

**MINISTRY OF EDUCATION AND TRAINING  
HO CHI MINH CITY UNIVERSITY OF ECONOMICS (UEH)**



**NGUYEN THI NGOC BICH**

**THE IMPACT OF INTELLECTUAL CAPITAL AND  
INNOVATION CAPABILITY ON BUSINESS  
SUSTAINABILITY: THE MEDIATING ROLE OF  
MANAGEMENT ACCOUNTING PRACTICES IN  
VIETNAMESE ENTERPRISES**

Major: Accounting

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**SUMMARY OF THE DOCTORAL DISSERTATION**

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This dissertation is completed by Nguyen Thi Ngoc Bich at **University of Economics Ho Chi Minh City (UEH)**, Vietnam from 2021 to 2025 under the academic supervision of:

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## **LIST OF RESEARCH HAVE BEEN PUBLISHED BY AUTHOR RELATED TO THE DISSERTATION**

1. Nguyen Thi Ngoc Bich, Pham Tra Lam & Tran Anh Hoa, 2024. Intellectual Capital and Business Sustainability: Exploring of Management Accounting Practices Role. In *The 12th International Conference on Emerging Challenges: Sustainable Strategies in the Data-driven Economy (ICECH 2024)*, pp.1280-1302.

2. Nguyen Thi Ngoc Bich, Tran Anh Hoa & Pham Tra Lam, 2024. Does Intellectual Capital and Information Technology Knowledge Improve Management Accounting Practice and Firm Performance? A SEM Approach. In *The joint Asian Conference on Business and Economic Studies (ACBES 2024)*, pp.212.

3. Nguyen Thi Ngoc Bich & Tran Anh Hoa, 2024. Corporate Social Responsibility, Intellectual Capital and Firm Performance: Evidence from Vietnam. In *The 9th International Conference on Accounting and Finance (ICOAF – 2024)*, pp.85-102.

4. Nguyen Thi Ngoc Bich, 2022. Improving management efficiency through organizational intellectual capital. *Finance Journal*, Issue 1, September 2022 (784), 67-70.

5. Phan Thi Thuy Quynh & Nguyen Thi Ngoc Bich, 2018. The relationship between intellectual capital, management accounting and business performance of enterprises - Some implications when applying this model to enterprises in Vietnam. *Proceedings of the International Scientific Conference "Using data and technology in management accounting - the key to improving operational efficiency and enterprise value"*, Finance Publishing House, 221-229.

## INTRODUCTION

### 1. Urgency for the Research

Business sustainability is a strategy that integrates economic, social and environmental factors into a business model to create long-term value (Aljuboori et al., 2021). Many businesses choose business sustainability to meet economic, social and environmental needs (Yusoff et al., 2019). To achieve this, businesses must fully and optimally apply their resources, in which intellectual capital (IC) is considered one of the most valuable resources that create market value and strengthen competitive advantage to create business sustainability (Gross-Golacka, 2020). IC is a combination of human capital (HC), structural capital (SC) and relational capital (RC) (Choong et al., 2008; Khalique et al., 2013, Novas et al., 2017).

Innovation capability (InC) plays an important role in creating superior value for a company and its customers in a global and dynamic market (Calantone et al., 2002; Lawson and Samson, 2001; Ngo and O'Cass, 2013), and InC plays a key role in driving growth and creating wealth (Yang, 2012). Therefore, developing InC is very important because innovation is considered the foundation for the survival and sustainable development of businesses (Hurley and Hult, 1998).

In the context of businesses aiming for business sustainability (BS), the application of management accounting practices (MAP) has become an important tool to optimize resources, effectively manage costs and support strategic decision making, thereby promoting InC and long-term competitiveness. Many studies have suggested that managers need to be aware that the application of MAP must be

continuous and evolving to support businesses in meeting the needs of the rapidly changing external environment (Scapens, 1994; Kaplan, 1998). Although the number of studies on MAP has been increasing for decades, very few studies have been conducted to determine whether traditional or modern MAPs are suitable for the BS of businesses.

In Vietnam, the current situation of businesses also poses an urgent need to improve management capacity. According to the Vietnam White Book (2024), there are 18,038 dissolved enterprises out of a total of 89,060 enterprises temporarily suspending business nationwide (as of December 31, 2023). Of the 735,455 enterprises operating nationwide, the rate of profitable enterprises accounts for 44.6%; the rate of break-even enterprises accounts for 8.5%; the rate of loss-making enterprises is 46.9%. In the context of many empirical evidences proving that investment in IC and InC plays an important role in improving the competitiveness of enterprises (Panayides, 2006; Saunila et al., 2012; Yang, 2012; Beattie and Smith, 2013; Gross-Golacka, 2020). Therefore, this study focuses on effective management strategies through IC and InC.

