

# Relationship between Management Accounting and Business Efficiency - the Intermediate Role of Management Efficiency: A Case Study of Small and Medium Enterprises in the Mekong Delta, Vietnam

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## Abstract

Management accounting is a reliable source of information in business activities. However, up to now, there have not been many complete and systematic studies on the factors affecting and the interaction between the implementation of management accounting and the business performance of enterprises. This is a challenging issue for policymakers and business managers. This study, using data from a survey of 370 SMEs in the Mekong Delta, applied the Partial Least Squares-Structural Equation Modeling in the analysis. The research results show that there is a positive linear relationship between management accounting and business efficiency of enterprises through the intermediate factors of management efficiency. Factors affecting the implementation of management accounting include enterprise size, market competition, business owner awareness, and professional qualification of the accounting team.

**Keywords:** Business efficiency; Management accounting; Management efficiency; Partial least squares-structural equation modeling; Mekong delta, Vietnam.

## 1. Introduction

Management accounting is a reliable source of information in business operations and influences management decisions and business performance. However, so far, there have not been many comprehensive and systematic studies on the influencing factors and interactions between the implementation of management accounting and the business performance of enterprises. The study of the above relationship has practical significance, contributing to the development and improvement of business efficiency for enterprises. This study focuses on (i) Determining the factors affecting the performance of management accounting and its influence on business performance; (ii) Build a quantitative analysis model of this relationship; (iii) Policy implications from research results. The study conducted a survey of 390 small and medium enterprises (SMEs) in the Mekong Delta, Vietnam to create a practical basis for the measurement model. The Mekong Delta is always considered an area with significant economic development compared to the whole country with 55,089 businesses and over 768 trillion VND registered in capital. Among enterprises in the Mekong Delta, medium-sized enterprises accounted for 28.3%, small and micro enterprises accounted for 68.4%. Due to the large geographical distance, the study selects a sample of five provinces and cities in the Mekong Delta region: Can Tho City and provinces Long An, An Giang, Dong Thap, and Ca Mau. These are also localities with a larger number of active SMEs than other provinces in the region Vietnam (Ministry of Planning and Investment, 2020).

## 2. Theoretical Overview

### 2.1. Foundation Theory

Institutional theory of organizations is an adaptive change processes framework. It examines the impact of external environmental factors and market conditions on organizational change and growth (Barnett and Carroll, 1995). Applying institutional theory, Burns and Scapens (2000) consider the change in management accounting as a change in the rules and habits of the organization. According to Meyer and Rowan (1977) formal and informal management accounting change is used to imply that change is not specifically directed (formal change), but can develop from actions. The intention of individuals to enact and change the habits of the organization (informal change). Formal change occurs through the introduction of new management accounting systems and techniques which, in turn, cause the organization to change including its operations. Thus, management accounting practice includes formal practices such as valuation systems, pricing techniques, financial systems, performance evaluation

systems, and strategic accounting [Smith et al. \(2008\)](#). This theory explains the implementation of management accounting applied by businesses.

Contingency theory states that the effectiveness of an organization's operation depends on its foundation. That is, the effectiveness of an organization depends on its ability to cope with the uncertainty of the business environment ([Morton and Hu, 2008](#)). The traditional school of thought holds that similar organizations can share an optimal structure for all ([Weber, 1947](#)). However, in reality there is always a significant change in the organizational structure. Contrary to traditional theory, it is unable to confirm that there can be a single best and all-encompassing organizational structure. [Otley \(1980\)](#), applied contingency theory to management accounting practice and explained that there is no single universal standard accounting practice that can be applied to all organizations. This theory considers certain influencing factors that will assist management in deciding to choose an appropriate management accounting practice. These factors can be changes in the technology and infrastructure of an organization. The contingency view suggests that an effective management accounting system should accommodate both internal and external factors ([Battilana and Casciaro, 2012](#)). Internal factors can be likened to similar ownership structures or management teams and key personnel; external factors such as technological change, competition and market forces.

Scientific management theory of [Taylor and Person \(1947\)](#) shows that the important principles of management are: Each part of an individual's job is analyzed in a "scientific" way, and the most effective method of doing so is proposed "one best way" to do. This includes checking the conditions necessary to do the job and measuring the maximum output that a "best" employee can do; then employees have to do this work every day. The person suited best for the job is selected, again "scientifically". The individual is trained to do the job in the exact way it is intended. According to Taylor, everyone has the ability to be "the best" at some job. The role of management is to find out which job is right for each employee and train them until they reach the top. Managers must cooperate with workers to ensure that the work is done in a scientific manner. There is a clear "division" of work and responsibilities between management and employees. Managers are concerned with planning and monitoring work, and employees carry out it.

The above theories are related to this study, in which it is important to explain the cognitive nature of management accounting, the ability to apply management accounting and effective management of enterprises.

