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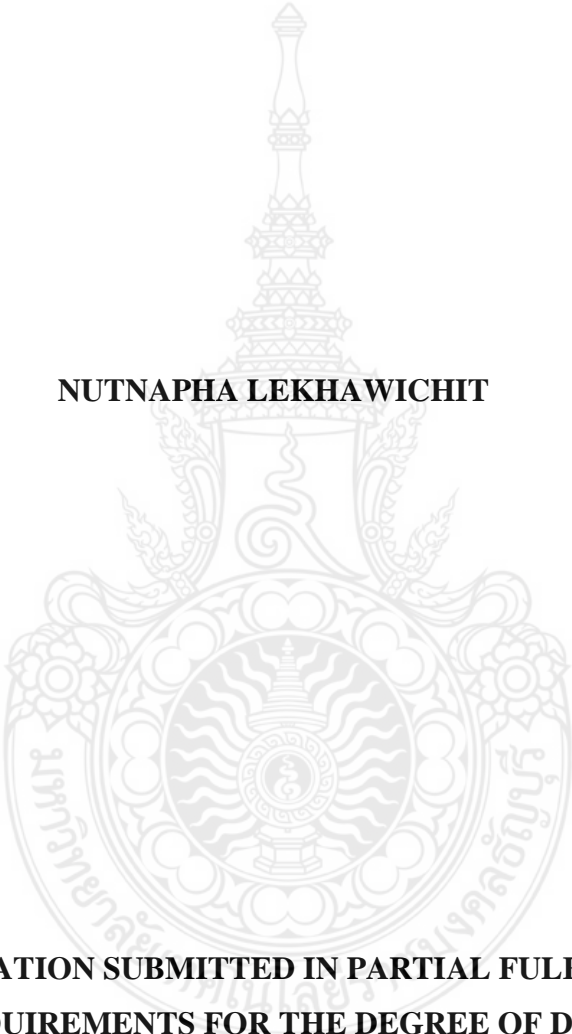# A CASE STUDY OF GEMS AND JEWELRY INDUSTRIES IN THAILAND

NUTNAPHA LEKHAWICHIT

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY PROGRAM IN BUSINESS ADMINISTRATION
FACULTY OF BUSINESS ADMINISTRATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
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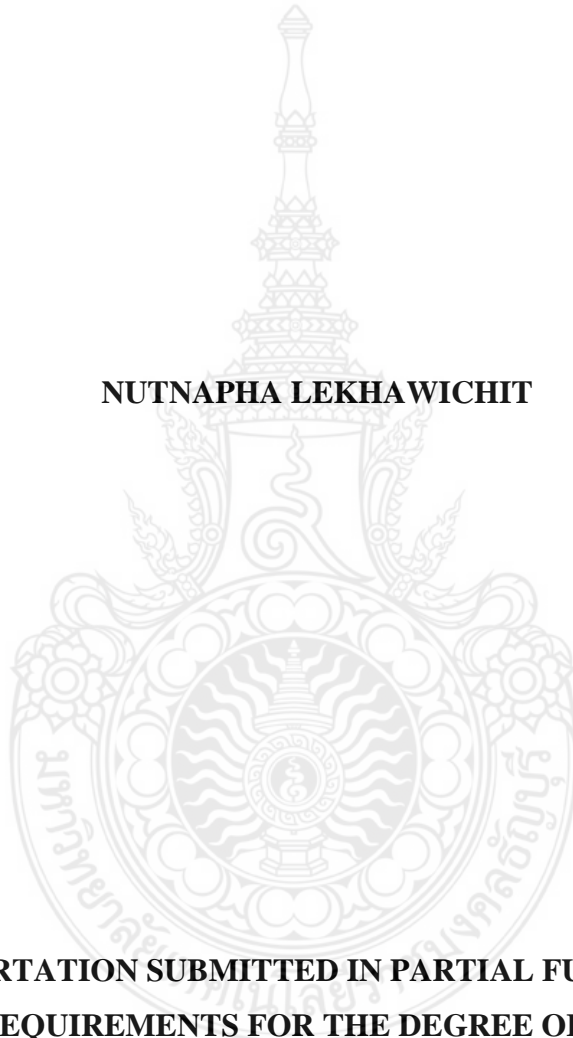# A CASE STUDY OF GEMS AND JEWELRY INDUSTRIES IN THAILAND

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Dissertation Title	Determinants of Export Performance: A Case Study of Gems and Jewelry Industries in Thailand
Name-Surname	Miss Nutnapha Lekhawichit
Program	Business Administration
Dissertation Advisor	Associate Professor Chanongkorn Kuntonbutr, D.B.A.
Academic Year	2019

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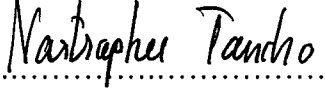
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February 3, 2020

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ABSTRACT

The purpose of this study was to investigate the relationship between firm's resources and export performance through export marketing strategies. The study also examined the role of export marketing strategies as a mediator on the relationship among firm's resources, firm's capability and export performance of gems and jewelry industries in Thailand.

The conceptual framework of the research is based on the Resource-Based View of the firm (RBV) theory and used to identify advantage-generating resources and capabilities as critical determinants of the export performance. The independent variable was RBV which had been expected to have an impact on the performance of gems and jewelry exports in Thailand. The components of RBV comprised of firm's resources and firm's capability. The dependent variable was export performance. In addition, the export marketing strategies were examined as a mediator. The research employed a quantitative survey method using a structured questionnaire as the main instrument for collecting the data gained from 323 executives of gems and jewelry exporters in Thailand. The structural equation modelling (SEM) was assigned to test the hypotheses.

It was found that firm's resources had a positive direct effect on export performance and export marketing strategies. Firm's capability had a positive direct effect on export marketing strategies but it had no significant direct effect on export performance whereas export marketing strategies had a positive direct effect on export performance. With reference to these findings, it could be concluded that the export marketing strategies were a mediator among firm's resources, firm's capability and export performance.

Keywords: export performance, international business, Resource-Based View, resources, capability

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Finally, and most importantly, I wish to acknowledge a debt of gratitude to my soul mate, my dearest husband and my best friend, Mr. Monton Ponpai for allowing me the luxury of undertaking a Ph.D. and hence putting up with the many sacrifices that this has involved over the years. I would especially like to thank my husband for all of his support, encouragement and above all patience that he continually provided me throughout my Ph.D. study. You are the best thing that has ever happened to me. The completion of this dissertation has only been possible because of you.

<div align="right">Nutnapha Lekhawichit</div>

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CHAPTER 1

INTRODUCTION

1.1 Background and Statement of the Problem

Under the act of globalization, the role of world trading has changed rapidly and continuously and it cause to the development to economic integration to make a trading cooperation and investment at the bilateral, regional and multilateral trade including to the increase of free trade area. Such a situation cause rapidly changing of international economy. This was partly caused by the impact of the economic crisis, trade liberalization and economic integration of the various countries.

Such a changes cause the effect to the competitiveness of a country that relies on international trade especially in the export sector witch play the major role to the growth of the economy of any country. If they cannot adjust to keep pace with these changes. It will allow the development of the national economy was slowing down. Effect to employment in the country and decrease the country's income. Therefore, the developing of competitiveness for the changing in the competitive environment. To prepare for competing in the global market is absolutely necessary (Haar & Reyes, 2002; Tamamura, 2002; Wignaraja, 2003).

In addition, the economic circumstances in the country has been affected by oil prices surged and its effect to production costs. The impact of external factors such as the real estate subprime in the America that causes a slowing of the economic in different countries of the world. The impact of the appreciation of the Thai Baht since 2005. As a small country, Thailand has no role in the pricing of products in the global market. The situation cause the export of Thailand a continually slowing down to the present, and it cause direct impact on the export sector.

The intense competition is the opportunity and a challenge to the exports business sector to try to improve the products and services by the various strategies to making a difference in the product to meet their customer's needs. (Clark, Palaskas & Tsampra, 2002; Wignaraja, 2003).

As the table 1 shows The Global Competitiveness Ranking by World Economic Forum ranks Competitiveness of countries around the world, including 138 countries.

Covering the three area factors consist of basic requirements, efficiency enhancers, Innovation and sophistication factors. In summary, the overall results raking Thailand Competitiveness of 2016 are at 34 has fallen for 2 place from 2015 which is ranked at 32, still inferior in several Asian countries such as China and was ranked 28 and Malaysia 25
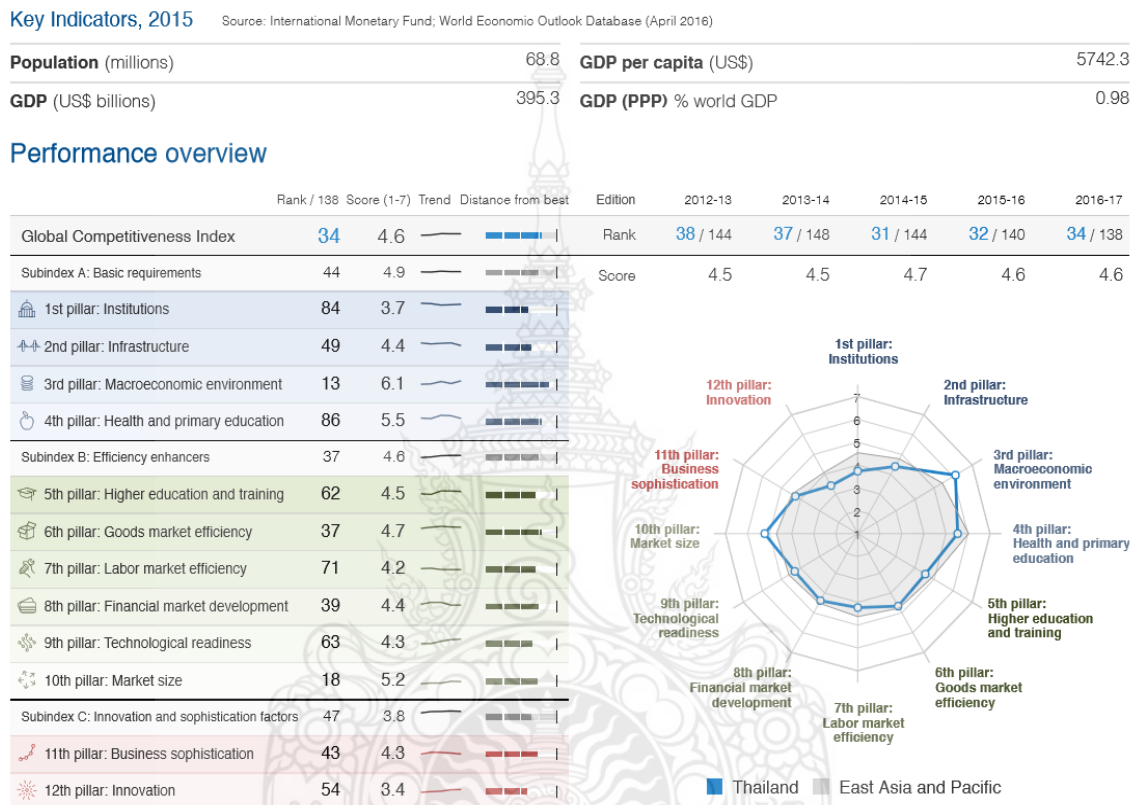
Figure 1.1 Global Competitiveness Ranking of Thailand by World Economic Forum
Source: Global Competitiveness Index Report 2016-2017, by Word Economic Forum

Table 1.1 Global Competitiveness Ranking by World Economic Forum

Country	2012	2013	2014	2015	2016
Singapore	2	2	2	2	2
China	29	29	28	28	28
Malaysia	25	24	20	18	25
India	59	60	71	55	39
Thailand	38	37	31	32	34
Philippine	65	59	52	47	57
Indonesia	50	38	34	37	41
Vietnam	75	70	68	56	60

Source: Global Competitiveness Index Report 2016-2017, by Word Economic Forum

Exporting has increased the importance of foreign income and economic development of the country. I important to the economic and social development of the country. Thailand still has depended on revenue from exports to bring money from the foreign countries. Also export are mechanism to the development and expansion of the manufacturing and services of related sector. Cause the employment, skills development, import of new technologies. Thereby promoting the export of goods and services, thus guiding the government tried to start it. To continually improve its export sector. Government has supported a study on the Competitiveness of Thailand to increase the capacity of the country's competitiveness in the macro strategy and the micro strategy.

Exporting is a key factor makes Thailand has experienced economic growth in the past decade. Thailand's export of agricultural and agricultural industry are in upward trend in regression ratios. But the export proportion of industrial are increased. As it shown in the table 1.2, on 1997 export ratio percentage of agriculture goods and agriculture industries goods was13.93 and 8.35 of the total export ratio, while the year of 2016 export ratio of agriculture goods and agriculture industries goods are 9.70 and 7.15 The ratio clearly shown a downward trend of both industry. Meanwhile the industry that shown an upward trend, which on 1997 export ratio percentage was 72.27 of total export value. While on the year of 2016 the ratio is increased up to 79.49 of total export value.

The data on table 3 has clearly shown the trend of Thailand export goods that industries goods is going to play the major roll to Thailand's economic

The exporting of gems and jewelry business in Thailand are the setting of the firms this research. Gems and jewelry products are the important industry with the third largest export product after automotive and computer industries. Table 1.3 shown the total value of Thailand top ten export product in 2008-2017, gems and jewelry product is in the top ten of the most total value export product in Past 10 years. It is account for seven percent of the economy compared to the growth of Gross Domestic Product (GDP). The gems and jewelry industry is a potential industry important to the Thailand's economic development. With a proportion of exports More than 80 percent of product. It creates over two million employments throughout its supply chains in 2016. In addition, it generates circulating money in the economic system in Thailand. Further, the business context under the globalization circumstance are more complex, various customers and competitors expand into global, it cause the rapidly changing in the competitive environment and customers behavior. Therefore, the findings of this study would support and strengthen the competitiveness of gems and jewelry industries in Thailand to improve their performance in the international market (The Gem and Jewelry Institute of Thailand).
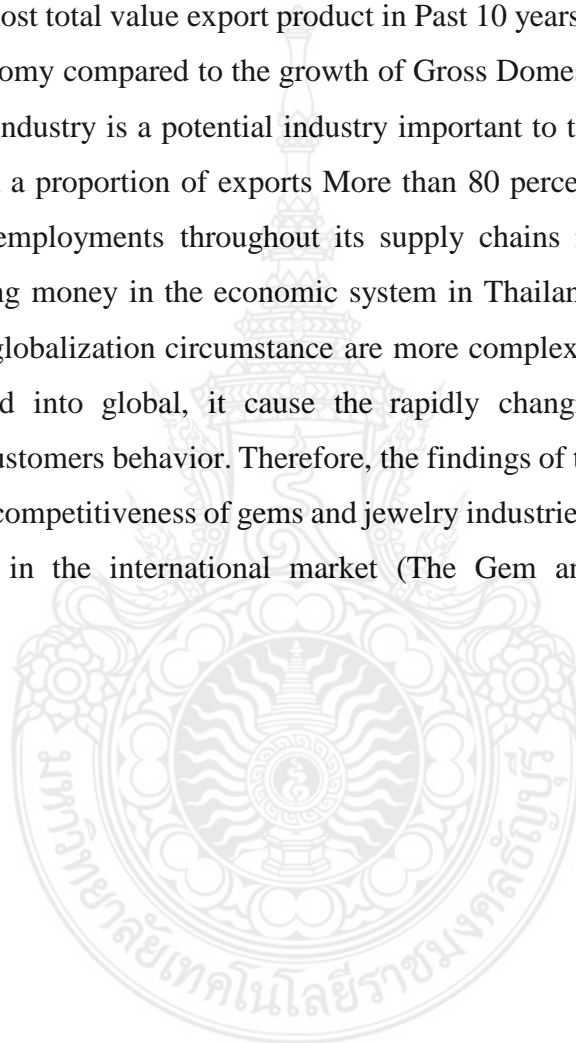
Table 1.2 Thailand Export Structure: 1992- 2017