Thus, in the current economic context of Vietnam, investing in IC, InC and MAP is a prerequisite for sustainable development. Therefore, this study was conducted to assess the impact of IC and InC on business sustainability, by examining the mediating role of MAP in this relationship.

## **2. Research Objectives and Research Questions**

### **2.1. Research Objectives**

The overall research objective of the thesis is to provide a theoretical basis and management orientation in improving the effectiveness of sustainable management in Vietnamese enterprises. Developing from the general objective, three specific objectives are identified as follows:

(1) Examine the impact of IC and InC on business sustainability of Vietnamese enterprises.

(2) Examine the mediating role of MAP in the relationship between IC, InC and BS of Vietnamese enterprises.

(3) Propose relevant policy implications to promote BS based on IC, InC and MAP in Vietnamese enterprises.

### **2.2. Research Questions**

To achieve the above research objectives, three specific research questions are posed as follows:

(1) Do IC and InC have an impact on BS of Vietnamese enterprises?

(2) Does MAP have a mediating effect on the relationship between IC, InC and BS of Vietnamese enterprises?

(3) Are there any relevant policies to promote BS based on IC, InC and MAP in Vietnamese enterprises?

## **3. Subject and Scope of the Study**

### **3.1. Research subject**

The research object of the thesis is the relationship between IC, InC, MAP and business sustainability of enterprises in Vietnam. The survey subjects are identified as senior managers and accounting

managers working in Vietnamese enterprises. This study has the unit of analysis as the organization, specifically Vietnamese enterprises.

### **3.2. Research scope**

*Scope of space:* the study is carried out with all types of enterprises of all economic sectors in Vietnam, including: state-owned enterprises, foreign enterprises, private enterprises, limited liability companies, joint ventures, and foreign-affiliated companies. These enterprises operate in a variety of sizes, large, medium, small, and diverse in industries and fields from manufacturing to trade and services; *Scope of time:* the study is carried out from 2022 to 2024; *Data survey time:* from October 2023 to September 2024.

### **4. Research Methodology**

Based on the objective of this study is to verify scientific theory (section 2), the quantitative research method is used based on the deductive process (Nguyen Dinh Tho, 2013). However, before conducting the official quantitative research, the study conducted a preliminary qualitative exploration to check the clarity and appropriateness of the survey questionnaire.

### **5. Contribution of the Study**

*Theoretically:* The results of the thesis contribute to supplementing empirical evidence on the suitability of the underlying theories including: resource-based theory, stewardship theory, innovation theory and dynamic capabilities theory in explaining the relationship between IC, InC with MAP and business sustainability in a developing market, Vietnam.

*Practically:* The results of the thesis provide important information for business managers in Vietnam in building and

managing resources to achieve sustainability, specifically: Developing human capital; Building structural capital; Improving MAP; Strengthening innovation capacity; Integrating governance and innovation factors.

*The novelty of the thesis:* Detailed analysis of IC components: this study considered intellectual capital as a composite concept, and also analyzed IC components (HC, RC, SC) separately and how these components interact with MAP and BS. This helps to better understand the role of IC and each of its components in promoting sustainability; Mediating effect of MAP: examining the mediating role of MAP in the relationships between IC and BS has provided insights into how internal governance practices can convey the value of intellectual capital to sustainability outcomes. This is a new aspect that has not been exploited by many other studies; Research context in Vietnam: This thesis focuses on enterprises in Vietnam, a developing market with its own characteristics in business culture and economic environment.

## **6. Structure of the Thesis**

In addition to the introduction and conclusion, the thesis has 5 chapters, specifically as follows:

Chapter 1. Literature Review

Chapter 2. Theoretical Basis

Chapter 3. Research Methodology

Chapter 4. Research Findings

Chapter 5. Conclusion and Implications

Finally, the thesis ends with references and related appendices.



## **CHAPTER 1. LITERATURE REVIEW**

### **1.1. Overview of research on sustainability in business**

#### **1.1.1. Research overview process**

The process of conducting a research overview on business sustainability consists of three stages conducted by bibliometric analysis.

#### **1.1.2. General overview of research on BS in the world**

Based on the collected research data, the author analyzed the number of studies on BS and divided them into four stages including: formation (1991 - 2006), development (2006 - 2015), acceleration (2015 - 2020) and explosion (2020 - 2024).

#### **1.1.3. Research directions in the world on sustainability in business:**

The results of bibliometric analysis show that the topic of business sustainability is studied in five main topic clusters/directions, in this study it is related to three topic clusters.

