



The relationship between management accounting implementation and business performance of Vietnamese small and medium enterprises

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ABSTRACT

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The study examines the relationship between management accounting implementation and the business performance of Vietnamese small and medium enterprises. The quantitative study analyzed data collected from 259 Vietnamese small and medium enterprises using a convenient non-probability sampling method. Based on the evaluation of relevant domestic and foreign research, a model and research hypotheses are put forward to investigate the impact of management accounting applications on performance. Experts' opinions guided the design and editing of the questionnaire, and we assessed its reliability using Cronbach's alpha coefficient. The convergent and discriminant validity of the scales were evaluated by Exploratory Factor Analysis. Regression analysis using SPSS software to evaluate influence between factors in the proposed model. Analysis results show that management accounting implementation is positively influenced by business size, managers' awareness, level of competition, and accountants' competencies; implementation investment costs have a negative impact. Competitive pressure is the most influential factor motivating business managers to apply management accounting to their businesses to improve business efficiency. Business size significantly influences the application of management accounting, with small and medium-sized business models having the slightest impact. The implementation of management accounting positively affects performance. Therefore, the research provides evidence about current management accounting and enterprise business performance. The research has practical value for managers in expanding the application of management accounting in small and medium enterprises.

Contribution/Originality: It is essential to confirm the relationship between management accounting implementation and business performance in small and medium enterprises in Vietnam. To implement management accounting to improve performance, enterprises need to consider business size, managers' awareness, level of competition, accountants' competencies, and implementation investment costs.

1. INTRODUCTION

Small and medium enterprises are always attractive to researchers. Small and medium enterprises contribute noticeably to the Gross Domestic Product (GDP) and create jobs (Gherghina, Botezatu, Hosszu, & Simionescu, 2020). In the field of accounting, small and medium enterprises are also involved. Accounting information users are increasing in small and medium enterprises, and the quality of accounting information positively impacts business performance (Amoako, 2013). Management accounting applications provide necessary information to make

decisions timely and effectively. Management accounting prevents ineffective operations in small and medium enterprises (Mayr, Mitter, Kücher, & Duller, 2021). Management accounting services are effective and impact the performance of small and medium enterprises (Adu-Gyamfi & Chipwere, 2020; Dahal, Bhattarai, & Karki, 2020). However, management accounting practice in small and medium enterprises is still low and different from that of large companies (Lavia López & Hiebl, 2015). Therefore, it is necessary to continue conducting separate theoretical and practical research for enterprises of small and medium sizes, mainly linked to different economic contexts.

In Vietnam, management accounting has been helping many businesses create compelling competitive advantages in world and regional economic integration. Establishing management accounting systems and implementation in businesses in Vietnam receives more attention. However, implementation still has many limitations due to the unique characteristics of each enterprise. While relevant guiding documents still need to be clarified and appropriate, the application of management accounting has not strongly influenced administrators' business decision-making. There are still numerous issues with each type's specific implementation and application that require resolution. Management accounting practices and the impact of management accounting have not received much attention, and role of management accounting in corporate governance is not entirely recognized (Lan, 2021). Management accounting has not fully promoted its functions and roles in operating, controlling, and evaluating businesses. There are few studies examining how management accounting practices affect the business performance of small and medium enterprises in Vietnam.

Previous research shows that more needs to be learned about the factors that affect how small and medium-sized businesses use management accounting and how that affects their operational efficiency. Therefore, the research questions are:

1. What factors affect the implementation of management accounting in small and medium enterprises?
2. How does management accounting implementation impact the performance of small and medium-sized enterprises in Vietnam?

The structure of the article includes six main parts. After the introduction, Section 2 clarifies the literature review. Section 3 proposes the research model and hypotheses. Section 4 provides research methodology. Section 5 presents the research results. Section 6 presents conclusions, summarizing the research results and outlining some limitations.

2. LITERATURE REVIEW

Authors and researchers worldwide have studied the impact of management accounting on financial performance (Gyamera et al., 2023). Some studies show positive effects, while others show the opposite.