Year	Value: Million Bath						Ratio: Percent					
	Total	Agricultural products	Agro industry product	Industry product	Minerals and fuels	Other	Total	Agricultural products	agro industry product	Industry product	Minerals and fuels	Other
1997	1,806,682.0	251,637.5	150,939.2	1,305,601.0	50,449.5	48,054.8	100.00	13.93	8.35	72.27	2.79	2.66
1998	2,248,089.4	294,761.7	176,189.2	1,660,795.3	44,273.5	72,069.8	100.00	13.11	7.84	73.88	1.97	3.21
1999	2,214,248.7	265,423.9	172,437.6	1,665,075.9	47,947.9	63,363.4	100.00	11.99	7.79	75.20	2.17	2.86
2000	2,768,064.8	291,956.1	187,698.6	2,115,414.0	97,399.0	75,597.1	100.00	10.55	6.78	76.42	3.52	2.73
2001	2,884,703.9	312,527.8	213,492.5	2,171,481.9	90,699.8	96,501.9	100.00	10.83	7.40	75.28	3.14	3.35
2002	2,923,941.4	305,417.1	218,941.6	2,226,375.6	86,242.8	86,964.4	100.00	10.45	7.49	76.14	2.95	2.97
2003	3,325,630.1	365,037.4	247,582.4	2,542,797.2	95,635.2	74,578.0	100.00	10.98	7.44	76.46	2.88	2.24
2004	3,873,689.6	414,522.1	255,650.2	2,994,069.2	148,086.6	61,361.5	100.00	10.70	6.60	77.29	3.82	1.58
2005	4,438,691.0	418,068.9	280,160.7	3,470,144.2	206,894.3	63,422.9	100.00	9.42	6.31	78.18	4.66	1.43
2006	4,937,372.2	499,674.2	303,069.7	3,808,82.2	262,553.6	63,192.6	100.00	10.12	6.14	77.14	5.32	1.28
2007	5,302,119.2	522,531.8	327,300.1	4,165,780.2	246,967.6	39,539.6	100.00	9.86	6.17	78.57	4.66	0.75
2008	5,851,371.1	662,228.9	385,771.2	4,417,833.9	385,526.1	11.0	100.00	11.32	6.59	75.50	6.59	0.00
2009	5,194,596.7	559,458.6	384,299.3	3,976,793.2	274,045.6	0.0	100.00	10.77	7.40	76.56	5.28	0.00

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Table 1.2 Thailand Export Structure: 1992- 2017 (Cont.)

Year	Value: Million Bath						Ratio: Percent					
	Total	Agricultural products	Agro industry product	Industry product	Minerals and fuels	Other	Total	Agricultural products	agro industry product	Industry product	Minerals and fuels	Other
2010	6,113,335.5	679,718.6	419,318.7	4,697,001.7	317,296.5	0.0	100.00	11.12	6.86	76.83	5.19	0.00
2011	6,707,989.5	875,661.1	526,749.9	4,906,495.1	399,083.4	0.0	100.00	13.05	7.85	73.14	5.95	0.00
2012	7,077,762.2	724,293.1	560,190.0	5,320,016.8	473,260.4	1.8	100.00	10.23	7.91	75.17	6.69	0.00
2013	6,909,543.9	687,562.3	521,670.7	5,254,109.8	446,201.1	0.0	100.00	9.95	7.55	76.04	6.46	0.00
2014	7,311,089.0	719,099.2	546,574.8	5,644,724.7	400,690.3	0.0	100.00	9.84	7.48	77.21	5.48	0.00
2015	7,225,722.8	679,760.9	560,544.0	5,685,448.7	299,969.3	0.0	100.00	9.41	7.76	78.68	4.15	0.00
2016	7,550,704.1	682,988.3	602,918.6	6,029,997.0	234,755.6	44.6	100.00	9.05	7.98	79.86	3.11	0.00
2017	8,006,265.2	777,083.6	577,298.6	6,359,186.0	292,697.0	0.0	100.00	9.71	7.21	79.43	3.6	0.00

Source: Center for Information and Communications Technology. Ministry of Commerce In cooperation with the Customs Department

Table 1.3 Thailand Top Ten Export Product 2008-2017

Product	Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1. Computer Equipment and Components	Ranking	1	1	1	1	2	2	2	2	2	2
	Value: million (฿)	605,314.0	545,468.9	596,677.7	513,710.1	588,398.7	537,052.6	588,613.8	595,418.6	587,247.8	624,896.1
2. Electronic board	Ranking	5	4	4	9	10	9	8	6	5	6
	Value: million (฿)	237,972.6	219,508.7	255,322.1	238,173.4	206,462.1	218,088.0	240,854.6	261,320.4	270,330.5	279,659.1
3. Car accessories and parts	Ranking	2	2	2	2	1	1	1	1	1	1
	Value: million (฿)	237,972.6	219,508.7	255,322.1	238,173.4	206,462.1	218,088.0	240,854.6	261,320.4	270,330.5	279,659.1
4. Gems and Jewelry	Ranking	4	3	3	4	3	4	4	3	3	3
	Value: million (฿)	274,093.1	333,700.5	366,818.3	371,239.3	408,040.2	305,838.6	324,155.8	371,072.0	501,124.1	434,890.7
5. Plastic beads	Ranking	8	10	8	6	6	6	5	4	4	5
	Value: million (฿)	181,158.7	151,978.8	200,326.0	265,381.6	263,587.5	270,792.9	311,058.6	278,322.2	270,501.7	293,551.4
6. Rubber products	Ranking	10	8	7	7	8	7	7	8	7	4
	Value: million (฿)	149,894.9	152,799.5	203,428.1	253,054.9	259,583.5	257,181.3	257,152.6	230,169.0	230,554.0	346,897.5

Table 1.3 Thailand Top Ten Export Product 2008-2017 (Cont.)

Product	Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
7. Mechanical and mechanical components	Ranking	-	-	-	-	-	10	9	7	6	7
	Value: million (฿)	-	-	-	-	-	205,035.7	231,942.1	238,564.9	243,753.8	256,241.5
8. Chemical	Ranking	-	9	9	8	7	5	6	9	8	8
	Value: million (฿)	-	152,208.9	182,464.7	250,053.8	263,027.8	274,940.3	276,237.2	215,019.4	213,622.2	252,336.4
9. Instant Oil	Ranking	3	5	6	5	4	3	3	5	9	9
	Value: million (฿)	295,798.0	214,175.9	245,996.2	303,794.8	397,858.7	386,000.7	363,269.9	271,424.4	193,280.8	242,352.1
10. Rubber	Ranking	6	-	5	3	5	8	10	-	-	10
	Value: million (฿)	223,628.2	-	249,262.5	382,903.5	270,153.8	249,296.4	193,754.8	-	-	204,556.4

1.2 RBV as an Integrative Perspective

With the growing globalization, there has been increasing concern regarding export performance. Export performance has been conceptually defined as the outcome of a firm's activity in an export market (Toften & Olsen, 2003). There seems to be general agreement that export performance is a multi-dimensional construct and comprises export effectiveness, export efficiency and adaptiveness (Aaby & Slater, 1989; Gertner, Gertner & Guthery, 2006).

This research employ the resource-based view of the firm (RBV) perspective to develop the theoretical framework in identifying advantage generating resources and capabilities as key drivers to the starting point of export process, export marketing strategy and export performance. There are many studies had attempt to explain better understanding of the factors that relate to the successful of exporting. However, several versions of the RBV framework have been developed in the literature, there are still left the questions need to be answered especially in different contexts. Most of RBV studies are in the context of America developed countries such but there is a lacking of studied in the context of developing countries. Therefore, the researcher interested to study advances the RBV theoretical relate to export performance in the context of Thailand gems and jewelry industries. Drawing form RBV framework, this research integrate export marketing mix (4Ps) as the mediating variable to investigate the influence on export performance.

1.3 Research Contribution

The development of a comprehensive model testing mediating effect of selected key determinants of export performance in this thesis has significance in broadening research and theory development. The study adds empirical and new exploratory knowledge to the export performance literature and provide additional insight into how firms can improve their export performance in international business. This research contributes to export performance literature in international business by investigating how the interplay between certain internal resources and capabilities and their interaction with export marketing strategy contribute to export performance.

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The findings of this research have relevant theoretical implications development in terms of resource advantages and its relationship with competitive strategy. Acquisition of internal resources of the firm and competitive strategy have been identified as most important factors to be considered when a firm intends to enhance its export performance. The findings relating to the role of firm resource, firm capabilities and export strategy can provide guidance to managers to leverage their internal resources to enhance export performance.

1.4 Purpose of the Study

According to the resource-based view, resources are key determinants of competitive advantage and performance (Barney, 1991). This dissertation focuses on investigating the determinant of export strategy and export performance from the RBV perspective. The general objective of this study was to determine the influence of selected Purposes and Objectives of Study.

1. To assess the influence of firm's resource on export performance of gems and jewelry industries in Thailand.

2. To investigate the influence of firm's capabilities on export performance of gems and jewelry industries in Thailand.

3. To examine the mediating effect of export marketing strategy in the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand.

1.5 Research Questions and Hypotheses

The key research questions for this study are:

RQ1. Does the firm's resources influence on export performance of gems and jewelry industries in Thailand?

RQ2. Does the firm's resources influence on export marketing strategy of gems and jewelry industries in Thailand?

RQ3. Does the firm's capabilities influence on export performance of gems and jewelry industries in Thailand?

RQ4. Does the firm's capabilities influence on export marketing strategy of gems and jewelry industries in Thailand?

RQ5. Does the export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand?

From the literature review and on the basis of the relationships depicted in the conceptual model, the following hypotheses are:

H1: There is a positive relationship between firm's resources and export performance of gems and jewelry industries in Thailand.

H2: There is a positive relationship between firm's resources and export marketing strategy of gems and jewelry industries in Thailand.

H3: There is a positive relationship between firm's capabilities and export performance of gems and jewelry industries in Thailand.

H4: There is a positive relationship between firm's capabilities and export marketing strategy of gems and jewelry industries in Thailand.

H5: Export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand.

1.6 Research Framework
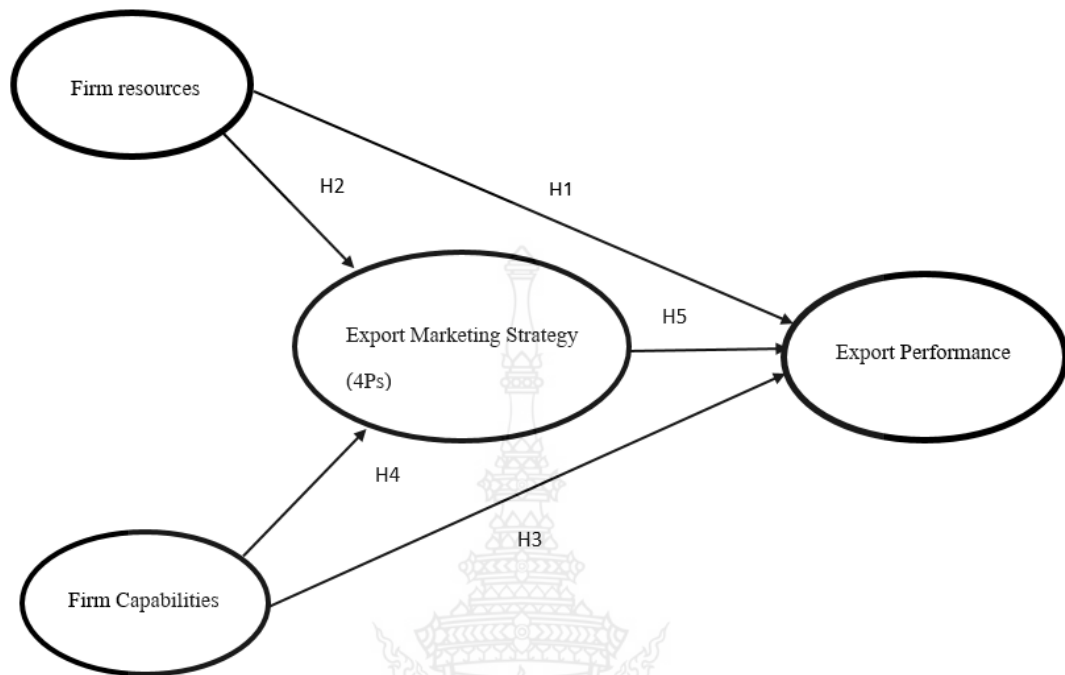
Figure 1.2 Research Framework

1.7 Definitions of Terms

The term definitions in the following, described the terminology used in this study.

Export Performance

The extent to which a firm's objectives, both economic and strategic, with respect to exporting a product into a foreign market, are achieved through planning and execution of marketing strategy (Cavusgil & Zou, 1994)

Export Marketing Strategy

The firm responds to the interplay of internal and external forces to meet the objectives of the export venture concerning with the creation of a marketing mix which including with product, price, promotion and distribution (4Ps) (Cavusgil and Zou 1994)

Firm Resources

Firm resources are available factors or input, both tangible and intangible, controlled by a firm that enable the firm to conceive of and implement strategies to improve the efficiency and effectiveness (Daft, 1983; Barney, 1991).

Firm Capabilities

The ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result (Helfat and Peteraf, 2003)

1.8 Scope of the Study

Porter (1990) has criticize that nature and characteristics of one industry differ from another industry. The people within one nation differ from other nation in term of culture, beliefs, Values, determination, and management style. Environments under which firms of industries operate also differ from one country to the others. In order to determine success factors governing a nation's industry success, each attribute within an industry within a country must be studied and analyzed. To gain an insight understanding of an industry within a country, this research performs a detailed study to determine what success factors of one selected industry in Thailand.

This study aim to investigate the determinants of export performance from the RBV perspective. The comprehensive review of the RBV - grounded theoretical and empirical research on competitive advantage, international marketing and export performance to determine the export performance models and frameworks. The study selected and industry with potential success. Criterion for selection based on past export performance of the industry. With the long history of Thai Jewelries success and good export performance of gems and jewelry industries. This research studies gems and jewelry company related exporting firms based in Thailand. The RVB theory are tested for their contributions to the success of jewelries export performance.

CHAPTER 2
REVIEW OF THE LITERATURE

2.1 Introduction

This chapter presents a review of the literature relevant to this study. The focus of the review is on firm factors and export performance. The chapter covers a review of the theoretical perspectives of Resource Based View and the concepts of firm factors and export performance.

2.2 Gems and Jewelry Industries of Thailand

Gems and jewelry industries of Thailand is regarded as one of the significant industries influencing the national economic growth. It has been developed dramatically over the past two decades and led to a higher level of manufacturing significance to Thai economic system. Currently, Gems and jewelry industries has been placed in the third rank of Thai industries for raising the highest revenue from export in 2018.

2.2.1 Evolution of Gems and jewelry industries of Thailand

Gems and jewelry industries had been established long ago. However, it was just placed importance and promoted from the government sector in 1977 due to their anticipation of its high value-added manufacturing. Furthermore, Thailand was a source of priceless raw gems and skilled lapidaries who were meticulous about gemstone cutting. In addition, Thailand was the only nation in the world employing a heat treatment technique to enhance gemstones' exquisite colours. Therefore, it can be assumed that the initiation phase of this industry involved gemstone cutting. Afterwards, Gems and jewelry industries was evolved and extended its areas over jewelry manufacturing and diamond cutting. Its evolution can be viewed from a household handicraft industry to small-scale, medium-scale and large-scale industries. The evolution of Gems and jewelry industries can be divided into three following phases (The Gem and Jewelry Institute of Thailand, 2007):

The First Phase: Small Scale Industries (1977-1985)

During this period, the majority of industries were in small-scale sizes with the annual growth rate of 28.87%. This phase was the initiation of Gems and jewelry

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industries of Thailand where it had the initial gem trade center as well as gem cutting. The significant source of raw gems can be found in Chanthaburi province. Due to the abundance of precious minerals in this area combining with the world's approval of skilled lapidaries, Thailand becomes the center of gem cutting for various countries. When Thai gems had been proverbial in the international gem society, Thailand began to export gems for raising the national income.