### **1.2. Overview of research on the impact of intellectual capital, innovation capacity on MAP and business sustainability**

#### **1.2.1. Research overview process**

The current study conducts a systematic review of the relationships.

#### **1.2.2. Overview of the impact of intellectual capital on BS**

#### **1.2.3. Overview of the impact of intellectual capital and MAP**

#### **1.2.4. Overview of the impact of InC on BS**

#### **1.2.5. Overview of the impact of innovation capacity on MAP**

#### **1.2.6. Overview of the impact of MAP on BS**

### **1.3. A review of domestic studies on intellectual capital, innovation capacity, MAP and business sustainability**

Tuan's (2024) study shows that intellectual capital contributes to improving the sustainable performance of Vietnamese enterprises. A subsequent study by Bich et al. (2023) shows that all three components of intellectual capital have a positive impact on business performance. IC and its components play an important role in creating added value and improving business performance (Nguyen et al., 2021; Vo et al., 2021; Nga and Dat, 2021; Tuan and Trung, 2021; Hanh et al., 2023).

Ngan and Thai (2024) show the role of absorptive capacity, innovation capacity and responsible innovation in sustainable competitive advantage. Nguyen and Anh (2015) studied dynamic capabilities, a new approach to sustainable development. Lien and Thao's (2024) study showed that innovation capabilities affect business performance through the mediating role of the information system of international economics. Nguyen et al.'s (2021) study only showed that the factors affecting MAP are most widely applied in Vietnamese enterprises.

### **1.4. Identify Research Gaps**

(i) Research Gaps on intellectual capital to business sustainability; (ii) Research Gaps on InC to BS; (iii) Research Gaps on the mediating role of MAP in the relationship between IC and BS, between InC and BS.

## **CONCLUSION OF CHAPTER 1**

## **CHAPTER 2. THEORETICAL BASIS**

### **2.1. Definitions and Concepts**

#### **2.1.1. Business Sustainability (BS)**

According to the approach of Young et al. (2023), this study defines BS as the management and coordination of business activities to meet the current needs of the organization and its stakeholders, while protecting and enhancing economic - social - environmental resources for future generations. This requires integrating these three pillars into the strategy, operations and governance of the enterprise, while ensuring CSR and ethics in all decisions.

#### **2.1.2. Intellectual Capital (IC)**

##### **2.1.2.1. Human Capital (HC)**

Human capital is defined as the set of knowledge, skills and abilities of each individual in the organization, playing a fundamental role in the development of IC (Bontis, 1998; Subramaniam and Youndt, 2005).

##### **2.1.2.2. Structural capital (SC)**

Structural capital refers to the set of knowledge embedded in an organization's systems, processes, and culture, which exists independently of individual employees (Bontis, 1998). According to Halim (2010), SC includes internal connections and knowledge infrastructure that remain after employees leave the organization.

##### **2.1.2.3. Relational capital (RC)**

Relational capital is defined as the value of knowledge gained from an organization's external relationships with customers, partners, suppliers, and other stakeholders (Wu et al., 2008). RC includes social capital, which reflects the network of relationships within and outside

the organization (Yli-Renko et al., 2001), and customer capital, which focuses on knowledge from customer relationships (Bontis et al., 2000; Bollen et al., 2005).

The current study has chosen to pursue a multidimensional flow (Bontis et al., 2000; Subramaniam and Youndt, 2005). Specifically, intellectual capital is a set of intangible assets, including HC (knowledge, skills, experience of employees), SC (systems, processes, infrastructure) and RC (relationships with customers, partners), which help enterprises improve performance, create value and gain competitive advantage in the knowledge economy.

#### 2.1.3. Innovation capability (InC)

Hogan et al. (2011) propose a more comprehensive view of the concept of InC as “the ability of a firm, compared to its competitors, to apply its collective knowledge, skills and resources to innovative activities related to new products, processes, services or management, marketing or work organization systems, to create added value for the firm or its stakeholders”. Furthermore, this concept of InC is developed based on rigorous multi-stage scale development processes. Therefore, this thesis chooses to apply the concept of innovation capability according to Hogan et al. (2011), because of its comprehensiveness and suitability to the research objectives.

#### 2.1.4. Management accounting practice (MAP)

In this study, MAP adopts the concept proposed by Tayles et al. (2007). MAP concept according to Tayles et al. (2007) was chosen by this study because of its strategic and comprehensive nature, focusing on performance measurement, management control and decision support. This definition not only reflects the integrated nature of MAP

but also emphasizes its role as a strategic tool, meeting diverse management needs in the modern business context.