Management accounting uses the information to make decisions and plan, control, and evaluate performance aspired to succeed (Ghorbel, 2016; Mayanja, 2010) giving businesses a competitive advantage over other companies (Ashfaq, Younas, Usman, & Hanif, 2014; Stefanou & Athanasaki, 2012). Size, market competition intensity, and commitment of owners and managers of advanced manufacturing and technology companies impact management accounting practices in small and medium enterprises (Ahmad, 2012; Ahmad & Mohamed Zabri, 2015). Operational technology also significantly influences management accounting practice (Kordlouie & Hosseinpour, 2018). Increasing awareness of the importance of management accounting applications and improving the qualifications of accounting staff and managers' confidence in management accounting information are necessary to use management accounting (Le, Bui, Tran, & Nguyen, 2020).

Business success has recognized management accounting practices as critical (Al-Mawali, 2013; Horngren, 2009). Budgeting, performance evaluation, and information for decision-making (Gichaaga, 2013) in management accounting practice help add value to the client and its organization (Nuhu, Baird, & Appuhami, 2016). For small and medium enterprises, management accounting practices effectively manage the business and improve business efficiency (Ahmad & Mohamed-Zabri, 2013; Maziriri & Mapuranga, 2017; Osim, Umoffong, & Goddymkpa, 2020).

Managers who demonstrate a high level of organizational commitment, utilize a wide range of management accounting information, and possess a higher ability to process information can enhance operational efficiency (Al-Tit, 2017). Applying different management accounting methods to activities in supply chain is an effective strategy to enhance organizational performance (Pradhan, Swain, & Dash, 2018). Business efficiency refers to how performance is impacted, such as reducing costs, improving revenue and competitiveness, achieving set goals, and meeting the needs (Maziriri & Chinomona, 2016). Management accounting boosts business success and can affect organizational performance (Khalid & Kot, 2021).

Research on small and medium enterprises' accounting practices is considered lacking (Gyamera et al., 2023; Najera Ruiz & Collazzo, 2021). This study adds empirical evidence on the application of management accounting in small and medium enterprises and its impact on business performance in the new context.

3. RESEARCH MODEL AND HYPOTHESIS

Based on research on the application of management accounting in enterprises and its impact on performance in small and medium enterprises, the study proposes a research model as in Figure 1:

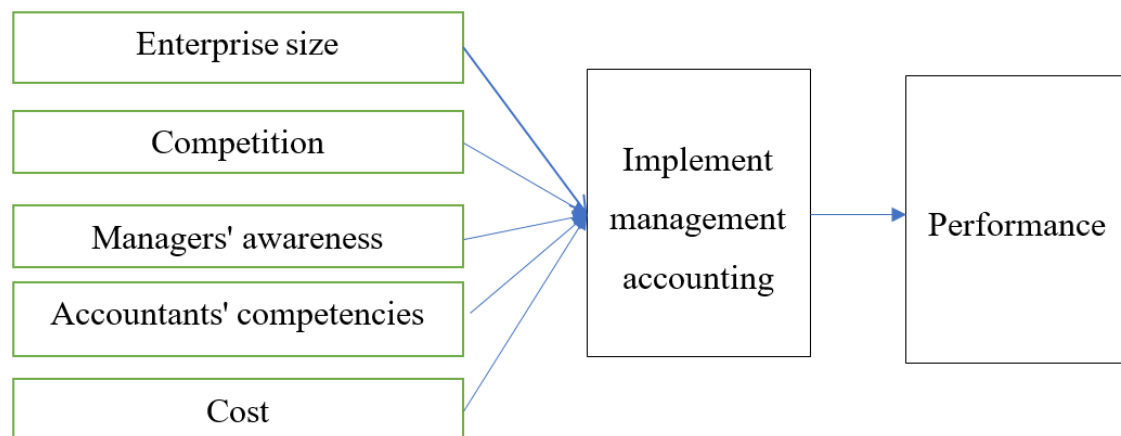


Figure 1. Research model.