The government anticipated the significance of Gems and jewelry industries; therefore, they started to promote it earnestly by implementing the number of policies. In 1977, the government formulated the policy of exemption from raw gem import duties and sales tax. Subsequently, in 1980, sales tax and municipal tax were exempted by the government. With regard to all earnest promotions from the government, the industry could constantly increase a number of export products from 1977 to 1985. Its export growth data has been displayed the annual averaged rate of 28.9%. (However, in 1981, the entire world encountered economic crisis and depression, which had a further effect on export declination of gem and jewelry, categorized as costly products).

The Second Phase: Golden Age of Industry (1986-1990)

The second phase was during 1986-1990. At that time, the export growth rates of this industry in U.S.A., Europe or Japan were inclined continuously, which also influenced Thailand. Likewise, the export growth rate of this industry in Thailand increased dramatically with an annual average rate of 34.6%. Therefore, Thailand became one of the top ten nations with the highest export growth rate of gem and jewelry of all time. Thus, the government had a plan for developing Gems and jewelry industries with the intention to earnestly promote Thailand to be one of the world gem and jewelry trade centers in the near future.

A government sector adopted many significant policies in the golden age of Gems and jewelry industries. In 1988, the government allowed gold buyers under the government authorities, who aimed for export, to be exempt from sales tax with the reason that gold was equal to money. The aforementioned policy contributed to the cost reduction in manufacturing for jewelry manufacturers. Subsequently, in 1989, sales tax for the income of gold import was exempt and the gold was kept in a treasury under the

government authorities (only for the gold that sold to exporters). In addition, a bonded warehouse was established with the exemption of import and export duties.

The Third Phase: Borderless Competitive Age (Since 1991)

Since 1991, the export growth rate of Gems and jewelry industries has been declined compared to the preceding years. In other words, it has been a period of growth recession due to the recent change of tax imposition from sales tax to value-added tax (VAT). The impact of this change was that entrepreneurs, especially small-business owners, could not get tax refunds from the Revenue Department. Hence, price increase or no VAT must have been adopted (especially for raw materials utilized for jewelry manufacturing). Meanwhile, India enhanced its manufacturing and export capacities. Likewise, the new competitors of Thailand: China and Vietnam had higher capacities to develop design of the products. Moreover, both of them collaborated with other foreign countries in order to develop manufacturing and trading. Therefore, skills of Thai lapidaries, especially those who were from a low-end market, must be enhanced in order to seize the market share for Thai gem and jewelry.

In the third phase, the government sector adopted several significant policies. In 1992, it was announced that the value-added tax (VAT) must be kept at the rate of 7% for all products. Immediately following the 1st January 1993, Thailand initially proceeded the rate of customs duty in accordance with the ASEAN Free Trade Area (AFTA) agreement. The customs duty rate was expected to decline to 0-5% within nine years, including the cancellation of non-tax incentives.

On the part of policies promoting the export of Gems and jewelry industries, the government adopted the policies of gold, which was freely imported and exported in 1999 as well as the exemption of value-added tax (VAT) for gold, white gold, silver and palladium imports in 2000. During the periods of 1991-2006, at the beginnings of those years, the export growth rate of Gems and jewelry industries still have been inclined continuously. Nevertheless, the export growth rate in this phase was not as high as in the golden age of this industry. In other words, during the third phase, the annual average rate of export growth for this industry was only 7.2%.

2.2.2 Structure of Gems and jewelry industries of Thailand
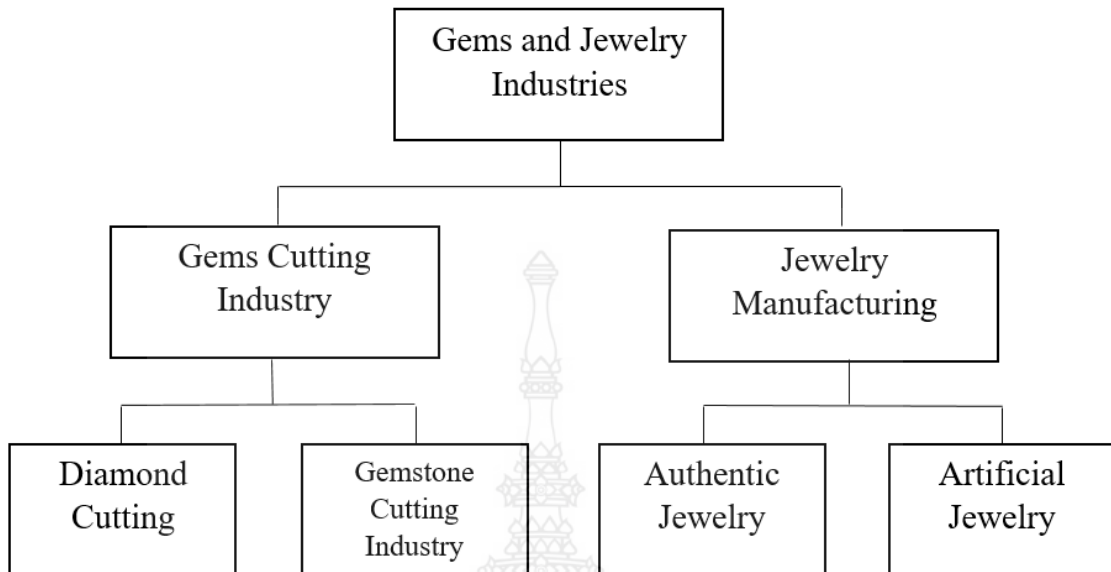
Figure 2.1 Structure of Gems and jewelry industries Source: Competitive Benchmarking (Gem and Jewelry Field) (p.42), by The Gem and Jewelry Institute of Thailand, 2003

Gems and jewelry industries of Thailand consists of two following large-scale industries (The Gem and Jewelry Institute of Thailand, 2003, pp.42-43):

1. Gem Cutting Industry Consists of

Diamond Cutting Industry

Although Thailand has no natural source of diamonds, they are imported for cutting from foreign countries such as Belgium and Israel. Both countries employ Thai lapidaries especially for diamond cutting because they are skillful and their wages are minimum. Moreover, both of them make investments of this industry in Thailand and train Thai lapidaries for enhancing their skills. One of the factors leading Thailand to become the world's diamond cutting center is that Thailand has contained an immense amount of natural resources of colored-gemstones. For this reason, Thai lapidaries have had opportunities to develop and enhance their cutting skill regularly. When compared cutting skill of lapidaries in Thailand to other countries, Thai lapidaries are accepted to cut diminutive diamonds, which are less than one-carat size. The main competitor for Thailand is India.

Gemstone Cutting Industry

Gemstone Cutting Industry in Thailand was established for a long time because Thailand was a significant source of gem resources. Gemstone industry includes gemstone mining, which requires unskilled labors and gemstone enhancement. The prominent point of this industry in Thailand is a process of gemstone heat treatment regarded as folk wisdom, which proceeds in a household. This process started with trial and error, which later led to the body of knowledge. Gemstone heat treatment of Thailand can enhance gemstones' colors, bringing about higher quality and price. Another prominent point of this industry is the capacities to shape and cut gemstones. These capacities require lapidaries' experience of examining raw gemstones in order to realize how to cut and polish gemstones properly. Therefore, the highest essence, as well as the natural sparkle of gemstones, still maintain. Additionally, Thai lapidaries have been accepted by foreigners because of their long experience in gemstone cutting.

2. Jewelry Industry Consists of

Authentic Jewelry Industry

Currently, the majority of jewelry manufacturers produce jewelry for both national trade and export. However, the export requires advanced manufacturing technology for enhancing products' qualities, designs and prices in order to compete against other countries. Manufacturers for jewelry export can be divided into the following groups:

- Manufacturers who are from the areas of jewelry manufacturing for domestic markets, gem export or domestic gemstone trade.

- Manufacturers who form a joint venture with foreign partners (a number of these manufacturers are approximately 50% of all manufacturers for jewelry export)

Artificial Jewelry Industry

During the initial period, jewelry was only produced for meeting domestic needs. Afterwards, it was produced for export due to capacities to develop designs and manufacturing techniques, which can imitate authentic jewelry. Therefore, this industry in Thailand has been grown rapidly, especially in investment and manufacturing. In addition, other foreign manufacturers: Switzerland, Taiwan and Japan move their

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manufacturing bases into Thailand. The reasons are that Thailand consists of skillful labors and the wages are lower than Hong Kong, South Korean and Taiwanese labors.

2.2.3 Structure of Gem and Jewelry Market

Gem and Jewelry market can be categorized into two types. The first type is a domestic market, which its proportion is approximately 20% of the total products. The second type is an international market, which its proportion is approximately 80% of the total products. Europe, U.S.A. and Japan are the main export markets of Thailand. More details are as follows (The Gem and Jewelry Institute of Thailand, 2007):

Domestic Market

Gem and Jewelry are categorized as costly products, which are mostly produced for meeting customers' needs. The majority of domestic customers are foreign tourists or those who have stable careers, or live in the middle class and the upper class of Thailand. It could be assumed that these customers have high purchasing power. The highest popular jewelry is gem while the second and third highest popular jewelry are gold and silver, respectively. White gold jewelry, on the other hand, is less popular than the aforementioned jewelry; therefore, its target is relatively narrow. With regard to the design of jewelry, it is significantly based on customers' requirement. Thus, jewelry styles traded in domestic markets are various. On the part of jewelry vendors, the majority of them are both manufacturers and distributors, or retailers in jewelry stores. These gem and jewelry vendors trade in the jewelry stores, where they are adjacent to each other. Examples are areas of Ban Mo, Phahurat and Yaowarat. These areas are sources of the most purchasing high-priced products, or adjacent to foreign tourists' hotels. Regarding the leading jewelry manufacturers, the majority of them own their retail stores and hire their own retailers, or own both domestic and overseas stores. The main trade centers are located in department stores and the areas with a large number of tourists: Silom, Surawong, Bang-Rak, Gemstone and Diamond stores in five-star hotels as well as top department stores in Thailand. Besides, the sources for wholesale jewelry (or it was known as "Kilogram Calibration Weight") are in areas of Si Phraya and Khaosan Road, where a great number of foreign tourists prefer going for purchasing the products.

Market competition among domestic gem and jewelry vendors involves a tourism business connection, including tour operators or tour guides. This business

connection is mutually beneficial to both vendors and tour operators or tour guides. In other words, tour operators or tour guides are responsible for taking both Thai and foreign tourists to vendors' stores for purchasing gems and jewelry. While the vendors get more customers, tour operators or tour guides are also remunerated for this duty. The reason they penetrate a tourist group is that this group is categorized as customers who have high purchasing power. However, the price of products purchased by Thai tourists is lower than one purchased by foreign tourists. Nevertheless, in this case, one of the concerned problems is exploitation of the tourists, which is in the process of problem solving by the government.

International Market

Market share of gem and jewelry products is mostly depended on overseas markets, which have higher economic conditions. When compared to other countries, incomes of the overseas population are at a higher level with high elasticity. Therefore, the higher customers' incomes, the more opportunities for customers to purchase gem and jewelry. For this reason, the majority of gem and jewelry of Thailand are exported to foreign countries with the rate of 80%. The manufacturing mainly penetrates overseas markets where customers must have high purchasing power. Thus, one of the factors influencing purchasing power is incomes of the population from importing countries. The real incomes of customers can influence their buying behavior and reflect their market opportunities in purchasing any products. The higher incomes of customers are, the more market opportunities are waiting for them. In other words, customers will change their buying behaviors of goods and services when their real incomes are higher. Another factor influencing buying behaviors of customers is the enhancement of goods and services qualities, resulting in income elasticity of demand. This result is associated with the consideration of a change in demand for goods and services selected by customers when their levels of the real incomes are changed.

Competition for Gems and jewelry industries in a global market can be divided into the following three levels:

1. High-end market (high-quality; high-priced products)

Levels of Italian and Hong Kong high-end markets are higher than Thai high-end market due to their advancements in manufacturing technologies, designs and styles of products.

2. Mid-end market (medium-quality; average-priced products)

This type of market in Thailand has a strong point of skillful and meticulous lapidaries for cutting. Additionally, their wages are lower than those who live in developed countries.

3. Low-end market (poor-quality; low-priced products)

The majority of products from China, India and Sri Lanka are from this market level because the wages of their lapidaries are lower than those who live in Thailand and other developed countries. For this reason, many manufacturing bases of low-quality products move to the first three aforementioned countries instead. Therefore, Thai manufacturers must enhance the products in order to penetrate more mid-end markets.

2.3 Resource-Based View of the Firm

The Resource Based View (RBV) is based on the concept of corporate resources that has been mentioned by Penrose (1959) on typically economist point of view to generate the production opportunities by using different resource rather than external factors which growing form demand or from changing of technology. From this emerging concept of Penrose, there has been continually investigate to extend the theory by other scholars (Ansoff, 1965; Wernerfelt, 1984; Prahalad & Hamel, 1990; Barney, 1991; Grant, 1991; Teece et al., 1997; Helfat & Peteraf, 2003; Kor & Mahoney, 2004). In 1984, Wernerfelt has presented new concepts about sources of competitive advantage instead of considering differentiated products and low cost. The firm should consider on the most important mater of the organization which is the resources within the organization (organization's strengths and weaknesses) that tend to respond toward the changes and needs of the external environment (organization's opportunities and threats).

In 1991, Jay Barney has published the article "Firm Resources and Sustained Competitive Advantage" Published in Journal of Management. After that, this article has becoming recognized as a key theory of competitive advantage which has been continually extended and challenge the theory by other scholars. Barney (1991) presented

that, to sustain a competitive advantage a firm's resources and capabilities must have four essential characteristics of strategic resources that need to be addressed (1) they must be valued or be able to generate value within the organization by creating opportunities and solving threats in the environment, (2) they must be must be hard to find or rare, (3) they must not be imitated or being difficult to imitate, (4) they must be non-substitutable (Barney, 1991; Barney & Wright, 1997; Barney, Wright & Ketchen, 2001; Westhead, Wright & Ucbasaran ,2002). Resource-based View theory has since been recognized as a key theoretical paradigm of determinant the export performance literature (Matanda & Freeman, 2009).

1. **Valuable**: Resources are valuable if they can generate strategic to the firm. The valuable resources can exploiting market opportunities or helps in reducing market threats. There is no advantage to possess a resource if it does not enhance value to the firm. Lacity, Willcocks and Feeny (1996) suggest that Barney's 1991 concept of valuable is obscure to measure the competitive advantage of a firm. To measure whether the resource is valuable or not should measure by its profitability, and accordingly it should take the form of an economic asset irrespective of how tangible or intangible it is.