## 2.2. Experimental Studies

Small and medium enterprises are enterprises with small scale in terms of capital, labor or revenue. According to [Ayyagari et al. \(2003\)](#), according to the World Bank's criteria, small and medium enterprises (SMEs) are enterprises with less than 200 employees, capital and revenue from 15 million USD or less. In Vietnam, Decree No. 39/2018/ND-CP ([Nguyen, 2018](#)), SMEs are defined according to the criteria of labor, capital and revenue according to different production and business fields.

**Table-1.** SME criteria in Vietnam (2018)

SME criteria	Business industries	
	Agriculture, Forestry, Fisheries and Industry, Construction	Trade, service
Labor (person)	< 200	< 100
Capital (billion VND)	< 100	< 100
Revenue (billion VND)	< 200	< 300

Management accounting: The field of accounting includes three main areas: financial accounting, management accounting and auditing. In particular, management accounting involves creating accounting information for management and employees to assist them in performing their work ([Caplan, 2006](#)). Management accounting is an important tool to provide appropriate information for managers to make business decisions and it is not only widely applied in multinational business organizations around the world but also in medium-sized enterprises in developing countries. Moreover, management accounting has been playing an important role in business activities of enterprises ([Ndwiga, 2011](#)). According to [Kamilah and Zabri \(2018\)](#), the implementation of management accounting is the building of an information system in an organization to provide reliable information to add value to customers and the organization, through which, good performance of management accounting will facilitate effective decision making and assist organizations in promoting business activities.

Factors affecting the implementation of management accounting: Since the early 2000s, many researches around the world have identified the factors affecting the implementation of management accounting in enterprises, including: Competition in the market ([Kordlouie and Hosseinpour, 2018](#); [Nair and Nian, 2017](#); [Wu and Boateng, 2007](#)); Size of the firm ([Ahmad and Zabri, 2018](#); [Godil et al., 2019](#); [Lucas et al., 2013](#); [Nair and Nian, 2017](#)); Perceptions of business owners/ administrators of management accounting ([Ahmad and Zabri, 2018](#); [Nguyen et al., 2019](#)); Professional qualifications of accountants ([Godil et al., 2019](#); [Lucas et al., 2013](#); [Nair and Nian, 2017](#)). Based on empirical studies, the study proposes the following hypotheses:

- H1: The size of the business affects the performance of management accounting;
- H2: Competition in the market affects the performance of management accounting;
- H3: Perception of business owners/ administrators affects the performance of management accounting;
- H4: The professional qualification of accountants affects the performance of management accounting.

Implementation of management accounting, management efficiency and business efficiency: Effective management: Facing a highly competitive market environment, forming marketing strategies, consolidating business operations and upgrading service quality have become essential for business survival. Effective management is an

important tool to help enterprises survive and sustain themselves in a competitive environment. It is expressed through the comparison between the optimal output and input of a business. Furthermore, management efficiency is the result of production and business activities that reflect the ability, with constant inputs, to maximize output with effective management has motivated them to value customers in participating and purchasing products and services (Sun, 2019).

Business efficiency: According to *Business Ratios Guidebook (2020)*, business performance of enterprises is measured by the ratio of net profit to sales (Return on sales, ROS). In which, net profit is profit after tax. This indicator shows how much profit per dollar of revenue. The larger the ROS, the higher the business performance. According to *Liu et al. (2011)*, the ratio of net return to total assets (ROA) is also a measure of business performance of the enterprise because assets are used to support other business activities. It determines whether the company can generate a commensurate return on assets rather than on revenue. This indicator shows how much profit for a dollar of investment property. The larger the ROA, the higher the business performance. Return on equity (ROE) is also a measure of an enterprise's business performance (*Carter and Jones-evans, 2009; Sylvester and Austin, 2019*).

Performing management accounting will provide forecast information for business managers and investors to evaluate expected future financial in terms of income, revenue, expected cash flow, non-financial information such as risk and uncertainty (*Bravo and Dolores, 2019*). Thus, implementing management accounting will affect the efficiency of enterprise management (*Phornlaphatrachakorn and Na-kalasindhu, 2020*). Management efficiency is a factor that determines the performance of an enterprise and its profitability. It can be measured in two respects, such as the difference between its actual performance and what could be achieved under best practice decisions (*Chang and Ma, 2019; Sun, 2019*). Since 2000, many empirical studies have shown that when enterprises use management accounting well, their management efficiency and business performance will be higher (*Alleyne and Weekes-Marshall, 2011; Merchant and Van der, 2003; Mitchell et al., 2000; Nuhu et al., 2016; Phornlaphatrachakorn and Na-kalasindhu, 2020; Sylvester and Austin, 2019*). In addition, studies on SMEs in Palestine and Pakistan show that the level of competition in market and the size of enterprises have a positive impact on business efficiency. In addition, research on enterprises in Palestine and SMEs in Pakistan shows that the level of competition and the size of enterprises have a positive impact on business performance of enterprises (*Ojra, 2014; Saeed et al., 2013*). Based on experimental studies.