## **2.2. Theoretical Framework**

2.2.1. Resource-Based View (RBV)

2.2.2. Stewardship Theory

2.2.3. Dynamic Capabilities

2.2.4. Innovation Theory

2.2.5. Applying Theoretical Framework to research content

## **2.3. Hypothesis Development and Proposed Research Model**

2.3.1. Hypothesis Development

2.3.1.1. Impact of IC on Business Sustainability

H1: IC has a positive impact on business sustainability.

*H1a: HC has a positive impact on BS.*

*H1b: SC has a positive impact on BS.*

*H1c: RC has a positive impact on BS.*

2.3.1.2. Impact of IC on MAP

H2: Intellectual capital has a positive impact on MAP.

*H2a: Human capital has a positive impact on MAP.*

*H2b: Structural capital has a positive impact on MAP.*

*H2c: Relational capital has a positive impact on MAP.*

2.3.1.3. Impact of innovation capacity on MAP

H3: Innovation capacity has a positive impact on MAP.

2.3.1.4. Impact of InC on Business Sustainability

H4: InC has a positive impact on business sustainability

2.3.1.5. Impact of MAP on business sustainability

H5: MAP has a positive impact on BS.

2.3.1.6. Mediating role of MAP in the relationship between IC and business sustainability

H6a: MAP plays a mediating role in the relationship between IC and BS.

*H6a1: MAP plays a mediating role in the relationship between HC and BS.*

*H6a2: MAP plays a mediating role in the relationship between SC and BS.*

*H6a3: MAP plays a mediating role in the relationship between RC and BS.*

H6b: MAP plays a mediating role in the relationship between InC and BS.

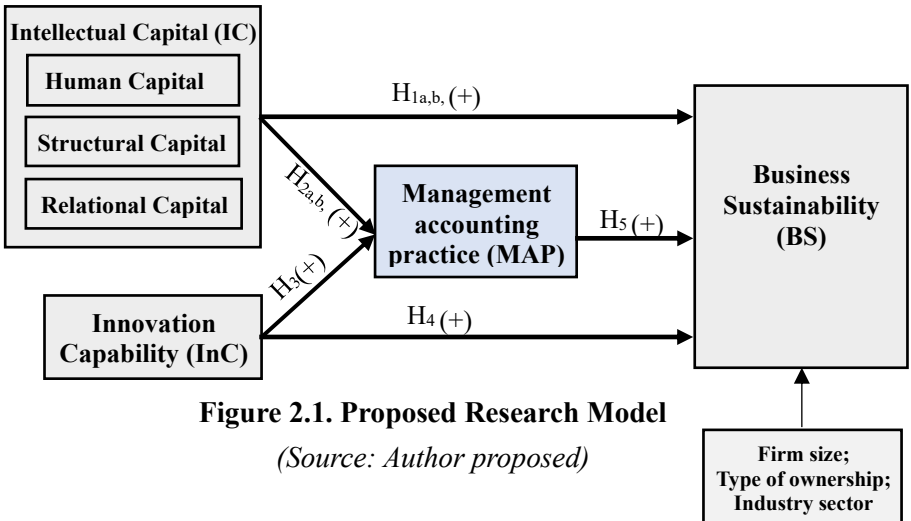
### 2.3.2. Control variables

2.3.2.1. Firm size

2.3.2.2. Type of ownership

2.3.2.3. Industry sector

### 2.3.3. . Proposed Research Model



**Figure 2.1. Proposed Research Model**

(Source: Author proposed)

## CONCLUSION OF CHAPTER 2

### CHAPTER 3. RESEARCH METHODOLOGY

#### 3.1. Research Process

Based on Benevene et al. (2021): (i) Identifying the research problem; (ii) Reviewing the literature; (iii) Developing hypotheses and research models; (iv) Research design and methods; (v) Data collection; (vi) Data analysis; (vii) Conclusions and recommendations

#### 3.2. Scale of research concepts

##### 3.2.1. Scale of latent variables

##### 3.2.1.1. Intellectual capital

With a clear approach, based on a solid theoretical foundation and empirically verified, the scale of Novas et al. (2017) is a suitable choice to ensure reliability and scientificity, and at the same time effectively analyze the relationship between IC, MAP and BS in the context of Vietnamese enterprises. In the above study, the concept of IC scale is a multi-dimensional scale, the second-order structure of the result-cause form includes 3 second-order structures with 11 observed variables.

##### 3.2.1.2. Management accounting practice

The MAP scale of Terdpaopong et al. (2019) was chosen as the scale for the study with a multi-dimensional form of the second-order structure of the result-cause form including 5 second-order structures with 45 observed variables.