2. Rare: Resources must be difficult to find among the existing and potential competitors of the firm. Hence resources must be rare or unique to offer competitive advantages. Resources that are possessed by a several firms in the market place cannot provide competitive advantage, as they cannot design and execute a unique business strategy in comparison with other competitors;

3. Imperfect Imitability: Imperfect imitability means making copy or imitate the resources will not be feasible. Bottlenecks for imperfect imitability can be many viz., difficulties in acquiring resource, ambiguous relationship between capabilities and competitive advantage or complexity of resources. Resources can be basis of sustained competitive advantage only if firms that do not hold these resources cannot acquire them;

4. Non-Substitutability: Non-substitutability of resources implies that resources can't be substituted by another alternative resource. Here, competitor can't achieve same performance by replacing resources with other alternative resources.
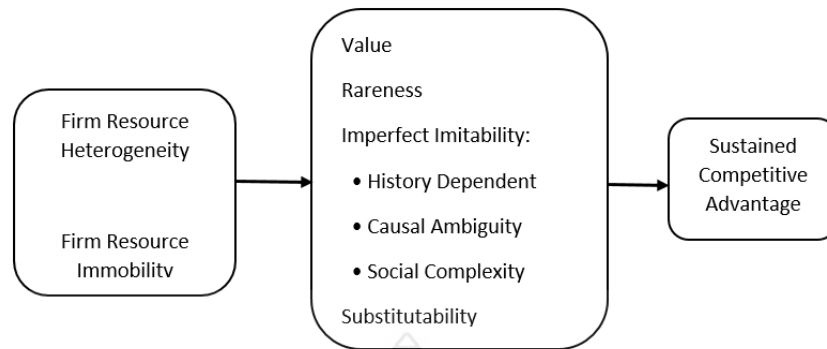
(Reproduced from Barney, 1991: 112)

Figure 2.2 Barney 1991 Resource-based Model of Sustainable Competitive Advantage

Fahy's (2002) resource-based model of sustainable competitive advantage in a global environment, presented in Figure 2.2 links not only the firm-level resources, competences and performance but it is extended to include the country-specific resources of both country-of-origin and host country.
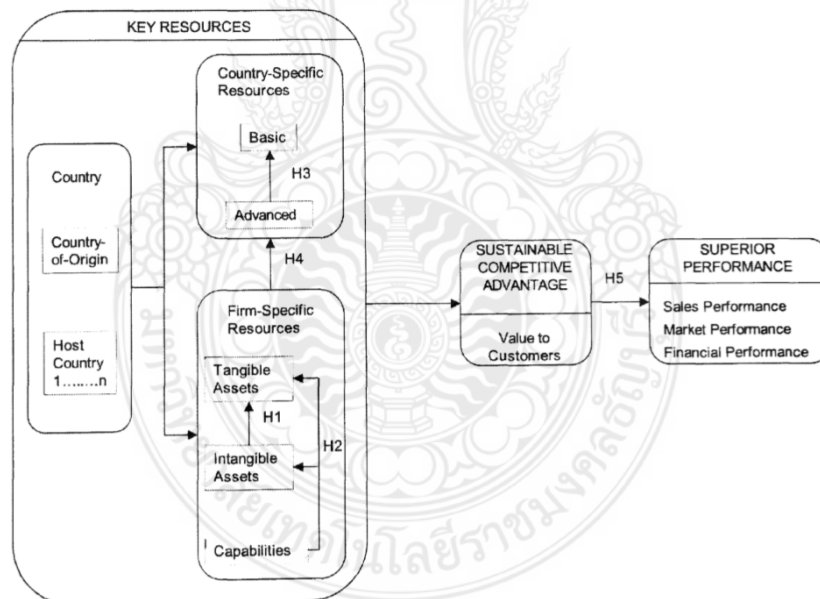
(Reproduced from Fahy, 2002: p 63)

Figure 2.3 Fahy 2002 Resource-based Model of Sustainable Competitive Advantage

Fahy (2002) distinguishes between three generic groupings of firm's resources:

- Tangible assets - plant and equipment, land, other capital goods and stocks, debtors and bank deposits.

- Intangible assets - trademarks, patents, trade secrets, network and reputation.
- Capabilities - skills, team work, organizational culture and relationships between management and workforce.

Fahy (2002) has argues that in a global environment capabilities are a more important source of competitive advantage than intangible assets, which are yet more important than tangible assets. Capabilities are the firm's most important resource in a global environment "because they are either skill-based or interaction-based", have "varying levels of tacitness and complexity" and therefore are difficult to duplicate (Fahy, 2002: p 127).

(Reproduced from Majlesara, 2014)

Figure 2.4 Majlesara 2014 Model of Sources of Superior Performance in Exporting

Majlesara (2014) Has note that competitive skills in export can be considered as an essential contributor to the company's competitive advantage. Accordingly, this competitive advantage produces superior export performance. Besides, Piercy, Kaleka, and Katsikeas (1998) in their study of UK exporters, found that there is a gap between high and low export performers in the possession of these critical competitive skills in exporting.
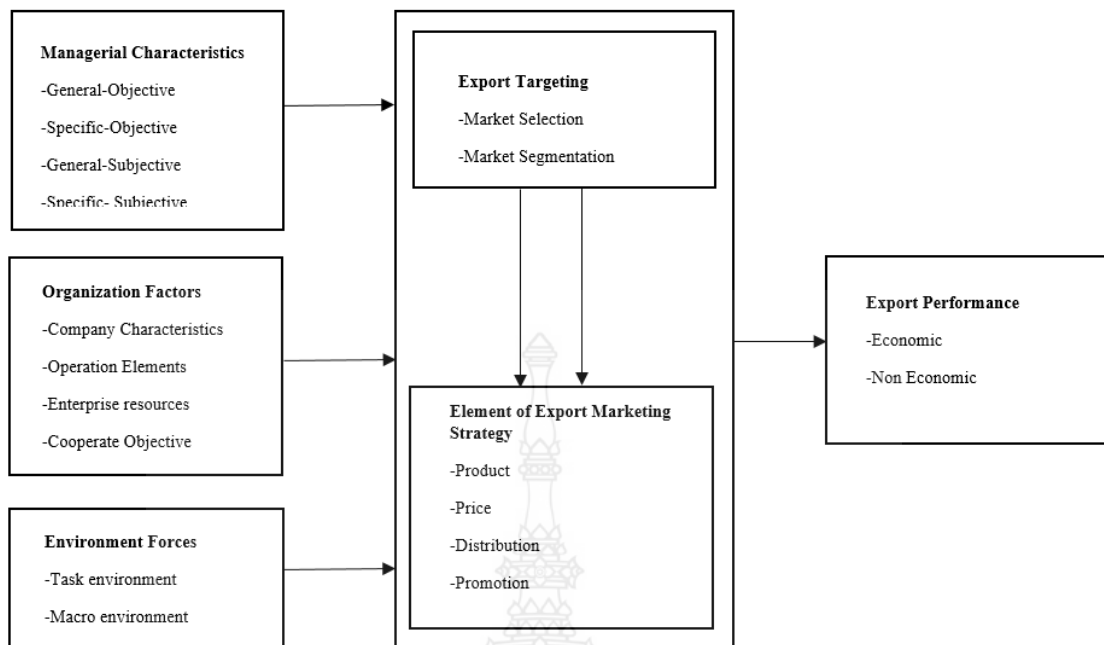
(Reproduced from Leonidou, Katsikeas and Samiee, 2002: 52)

Figure 2.5 Leonidou, Katsikeas and Samiee's (2002) Model of Export Performance

Leonidou, et al. (2002) propose a simplified export performance model based on three distinct sets of variables identified in their analysis of the export marketing strategy literature. The model shown in Figure 2.5 is used to assess the association between export marketing strategy and performance. The analysis indicated significant association between the marketing strategy variables and the overall export performance. The central conclusion of the study is that an implementation of a well-designed export marketing strategy determines the export success.

The Resource-based view has since used as the theoretical basis for the export activity, based on the different resources and capabilities of the firm (Morgan et al., 2004). The Resource-based view (RBV) explain a firm resource consisted with two category tangible resource and intangible resource that enables the firm to perform strategy that means to improve the efficiency and effectiveness of the firm (Barney, 1991; Wernerfelt, 1984).

The Resource-based view has explain the theoretical of organization success and sustainable competitive advantage (Eisenhardt & Martin, 2000.). The internal assess

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are the organization competitive capability that is important to create sustain competitive advantage (Lorenzoni & Lipparini, 1999).

2.4 Overview of Export Performance

With the growing globalization of the world economy, there has been increasing concern regarding export performance. Export performance has been conceptually defined as the outcome of a firm's activity in an export market (Toften & Olsen, 2003). There seems to be general agreement that export performance is a multi-dimensional construct and comprises export effectiveness, export efficiency and adaptiveness (Aaby & Slater, 1989; Gertner, Gertner & Guthery, 2006).

Exporting is one of the significant preliminary steps of an enterprising organization activity to expand the business in the global market. There is a number of empirical literature has uniformity in conceptualization, definition and measurement of export performance and extended to studies in the difference countries or context. (Eusebio, et al, 2007). This has contributed to the challenge of identifying and understanding the antecedents of export performance (Madsen, 1989; Zou, Taylor & Osland, 1998. Many studies are the topics approached in the export literature (Morgan et al., 2004). Most of the studies suggest that the competitive advantage and export performance come from the company's ability to answer to the external environment and developing export strategy (Hitt et al., 1997; Zou et al., 2003; Gabrielsson et al., 2012).

To identify the key themes in export performance studies and in the literature, Table 2.1 sets out details of studies that have tested determinants of export performance. While the studies in Table 2.1 focus on the last thirty-three years. The sixty-eighth studies summarized in Table 2.1 have reported export performance as their dependent variable. Ten columns of Table 2.1 set out the research design and sampling adopted by the studies which include, data collection methods (Column 2), industry sector (Column 3), sample size (Column 4), size of business sampled (Column 5), country focus (Column 6), Independent Variables (Column 7), dependent Variables (Column 8), Export performance measurement (Column 9), and finally the analytical approach for theory testing (Column 10). The various measures of export performance, objective, strategic

and subjective are list is not exhaustive, it does include some of the most influential publications in this field over the past thirty-three years.

Table 2.1 Summary of Export Performance Research

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Researchers	Data collection methods	Industry focus	Sample size (useable)	Size of firms sampled	Country	Independent Variables	Dependent Variables	Export performance measures	Analytical approach
Gomez-Mejia and Luis R, 1988	Survey	Manufacturing	501 (38.54%)	Mixed	USA	Firm characteristics (Human resource)	Export performance	Objective	Regression
Bijmolt and Zwart, 1994	Survey	Mixed	cluster	SME	Netherland	Firm characteristics	Export performance	Objective Subjective	Regression
Das,1994	Interview	Mixed	58	Mixed	LDC	Organization characteristics	Export performance	Objective	Discriminant
Katsikeas, Piercy and Ioannidis, 1996	Survey	Greece firm exporting to EU	89 (92.6%)	Mixed	Greek	Firm characteristics Export relate variable Export commitment	Export performance	Objective	Lease square Regression
Hoang, 1998	Survey	Manufacturing	863 (51%)	Mixed	New Zealand	Firm characteristics (size)	Export performance	Objective	Correlation coefficients
Thirkell and Dau,1998	Survey	Manufacturing	323 (50.3%)	Mixed	New Zealand	firm characteristics strategy marketing orientation	Export performance	Objective Subjective	Pairwise correlation
Styles, 1998	Survey	Mixed	323 (37.0%) 202 (35.0%)	SME	Australia UK	Organization Characteristics Produce characteristics Export market strategy	Export performance	Subjective	SEM
Hart and Tzokas,1999	Survey	Mixed	150 (30%)	SME	UK	Export marketing research activity	Export performance	Objective	Regression

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Beamish et al., 1999	Survey	Mixed	500 (51.8%)	Medium large	Australia	firm characteristics	Export performance	Objective	Correlation regression
Francis & Collins-Dodd, 2000	Survey	High-Technology	170 (51.8%)	SME	Canada	Export orientation	Export performance	Objective Subjective	Regression
Wolff & Pett, 2000	Survey	Mixed	1,600 (32%)	Small	USA	Firm size	Export performance	objective	ANOVA
Olson & Gough, 2001	Survey	Mixed	452 (17%)	Small	USA	Export planning	Export performance	Not clear	Chi-square
Peng & York, 2001	Survey	Mixed	915 (21%)	Mixed	USA	Firm ability	Export intermediary performance	Objective Subjective	Multiple regression
Prasad et al., 2001	Survey	Mixed	2,019 (19.1%)	Mixed	USA	Market orientation	Export performance	Objective Subjective	ANOVA
Cadogan et al., 2002	Survey	Mixed	2,205 (81%)	Mixed	Finland	Export market orientation	Export performance	Objective Subjective	SEM
Cadogan et al., 2002	Survey Interview	Mixed	2,036 (22%-36%)	Mixed	USA	Export market orientation	Export performance	Objective Subjective	SEM
Samiee & Walters, 2002	Survey	Mixed	880 (25.3%)	Mixed	USA	Firm characteristics	Export performance	Objective	SEM
Shoham et al., 2002	Survey	Mixed	1,996 (17.2%)	Mixed	Australia	Firm strategic	Export performance	Objective	Regression

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Cadogan et al.,2003	Survey	manufactory	800 (23%)	Mixed	Hong Kong	Competition EMO behavior Technology	Export performance	Objective	SEM
Akyol & Akehurst, 2003	Survey	Textile and apparel	156 (66%)	Mixed	Turkey	Export market orientation	Export performance	Objective Subjective	regression
Dhanaraj & Beamish, 2003	Survey	Mixed	468 (15 %) 369 (24.1%)	SME	USA and Canada	Firm size Enterprise	Export performance	Objective Subjective	SEM
Julian, 2003	Survey	Mixed	1,000 (15.10%)	SME	Thailand	Firm characteristics	Product characteristics	Not clear	Multiple regression
Morgan et al., 2003	Survey	Mixed	UK 243 (43%) China 198 (88%)	Mixed	U.K./China	Experience, information knowledge	Adaptive performance	Subjective	Multiple disciminant
O'Cass & Craig, 2003	Survey	Mixed	1,132 (58%)	Mixed	Australia	Firm characteristics Environment	Marketing performance	Subjective	SEM
Spence, 2003	Survey	Mixed	(67%) (133)	SME	U.K.	Firm structural, knowledge characteristic Market characteristics	Export performance	Not clear	Multiple Regression
Ali, 2004	Survey	food	300 (67 tot)	Mixed	Australia	Firm characteristics	Export performance	Not clear	Regression
Cadogan & Cui, 2004	Survey	Mixed	414 (50%)	Mixed	China	Market orientation	Export success	Objective	SEM

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Lages & Montgomery, 2004	Survey	Mixed	1,967 (23.33%)	SME	Portuguese	Marketing strategy	Current adaptation of the marketing mix	Subjective	SEM
Ogunmokun & Ng, 2004	Survey	Mixed	596 (37.5%)	SME	Australia	Firm characteristics	Export performance	Objective	SEM
Brouthers & Nakos, 2004	Survey	Mixed	(34%)	SME	Greece	Firm and managerial characteristics	Export performance International sales	Not clear	Regression
Lages & Montgomery, 2005	Survey	Mixed	2,500 (22%)	SME	Portuguese	Management international experience Export market competition	Export performance improvement	Subjective	SEM
Lages & Montgomery, 2005	Survey	Mixed	2,352 (23%)	SME	Portuguese	Management international experience Export market competition	Export performance improvement	Objective Subjective	SEM
Contractor et al., 2005	Survey	Software	450 (10.4%) 587 (10.2%)	SME	India Taiwan	Firm characteristics	Export performance	Objective	ANOVA
Mostafa et al., 2006	Survey	Mixed	960 (29.8%)	SME	U.K.	Internet commitment	Export performance	Objective Subjective	SEM
Duenas-Caparas, 2007	Survey	Mixed		Mixed	Philippines	Firm characteristics	Export performance	Subjective	OLS

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Ural, 2008	Survey	Mixed	300 (100%)	SME	Turkey	Information sharing Communication quality Long-term orientation Satisfaction	Export performance Strategic export performance Satisfaction with export venture	Objective Subjective	SEM
Lages et al., 2008	Survey	Mixed	2,352 (22%)	SME	Portuguese	Management forces Export performance in preceding year Export market force	Export performance improvement in current year	Objective Subjective	SEM
Koksas, 2008	Survey	Mixed	350 (29%)	Mixed	Turkish	Information sources Information type	Export performance	Objective	Multiple regression
Lages et al., 2008	Survey	Mixed	2500 (22%)	Mixed	Portuguese	Management force Export performance in preceding year Export market forces	Export performance	Subjective	SEM
Mavrogiannis et al., 2008	Survey	food and beverage	155/103	Mixed	Greek	Export market attractiveness Export competencies, Management	Export marketing mix Entrepreneurial orientation Trade barriers Export problems	Objective Subjective	SEM

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Maurel, 2009	Survey	French wine	214(29%)	SME	French	Resource and competency Export strategy	Export performance	Objective Subjective	regression
Oyenniyi, 2009	Survey	Mixed	50 (82%)	Mixed	NIGERIAN	Controllable force Uncontrollable force Marketing strategy	Export performance	Objective Subjective	regression
Sohail & Alashban, 2009	Survey	Mixed	214 (24 %)	SME	Saudi Arabia	Product characteristics Export market characteristics Export market strategy	Export performance	Objective Subjective	Multiple regression
Boehe & Cruz, 2010	Survey	Mixed	3,356 (7.5 %.)	medium and large	Brazil	Product quality Product innovation CSR product	Export performance improvement	Objective Subjective	Multiple regression
Ling & Lim, 2010	Survey interviews	PRC contractors	100 (37%)	Mixed	China	Firm characteristics	Export performance	Subjective	Not clear
Tooksoon & Mohamad, 2010	Survey	Agro-based	15.26%	Mixed	Thailand	Marketing capability	Export performance	Objective	SEM
Carneiro et al., 2011	Survey	manufactured	448 (15.5 %)	large	Brazilian	External environment Firm characteristics Strategy	Export performance	Objective Subjective	SEM

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Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Zaiem & Zghidi, 2011	Survey interviews	Mixed	120 (100%)	Mixed	Tunisia	Internal characterizes External characteristics Product adaptation strategy	Export performance	Objective Subjective	Regression
Ibrahim & Ogunyemi, 2011	Survey	Textile and clothing	310 (63)	Mixed	Egypt	Linkages Information sharing	Export performance	Objective Subjective	Linear regression
Cadogan et al., 2012	Survey	Mixed	1,205 (81%)	Mixed	Finland	Export flexibility EMO	Export performance	Objective	SEM
Lengler & Marques, 2013	Survey	Mixed	197 (75%)	Mixed	Brazilian	Customer orientation Competitor orientation Competitive intensity	Profit Sale	Objective Subjective	SEM
Adu-Gyamfi & Korneliussen, 2013	Survey	Mixed	100 (73%)	SME	Ghana	Resource commitment Management experience Firm size Degree of internationalization	Export performance	Subjective	SEM
Singh & Mahmood, 2013	Survey	Mixed	779 (29%)	SME	Malaysia	Export market orientation	Export performance	Objective Subjective	Regression

Table 2.1 Summary of Export Performance Research (Cont.)