Enterprise size. Management accounting is often associated with business size (Chenhall, 2003). Through better estimates (Abdel-Kader & Luther, 2008) the control system has a higher management accounting application in large enterprises (Al-Tit, 2017). Research by Macintosh and Scapens (1991) shows complexity level in using management accounting of large enterprises. Ahmad (2012) affirms the influence of business size in applying management accounting in small and medium enterprises. However, Pollanen and Abdel-Maksoud (2010) point out that business size is not the main factor affecting the extent to which manufacturing enterprises apply management accounting. To further clarify the impact of business size, the hypothesis is proposed as follows:

H₁: Business size positively influences management accounting applications of small and medium enterprises in Vietnam.

Competition. Ahmad (2017) believes competition creates pressure, risk, and instability for businesses. To operate well in a highly competitive environment, companies need more reliable accounting information and to apply new management methods. The level of competition influences the adoption of management accounting (Anderson & Lanen, 1999). Businesses must effectively exploit accounting information to survive in a fiercely competitive environment (Pradhan et al., 2018). The hypothesis proposed is:

H₂: Competition in the market positively influences management accounting applications of small and medium enterprises in Vietnam.

Managers' awareness. Business administrators' awareness and active interest in management accounting practice are essential deciding factors (Hoque & James, 2000). Administrators use management accounting information every day, so they should know why it's important to use it and what role management accounting

plays. Knowing these things will help businesses use management accounting more effectively (Abdel-Kader & Luther, 2008; Pollanen & Abdel-Maksoud, 2010). Awareness of new management accounting techniques and their application to businesses also affects management accounting practices (Halbouni & Nour, 2014). Therefore, the research hypothesis is:

H₃: Managers' awareness positively affects management accounting application of small and medium enterprises in Vietnam.

Accountants' Competencies. The capacity of the accounting team affects the application of management accounting in the organization. Qualified accountants will help support analysis and provide valuable management accounting information to support business operations (Collis & Jarvis, 2002; Wu & Boateng, 2010). The team of accountants is a necessary force that provides appropriate information to administrators (Khocha, 2017; Lucas Jr, Agarwal, Clemons, El Sawy, & Weber, 2013). Poor employees are a barrier to adopting measures to improve the efficiency of an organization (Macintosh & Scapens, 1991). Based on these views, the proposed hypothesis is:

H₄: The qualifications of accountants positively influence management accounting application of small and medium enterprises in Vietnam.

The practice of management accounting comes at a cost. The cost of setting up management accounting is compatible with the feasibility of implementing it in small and medium enterprises. Implementing management accounting requires investment, but the benefits are difficult to measure, and specifically, it is an obstacle to applying management accounting (Mahfar & Omar, 2004). In developing countries, small and medium enterprises often have difficulty accessing loan sources, so it isn't easy to invest in management accounting. Research by Mahfar and Omar (2004) shows that costs impact the implementation of management accounting. The hypothesis is given as follows:

H₅: The cost of implementing management accounting negatively affects management accounting applications of small and medium enterprises in Vietnam.

Implement management accounting. Research by Ahmad and Mohamed-Zabri (2013); Nuhu et al. (2016) and Maziriri and Mapuranga (2017) proves that the influence of management accounting practices on the business performance of enterprises is in the same direction. Research on small and medium enterprises (Ahmad, 2017) retail businesses (Ahmad & Zabri, 2018) and manufacturing enterprises (Kefasi, 2019) shows that cost, budgets, performance measurement practices, and financial performance have a significant relationship. Therefore, the hypothesis proposed is:

H₆: There is a positive correlation between management accounting implementation and the performance of Vietnamese small and medium enterprises.

Performance. Various performance indicators in empirical research on small and medium enterprises measure business performance. Jusoh, Nasir Ibrahim, and Zainuddin (2008) measure performance using financial measurement tools. Khatab, Masood, Zaman, Saleem, and Saeed (2011) use revenue growth, increase assets, profit, Return on Equity ROE, Return on Assets-ROA, Return on Sales-ROS, Return on Debt-ROD, and Tobin's Q. To evaluate the performance of Vietnamese small and medium enterprises, the study considers increasing and completing the set goals of return on assets, return on equity, and return on revenue.