##### 3.2.1.3. Innovation capability

Innovation capability is measured using a first-order unidimensional scale with 6 observed variables (INC1 to INC6), based on the study of Aljuboori et al. (2021). This scale focuses on the core

aspects of innovation, including creativity, new product/service development, and risk taking, which are directly related to business sustainability (BS).

#### 3.2.1.4. Business sustainability

Through a review of the theory of measuring business sustainability, this thesis chooses to use the multidimensional scale proposed by Chow and Chen (2012) and has been extended by Yusoff et al. (2019). This scale reflects the three-pillar model including the economic, social, and environmental aspects of the enterprise. This is a second-order multidimensional scale of the cause-effect type consisting of three second-order constructs with 22 observed variables.

#### 3.2.2. Direct scale

##### 3.2.2.1. Firm size

##### 3.2.2.2. Type of ownership

##### 3.2.2.3. Industry sector

### 3.3. Research Design

#### 3.3.1. Preliminary qualitative research

#### 3.3.2. Official quantitative research

##### 3.3.2.1. Sample

The author uses the concept of MAP as a multidimensional scale of the second-order structure of the result-cause form including 5 second-order structures, in which the largest number of observed variables of MAPS is 14. Therefore, the minimum sample size required is 140 samples as recommended by Hair et al. (2016). However, to increase the reliability of the data and minimize sampling error, the author plans to collect 500 survey forms from different enterprises in Vietnam.



### 3.3.2.2. Data collection method

To test the theoretical model, this study selected the survey subjects as senior managers and accounting managers in the management group in the enterprise. The target subjects include enterprises operating in many different fields in Vietnam. In the main study, the sample was selected by the convenience method combined with seed development, applied to both preliminary and main studies.

### 3.3.2.3. Data analysis method

(i) Pre-test analysis; (ii) Stage 1 in PLS analysis: Low-order model analysis (LOC); (iii) Stage 2 in PLS analysis: High-order model analysis (HOC); (iv) Post-hoc analysis.

## CONCLUSION OF CHAPTER 3

## CHAPTER 4. RESEARCH FINDINGS AND

### 4.1. Descriptive Analysis

Table 4.1. Demographic information of the study sample

Element	Characteristic	Frequency	Percent (%)
Position	Board of Directors	124	32.4
	Chief Accountant	259	67.6
	Add	383	100
Education level	Above university	36	9.4
	University	335	87.5
	College	9	2.3
	Other	3	0.8
	Add	383	100
Experience	Under 5 years	99	25.9
	About 5 to 10 years	156	40.7
	Over 10 years	128	33.4
	Add	383	100

*(Source: Results from a sample of 383 Vietnamese enterprises, 2024)*

## **4.2. Brief qualitative research results**

Synthesizing the interview data of the participants, it shows that the rate of agreement for the statements of the observed variables is quite high, all from 70% or more. After considering the comments suggesting corrections, the author has adjusted the scale with the aim of clarifying the meaning of some observed variables according to the above comments.

## **4.3. Descriptive statistics of variables**

4.3.1. Descriptive statistics of Intellectual Capital

4.3.2. Descriptive statistics of Innovation Capacity

4.3.3. Descriptive statistics of Management Accounting Practice

4.3.4. Descriptive statistics of Business Sustainability

## **4.4. Official quantitative research results**

4.4.1. Pre-test analysis

Robustness test: The EFA factor analysis results show that the extracted variance accounts for only 31.625% of the total variance (<50%), which proves that there is no presence of CMB (Podsakoff and Organ, 1986).

FIMIX-PLS: All criteria including AIC, AIC3, AIC4, BIC and CAIC in the segment of dividing the sample into one group are the highest compared to the segment of dividing the sample into two and three groups. This result indicates that unobserved heterogeneity of the data does not exist.

4.4.2. Results of the analysis of the lower-order model (LOC)

4.4.2.1. Quality of observed variables

Through successive runs, the observed variables INC1, MAPC1, MAPC7 contain external loading factors of 0.552; 0.695; 0.695, are all less than 0.7, so they are eliminated from the model

#### 4.4.2.2. Reliability and validity of the scale

Table 4.21. Results of assessing reliability and convergent validity of the scale

Research concept	Cronbach's alpha	Reliability synthesis (rho c)	Extracted variance average (AVE)
HC	0.885	0.929	0.813
RC	0.910	0.937	0.788
SC	0.932	0.952	0.831
INC	0.906	0.930	0.725
MAPB	0.877	0.905	0.576
MAPC	0.829	0.880	0.594
MAPI	0.933	0.944	0.652
MAPP	0.919	0.934	0.640
MAPS	0.945	0.952	0.585
ENS	0.960	0.966	0.737
SS	0.922	0.939	0.719
ES	0.923	0.939	0.721

*(Source: Results from a sample of 383 Vietnamese enterprises, 2024)*

The results of the internal consistency reliability assessment show that the values are all greater than the threshold of 0.7 recommended by (Hair et al., 2021). The results of the convergent validity assessment show that the average variance extracted (AVE) of the concepts are all higher than 0.50, so all scales meet the required thresholds well and have high convergence.