(1) Researchers	(2) Data collection methods	(3) Industry focus	(4) Sample size (useable)	(5) Size of firms sampled	(6) Country	(7) Independent Variables	(8) Dependent Variables	(9) Export performance measures	(10) Analytical approach
Freeman & Styles, 2013	Survey	Mixed	1,080 (14%)	SME	Australia	Location Resource Capability	Export performance	Subjective	Least squared
Rock & Ahmed, 2014	Survey, interview	Mixed	480(28%)	Mixed	Chile	Resource Capability	Export success	Objective Subjective	regression
Lin et al., 2014	Survey	Machinery	1,600 (15.25%)	large	Taiwan	Inter-firm relationship Commitment Trust Social Interaction Power EMO	Export Performance Strategic Performance Financial Performance Competitive Performance	Objective Subjective	SEM
Majlesara et al., 2014	Survey	Mixed	157 (42%)	Mixed	Iran	Resource Skill Competitive advantage	Export performance	Objective Subjective	Regression
Palma et al., 2014	Survey	jewelry	70 (46%).	Mixed	Brazilian	Sustainable strategic	Export performance	Objective Subjective	regression
Behyan et al., 2015	Survey	Mixed	536 (19.48%)	Mixed	Malaysia	Internationalization orientation	Export performance	Objective Subjective	regression
Pinho, 2015	Survey	Mixed	750 (16%)	SME	Portuguese	Social capital Commitment	Export performance	Objective	

Table 2.1 Summary of Export Performance Research (Cont.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Researchers	Data collection methods	Industry focus	Sample size (useable)	Size of firms sampled	Country	Independent Variables	Dependent Variables	Export performance measures	Analytical approach
Boso et al., 2016	Survey	Mixed	3324 (9.4%)	SME	Ghanaian	Simultaneous entrepreneurial Market orientation Financial capital	Export performance	Subjective	SEM
Özdemira et al., 2017	Survey	Mixed	20.000(2.2%)	Mixed	Turkey	Sale factor Human factor Country factor	Export performance	Objective	SEM
Viet et al., 2017	Survey	seafood	350(87.14%)	Mixed	Vietnam	Characteristics and capabilities Industry characteristics Management characteristics Foreign market characteristics Domestic market characteristics	Export performance	Subjective	SEM

Research design. Column (2) review of thirty-three year previous study there is two study by Cooper and Kleinschmitd, (1985) and Das, (1994) adopted a conventional descriptive research approach reporting quantitative methods in testing research hypotheses. Mail surveys were used for data collection in all other studies perhaps to overcome difficulties in reaching firms that were geographically dispersed. Such difficulties are exacerbated in the case of cross cultural studies, where firms were located in different countries as was the case in the studies report by Zou, Taylor and Osland (1998), Styles (1998), Styles and Ambler (2000), Stottinger and Holzmuller (2001), Raymond, Kim and Shao (2001), Dhanaraj and Beamish (2003), Lages and Lages (2004) and Calantone et al. (2006). This research also faced the challenge of geographically dispersed respondents and due to the nature of the respondents, therefore opted for an online mail survey.

Industry sector. Forty-seven of the research studies as shown in Column (3) have drawn samples from mixed industry sectors whereas eleven studies have focused on manufacturing firms generally. Twenty-one studies have focused on just one industrial sector in order to control for industry specific influences, such as type of product and level of technology. However according to Leonidou, Katsikeas and Piercy (1998) this single industry approach does not permit generalization of results to other industry sectors as it introduces doubt on external validity of the findings.

Sample size. Column (4) All but twenty of the studies reported sample sizes less than three hundred even though a high sample size allows for more sophisticated statistical analysis. For the studies that reported smaller sample sizes, external validity and generalizability remain an issue as the results obtained may not be representative of the population (Sousa 2004).

Size of firms sampled. Thirty-eight studies collected data from businesses of mixed or undetermined sizes. Twenty-two studies specifically focused on SMEs however there is two studies focused on medium and large business, two studies only focused on large business and two studies only focused on small business as shown on table 2.1 column 5.

Country focus. Results captured in the 1985s were predominately from the United States whereas from 2000, studies from Canada, Australia, the United Kingdom,

New Zealand and other origins become more prevalent as well as cross-cultural studies comparing between two difference context country focus such as the Australia and the United Kingdom, Israel and Australia, USA and Canada and the United Kingdom and China.

Independent variable. The studies of export performance were primarily implicating with the theory of competitive advantage witch mostly focus on effect of firm's resources on export performance. The evidence literature review proved that firm's resources was most popular predictor variable with twenty-nine studies. Firm's capabilities was the next most popular variable tested and cited in ten studies. Moreover, the variable often founded to be cited are in the field of marketing such as marketing strategy with eight studies and market orientation with five studies. The remaining variables follow by firm' strategy, export orientation, environment and supply chain is becoming the emerging issue that the researcher has challenge to prove the relationship on export performance.

Dependent variable - export performance. Export performance has been measured using objective and subjective indicators. Objective measures of export performance are by far the most frequently cited across the spectrum of studies in Table 2.1. However, strategic and subjective measures have become more popular in the last decade with a growing number of researchers preferring multiple measures of export performance.

Analytical approach. Statistical analysis covered in Table 2.1 verified that the level of statistical sophistication has advanced since the 1985s. The majority of the studies use multivariate data analysis techniques such as factor analysis, multiple regressions and more recently structural equation modeling with eight studies adopting this more complex data modeling approach.

Having summarized some of the most prominent export performance studies dating back to 1985, Section 2.4 will now provide an in depth analysis of the dependent variable export performance and highlights the most popular measurement items used for data collection. Section 2.5 will then investigate the construction of firm factor. Sections 2.5.1 and 2.5.2 will critique the literature to establish if firm resources and firm capabilities have been found to impact export market strategy and export performance.

Section 2.5.3 will examine the export market strategy and evaluate if these factors in fact impact on a firm's export performance.

2.5 Measurement of Export Performance

Export performance measurement is an important instrument to analyze the level of company's international success in an international context. There has been several of research published in the past four decades on the area of determinants of export performance according to Aaby and Slater (1989), Bilkey (1978), Chetty and Hamilton, (1993), Madsen (1987) as well as Cavusgil and Kirpalani (1993), there still remain criticize for a conclusions that can indicate firms in their export performance.

The evidence on the measures of export performance has indicate fragmented and conflicting results. Differences either on the definition or conceptualized and operationalized. Sousa (2004) indicate that export performance measurements may be problem driven rather than theory driven, as studies on export performance differ in definitions and address different problems. Flor and Oltra (2005) suggest that the most argument on export performance measurement relate to unit of analysis, number and type of dimensions that should be included in the analysis whether on objective or subjective indicators. Styles and Ambler (1994) also called for future research to empirically test a comprehensive list of variables that might influence export performance.

An overview of the relevant literature indicate that measurement of export performance can be classified into two categories, objective measurement and subjective measurements. The indicators using for measure objective export performance are mainly based on absolute values such as export sales volume, export profit margin, export market share while the indicators using for measure subjective export performance are based on perceptual values such as the manager's perception of success and satisfaction with export sales. Beleska-Spasova (2014) note that the measurement of export performance should fulfil with: i) be composite and multidimensional. ii) having a frame of reference. iii) be assessable over time and iv) reflect the firm's strategic goals at the appropriate level (Beleska-Spasova, 2014).

Table 2.2 Categorizing Objective and Subjective Measures of Export Performance

Studies	Export Performance Measures	
	Objective	**Subjective**
Cooper & Kleinschmidt, 1985	Export Intensity	-
	Export growth	
Gomez-Mejia & Luis, 1988	Export Sales	-
Walters & Samiee, 1990	Export Intensity	-
	Export Profit	
	Export Sales	
Dominguez & Sequeira, 1993	Export Intensity	-
	Export Sales	
Cavusgil & Zou, 1994	Export Profit	Goals
	Export Sales	Success
Bijmolt & Zwart, 1994	Export Profit	Satisfaction
	Export Sales	Perceived
Mallika, 1994	Export Sales	-
Katsikeas et al., 1996	Market share	-
	Export Sales	
	Export Profit	
Hoang, 1998	Export Intensity	-
	Export growth	
Thirkell & Dau, 1998	Export market share	satisfaction
	Export Profit	
Shoham, 1999	-	Satisfaction (export sales, export profit)
Beamish et al., 1999	Export Intensity	-
	Export growth	
Francis & Collins-Dodd, 2000	Export Sales	Attitude toward overall export
Wolff & Pett, 2000	Export sales	-
Peng & York, 2001	Export Sales	Perceived
Prasad et al., 2001	Sales growth	satisfaction
	Export Profit	
Cadogan et al., 2002	Export Sales	satisfaction
	Export Profit	
Shoham et al., 2002	-	Success (export activity, export sales)

Table 2.2 Categorizing Objective and Subjective Measures of Export Performance (Cont.)

Studies	Export Performance Measures	
	Objective	Subjective
Cadogan et al., 2002	-	Satisfaction (export sales, export profit export market share)
Samiee & Walters, 2002	Export Sales Export transaction	-
Cadogan et al., 2003	Export sales Export sales growth Export profit	-
Akyol & Akehurst, 2003	Export sales Export growth	Satisfaction (export operation, competitive performance, overall export performance)
Dhanaraj & Beamish, 2003	Export Profit Market share and growth	Perceived
Cadogan & Cui, 2004	Export sale growth (last 3 year, compare to average industry)	
Ogunmokun & Ng, 2004	Export sale Export growth Export Profit	-
Contractor et al., 2005	Export intensity Export growth	-
Mostafa et al., 2006	Sales growth Export Profit	Achievement
Duenas-Caparas, 2007	Export sale	-
Altıntas ,2007	-	Perception (export intensity) Satisfaction (overall export performance) Export market penetration Achievement (export success)
Lages et al, 2008	Export intensity	Achievement (performance) Satisfaction (performance)

Table 2.2 Categorizing Objective and Subjective Measures of Export Performance (Cont.)

Studies	Export Performance Measures	
	Objective	**Subjective**
Karelakis & Mattas, 2008	Export intensity Export growth Export Profit Market diversification. (scale)	Perception (overall export performance)
Koksas, 2008	Export intensity	-
Lages et al., 2008		Achievement (performance) Satisfaction (performance)
Mavrogiannism et al., 2008	Export sales growth	Satisfaction with achievement (performance)
Ural,2008	-	Perception (overall export performance)
Oyenniyi, 2009	Profit Sales	Achievement (performance)
Sohail & Alashban, 2009	-	Perception (performance)
Boehe & Cruz, 2010	Export volume Export Profit	Satisfaction (overall performance)
Ling & Lim, 2010	-	Perception (performance)
Tooksoon & Mohamad, 2010	Export sales growth Export profit	-
Zaiem & Zghidi, 2011	Export sales volume Export profit Market share	Achievement (export venture) Satisfaction (exporting venture)
Freeman et al., 2011	Export sales Export profit	Satisfaction (export profit, customer satisfaction)
Ibrahim & Ogunyemi, 2011	Export sales Export profit	Achievement (marketing performance)
Carneiro et al., 2011	-	Satisfaction (export revenues, export growth, export profitability)
Cadogan et al., 2012	-	Satisfaction (export performance, export sales volume, export market share, achievements over the past three years)

Table 2.2 Categorizing Objective and Subjective Measures of Export Performance (Cont.)

Studies	Export Performance Measures	
	Objective	**Subjective**
Lengler & Marques, 2013	Export sales	Perception (competitive intensity)
	Export profit	
Mysen, 2013	-	Satisfaction (goal achievement, strategic performance, selling performance, relationship survival)
		Perception (competitive intensity)
Adu-Gyamfi & Korneliussen, 2013	-	Satisfaction (overall export performance)
Singh & Mahmood, 2013	Export sales	Perception (competitive intensity)
	Export profit	
Freeman & Styles, 2013	-	Satisfaction (overall export performance)
Rock & Ahmed, 2014	Growth rate of exports	Perception (competitive intensity)
Lin et al., 2014	Export sales	Satisfaction (overall export performance)
	Export profits	
Majlesara et al., 2014	Export sales	Perception (competitive intensity)
	Export profits	
Palma et al. , 2014	Exports growth	Perception (competitive intensity)
	Export profits	
Behyan et al., 2015	Exports growth (growth)	Perception (competitive intensity)
	Export profits (growth)	
Tan & Sousa, 2015	Export profits	Perception (competitive intensity)
	Return on investment	
	Export sales	
	Sales growth	
Pinho, 2015	Export sales growth	-
	Export profit	
	Export sales	
	Export market share	
	(five-point Likert scale)	

Table 2.2 Categorizing Objective and Subjective Measures of Export Performance (Cont.)

Studies	Export Performance Measures	
	Objective	Subjective
Boso et al., 2016	-	Achievement (marketing performance, overall performance)
Prima et al., 2016	Export Intensity Market diversification	Satisfaction (export revenues, export intensity)
Özdemira et al., 2017	Export sales volume Export profitability (five-point Likert scale)	-
Viet et al., 2017		Perception (export intensity) Satisfaction (overall export performance) Achievement (export success)

2.5.1 Objective Measures of Export Performance

Objective measures are widely accepted indicators to measures export performance of the firm. Objective measurement are based on certain values (Akyol & Akehurst, 2003; Sousa, 2004, Spasova, 2014). It's uncomplicated to aggregate the performance of the firm. Objective measurement related to sales, profit, and growth rate or market performance. Though, objective measurements are widely accepted indicators and provide objective comparisons that all stakeholders can understand, still there a major problems for empirical studies that has been commonly cited was to Collecting actual financial data because the firm tend to be privately owned and are generally disconcerted to reveal sensitive financial information to researchers (Nakos, Brouthers & Brouthers, 1998; Wolff & Pett, 2006). Furthermore, some company financial data are obscure, they look unclear between domestic and export financial data (Deshpande & Farley, 2004; Leonidou, Katsikeas & Samiee, 2002).