Based on the empirical studies, this study proposes the following hypothesis:

H5: Implementing management accounting has a positive impact on the efficiency of enterprise management;

H6: Effective management has a positive impact on business performance of enterprises;

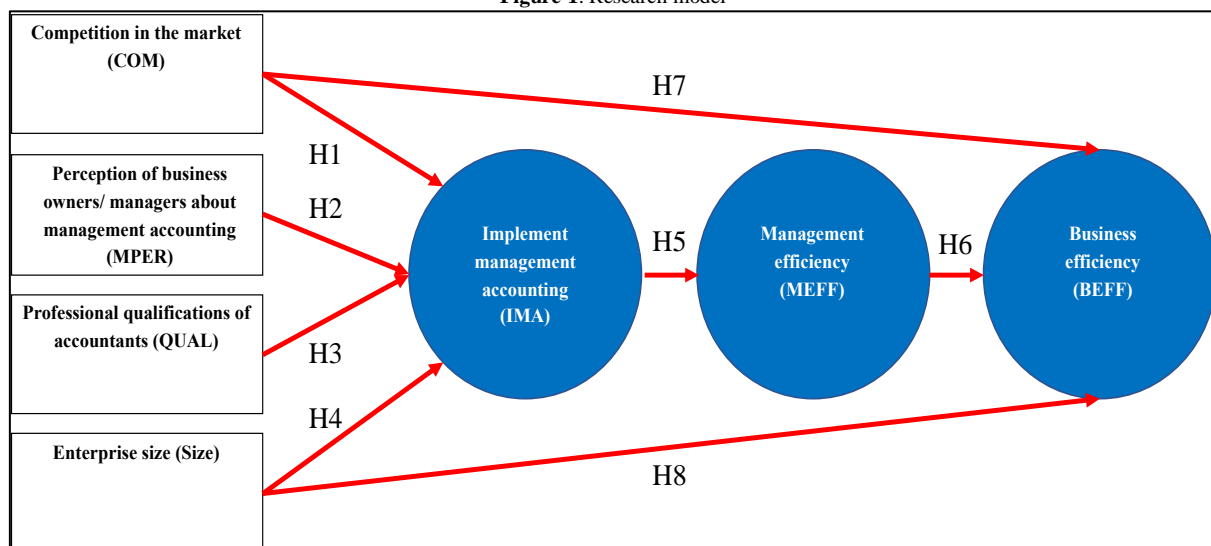
H7: Enterprise size has a positive impact on business performance of enterprises;

H8: The level of competition in market has a positive impact on business performance of enterprises.

### 3. Research Model

Theoretical review and empirical research are needed for further research to extend the theory, provide more empirical evidence and management implications related to implementation of management accounting and business efficiency of the enterprise. Previous studies highlight insights into the impact of implementation of management accounting on business efficiency, and measure relationships using different qualitative models, independent metrics such as exploratory factor analysis or separate regression models, but do not provide an adequate basis for a comprehensive analytical framework on business efficiency. Therefore, the aim of this study is to extend the findings from previous studies on the above relationship and integrate analysis of the relationships in the linear structural model. The research team selected the research model for SMEs in the Mekong Delta, Vietnam as follows:

Figure-1. Research model



## 4. Research Methodology

### 4.1. Measurement

All scales are adjusted from previous studies with some adjustments to suit the research context in Vietnam. We designed three processes for conducting surveys. First, we surveyed using the expert method to discuss with financial industry experts, including with SME financial management experts including 10 with at least five years of experience working in these financial regulatory agencies in Can Tho City. They then suggested some adjustments to ensure that the questionnaire is relevant to the context of Vietnam. Second, pilot survey with 20 business owners or business managers in Can Tho City to re-check the survey questionnaire for no errors and appropriate content. Thirdly, surveying enterprises in five typical provinces and cities (Can Tho City, provinces of Long An, An Giang, Dong Thap, and Ca Mau), enterprises have experienced in implementing management accounting. A total of 390 SMEs respondents filled out the questionnaire. The survey sample was selected based on the respondents' willingness to participate in the study.

A five-way Likert scale ranging from "strongly disagree" to "strongly agree" was used to measure all observed variables: "Business size", "Market competition", "Professional qualifications of accountants", and "Implement management accounting" with 17 observed variables were included in the questionnaire. The measurement factors are based on the scale of [Nair and Nian \(2017\)](#) in the study on the implementation of management accounting for SMEs in Malaysia, developed by the authors appropriate to the context of Vietnam based on the results of the expert discussion. Measuring the scale of "Management efficiency", three observed variables based on research on SMEs in Thailand by [Phornlaphatrachakorn and Na-kalasindhu \(2020\)](#). Measuring "Business efficiency", four observed variables were included in the questionnaire. The measurement elements of this scale are based on the assessment of [Lucas et al. \(2013\)](#) and were developed by the authors as a result of expert discussions. To measure the scale "Perception of business owners", four observed variables were included in the questionnaire. The measurement factors for these scales are based on the scale of [Nguyen et al. \(2019\)](#). A detailed measurement table of the scale and observed variables is available in Appendix.