4. RESEARCH METHODS

4.1. Research Design

The qualitative research method determines research hypotheses about the relationship between factors and form measurement scales. Quantitative research methods help determine the scale's reliability, relationship, and level of influence between factors. The design of empirical survey research aims to elucidate the relationship between proposed hypotheses and the research model. The research design is appropriate and necessary for the

research objectives. To describe and clarify the relationship between variables, it is necessary to have actual data from small and medium-sized enterprises performing management accounting.

4.2. Technique

Collected data were analyzed using SPSS 25.00 software. Statistical analysis and social science research commonly use this software. Test the reliability of the scale using Cronbach's Alpha method. Summarize and reduce the scale, and evaluate convergent and discriminant validity using Exploratory Factor Analysis. Use linear regression to determine the influence of factors in the model.

4.3. Participants

Participants are managers, chief accountants, and people who participate in direct management and have decision-making authority in the operations of Vietnamese small and medium enterprises. The structure of enterprises in the survey sample is in Table 1.

Table 1. Research sample.

Criteria	Quantity	Criteria	Quantity
<i>The years established</i>	259	<i>Sectors</i>	259
Under 5 years	123	Agriculture, forestry and fisheries	37
6-10 years	98	Build, industry	125
11-20 years	33	Trade - services	84
Over 20 years	5	Other	13

4.4. Data Collection

Analytical data is data collected objectively from survey results through a pre-structured questionnaire. Questionnaires were used to collect information about the application of management accounting at the enterprise and its impact on operational efficiency. In addition to general demographic information, questions about management accounting application and operational efficiency use a Likert scale with five levels. The study uses a convenient non-probability sampling method to help save time and costs (Thø, 2014) and can choose an audience that is accessible, knowledgeable, and relevant to management accounting. The number of ballots issued was 300, and the number of valid votes collected and used in the analysis was 259. The sample size of 259 is considered good.

5. RESEARCH RESULTS AND DISCUSSION

5.1. Scale Reliability

Reliability test results show that all variables have Cronbach's alpha coefficient > 0.6 , and each variable has a total correlation coefficient > 0.3 (Table 2). All measurement variables are consistent and consistent with the research (Hair, Black, Babin, & Anderson, 2010). Therefore, this study has seven factors and 25 statistically significant observed variables.

Table 2. Assessment of scale reliability.

No.	Variable	Symbol	Observed variables	Cronbach's alpha	Corrected item-total correlation
1	Enterprise size	SZ	3	0.740	0.510
2	Competition	CP	4	0.812	0.561
3	Managers' awareness	MA	4	0.659	0.419
4	Accountants' competencies	AC	4	0.864	0.639
5	Cost of practicing management accounting	CO	3	0.674	0.384
6	Implement management accounting	IMA	4	0.810	0.559
7	Performance	PE	3	0.676	0.383

5.2. Factor Analysis

Table 3 presents factor analysis results. In exploratory factor analysis, principal component extraction and varimax rotation with Kaiser-Meyer-Olkin (KMO), significance level, and Bartlett test are used to evaluate scales' convergent and discriminant validity. The coefficient KMO is 0.764, over 0.5. The significance level of the Bartlett test is 0.000, which meets the condition of being bigger than 0.05. That shows the appropriateness of the exploratory factor analysis. The total variance extracted with 63.434% is bigger than 50%, so all observations are approximate. The official scales have six independent variables with 18 observations.

Table 3. Factor analysis.

Rotated component matrix					
-	Component				
	1	2	3	4	5
AC2	0.888				
AC1	0.842				
AC3	0.831				
AC4	0.786				
CP2		0.847			
CP4		0.802			
CP1		0.704			
CP3		0.652			
SZ1			0.774		
SZ2			0.763		
SZ3			0.761		
MA1				0.730	
MA3				0.704	
MA2				0.700	
MA4				0.657	
CO1					0.814
CO2					0.793
CO3					0.630

For the IMA (Implement Management Accounting) variable, the coefficient KMO is 0.789. The significance in Bartlett test is 0.000. Exploratory factor analysis is appropriate because KMO is over 0.5 and the significance is lower than 0.05. The extracted total variance is 69.931%, surpassing the 50% threshold.

5.3. Regression

Table 4 shows that R squared is 0.555 greater than 0.5, so the model is significant. Five variables explain 55.5% of the dependent variable change. The rest of the variables are out-of-model and random errors.