Madsen (1987) has specified the objective measures of export performance into three sub-dimensions: sales, profits and change. Each of sub-dimensions can be analyzed into objective measure and satisfaction-based measures (Madsen, 1987). Shoham (1998)

suggest that the three sub-dimensions offer different views of export performance as indicate by the uniqueness or the strategic goal of the firm, as the firm may have high profitability and can be disappointed on market share or sales growth. Zou & Stan (1998) specify the objective measures comprise with sales measures, profit measures and growth measures. Sousa (2004) has analyzed objective measures into five dimensions which are export intensity, export profitability, export sales growth, export sales volume and sales efficiency (Sousa, 2004). Sousa (2004) argued the using of sales related measurement that sales values of new product on a large foreign market may overstate export performance, which differ from the sale value on a small foreign market may performed a high market share. The objective items such as return on assets, return on investments and export market share can use in considering the measurement of export profitability. Lages et al., (2008) and Lages (2004) note that the managers are generally give more focus on the short-term performance than the long-term because it relates to their own personal interests. Even though the long-term performance is crucial, it's not easy to focus on the future if the export activities of the short term are unsuccessful (Lages, 2004).

The evidence from previous studies indicate that acquiring the precise financial data especially a long-term period data is an important issues challenge researchers to be concerned about, while the managers may not respond openly for the real financial data (Gertner, Gertner & Guthery 2006). Therefore, these would be the problem researchers must aware to achieve collecting data of export performance which to understand predictors of this construct.

2.5.2 Subjective Measures of Export Performance

Subjective measures based on the perceptual values, it rely on the respondents of manager's satisfaction on export performance towards the success of export activities. The measurement are involve to achievements of strategic goals such as competitiveness improvement or increasing the market share (Das, 1994; Morgan et al., 2004; Solberg, 2002). Furthermore, there have been mentioned that subjective measurement of export performance are highly correlated with objective measures (Chetty & Holm 2000; Racela, Chaikittisilpa & Thoumrungroje 2007; Wilkinson & Brouthers 2006). The measurement of subjective indicators mainly compared to the firm's competitors or determine by the firm's expectations. (Diamantopoulos & Kakkos, 2007). Export performance satisfaction

can be indicated by point scales ranging from "very unsatisfied" to "very satisfied" (Lages et al., 2008b). In cases of the managers are unable to produce financial data, subjective measurement has been recommended to summarize or determine the performance of the firm (Robertson and Chetty, 2000). Subjective measures are proven a valid and reliable indicators in measuring long-term performance (Lages and Sousa, 2010).

Table 2.2 shows that satisfaction with the export performance is the most preferred subjective measure of export performance. A firm can realize success if performance is better than or equal to expected export performance and realize failure if export performance is lower than expected" Lages and Lages (2004, p. 39). From literature review has reveal that the export managers felt more comfortable to provide their subjective responses in regards to export performance without any reference to specific financial data (Madsen, T. 1998; Wilkinson & Brouthers 2006). Robertson and Chetty (2000) and Gertner, Bertner and Guthery (2006)

2.6 Construction of Firm Factors

2.6.1 Firm Resource

Recent studies have examined the contribution of the resources of firms in order to achieve an advanced position in the export markets, comprising with the firm's resource such as experience, information systems, firm size, material resources, financial resources, connection relationship with customer, pricing, distributions, communication and the capability for product development (Sahut et al., 2013). The value of the resources and capabilities explain the variation in the business performance (Makadok, 2001). From this perspective, the firm use the resources and the capabilities to achieve an export performance. Most of the studies suggest that the competitive advantage and export performance come from the ability to respond to the external environment, developing and actuate an export strategy (Hitt et al., 1997; Zou et al., 2003; Gabrielsson et al., 2012).

Recent studies have examined the contribution of the capabilities and resources in order to take advantage positioning in export markets, such as experience, material resource, financial resources and capital, information systems, relations with customer and client, pricing, distributions and the capability for product development (Sahut et al., 2013).

A range of researcher have establish lists of firm resources that enable firms to strengthen their strategies. However, for the purpose of this thesis, firm resources will be consisted by four variables: physical resources, human resources, organizational resources and financial resources (Barney, 1991; Haber & Reichel, 2007; Morgan, R. & Hunt, 1999). Physical resources are involve to the firm's technology and production capacity. Human resources are comprising with intangible assets such as management experience and commitment. Organizational resources are consisted the planning, coordination processes and systems within the firm. Financial resources represent the capital available for a firm to develop export markets.

Table 2.3 Summary of Firm Resource Literature

Author	Firm Resources			
	Physical	**Human**	**Organizational**	**Financial**
Caparas & Teresa, 2007		Experience	Planning	Capital
Maurel, 2009	Production	Experience		
Oyenniyi, 2009	Production	Experience	Planning	
Sohail, 2009	Production			
Solberg & Olsson, 2009	Technology Production			
Boehe & Cruz, 2010	Technology Production			
Ling & Lim, 2010	Technology Production			
Zaiem & Zghidi, 2011	Technology Production	Experience		
Carneiro et al., 2011			Planning	
Torrens et al., 2014			Planning	
Freeman & Styles, 2014		Experience	Planning	
Majlesara et al., 2014		Experience	Planning	
Rock & Ahmed, 2014	Production	Experience	Planning	Capital
Boso, 2016				Capital

Table 2.3 Summary of Firm Resource Literature (Cont.)

Author	Firm Resources			
	Physical	Human	Organizational	Financial
Pinho, 2016			Planning	Capital
Özdemira et al., 2017		Experience		Capital
Viet et al., 2017	Technology	Experience	Planning	

The measures used to capture a firm's resources include physical resources (technology and production capacity), human resources (experience and commitment), organizational resources (planning and coordination) and lastly financial resources (available capital). Commitment proved to be the most popular predictor variable with fifteen studies adopting this measure.

Table 2.4 Association Between Firm Resource and Export Market Strategy and Export Performance

Literature	Association with Export Market strategy	Association with Export Performance
Aaby a& Slater, 1989	(+)	
Bijmolt et al., 1994	(+)	
Katsikeas et al., 1995		(+)
Hoang & Peter, 1998	(+)	(+)
Caparas & Teresa, 2007		(+)
Maurel, 2009		(+)
Oyenniyi, 2009	(+)	
Sadiq Sohail 2009	(+)	(+)
Solberg & Olsson, 2009		(+)
Boehe & Cruz, 2010		(+)
Ling & Lim, 2010		(+)
Zaiem & Zghidi 2011	(+)	
Carneiro et al., 2011	(+)	(+)
Majlesara et al., 2014	(+)	(+)
Pinho, 2016		(+)
Viet et al., 2017	(+)	(+)

Table 2.4 the studies concluded that firm resource was a strong predictor to export market strategy and export performance.

2.6.2 Firm Capabilities

It has been agreed that the capabilities are the organizational processes through the resources availability are developed and transformed into an offer value for the export market (Day, 1994; Porter, 1998; Hunt, 2000; Leonidou et al, 2011; Magretta, 2012, Rock & Ahmed, 2013). A number of studies claim that the development of firm capabilities or market based assets is possibly more important than firm resources (Doole, Grimes & Demack, 2006; Ibeh, 2003; Morgan, Kaleka & Katsikeas, 2004; Sapienza et al., 2006; Rock & Ahmed, 2013).

The previous studies had attempted to identify key factors that contributed to successful export marketing. The literature has long considered firm capabilities critical for export success. There was a dramatic contrast between high and low export performers that possessed information, relationship and product development capabilities (Piercy et al. 1998). First, market research activities or information capabilities implies that information acquisition is a precondition to make rational market entry decisions to achieve high export performance (Wolff & Pett, 2006). Second, relational factors, such as personal contact, communication with channel members and maintaining positive working relationships with distributors, can increase the chances of export success (Styles & Ambler, 2000; Lages et al., 2009a). Finally, firms arguably need to develop new products, or modify existing products periodically to gain or sustain their competitive advantage to deliver new products of higher uniqueness that in the long term allows for better.

Table 2.5 are review of ten year previous studies that have explored capability development. Information capability was reported in six studies, relationship capability in six studies and product development capability in nine studies. However, looking at studies that specifically tested the influence of these three variables on export performance, product development capability was by the far the most frequently cited (nine studies), followed by relationship capability and information capability (six studies).

Table 2.5 Summary of Firm Capabilities Literature

Literature	Capability		
	Information	Relationships	Product Development
Citrin et al., 2007	✓		✓
Grimes et al., 2007	✓	✓	
Caparas, 2007			✓
Koksal, 2008	✓		✓
Maure,l 2009		✓	✓
Omotayo, 2009			✓
Sohail, 2009			✓
Ural, 2009	✓	✓	
Solberg & Olsson, 2009			✓
Boehe & Cruz, 2010			✓
Ling & Lim, 2010		✓	
Solberg & Olsson, 2010		✓	
Elwan & Ogunyemi, 2012	✓		
Freeman & Styles, 2014	✓	✓	✓

Twenty-two studies reported information capability as a predictor of export market strategy and export performance. Found that firm capability was associate with export market strategy in ten studies and firm capability was associate with export performance in seventeen studies as show in table 2.6

Table 2.6 Association Between Firm Capabilities and Export Market Strategy and Export Performance

Literature	Association with Export Market Strategy	Association with Export Performance
Aaby & Slater, 1989	(+)	
Bijmolt & Zwart, S 1994	(+)	
Katsikeas et. Al., 1995		(+)
Hoang, 1998	(+)	(+)
Dueñas-Caparas & Teresa, 2007		(+)
Koksal, 2008		(+)
Mavrogiannis, 2008	(+)	
Maurel, 2009		(+)
Oyenniyi, 2009	(+)	
Sohail, 2009	(+)	(+)
Ural, 2009		(+)
Solberg & Olsson, 2009		(+)
Boehe & Cruz, 2010		(+)
Ling & Lim, 2010		(+)
Solberg & Olsson, 2010		(+)
Zaiem & Zghidi, 2011	(+)	
Carneiro et. al., 2011	(+)	(+)
Elwan & Ogunyemi, 2012		(+)
Joanne & Styles, 2014		(+)
Majlesara et. al, 2014	(+)	(+)
Pinho, 2016		(+)
Viet et. al., 2017	(+)	(+)

2.6.3 Export Market Strategy

One of the roles of export companies is to develop and implement export marketing strategies (Timmor & Zif, 2005). As world markets globalize, the effect of dynamic of global marketing on a firm's performance has been continuously discussed in the literature. A number of studies argue that global marketing strategy plays an important role in determining a firm's performance in the global market (Birkinshaw, et al, 1998; Lages, 2000). The relationship between marketing strategy and performance has been

well documented in the domestic marketing context (Cavusgil & Zou, 1994). Similarly, the linking of marketing strategy to export performance has been one of the most widely investigated topics in international marketing research (Namiki, 1994; Zou & Stan, 1998). In the international marketing context, a number of studies have suggested that export performance is influenced by export marketing strategy (Lee, 2004).

However, there's a number of empirical studies found that the export performance had negative effect on export performance (Cavusgil & Zou, 1994; Zou & Stan, 1998). According to the study of O'Cass & Julian (2003) and Azizi & Samsinar (2008) did not find a significant relationship between export marketing strategy and export performance of Malaysian wooden furniture exporters. This phenomenon is attributable to the Malaysian wooden furniture exporters' failure to adapt their export marketing strategy.

The influence of marketing strategy on export performance has being the focus of a number of studies (Zou & Stan, 1998). Export marketing strategy is the tool by which a firm responds to the interplay of internal and external forces to meet the objectives of the export venture (Cavusgil & Zou, 1994; Moghaddam et al., 2012). The key aspects of export marketing strategy include product, price, promotion and distribution (Cavusgil & Zou, 1994; Douglas & Craig, 1989 Aaby & Slater, 1989; Cavusgil & Zou, 1994; Katsikeas et al., 2000; Leonidou et al., 2002; Craig, 2005; Ayan & Percin, 2005; Lages et al., 2008; Chen et al., 2016; Erdil & Ozdemir, 2016; Viet et al., 2017).

In addition, the results of studies of Madsen (1987), Aaby & Slater (1989), Cavusgil & Zou (1994), Zou & Stan (1998), Katsikeas et al. (2000), Leonidou et al. (2002) Ayan & Percin, (2005), Lages et al. (2008), Mavrogiannis et al. (2008), Chen et al. (2016), Erdil & Ozemir (2016) Viet et al. (2017) show that firms' export marketing strategies effects on export performance. However, from the literature review found one researcher (Hoang, 1998) used only two category of export market strategy product and promotion.

Table 2.7 Summary of Firm Export Marketing Strategy Literature

Author	Firm export marketing strategy			
	products	pricing	promotion	distribution
Douglas & Craig, 1989	✓	✓	✓	✓
Aaby & Slater, 1989	✓	✓	✓	✓
Cavusgil & Zou, 1994	✓	✓	✓	✓
Katsikeas et al., 2000	✓	✓	✓	✓
Leonidou et al., 2002	✓	✓	✓	✓
Craig, 2003	✓	✓	✓	✓
Ayan & Percin, 2005	✓	✓	✓	✓
Hoang, 1998	✓		✓	
Lages et al., 2007	✓	✓	✓	✓
Lages et al., 2008	✓	✓	✓	✓
Mavrogiannis et al., 2008	✓	✓	✓	✓
Sohail & Alashban, 2009	✓	✓	✓	✓
Oyeniyi, 2009	✓	✓	✓	✓
Tooksoon & Mohamad, 2010	✓	✓	✓	✓
Erdil & Ozemir, 2016	✓	✓	✓	✓
Chen et al., 2016	✓	✓	✓	✓
Viet et al., 2017	✓	✓	✓	✓

Table 2.8 Association Between Export Market Strategy and Export Performance

Literature	Association with export performance
Douglas & Craig, 1989	(+)
Aaby & Slater, 1989	(+)
Cavusgil & Zou, 1994	(+)
Katsikeas et al., 2000	(+)
Leonidou et al., 2002	(+)
Craig, 2003	(+)
Ayan & Percin, 2005	(+)

Table 2.8 Association Between Export Market Strategy and Export Performance (Cont.)

Literature	Association with export performance
Hoang, 1998	(+)
Lages et al., 2007	(+)
Lages et al., 2008	(+)
Mavrogiannis et al., 2008	(+)
Sohail & Alashban, 2009	(+)
Oyeniyi, 2009	(+)
Tooksoon & Mohamad, 2010	(+)
Erdil & Ozemir, 2016	(+)
Chen et al., 2016	(+)
Viet et al., 2017	(+)

2.7 Chapter Summary

In summarize, Chapter 2 highlighted considerable gaps remaining in the literature. A preliminary conceptual model has been proposed to capture the constructs explaining export performance. The link between a firm's resources, firm's capabilities and export market strategy and export performance. This can be achieved by developing and testing more widely accepted theoretical models of the determinants of export performance.

The objective of this literature review was to discuss on the theoretical rational, the resource-based view and highlight the variables which previous academic research has suggested as antecedents of export performance. The preliminary conceptual model includes four distinct constructs being firm resources, firm capabilities, export market strategy and finally the export performance

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

This chapter illustrates the conceptual framework and hypothesis development drawn from export performance literature and applies the resource-based view as the underpinning theory. The conceptual model is developed theoretically on the factors of export performance to explain the relationships between variables. The literature review has identified variables likely to have an impact on a firm's export performance. Thus the purpose of this chapter is to develop two theoretical models of export performance to explain the relationships between variables.