#### 4.4.2.3. Discrimination of the scale

All HTMT values are less than 0.85, ensuring that the concepts are clearly differentiated (Henseler et al., 2015). With the Fornell-Larcker index test, the square root of AVE results are all greater than the related correlation coefficients, so the scale achieves discriminant validity (Hair et al., 2016).

#### 4.4.2.4. Multicollinearity test

The results of the VIF variance inflation factor test of the observed variables are all  $< 5$  but still within the recommended range (Kock, 2015). Therefore, the phenomenon of multicollinearity does not exist in this study

#### 4.4.2.5. Measurement invariance test

The test results show that the deviation between the times reaches the required level, the confidence interval does not contain the value 0, the highest standard errors = 0.022.

#### 4.4.3. Results of the analysis of the higher-order model (HOC)

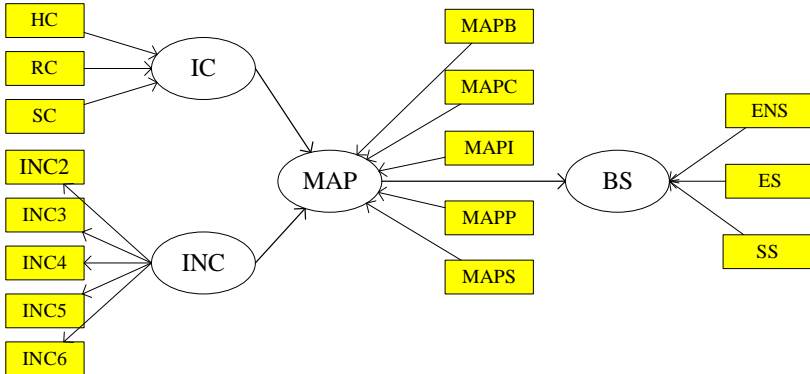


Figure 4.1. Higher-Order Model (HOC)

##### 4.4.3.1. Evaluation of the HOC measurement model

Evaluation of collinearity between constructs: no collinearity between observed variables of the scales

Evaluation of the quality of observed variables: the analysis results show that the external loading coefficients of the above observed variables are all greater than 0.5, so the observed variables are still retained to test the model (Hair et al., 2021).

#### 4.4.3.2. Evaluation of the HOC structural model

Evaluation of multicollinearity: no multicollinearity occurs in the model. Model fit: the research model is not only suitable for the current data but also has the ability to effectively explain and predict the dependent variables in the study.

Table 4.30. HOC model fit

Criteria	Element	MAP	BS
$f^2$	IC	0.458	0.441
	INC	0.000	0.124
	MAP		0.046
$R^2$		0.342	0.588
$Q^2$		0.187	0.422
SRMR		0.058	

*(Source: Results from a sample of 383 Vietnamese enterprises, 2024)*

Assessing the influence of each independent variable on the dependent variable:  $f^2$  index analysis from Table 4.30 shows the significant influence of the independent variables on the dependent variables in the model. Post-hoc analysis: the results show that the SRMR coefficient reaches a value of 0.058, below the upper limit of 0.08 (Table 4.30) which is considered a good fit for PLS – SEM models (Henseler et al., 2015).

#### 4.4.4. Summary of research hypothesis testing results

##### 4.4.4.1. Direct impact testing

Table 4.31. Path analysis results

Hypothesis	Relationship	$\beta$ coefficient	t value	p-value	Conclude
H1	IC -> BS	0.544	10.741	0.000	Accept
H2	IC -> MAP	0.580	13,83	0.000	Accept
H3	INC -> MAP	0.014	0.311	0.756	Not accepted
H4	INC -> BS	0.239	5.089	0.000	Accept
H5	MAP -> BS	0.170	3.351	0.001	Accept

(Source: Results from a sample of 383 Vietnamese enterprises, 2024)