The Durbin - Watson coefficient is 1.822, so the model has no first-order series autocorrelation.

Table 4. Model summary.

Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	0.745	0.555	0.546	0.561	1.822

Note: Predictors: (Constant), CO, AC, MA, SZ, CP.
Dependent variable: IMA.

In variance analysis (ANOVA), Table 5 presents the significance of this model test as $0.000 < 0.05$. Therefore, the regression model is suitable.

Table 5. ANOVA.

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	99.402	5	19.880	63.106	0.000
	Residual	79.703	253	0.315	--	-
	Total	179.104	258	-		--

Note: Dependent variable: IMA.
Predictors: (Constant), CO, AC, MA, SZ, CP.

The regression to determine the relationship between factors and management accounting practices shows that the given factors have a significant influence. The hypotheses are accepted. Table 6 displays the regression coefficients. The significant values for each independent variable are smaller than 0.05, so all variables are significant. VIF coefficients are all lower than 2. It means no multicollinearity occurs.

Table 6. The regression with IMA.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	-0.163	0.347	-	-1.046	0.000	-	-
	SZ	0.098	0.052	0.093	1.871	0.002	0.715	1.399
	CP	0.305	0.054	0.255	3.180	0.000	0.713	1.403
	MA	0.175	0.064	0.117	2.727	0.001	0.953	1.049
	AC	0.204	0.039	0.198	1.097	0.000	0.977	1.023
	CO	-0.191	-0.069	-0.161	1.313	0.000	0.815	1.227

Note: Dependent variable: IMA.

Table 7 presents the regression results that determine the impact of applying management accounting on performance. R squared is greater than 0.5, so the model is significant.

Table 7. The regression with PE.

Model summary ^b					
Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	0.811 ^a	0.658	0.650	0.658	1.893

Note: a. Predictors: (Constant), IMA4, IMA3, IMA1, IMA2.
b. Dependent variable: PE.

Table 8 shows that all variables are significant in the model ($\text{sig} < 0.05$), and no multicollinearity occurs ($\text{VIF} < 2$). All variables are significant in the model ($\text{sig} < 0.05$), and no multicollinearity occurs (Variance Inflation Factor- $\text{VIF} < 2$).

Table 8. Coefficients.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	2.102	0.189	-	11.109	0.000	-	-
	IMA1	0.255	0.155	0.202	2.789	0.000	0.555	1.800
	IMA2	0.215	0.153	0.260	2.196	0.000	0.548	1.824
	IMA3	0.182	0.146	0.217	1.778	0.000	0.668	1.498
	IMA4	0.216	0.152	0.256	2.233	0.000	0.597	1.674

Note: Dependent variable: PE (Performance).

5.4. Discussion

The research model suggests that the competitive environment, business size, manager awareness, professional level of accounting staff, and costs all have a big impact on how management accounting is used in Vietnamese small and medium-sized businesses. Costs have a negative impact on the application of management accounting, while the remaining factors impact it in the same direction. This result is consistent with the research of [Ahmad \(2017\)](#); [Ahmad and Mohamed Zabri \(2015\)](#); [Austin and Ejike \(2019\)](#) and [Wu and Boateng \(2010\)](#).

Competition has the most significant influence on implementing management accounting in small and medium enterprises in Vietnam (Beta coefficient is 0.255). That shows they recognize that changes in the external competitive environment and increasing competitive pressure push them to apply effective accounting methods to improve competitiveness in the new context.

Businesses are primarily interested in the qualifications of accountants when it comes to management accounting practices (Beta is 0.198). To gain benefits from management accounting, accountants first need to have a correct understanding of the role of management accounting. At the same time, accountants must have enough ability and capacity to collect, process, and analyze management accounting information suitable for each business.

In addition, this study is also consistent with the results of previous studies on managers' awareness of management accounting (Beta is 0.117). When administrators understand the importance of implementing management accounting, the entire enterprise can effectively promote implementation.

Business size significantly impacts management accounting applications (Beta is 0.093). Enterprises with larger capital and operating assets require more information to serve management decision-making requirements.