3.2 Hypothesized Structural Model

Drawing from the resource-based view and the literature reviewed of export performance in the previous chapter, the proposed conceptual model is shown in Figure 3.1. A review of export performance literature suggests that export performance of the firm is likely to be associated with the manager's experience, export commitment, knowledge and skills (Griffith & Hoppner, 2013; Lages & Sousa, 2010; Navarro et al., 2010a; Sraha, 2015). On resources and capabilities, the resource-based view literature argues that managers with international experience and commitment are more likely to learn the characteristics of various export markets and adapt export marketing strategies for effective operations (Lages, 2000; Lages et al., 2008b; Sraha, 2015). Drawing from the resource-based view, the conceptual model integrates the export marketing mix strategy, place, product, promotion and price (4Ps) as the main mediating variable connecting other independent and dependent variables in the model.

Figure 3.1 display the relationships between the independent and mediating variables on the association with export performance. The next section discusses hypotheses formation.
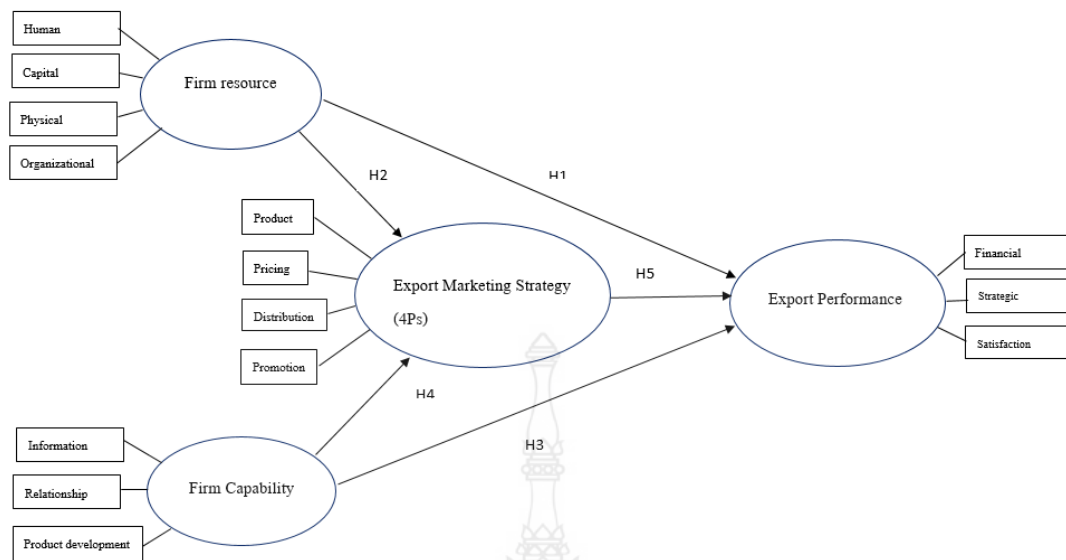
Figure 3.1 The Proposed Hypothesized Structural Model

From the conceptual frame work, the following research hypothesis are as follow:

H1: There is a positive relationship between firm resources and export performance of gems and jewelry industries in Thailand.

H2: There is a positive relationship between firm resources and export marketing strategy of gems and jewelry industries in Thailand.

H3: There is a positive relationship between firm capabilities and export performance of gems and jewelry industries in Thailand.

H4: There is a positive relationship between firm capabilities and export marketing strategy of gems and jewelry industries in Thailand.

H5: Export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gem and jewelries industry in Thailand.

3.3 Research Design

The design process involves answering questions regarding the purpose of the study, the type of investigation, the unit of analysis being investigated, the sampling design and the data collection method to be used. This study is a quantitative research design to collect the data through designed questionnaire by mail survey. A member of

Thai Gems and jewelry industries in each firm who is a key information of Thai gem and jewelry company was investigated. Structural Equation Modeling (SEM) is the techniques statistical tools that will be used for analyze the data to explain the relationships between variables of this study.

3.4 Industry Selection

High creativity firms which is the exporting of gems and jewelry industries firms in Thailand are chosen. They are chosen because they are characterized by rapid fashionable, high prices and costs, response to specific customers who have money power. Also, gem and jewelry firms deal with various businesses throughout its supply chains for example packaging business, chiseling metal, value metal analysis, coating body of decoration, mold or plate of decoration, and so on. Therefore, gem and jewelry is the central network linking to the surrounding businesses. In addition, gem and jewelry manufacturing exports are value added for the economics of Thailand. Total value of the gem and jewelry exports is in the top ten of total manufacturing exports. In addition, the business contexts now are more complex, various customers and competitors expand into global. Hence, gem and jewelry firms must improve or create their products or services in many ways in order to meet customer needs together with adapting themselves to catch up with the rapid change of market. Then, these firms need to provide an excellent research context to be examined. As a concluding remark, gem and jewelry export business context is deemed suitable for this research topic to be examined.

3.5 Population and Sample

The data utilized in this research is collected through a large-scale postal survey of 1,395 Exporting Gem and Jewelry Manufacturing Firms in Thailand. These firms are listed in The Gem and Jewelry Institute of Thailand (Public Organization). The date of data record was March 12, 2018. The categories of these firms are natural, synthetic gem and jewelry items including gold, silver, platinum, diamond, pearls, custom jewelry, and so on, presented with unique craftsmanship, fabulous cutting and good bargains by hundreds of Thai Gem and Jewelry Manufacturers and Exporters.

The sample size was calculated according to Vanichbuncha, (2007), the rule of structural equation model (SEM) which consider the number of observed variables to the determine sample size for research studios that use SEM. The suggested ratio of the sample size to the number of observed variables was 20:1. The observed variables from the conceptual model is 14, the study thus targets the initial sample size to be 280 samples from Thailand gem and jewelry exporter.

Notwithstanding, Aaker et al. (2001), suggest the suitable response rate from mail surveys should not be less than 20 percent. When the sample size is 280 firms, questionnaires are mailed to approximately 1,400 firms. But for this research, the populations are only 1,395 firms so all of them are counted.

3.6 Data Collection

The key informants included the managers, director and owner or partners of businesses are selected. This study conducted three stages in order to collected answered questionnaires. First, mailing questionnaires to the target firm, all the 1,395 firms were contacted to participate in the mail survey. Notwithstanding, after three weeks of mailing to request cooperation from the target firm. The response rate from mailing questionnaires was very low (83 completed returned mail). Therefore, researcher needs to apply various techniques to get the appropriate number of data. A follow-up e-mail and telephone call were conducted. A telephone calls had been managed until sufficient number of the sample where meet. Hence, the details of questionnaires sending and calculated response rate are presented as shown in Table 3.1.

Table 3.1 Data Collection Details

Details	Amount
Questionnaires mailing	1,395
Returned questionnaires	83
Returned e-mail	12
Telephone call	228
Overall responses	323
Response rate (323/1,395) x 100	23.15

Table 3.1 shows the data collection detail of this study. Counting from original 1,395 mailed, the surveys completed and returned 83 mailed, 12 returned e-mail and 228 telephone call. The effective response rate is approximately 23.15%.

3.7 Research Instrumentation

The research instrument is the questionnaire, initially designed based on literature review of the relevant studies in the fields of export and international competitiveness and the expert opinions. The questionnaire was designed to collect information on managers' perceptions of the export market environment, export experience, export knowledge, export marketing mix strategy (4 Ps), and export performance.

Section one general information of the firm - The aim of the first section was to gather general data about the company that would enable classification of the respondents according to their characteristics into sub-samples for comparative analysis purposes**.**

Section 2 firm's resources - In measuring firm resources (physical, human, organization and capital resources). This section of the questionnaire was focused on the resources owned and controlled by the firm on the manager's perception of the importance of each resource for the firm's export performance. A Likert scales ranging Seven-point are used to rate each question from 1 to 7 are used to rate each question, where 1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree. This measure was developed by Freeman (2009).

Section 3 firm's capabilities - This section of the questionnaire was focused on the capabilities development that was measured with variables such as information capabilities, relationship capabilities and product development capabilities (Li & Ogunmokum, 2001; Morgan, N., Kaleka & Katsikeas, 2004; Piercy, Kaleka & Katsikeas, 1998; Vorhies & Harker, 2000). For each of the questions are rated by a Likert's seven-point scales ranging from 1 to 7 where 1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree. This measure was developed by Freeman (2009).

Section 4: export marketing strategy - This section of the questionnaire was focused on the export marketing mix strategy, which comprising with four main categorized as follow; product strategy, pricing strategy, promotion strategy and distribution strategy. Most of these items were drawn from past studies (Lages & Montgomery, 2004; Sraha, 2016; Bategeka, 2012) however some items were developed by the researcher in consultation with academics experts. Twenty eight items were used to operationalize the export marketing strategy construct. Respondents were asked to indicate the extent they have adapted the export marketing mix strategies in their major export markets. This research used a seven-point scales ranging from 1 - 7: 1 = not at all adapted, 2 = barely adapted, 3 = somewhat adapted, 4= moderately adapted, 5= well adapted, 6 = adapted to a greater extent, 7 = fully adapted. This measure was developed by Lages & Montgomery, (2004)**.**

Section 5 Export performance measures - Based on literature, export performance has been measured in three different ways: financial outcomes, strategic outcomes, and perceptual or attitudinal measures of performance (Zou, Taylor, & Osland, 1998). In this study, Export performance measurement was operationalized by using existing scales, called EXPERF, which were developed by Zou, Taylor, and Osland (1998). Three dimensions of an export performance construct include financial export performance (3 items), strategic export performance (3 items), and satisfaction with export firm (3 items). These nine items were rated on a 7-point scale. ranging from 1 to 7 are used to rate each question, where 1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree. This measure was developed by Zou, Taylor, and Osland's (1998)**.**

The questionnaire contained a total of 50 questions. Categorical/nominal type of questions were used to collect the factual background information. The majority of the questions in part two and three, consistent with previous research, were non categorical, designed to measure the respondent's perception of the role of individual resources and capabilities in their firms and their importance for the firm performance. Each concept was expanded into Likert-type statement to be answered on a seven-point scale. A Likert-type scale was chosen for two reasons: one, it is recognized as a less complex scale and easier for the responded to understand, thus increasing the validity of the data; and two,

the Likert-type scale has been used consistently in export performance research (Zou et aI., 1998; Brouthers & Nakos. 2004; Fahy, 2002; Dhanaraj & Beamish, 2003; Ibeh, 2003) conferring its reliability.

3.8 Content Validity and Instrument Reliability

Content Validity

The purpose of pretesting was to detect possible weaknesses and flaws in questionnaire design (Churchill 1999; Churchill & Iacobucci 2005) and ensure that all desired information could be obtained from the questionnaire (Aaker, & Brasel, 2004). Burns and Bush (2005) suggest that a pretest of 5-10 representative respondents is usually enough to identify problems with a questionnaire.

Step one: The questionnaire in this study was guided by the relevant literature and expert opinion within the field of research. The instrument was reviewed by three professional researchers in the field of marketing research and international business research. They were asked to provide additional to comments on the content of questionnaire to indicate whether the question/item was difficult or not clear to them. Furthermore, the experts were specifically requested to comment on the items in particular sections of the questionnaire measurement. The pretest questionnaire covered all aspects including scale items, question content, question wording and sequence, form layout, length and timing, continuity and flow. The questionnaire was revised based on their recommendations feedback to refine the instrument questions and measures for the study.

Step two: The questionnaire was revised and improve for the accuracy and validity of the questionnaire in accordance with comments and recommendations from the participants.

Step three: The questionnaire has been tested again to validate. The content validity was assessed by seven expertise, consistent with four university academicians and three professionals from business sector. The IOC is used to evaluate the congruence between the test items and the objectives.

$$IOC = \frac{\sum R}{N}$$

Where: R = Expert's assessment score

N = Number of subject-matter experts

The items of the questionnaire based on the score range from -1 to +1 as follows:

+1= the question is congruent with the objectives

0 = the question is uncertain to be congruent with the objectives

- 1 = means the question is not congruent with the objective

The items that had scores lower than 0.5 were revised. On the other hand, the items that had scores between 0.5 – 1.0 are deemed acceptable.

Table 3.2 Results of Content Validity Testing

Items	Source	Measurement Scale Adopted	IOC
Firm resource: 12 Item of four main categorized (physical, human, organization and capital)	Freeman, (2009)	7-point scale ranging from "strongly disagree" to "strongly agree"	0.81-0.95
Firm capabilities: 11 Item of three main categorized (information , relationship and product development)	Freeman, (2009)	7-point scale ranging from "strongly disagree" to "strongly agree"	0.76-0.86
Export marketing strategy: 18 Item of four main categorized (product, pricing, promotion and distribution)	Lages & Montgomery, (2004)	7-point scale ranging from "not at all adapted" to "fully adapted"	0.81-0.83
Export performance: 9 Item of three main categorized (financial, strategic and Satisfaction with export performance)	Zou, Taylor and Osland, (1998)	7-point scale ranging from "strongly disagree" to "strongly agree"	0.79-0.87

Table 3.2 shows assessment score of content validity testing evaluated by IOC. The IOC range between 0.76 to 0.95 which are within the acceptable range. Thus, these revealed that the instrument content are acceptable validity for further analysis in this research.

Instrument Reliability

Although majority of the instrument and the scales used in this research were adapted from previous studies and was originally pre-tested their reliability and validity by the previous researchers, the new research could not be taken for granted. The validation of the internal reliability of a measurement is particularly important when multiple-item scales are used in a survey instrument. Among the number of existing procedures, Cronbach's alpha is currently the most widely used to confirm the internal consistency of all factors. The Cronbach's Alpha is a squared correlation measuring the relationship between the observed scores and true scores where, indicated high levels of reliability of the instrument with all the values above the acceptable minimum of 0.50 (Cronbach, 1951; Nunnally, 1978) which mean, the higher the Alpha value, the more reliable the test. The reliability of measures was assessed using the Cronbach's alpha test in the SPSS program. In this study an alpha value of 0.70 or higher is usually considered acceptable for reliability. Although, for scales with a small number of items and for new scales a smaller alpha is considered permissible (Nunnally, 1978). According to Churchill (1979) the items with low item-to-total correlations are taken out because they do not share sufficiently in the construct's common core.

Table 3.3 Results of Measure Validation

Items	Cronbach's alpha
Firm resource	0.82
Firm capabilities	0.73
Export marketing strategy	0.80
Export performance	0.82

Table 3.3 shows a pilot study to pretest the questionnaire was conducted using 30 firms randomly selected from the list of gem and jewelry exporters in Thailand. The reliability of the measurements was evaluated by Cronbach's alpha coefficients. In the scale reliability, Cronbach's alpha coefficients are greater than 0.70 (Nunnally and Berstein, 1994). Thus, these revealed that the instrument are acceptable reliability for further analysis in this research.

3.9 Sequence of Statistics Analysis

    3.9.1 Descriptive Statistics Analysis

    Descriptive statistics analysis is the initial analysis of sample data presenting in the form of frequency distribution, percentage, mean and standard deviation.

    3.9.2 Inferential Statistics

    Inferential statistics is the statistics used for research hypothesis testing. The sequence of analyzing the Structural Equation Modeling (SEM) is divided into the following steps.

    1) Normality Test of Data

    The Normality Test of Data is the testing to measure the distribution of data whether there is a normal distribution or not by examining the Skewness (SK) and Kutosis (KU) of all observed variable in the model value Based on the Skewness: SK value. Whereas the Skewness value is must be between -2 to +2 (Hair et al, 2010) and the kutosis value fallen outside the critical value are -5 and +5 (Meyer & Guarino: 2006).

    2) Construct Validity Testing

      - Confirmatory Factor Analysis (Convergent validity)

    Confirmatory factor analysis (CFA) is used to verify the convergent and discriminant validity of the measures. In CFA, convergent validity is evaluated by the value of factor loading of each item should have a minimum factor loading of 0.60 (Nunnally, 1978). As for a further check, the Average Variance Extracted (AVE) was calculated for all constructs (Fornell and Larcker, 1981). In addition, the total confidence value of the latent variable must be checked by examine the Composite Reliability (CR) value must be greater than 0.70 and Average Variance Extracted (AVE) must be greater than 0.5.