#### 4.4.4.2. Testing for Mediating Effects

Table 4.32. Results of Mediating Variable Analysis

Hypothesis	Relationship	Direct impact			Indirect impact			Intermediary role
		$\beta$ coefficient	t value	p-value	$\beta$ coefficient	t value	p-value	
H6a	IC -> MAP -> BS	0.544	10.741	0.000	0.098	3.194	0.001	Partial intermediary
H6b	INC -> MAP -> BS	0.239	5.089	0.000	0.002	0.297	0.766	No middleman

(Source: Results from a sample of 383 Vietnamese enterprises, 2024)

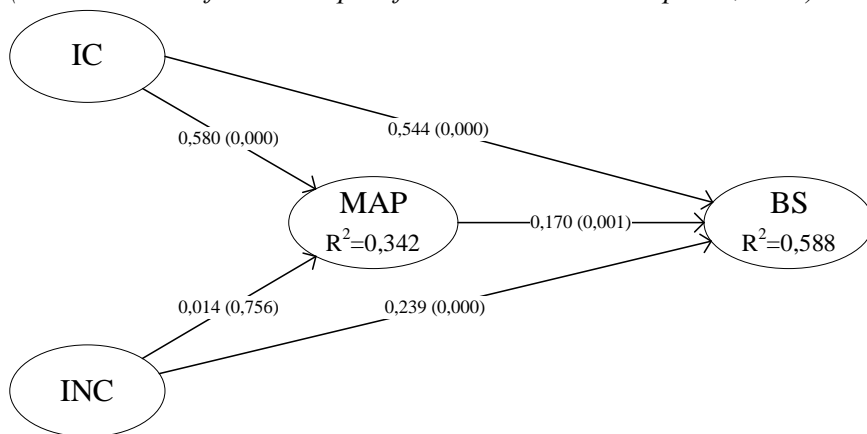


Figure 4.2. HOC structural model test results (Summary)

#### 4.4.5. Summary of detailed hypothesis test results

##### 4.4.5.1. Direct impact test (detailed)

Table 4.33. Path analysis results (detailed)

Hypothesis	Relationship	$\beta$ coefficient	t value	p- value	Conclude
H1a	HC -> BS	0.132	2.511	0.012	Accept
H1b	SC -> BS	0.404	6.035	0.000	Accept
H1c	RC -> BS	0.097	1.930	0.054	Not accepted
H2a	HC -> MAP	0.087	1.147	0.252	Not accepted
H2b	SC -> MAP	0.399	4.479	0.000	Accept
H2c	RC -> MAP	0.189	2.897	0.004	Accept
H3	INC -> MAP	0.024	0.496	0.620	Not accepted
H4	INC -> BS	0.236	4.908	0.000	Accept
H5	MAP -> BS	0.168	3.306	0.001	Accept

(Source: Results from a sample of 383 Vietnamese enterprises, 2024)

##### 4.4.5.2. Testing for mediating effects (details)

Table 4.34. Results of mediating variable analysis

Hypothesis	Relationship	Direct impact			Indirect impact			Intermediary role
		$\beta$ coefficient	t value	p- value	$\beta$ coefficient	t value	p- value	
H6a1	HC -> MAP -> BS	0.132	2,511	0.012	0.132	2,511	0.012	No middleman
H6a2	RC -> MAP -> BS	0.404	6,035	0.000	0.404	6,035	0.000	Full intermediary
H6a3	SC -> MAP - > BS	0.097	1,930	0.054	0.097	1,930	0.054	Partial intermediary
H6b	INC -> MAP -> BS	0.087	1,147	0.252	0.087	1,147	0.252	No middleman

(Source: Results from a sample of 383 Vietnamese enterprises, 2024)

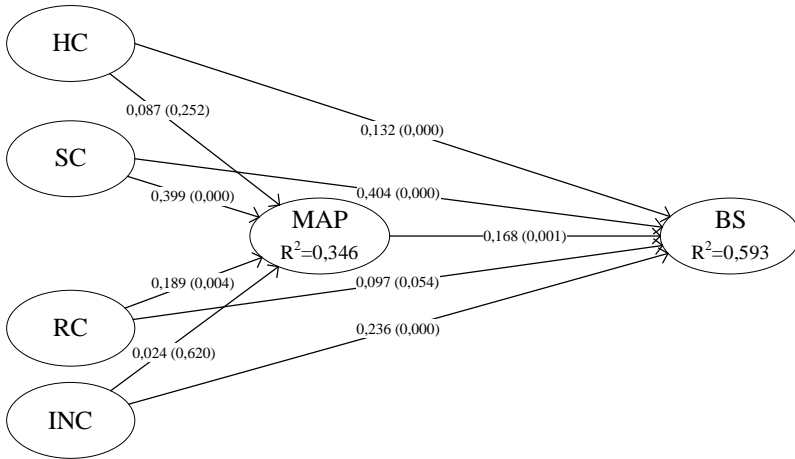


Figure 4.3. Results of testing the HOC structural model (Details)

#### 4.5. Discussion of research results

The research results show that HC and SC both have direct and strong influences on BS. SC is identified as an important factor in promoting BS. SC with coefficient  $\beta = 0.404$  also shows a strong influence on BS, consistent with Putnam's (1993) study that showed that SC, including social relationships and networks, plays an important role in maintaining BS. In addition, RC shows no relationship with BS (H1c). This result shows a difference with RBV theory in the context of Vietnam, where RC has not been effectively exploited for BS due to limitations in perception and measurement tools.