However, for small and medium-sized enterprises in Vietnam, cost is one of the obstacles to management accounting. To perform management accounting, businesses need to invest in facilities, human resource training, and consulting fees, but they are greatly limited in capital and human resources.

There is a positive relationship with the performance of Vietnamese small and medium enterprises. Exemplary implementation of management accounting contributes to improving the operational efficiency of small and medium enterprises. This result is consistent with the research of [Austin and Ejike \(2019\)](#) and [Gyamera et al. \(2023\)](#).

6. CONCLUSION AND LIMITATION

6.1. Conclusion

This empirical research shows that management accounting impacts the performance of small and medium enterprises. Business size, managers' awareness, competition, and accountants' competencies positively influence management accounting applications. Management accounting practice costs have a negative impact. Therefore, it is necessary to have measures to strengthen management accounting services for small and medium enterprises in Vietnam.

The larger the size of a business, the more complex its decision-making becomes. Implementation is still an obstacle to managing accounting in small and medium-sized enterprises today.

The perception of business owners still plays a decisive role in business operations in general and the application of management accounting. A correct assessment of the role of management accounting in the context of fierce competition and its applicability in businesses is an essential foundation for implementing management accounting.

6.2. Limitation

However, the survey sample size and the spatial scope of the convenience sampling method still limit this study. In addition, the research has not comprehensively analyzed the differences between industries in applying management accounting and business performance. We suggest that future studies expand the survey sample and in-depth research for each industry field to support administrators' decision-making better.

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REFERENCES

- Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, 40(1), 2-27. <https://doi.org/10.1016/j.bar.2007.11.003>
- Adu-Gyamfi, J., & Chipwere, K. Y. W. (2020). The impact of management accounting practices on the performance of manufacturing firms: An empirical evidence from Ghana. *Research Journal of Finance and Accounting*, 11(20), 100-113. <https://doi.org/10.7176/rjfa/11-17-13>
- Ahmad, K. (2012). *The use of management accounting practices in Malaysian SMEs*. United Kingdom: University of Exeter.
- Ahmad, K. (2017). The implementation of management accounting practices and its relationship with performance in small and medium enterprises. *International Review of Management and Marketing*, 7(1), 342-353.
- Ahmad, K., & Mohamed-Zabri, S. (2013). *The relationship between the use of management accounting practices and the performance of Malaysian medium-sized enterprises*. Paper presented at the Proceedings the 2nd International Conference on Global Optimization and its Applications 2013. https://www.academia.edu/download/43289691/The_relationship_between_the_use_of_mana20160302-8217-1duk6u.pdf.
- Ahmad, K., & Mohamed Zabri, S. (2015). Factors explaining the use of management accounting practices in Malaysian medium-sized firms. *Journal of Small Business and Enterprise Development*, 22(4), 762-781. <https://doi.org/10.1108/JSBED-04-2012-0057>
- Ahmad, K., & Zabri, S. M. (2018). The mediating effect of knowledge of inventory management in the relationship between inventory management practices and performance: The case of micro retailing enterprises. *Journal of Business and Retail Management Research*, 12(2), 1-11. <https://doi.org/10.24052/jbrmr/v12is02/tmeokoimtrbimpaptcomre>
- Al-Mawali, H. (2013). Performance consequences of management accounting system information usage in Jordan. *Business and Economic Horizons*, 9(1), 22-31.
- Al-Tit, A. A. (2017). Factors affecting the organizational performance of manufacturing firms. *International Journal of Engineering Business Management*, 9, 1-9. <https://doi.org/10.1177/1847979017712628>
- Amoako, G. K. (2013). Accounting practices of SMEs: A case study of Kumasi metropolis in Ghana. *International Journal of Business and Management*, 8(24), 73. <https://doi.org/10.5539/ijbm.v8n24p73>
- Anderson, S. W., & Lanen, W. N. (1999). Economic transition, strategy and the evolution of management accounting practices: The case of India. *Accounting, Organizations and Society*, 24(5-6), 379-412. [https://doi.org/10.1016/S0361-3682\(97\)00060-3](https://doi.org/10.1016/S0361-3682(97)00060-3)
- Ashfaq, K., Younas, S., Usman, M., & Hanif, Z. (2014). Traditional vs. contemporary management accounting practices and its role and usage across business life cycle stages: Evidence from Pakistani financial sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 104-125. <https://doi.org/10.6007/ijarafms/v4-i4/1285>
- Austin, U. N., & Ejike, S. I. (2019). *Impact of management accounting techniques on financial performance of manufacturing companies in Nigeria*. An Unpublished Research Project Submitted to Accounting Department, Nnamdi Azikiwe University, Awka.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2-3), 127-168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)