### 4.2. Data Collection and Processing

The survey was conducted for 390 SMEs in the Mekong Delta. The survey was conducted from June to December 2019. After data processing, 370 observations were guaranteed to be relevant and used for data analysis.

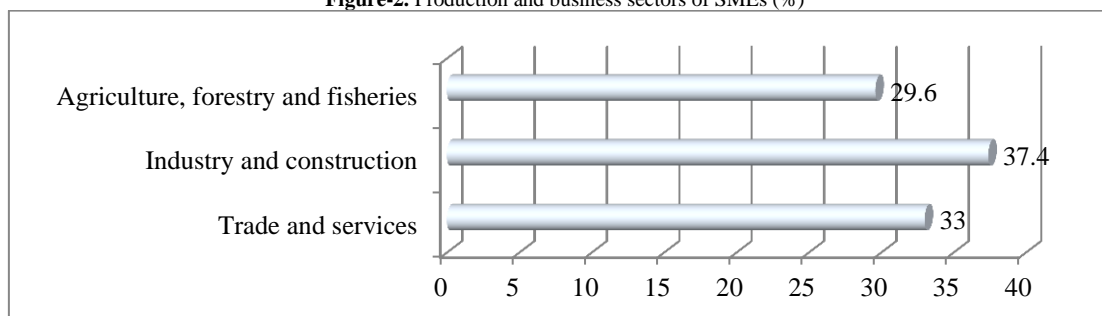
Because of the theoretical model with a set of interrelationships, the linear structural model (Partial Least Square - Structural Equation Model, PLS-SEM) was used to test the above hypotheses ([Anderson and Gerbing, 1988](#); [Kline, 1998](#)). The analysis of the linear structure is performed according to a process consisting of four steps: (i) Reliability test of scale; (ii) Exploratory Factor Analysis (EFA); (iii) Confirmatory Factor Analysis (CFA); and (iv) Structural Equation Modeling (SEM). Data analysis was done using SPSS and AMOS 20.0 software.

## 5. Results

### 5.1. Description of Survey

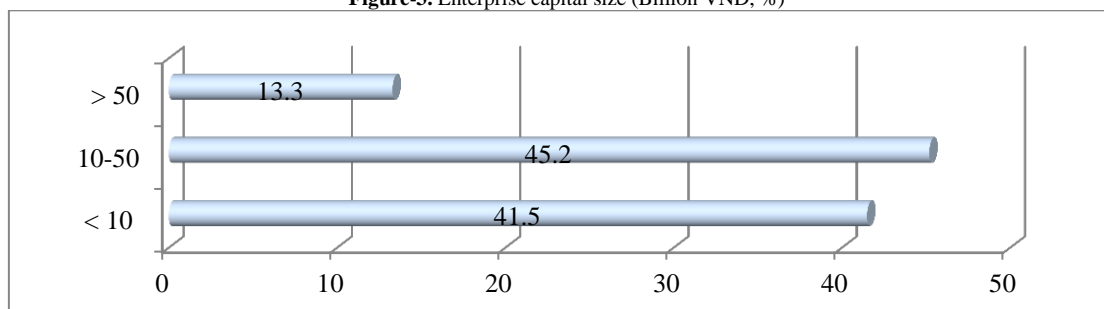
- Production and business fields: Among 370 surveyed enterprises, the production and business sectors of enterprises are in the fields of Trade and services, Industry and construction, and Agriculture, Forestry and Fisheries.

Figure-2. Production and business sectors of SMEs (%)

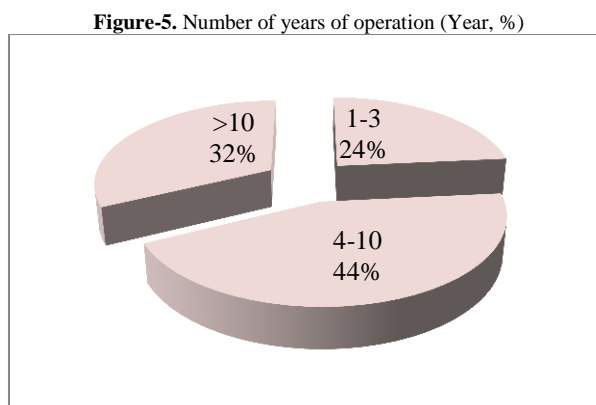


- Capital scale: Most enterprises have capital size  $\leq 50$  billion VND (86.7%).

Figure-3. Enterprise capital size (Billion VND, %)



- Labor size: Enterprises with 10–50 employees account for mainly (49.3%).