INC also has a positive influence on BS, supporting hypothesis H4, similar to Tidd and Bessant's (2014) study on the importance of innovation in maintaining competitiveness and sustainable development of enterprises.



MAP with coefficient  $\beta = 0.168$ , demonstrated the importance of improving accounting processes in improving business efficiency and sustainability. This result is consistent with the study of Dahal et al. (2024), who emphasized the role of MAPs in supporting strategic decisions and ensuring transparency, thereby contributing to the sustainable development of enterprises.

#### 4.6. The influence of control variables on business sustainability

Table 4.35. Results of testing the role of control variables

Impact	$\beta$ coefficient	t value	p-value	Conclude
Number of employees -> BS	0.093	1,507	0.132	No impact
Equity -> BS	0.152	2,682	0.007	Impact
Revenue -> BS	-0.168	2,352	0.019	Impact
Form of ownership -> BS	0.002	0.060	0.952	No impact
Industry -> BS	-0.011	0.330	0.741	No impact
	R <sup>2</sup> of BS			
No control variables	0.588			
Has control variables	0.603			

(Source: Results from a sample of 383 Vietnamese enterprises, 2024)

### CONCLUSION OF CHAPTER 4

## CHAPTER 5. CONCLUSION AND IMPLICATIONS

### 5.1. Summary of research results

The results of hypothesis testing using SmartPLS software show that the research model on BS with the factors IC, InC and MAP achieves good fit. Most of the relationships in the model are highly statistically significant, except for the relationship between InC and MAP.

## **5.2. Management implications**

The research results show that structural capital plays the most important role in promoting both MAP and BS. Meanwhile, InC has a direct impact on BS but does not affect MAP. In particular, MAP plays an intermediary role to help SC and RC indirectly impact BS.

## **5.3. New points of the research**

(i) Multidimensional analysis of intellectual capital; (ii) Mediating impact of international accounting practices; (iii) Research context in Vietnam.

## **5.4. Research contributions**

(i) Theoretical: The study develops an integrated model of IC–InC–MAP–BS and clarifies the distinct roles of HC, SC, RC. MAP is confirmed as an intermediate variable between IC and BS, and the study adds institutional factors to the theoretical framework for emerging markets.

(ii) Practical: The results provide guidance for Vietnamese enterprises in developing intellectual capital, improving MAP and innovation capacity. Thereby, helping enterprises optimize resources, improve operational performance and enhance long-term sustainability in a competitive environment.

## **5.5. Limitations and future research directions**

This study has some notable limitations. First, the research model does not include intermediate or regulatory factors. Second, the scope of the study only focuses on a number of specific industries and regions in Vietnam, limiting the ability to generalize the results to other industries or regions. Third, the study did not analyze in depth the components of BS including economic - social - environmental,

but only analyzed BS in general, so it did not clarify the impact of IC, InC and MAP on each of these components. Finally, the method of collecting data through self-report surveys can cause problems with reliability and accuracy, due to the bias of survey participants.

## CONCLUSION OF CHAPTER 5

### CONCLUSION

An overview of global research on BS shows the interest of many researchers. In the field of corporate sustainability management, factors such as vIC, InC, MAP and BS are all identified as important components contributing to the development and maintenance of competitive advantage of enterprises. Although the importance of each of these factors has been confirmed through many studies, there is still a lack of comprehensive studies that combine all of these factors together. In Vietnam, regarding the topic of MAP, there are very few studies in Vietnam on the relationship between IC, InC to MAP and between MAP and BS. Therefore, there are still many research gaps that need to be discussed and clarified. Therefore, the thesis was conducted to provide theoretical basis and evidence to explain the relationship between IC, InC to MAP and BS in Vietnam. The definitions of IC, InC, MAP and BS have been presented specifically and in detail. In addition, in the thesis, 4 fundamental theories are applied to argue for the above mentioned relationships. These theories include: RBV, Stewardship theory, Innovation theory and Dynamic capability theory.