- Collis, J., & Jarvis, R. (2002). Financial information and the management of small private companies. *Journal of Small Business and Enterprise Development*, 9(2), 100-110. <https://doi.org/10.1108/14626000210427357>
- Dahal, R. K., Bhattarai, G., & Karki, D. (2020). Management accounting techniques on rationalize decisions in the Nepalese listed manufacturing companies. *Researcher: A Research Journal of Culture and Society*, 4(1), 112-128. <https://doi.org/10.3126/researcher.v4i1.33816>
- Gherghina, Ș. C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 12(1), 347. <https://doi.org/10.3390/su12010347>
- Ghorbel, J. (2016). The relationship between the profile of manager and management accounting practices in Tunisian SMIs. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 61-72. <https://doi.org/10.6007/ijarafms/v6-i1/1980>
- Gichaaga, P. M. (2013). *Factors affecting implementation of the strategy in the water sector reforms in Kenya: A census of contracted water services providers by tana water services board*. Doctoral Dissertation.
- Gyamera, E., Abayaawien Atuilik, W., Eklemet, I., Henry Matey, A., Tetteh, L. A., & Kwasi Apreku-Djan, P. (2023). An analysis of the effects of management accounting services on the financial performance of SME: The moderating role of information technology. *Cogent Business & Management*, 10(1), 2183559.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: Global edition*. NJ: Pearson Higher Education Upper Saddle River.
- Halbouni, S. S., & Nour, M. A. (2014). An empirical study of the drivers of management accounting innovation: A UAE perspective. *International Journal of Managerial and Financial Accounting*, 6(1), 60-86. <https://doi.org/10.1504/IJMFA.2014.060512>
- Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12(1), 1-17. <https://doi.org/10.2308/jmar.2000.12.1.1>
- Horngren, C. T. (2009). *Cost accounting: A managerial emphasis*, 13/e. Upper Saddle River: Pearson Education India.
- Jusoh, R., Nasir Ibrahim, D., & Zainuddin, Y. (2008). The performance consequence of multiple performance measures usage: Evidence from the Malaysian manufacturers. *International Journal of Productivity and Performance Management*, 57(2), 119+-136. <https://doi.org/10.1108/17410400810847393>
- Kefasi, E. (2019). *Management accounting practices and the performance of manufacturing small and medium enterprises in Cape Town*. Doctoral Dissertation, Cape Peninsula University of Technology.
- Khalid, B., & Kot, M. (2021). The impact of accounting information systems on performance management in the banking sector. *IBIMA Business Review*, 578902. <https://doi.org/10.5171/2021.578902>
- Khatab, H., Masood, M., Zaman, K., Saleem, S., & Saeed, B. (2011). Corporate governance and firm performance: A case study of Karachi stock market. *International Journal of Trade, Economics and Finance*, 2(1), 39. <https://doi.org/10.7763/ijtef.2011.v2.76>
- Khochha, N. (2017). The organization of management accounting at small enterprises in Ukraine. *Baltic Journal of Economic Studies*, 3(4), 271-279. <https://doi.org/10.30525/2256-0742/2017-3-4-271-279>
- Kordlouie, H. R., & Hosseinpour, A. (2018). Management accounting practices in small and medium-sized enterprises regarding the impact of organizational dna, commercial potential and operational technology. *International Journal of Business Quantitative Economics and Applied Management Research*, 4(8), 22-31.
- Lan, N. T. N. (2021). *The impact of management accounting on business performance of Vietnamese enterprises*. Jakarta, Indonesia: Indonesia Stock Exchange
- Lavia López, O., & Hiebl, M. R. (2015). Management accounting in small and medium-sized enterprises: Current knowledge and avenues for further research. *Journal of Management Accounting Research*, 27(1), 81-119. <https://doi.org/10.2308/jmar-50915>