- Number of years of business operation: Most enterprises have more than four years of operation (76.5%)

### 5.2. Reliability Analysis

**Table-2.** Reliability of the scale and observed variables are excluded

No.	Scale	Ignored Observable Variables	Coefficient Alpha	Result
1	SIZE	None	0.802	Good quality
2	COM	None	0.862	Good quality
3	MPER	None	0.840	Good quality
4	QUAL	None	0.834	Good quality
5	IMA	None	0.848	Good quality
6	BEFF	None	0.863	Good quality
7	MEFF	None	0.847	Good quality

The results shown in **Table 2** show that: All the observed variables satisfy the conditions in the reliability analysis of the scale through the coefficient Alpha > 0.6 and variable-total correlation > 0.3 (Nunnally and Burnstein, 1994).

### 5.3. Exploratory Factor Analysis

**Table-3.** Factor Matrix

	Component						
	1	2	3	4	5	6	7
COM2	0.827						
COM5	0.826						
COM3	0.813						
COM1	0.787						
COM4	0.754						
MPER4		0.849					
MPER3		0.838					
MPER1		0.797					
MPER2		0.794					
SIZE4			0.823				

SIZE2			0.804				
SIZE3			0.783				
SIZE1			0.752				
QUAL3				0.864			
QUAL2				0.838			
QUAL1				0.799			
IMA3					0.867		
IMA1					0.863		
IMA2					0.801		
IMA4					0.785		
MEFF2						0.901	
MEFF3						0.862	
MEFF1						0.862	
BEFF3							0.863
BEFF4							0.849
BEFF2							0.839
BEFF1							0.817
Kaiser-Meyer-Olkin Measure			0.830	0.811	0.717	0.823	
Bartlett's Test (Sig.)			0.000	0.000	0.000	0.000	
Eigenvalues			1.624	2.756	2.297	2.837	
% of Variance			66.372	68.895	76.567	70.933	

Note:  $0.5 < \text{KMO} < 1$ ; Bartlett's test has significance level less than 0.05; Factor Loading of observed variables (Factor Loading)  $> 0.5$ ; Extracted variance  $> 50\%$  and Eigenvalue  $> 1$  (Anderson and Gerbing, 1988; Hair *et al.*, 2006).

The results presented in Table 3 show that: the factors of IMA are extracted into four factors corresponding to the measured variables of the theoretical model with the total variance extracted is 66.372% at the Eigenvalue of 1.624; EFA of IMA is extracted into four observed variables with extracted variance of 68.859% at Eigenvalue of 2.756. EFA of MEFF is extracted into three observed variables with extracted variance of 76.576% at Eigenvalue of 2.297. EFA of BEFF is extracted into four observed variables with extracted variance of 70.933% at Eigenvalue of 2.837; The EFA was conducted by Promax Rotation Method.

#### 5.4. Confirmatory Factor Analysis

The measurement model that is consistent with the actual data must be consistent with five measures: (i) Cmin/df; (ii) TLI, (iii) CFI, (iv) NFI; and (v) RMSEA (Gefen *et al.*, 2011). Based on Figure 2, the results of the measure values of the confirmatory factor analysis are presented in Table 3.

