the applying of management accounting in small and medium-sized enterprises in Binh Duong Province [Các nhân tố ảnh hưởng đến việc vận dụng kế toán quản trị trong các doanh nghiệp nhỏ và vừa tại tỉnh Bình Dương]. *Journal of Science and Technology [Tập chí Khoa học và Công nghệ]*. 2021;51(03): 139–148. <https://doi.org/10.46242/jsttuh.v51i03.3525>.
- [9] Albaddad O, Nassar M. Factors influencing the implementation of management accounting systems in small and medium-sized enterprises in Dubai. *International Business Research*. 2017;11(1): 245–252. <https://doi.org/10.5539/IBR.V11N1P245>.
- [10] Kordlouie HR, Hosseinpour A. Management accounting practices in small and medium-sized enterprises regarding the impact of organizational DNA. *International Journal of Business Quantitative Economics and Applied Management Research*. 2018;4(8): 22–31.
- [11] Eman AH, Nassar M. The factors affecting the different management accounting practices in small and medium-sized enterprises in Jordan. *International Journal of Academic Research in Business and Social Sciences*. 2018;7(12): 970–978.
- [12] Msomi MP, Ngibe M, Nyide CJ. Factors influencing the adoption of management accounting practices (maps) by manufacturing small and medium enterprises (SMEs) in Durban, Kwazulu-Natal. *International Journal of Entrepreneurship*. 2019;23(4): 1–18.
- [13] Rumman G, Alkhazali A, Barnat S, Alzoubi S, AlZagheer H, Dalbough M, et al. The contemporary management accounting practices adoption in the public industry: Evidence from Jordan. *International Journal of Data and Network Science*. 2024;8(2): 1237–1246. <https://doi.org/10.5267/j.ijdns.2023.11.010>.
- [14] Huyen TNT, Anh TL, Phan-Gia AV, Thanh TP. Factors affecting the implementation of strategic management accounting system in small and medium enterprises in the manufacturing sector in Vietnam. *Calitatea*. 2024;25(198): 51–58. <https://doi.org/10.47750/QAS/25.198.06>.
- [15] Nguyen TH, Nguyen DT, Nguyen TA, Nguyen CD. Impacts of contingency factors on the application of strategic management accounting in Vietnamese manufacturing enterprises. *Cogent Business & Management*. 2023;10(2): 2218173. <https://doi.org/10.1080/23311975.2023.2218173>.
- [16] Bui QH, Tu TH, Tran AH, Nguyen PN. Performance implication of management accounting systems in market-oriented firms: Empirical evidence from Vietnam. *Cogent Business & Management*. 2023;10(3): 2251630. <https://doi.org/10.1080/23311975.2023.2251630>.
- [17] Abdel-Kader M, Luther R. The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*. 2008;40: 2–27. <https://doi.org/10.1016/j.bar.2007.11.003>.
- [18] Davies HT, Nutley SM, Mannion R. Organisational culture and quality of health care. *BMJ Quality & Safety*. 2000;9(2): 111–119. <https://doi.org/10.1136/qhc.9.2.111>.
- [19] Erserim A. The impacts of organizational culture, firm's characteristics and external environment of firms on management accounting practices: an empirical research on industrial firms in Turkey. *Procedia - Social and Behavioral Sciences*. 2012;62: 372–376. <https://doi.org/10.1016/j.sbspro.2012.09.059>.
- [20] Ahmad K, Zabri SM. Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*. 2015;22(4): 762–781.
- [21] Pham NT, Le TMN. Factors affecting the use of management accounting at public units on the area of Ho Chi Minh City. In: *International Conference On – CIFBA*. Hanoi: Vietnam National University; 2020. p.663–672.
- [22] Van TH, Lan TTP. Factors affecting the implementation of strategy management accounting in Vietnamese enterprises [Các nhân tố ảnh hưởng đến việc vận dụng kế toán quản trị chiến lược trong các doanh nghiệp Việt Nam]. *Journal of Finance – Marketing [Tập chí Nghiên cứu Tài chính – Marketing]*. 2021;59(5): 11–24. <https://doi.org/10.52932/jfm.vi59.35>.