- Le, T., Bui, T., Tran, T., & Nguyen, Q. (2020). Factors affecting the application of management accounting in Vietnamese enterprises. *Uncertain Supply Chain Management*, 8(2), 403-422. <https://doi.org/10.5267/j.uscm.2019.10.003>
- Lucas Jr, H., Agarwal, R., Clemons, E. K., El Sawy, O. A., & Weber, B. (2013). Impactful research on transformational information technology: An opportunity to inform new audiences. *Mis Quarterly*, 37(2), 371-382. <https://doi.org/10.25300/misq/2013/37.2.03>
- Macintosh, N. B., & Scapens, R. W. (1991). Management accounting and control systems: A structuration theory analysis. *Journal of Management Accounting Research*, 3, 131.
- Mahfar, R., & Omar, N. (2004). *The current state of management accounting practices in selected Malaysia companies – An empirical evidence*. Paper presented at the International Business Management Conference, Universiti Tenaga Nasional.
- Mayanja, M. K. (2010). *Management accounting as an instrument for corporate governance in Botswana*. Doctoral Dissertation, University of South Africa.
- Mayr, S., Mitter, C., Kücher, A., & Duller, C. (2021). Entrepreneur characteristics and differences in reasons for business failure: Evidence from bankrupt Austrian SMEs. *Journal of Small Business & Entrepreneurship*, 33(5), 539-558. <https://doi.org/10.1080/08276331.2020.1786647>
- Maziriri, E. T., & Chinomona, E. (2016). Modeling the influence of relationship marketing, green marketing and innovative marketing on the business performance of small, medium and micro enterprises (SMMES). *Journal of Economics and Behavioral Studies*, 8(3 (J)), 127-139. [https://doi.org/10.22610/jeb.v8i3\(J\).1294](https://doi.org/10.22610/jeb.v8i3(J).1294)
- Maziriri, E. T., & Mapuranga, M. (2017). The impact of management accounting practices (MAPS) on the business performance of small and medium enterprises within the gauteng province of South Africa. *Journal of Accounting & Management*, 7(2), 2284-9459.
- Najera Ruiz, T., & Collazzo, P. (2021). Management accounting use in micro and small enterprises. *Qualitative Research in Accounting & Management*, 18(1), 84-101. <https://doi.org/10.1108/QRAM-02-2020-0014>
- Nuhu, N. A., Baird, K., & Appuhami, R. (2016). The association between the use of management accounting practices with organizational change and organizational performance in advances in management accounting. In (pp. 67-98): Emerald Group Publishing Limited. <https://doi.org/10.1108/S1474-787120150000026003>.
- Osim, E., Umoffong, N. J., & Goddymkpa, C. P. (2020). Management accounting practices and the performance of small and medium-sized enterprises in Akwa Ibom State, Nigeria. *Business Perspective Review*, 2(2), 57-74.
- Pollanen, R. M., & Abdel-Maksoud, A. B. (2010). The deployment of contemporary management accounting practices in Canadian firms: A contingency approach. *International Journal of Managerial and Financial Accounting*, 2(2), 134-152. <https://doi.org/10.1504/IJMFA.2010.033287>
- Pradhan, D., Swain, P., & Dash, M. (2018). Effect of management accounting techniques on supply chain and firm performance: An empirical study. *International Journal of Mechanical Engineering and Technology*, 9(5), 1049-1057.
- Stefanou, C. J., & Athanasaki, M. T. (2012). *Management accounting practices in ERP environments: A research agenda*. Paper presented at the In Proceedings of the 9th International Conference on Enterprise Systems, Accounting and Logistics June.
- Tho, N. D. (2014). *Scientific research methods in business*. Vietnam: Finance Publishing House.
- Wu, J., & Boateng, A. (2010). Factors influencing changes in Chinese management accounting practices. *Journal of Change Management*, 10(3), 315-329. <https://doi.org/10.1080/14697017.2010.493303>