Figure-6. CFA analysis results

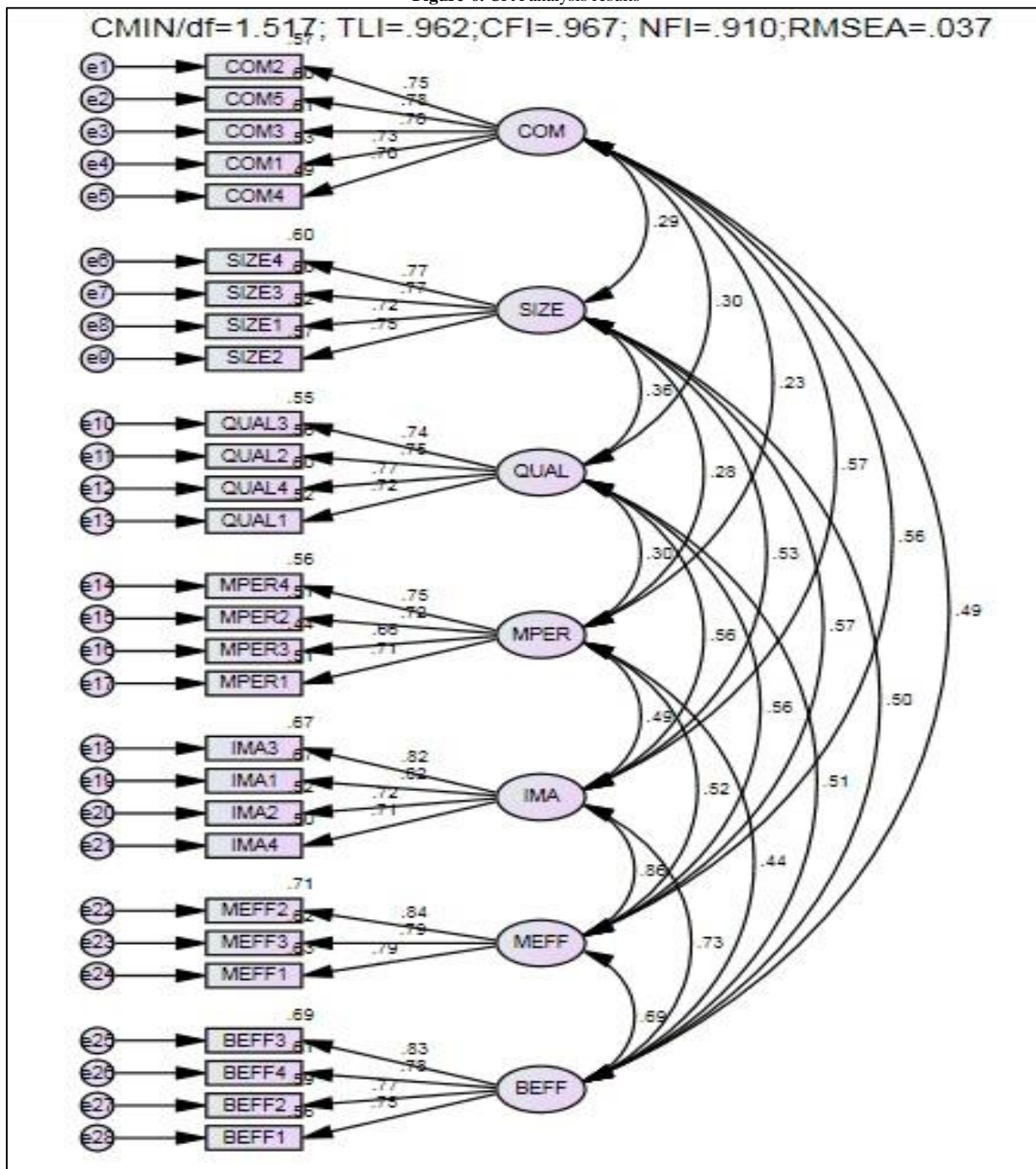


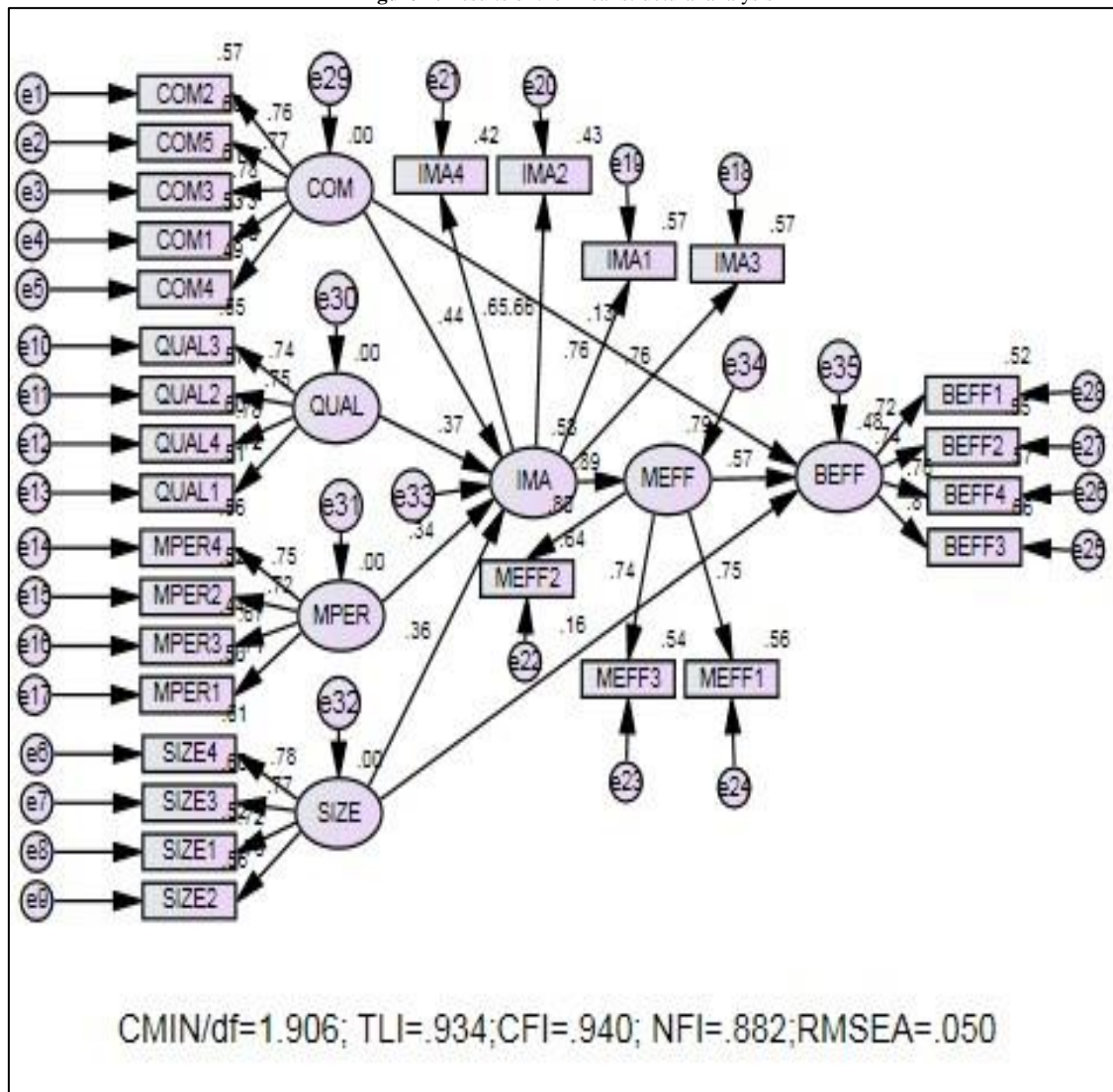
Table-4. The fit indices of the CFA

No.	Measure	Standard value	Model value	Result
1	Chi-squared adjusted for degrees of freedom (Cmin/df)	TLI, the closer is to 1, the more appropriate; TLI > 0.90 Consistent; TLI ≥ 0.95 is in good agreement (Bentler and Bonett, 1980; Hu and Bentler, 1995)	1517	Good
2	Tucker-Lewis Index	The closer the TLI is to 1, the more appropriate; TLI > 0.90 Consistent; TLI ≥ 0.95 in good agreement (Hu and Bentler, 1995)	0.962	Good
3	Comparative Fit Index	CFI > 0.90; 0 < CFI < 1, The closer to 1, the more suitable (Bagozii and Jy, 1988; Hu and Bentler, 1995)	0.967	Good
4	Normal Fit Index	NFI, the closer to 1, the more suitable; NFI close to 0.90, accepted; NFI > 0.95 Good fit. (Chin and Todd, 1995; Hu and Bentler, 1995)	0.910	Good
5	Root Mean Square Error Approximation (RMSEA)	RMSEA < 0.05, the model fits well; RMSEA < 0.08, accepted; The smaller the better (Bentler and Bonett, 1980; Browne and Cudeck, 1993)	0.037	Good

Table 4 shows that the measurement model is consistent with the actual data.

### 5.5. Analysis of Structural Equation Modeling

Figure-7. Results of the linear structural analysis



The results presented in Figure 7 show that: the model has a value of Cmin/df = 1.906; TLI = 0.934; CFI = 0.940; NFI = 0.882; and RMSEA = 0.05. Thus, the integrated model fits the actual data.

Table-5. Hypothetical results

Hypothesis	Impact		Estimate	S.E.	C.R.	P	Decision	
H1	IMA	<---	COM	0.460	0.056	8.180	***	Fit
H3	IMA	<---	QUAL	0.361	0.051	7.054	***	Fit
H2	IMA	<---	MPER	0.324	0.050	6.422	***	Fit
H4	IMA	<---	SIZE	0.364	0.052	6.986	***	Fit
H5	MEFF	<---	IMA	1.000	0.075	13.374	***	Fit
H6	BEFF	<---	MEFF	0.558	0.066	8.426	***	Fit
H7	BEFF	<---	COM	0.151	0.064	2.343	0.019	Fit
H8	BEFF	<---	SIZE	0.176	0.061	2.889	0.004	Fit

Note: \*\*\* (Sig. = 0.000).

The results presented in Table 5 show that: All hypotheses are accepted at a confidence level of over 95%.



Table-6. Magnitude of the impact

Impact on IMA			Regression coefficient	%	Position
IMA	<---	COM	0.460	30.5	1
IMA	<---	QUAL	0.361	23.9	3
IMA	<---	MPER	0.324	21.5	4
IMA	<---	SIZE	0.364	24.1	2
Sum			1.509	100	
Impact on BEFF					
BEFF	<---	MEFF	0.558	63.1	1
BEFF	<---	COM	0.151	17.1	3
BEFF	<---	SIZE	0.176	19.9	2
Sum			0.885	100	

Table 6 shows that factors affecting “IMA” in order of influence from high to low: COM, SIZE, QUAL, and MPER. Factors affecting “BEFF” in order of influence from high to low: MEFF, SIZE, and COM. Implementing management accounting (IMA) has a positive impact on management efficiency (MEFF). Effective management has a positive impact on Business efficiency (BEFF), with a confidence level of over 95% (In Table 5).

## 6. Discussion and Management Implications

Firstly, the factors affecting the implementation of management accounting include: enterprise size, market competition, perception of business owners, and professional qualifications of accountants. This result is similar to the study on Malaysian SMEs by Nair and Nian (2017). Enterprises should focus on (i) raising the size of the enterprise’s capital by increasing revenue, continuing to expand its scale and expanding its branches; (ii) Pay attention to improving the competitiveness of enterprises in the market; (iii) Raise awareness of the role of modern management accounting in enterprises; and (v) Regularly improve the qualifications of accountants. Second, the implementation of management accounting affects management efficiency, and consequently affects the business efficiency of enterprises. Third, management efficiency, enterprise size, market competition affect business efficiency. Fourth, management efficiency plays an intermediary role in the relationship between the implementation of management accounting and business efficiency. This result is similar to the study on SME in Thailand by Phornlaphatrachakorn and Na-kalasindhu (2020) and the study on SME in Palestine and Pakistan (Ojra, 2014; Saeed et al., 2013). Therefore, improving the management accounting system should be considered in the strategies and plans for SME development.

## 7. Conclusions and limitations of the Study

The present study aims to extend the theoretical framework and provide evidence in empirical results on the implementation of management accounting and business efficiency, with evidence from SMEs in the Mekong Delta, Vietnam. The findings highlight a strong intermediate role of management efficiency. The study also provides some insight into the interweaving relationship between factors through the Structural Equation Model.

The study has certain limitations. The survey subjects were only taken from SMEs in the Mekong Delta, which limits the generalizability of the study. Future research should examine different types of SMEs, in other regions, and make comparisons to enhance the generalizability of the findings. Moreover, this study only considers the factors of the implementation of management accounting and management efficiency impact on business efficiency because there are other factors affecting business efficiency that this study has not mention.

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## Appendix

**Table-7.** Scale and observed variables

No.	Scale	Code
I	Enterprise size	SIZE
1	The larger the enterprise's revenue, the more feasible the implementation of management accounting will be	SIZE1
2	The larger the number of employees of the enterprise, the more feasible the implementation of management accounting will be	SIZE2
3	The larger the number of departments and branches, the more feasible the implementation of management accounting will be	SIZE3
4	The larger the number of transactions with the business's partners, the more feasible the implementation of management accounting will be	SIZE4
II	Competition in the market	COM
5	The increasing number of enterprises operating in the same industry will affect the implementation of management accounting	COM1
6	The increase in the number of new products of enterprises operating with the same ability to substitute will affect the performance of management accounting.	COM2
7	The change of modern technology will increasingly affect the implementation of management accounting	COM3
8	Joining more and more international trade treaties will affect the implementation of international economics	COM4
9	The increasing foreign investment attraction policy will affect the implementation of international accounting	COM5
III	Perception of business owners/ managers about management accounting	MPER
10	The perception of business owners/ managers about the importance of high management accounting will affect the implementation of management accounting.	MPER1
11	The perception of business owners/ managers about the usefulness of management accounting is high, which will affect the implementation of management accounting.	MPER2
12	High awareness of business owners/ administrators about the content of management accounting will affect the implementation of management accounting	MPER3
13	Perceptions of business owners/ managers about intense competitive pressure will affect the implementation of management accounting	MPER4
IV	Professional qualifications of accountants	QUAL
14	Accountants understand the importance and usefulness of management accounting that will affect the implementation of management accounting	QUAL1
15	Accountants who understand the contents and techniques of management accounting will affect the implementation of management accounting	QUAL2
16	Accountants understand how to collect, process and analyze information about management accounting that will affect the performance of management accounting	QUAL3

17	Accountants understand how providing appropriate information to senior managers will affect the performance of management accounting	QUAL4
18	Accountants with a high degree of professional training in accounting will affect the implementation of management accounting.	QUAL5
V	Implement management accounting	IMA
19	Implement management accounting in making budget estimates	IMA1
20	Implement management accounting in the content of responsibility accounting	IMA2
21	Implement management accounting in accounting content of production costs and product prices	IMA3
22	Implement management accounting in providing relevant information for decision making	IMA4
VI	Management efficiency	MEFF
23	We can gain an actual performance that is better than operational inputs	MEFF1
24	We achieve a goal in deciding for a selection of best operational strategies	MEFF2
25	We have an actual outcome following the expected plan	MEFF3
VII	Business efficiency	BEFF
26	SMEs implementing good management accounting will increase the rate of return on assets (ROA-Return on Total Assets)	BEFF1
27	SMEs implementing good management accounting will increase the rate of return on equity (ROE-Return on common equity)	BEFF2
28	SMEs implementing good management accounting will increase the ratio of net profit on sales (ROS-Return on Sale)	BEFF3
29	SMEs implementing good management accounting will increase the ratio of net profit on cost (ROS-Return on cost)	BEFF4