      -SEM Method (Discriminant validity)

    Discriminant validity testing is used to classify precision checking examine by comparing between square root of AVE value and the correlation (Hair, 2010). Finally, the researcher proved on the discriminant validity of the instrument by examining the Square root of AVE which should be more than the correlation as recommended by Fornell and Larcker (1981). While the squared correlation values should be equal or more than 0.2 but not over 1.00 (Hair, 2010).

3) Structural Equation Modeling

Structural equation modelling is a multivariate technique that specifies variables as latent (unobservable) constructs and represents a set of hypotheses as a network of causal paths between constructs (Blunch 2008; Styles 1996). The criteria for assessing goodness-of-fit are Chi-square test (x^2), Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Normative Fit Index (NFI), Adjusted Goodness of Fit Index (AGFI) and Root Mean square Error of Approximation (RMSEA) (Hair ex al, 2010). The criteria to assess the item as shown in table 3.4.

Table 3.4 Model fit Analysis Criteria

Model Fit Criteria	Acceptable level
Chi-Square	-
Degree of freedom	-
Chi-Square/ df	< 2
p-value	$p > 0.05$
GFI	≥ 0.90
AGFI	≥ 0.80
RMSEA	< 0.10
NFI	> 0.90
CFI	> 0.90

3.10 Chapter Summary

In this chapter, a comprehensive discussion of research method was provided. Especially, it detailed the research design, the questionnaire design and measurement, the sample selection, data collection procedure and statistics technique. The next chapter presents the results of this research including the descriptive statistic, measure validation, and hypotheses testing with the results of study.

CHAPTER 4
RESEARCH RESULT

4.1 Introduction

This chapter presents the results of the study consistent with the research objectives and the hypotheses. The chapter comprising with ten sections. Following this introduction, Section 4.2 The data preparation strategies are then outlined in section 4.3 followed by the descriptive analysis in Section 4.4. Next, Section 4.5 are tested for normality distribution of data and followed by the Construct validity testing of each construct in section 4.6 and 4.7 provide the factor analysis in preparation for structural equation modeling. Section 4.8 are the discriminant validity testing and Section 4.9 covered statistical analysis and structural model analysis, followed by section 4.11, the discussion of the results of hypothesis testing of this research.

4.2 Data Preparation

This stage directly concerned about data arrangement including data screening, editing, and data coding and entry. The details were depicted below.

4.2.1 Data Screening and Editing

In order to obtain the completed data, the following process of data gathering was conducted. The questionnaires were distributed to the target group of population that was 1,395 Exporting Gem and Jewelry Manufacturing Firms in Thailand. The researcher received the returned 323 questionnaires.

4.2.2 Data Coding and Entry

The variables in this study had been encoded as to simplify the data processing and interpretation process. The abbreviation used for variables as shown in table 4.1.

IBM's statistical software packages were used for data analysis. SPSS Statistics version 20 was used for descriptive statistics and SPSS Amos version 23 was used for Structural Equation Model (SEM) analysis.

Table 4.1 Abbreviation of Constructs and Observed Variables

Construct Group	Observed variable	Type of variable
Firm's Resource	Human Resources (Human)	Independent
	Capital Resources (Cpital)	Variable
	Physical Resources (Product)	
	Organizational Resources (Planning)	
Firm's Capabilities	Information Capabilities (InformCap)	Independent
	Relationship Capabilities (RelatCap)	Variable
	Product Development Capabilities (ProdDevel)	
Export Marketing Strategy	Product Strategy (ProdSt)	Mediating
	Price Strategy (PricSt)	Variable
	Distribution Strategy (DisSt)	
	Promotion Strategy (PromSt)	
Export Performance	Financial Export Performance (FinEP)	Dependent
	Strategic Export Performance (StrEP)	Variable
	Satisfaction with Export Performance (SatEP)	

4.3 Demographic Data

Questionnaires that sent to research sample was defined the respondent are the manager of exporting gem and jewelry manufacturing firms in Thailand. The questions were asking about demographical which consist of six parts: experience, employees, ownership, education, market, and product. The summarized of demographic shown in table 4.2

Table 4.2 Demographic Summary

	Frequency	Percentage
Educational		
Below degree level	65	20.1
BA/BSc degree	218	67.5
MBA or higher	40	12.4
Ownership		
Thai owned	159	49.2
Foreign owned	115	35.6
Joint foreign and Thai	49	15.2
Employees		
Less than 50	148	45.8
50-200	138	42.7
More than 200	37	11.5
Year of experience		
Less than 5 years	55	17.0
5-10 years	110	34.1
10-15 years	107	33.1
Over 15 years	51	15.8
Main export market		
Asia	79	24.5
EU	115	35.6
USA	78	24.1
Other	51	15.8
Product type		
Gem	153	47.4
Jewelry	170	52.6

4.3.1 Profile of the Respondents

The demographic data from respondents were classified into personal profile. The personal profile composed of year of experience, employees, ownership, educational background, main export market, and product type.

The personal profile of respondents, With regard to ownership status, the educational background of the respondents with Bachelor's degree qualification were the largest group which accounted for 67.8% , below degree level graduate at 20.1% and master degree or higher graduation level at 12.4%. As for the ownership of the firm 49.2% were fully Thai owned, 35.6% were fully foreign owned. The rest of the firms at 18.9% indicated that they were joint ventures. Concerning the size of firms (measured by the number of full time employees), 45.8% of firms had employees in the range of less than 50 were the largest group. Then, followed by group with less than 50 - 200 employees, which accounted for 42.7%, and employee of more than 200 employees being the smallest group at 11.5%. These results indicate that the largest group of the firms surveyed were small enterprises and were yet to grow into medium sized enterprises. In relation to the exporting experience of firms, the group with experiences between 5-10 years was the dominant at 34.1%, while an almost similar proportion at 33.1% were the group of 10 - 15 years experiences, followed by the group with experiences of less than 5 years at 17.0% and the more than15 years of exporting experiences with the least percentage at 15.8

In terms of export markets, the largest group of exporting market were export to the European Union at 35.6%. Follow by the market in Asian which accounted for 24.5% and the similar proportion of 24.1% for the market in United stated of America. The rest of the export market at 15.8% are export to the other market such as Belgium, Japan, India and United Arab Emirates. Besides, majority of respondent firms at 52.6% exported products of jewelry while 47.4% exported Gem products.

4.4 Descriptive Statistics

The following section summarized features of data collected for the study and presented in quantitative and a comparable fashion.

4.4.1 Firm's Resources

The attribute of firm's resources construct was measured by four observed variables, which are production and technology, human experience, planning and capital. These independent variables comprised of two items which were used to rate respondent's level of agreement. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.3.

Table 4.3 Descriptive Statistics for Firm's Resource

Variable	Min	Max	Mean	SD
Production and technology				
Product1	2	7	5.29	1.092
Product2	1	7	5.16	1.115
Product3	1	7	4.77	1.099
Human experience				
Human1	2	7	4.73	1.128
Human 2	2	7	4.64	1.246
Human 3	2	7	4.65	1.233
Planning				
Planing1	1	7	4.87	1.253
Planing2	1	7	4.59	1.216
Planing3	2	7	4.71	1.244
Capital				
Capital1	2	7	4.62	1.134
Capital2	2	7	4.89	1.246
Capital3	2	6	4.52	1.028

The item with the highest mean value was "The firm incorporates the latest technology in their manufacturing processes" (M=5.29, SD=1.092) under production resources and technology variable. The item with the lowest mean value was "Our firm can meet competitive prices of other domestic and overseas suppliers in our main export country" (M=4.52, SD=1.028) under capital resources variable.

4.4.2 Firm's Capabilities

The attribute of firm's capabilities construct was measured by three observed variables, which were information capability, relationship capability and product development capability. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.6.

Table 4.4 Descriptive Statistics for Firm's Capabilities

Variable	Min	Max	Mean	SD
Information capabilities				
InformCap1	2	7	5.00	1.066
InformCap2	2	7	4.85	1.034
InformCap3	2	7	5.31	1.124
Relationship capabilities				
RelatCap1	1	7	5.51	1.320
RelaCapt2	2	7	5.17	1.261
RelatCap3	2	7	5.03	1.298
Product development capabilities				
ProDevel1	1	7	4.69	1.250
ProDevel2	1	7	4.74	1.281
ProDevel3	1	7	4.83	1.142
ProDevel4	2	7	4.60	1.160
ProDevel5	1	7	4.70	1.271

The item with the highest mean value was "Our firm develops and maintains good relationships with export customers" (M=5.51, SD=1.320) under relationship capabilities variable. The item with the lowest mean value was "Our product development efforts give us an edge in our main export country" (M=4.60, SD=1.160) under product development capabilities variable.

4.4.3 Export Marketing Strategy

The attribute of export marketing strategy construct was measured by four observed variables, which are Product strategy, Pricing strategy, Promotion strategy and Distribution strategy. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.5.

Table 4.5 Descriptive Export Marketing Strategy

Variable	Min	Max	Mean	SD
Product strategy				
ProdSt1	1	7	4.93	1.116
ProdSt2	2	7	4.99	1.109
ProdSt3	2	7	4.97	1.133
ProdSt4	2	7	4.80	1.387
ProdSt5	1	7	4.95	1.382
Pricing strategy				
PricSt1	3	7	5.14	1.255
PricSt2	2	7	4.89	1.267
PricSt3	1	7	4.85	1.449
PricSt4	1	7	5.27	1.347
Promotion strategy				
PromSt1	1	7	5.40	1.231
PromSt2	2	7	5.01	1.263
PromSt3	2	7	5.06	1.135
PromSt4	2	7	4.94	1.213
PromSt5	1	7	4.76	1.331
Distribution strategy				
DisSt1	1	7	4.96	1.311
DisSt2	2	7	4.66	1.194
DisSt3	1	7	5.21	1.122
DisSt4	1	7	4.97	1.354

The item with the highest mean value was "Advertising theme /message" (M=5.40, SD=1.231) under promotion strategy variable. The item with the lowest mean value was "sales promotion" (M=4.76, SD=1.331) under promotion strategy variable.

4.4.4 Export Performance

The attribute of export performance construct was measured by three observed variables, which are financial export performance, strategic export performance and satisfaction with export performance. These dependent variables comprise of tree items which used to rate respondent's level of agreement. The statistical analysis of the minimum and maximum score, mean value and standard deviation value, as shown in table 4.6.

Table 4.6 Descriptive Statistics for Export Performance

Variable	Min	Max	Mean	SD
Financial Export Performance				
FinEP1	1	7	4.97	1.150
FinEP2	1	7	4.89	1.216
FinEP3	2	7	4.86	.989
Strategic export performance				
StrEP1	2	7	5.06	1.116
StrEP2	3	7	5.08	1.098
StrEP3	2	7	5.02	1.053
Satisfaction with export performance				
SatEP1	2	7	4.94	1.232
SatEP2	1	7	4.92	1.225
SatEP3	2	7	5.02	1.102

The item with the highest mean value was "Our firm has strengthened our strategic position" (M=5.08, SD=1.098) under strategic export performance variable. The item with the lowest mean value was "Our firm has achieved rapid growth" (M=4.86, SD=0.989) under financial export performance variable.

4.5 Normality Test of Data

The total of 323 samples are tested for normal distribution by examining the skewness and kutosis of all observed variable in the model. Skewness is a measure of the asymmetry of the probability distribution around the mean of that variable (hair et al.,

2010). Hair et al. (2010) suggested that the variable is considered to be normal distribution if Skewness value is between -2 to +2. The result in table 4.7 shows that among 14 observed variable have skewness value falling within ± 2 critical value. Therefore, all of 14 observed variable are normal distribute
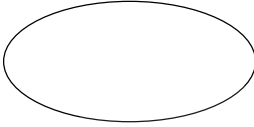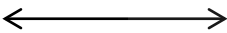
In addition, kutosis is a measure of relative peakness or flatness of distribution compare with normal distribution. Meyer & Guarino (2006) suggested that if standardized kutosis value fallen outside the critical value are -5 and +5. The result in table 4.7 shows that all of 14 observed variables have kutosis values falling within ± 5 critical value. Indicated that they have normal distribution.

Table 4.7 The Skewness (Sk) and Kurtosis (Ku) Statistics of Observed Variables

Variables	Mean	SD	Sk	Ku
Firm's resources				
- Production and technology	5.07	.894	-1.056	2.498
- Human experience	4.67	.985	-.103	-.102
- Planning	4.72	1.007	-.670	.875
- Capital	4.68	.971	-.319	-.577
Firm's Capabilities				
- Information capability	5.05	.897	-.326	.791
- Relationship capability	5.24	1.124	-1.040	.880
- Product development capability	4.71	.916	-.520	1.144
Export Marketing Strategy				
- Product strategy	4.93	1.008	.076	-.443
- Pricing strategy	5.04	1.030	-.617	.488
- Promotion strategy	5.04	.977	-.376	.815
- Distribution strategy	4.95	.979	-.410	1.681
Export Performance				
- Financial Export Performance	4.91	.913	-.886	1.361
- Strategic export performance	5.05	.884	.024	.098
- Satisfaction with export performance	4.96	1.014	-.235	.072

4.6 Construct validity: Confirmatory Factor Analysis (CFA) of Each Construct

Where the symbols used in data analyzed are as follows

Symbols	Implication
(ellipse)	Latent Variable
(rectangle)	Observed Variable
(circle)	Error Term
→	Direct Effect
↔	Relationship between Variable
CR	Composite Reliability
AVE	Average Variance Extracted
Chi-square	Chi-square statistic Value
p-value	Level of statistical significance set at the level .05
df	Degrees of freedom
GFI	Goodness of fit
AGFI	Adjusted goodness of fit
NGFI	Norm Fit Index
CFI	Comparative fit index
RMSEA	Root mean square error of approximation
d	Error term of independent variables
e	Error term of mediator and dependent variables
FR	Firm's resources
Product	Production and technology
Human	Human experience
Planning	Planning
Capital	Capital
FC	Firm's Capabilities

InformCap	Information capabilities
RelatCap	Relationship capabilities
ProDevel	Product development capabilities
EMS	Export Marketing Strategy
ProdSt	Product strategy
PricSt	Pricing strategy
PromSt	Promotion strategy
DisSt	Distribution strategy
EP	Export Performance
FinEP	Financial Export Performance
StrEP	Strategic export performance
SatEP	Satisfaction with export performance

4.6.1 Firm's resources
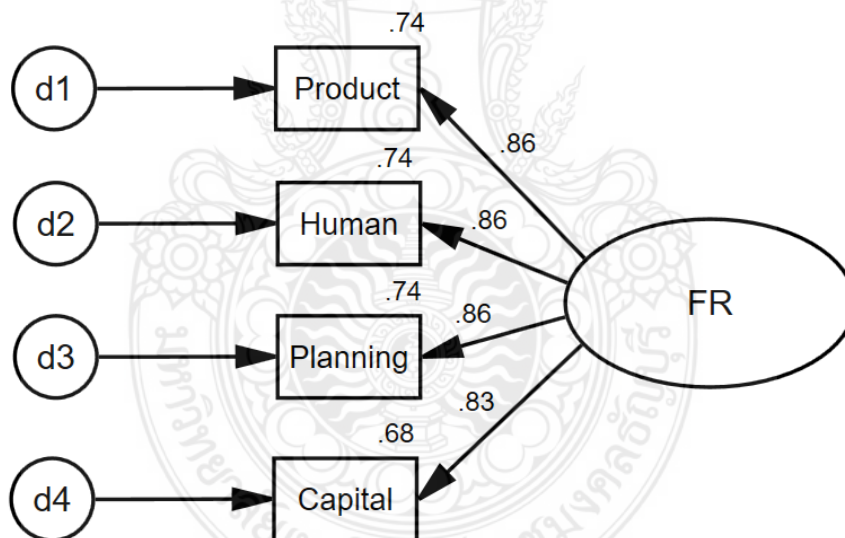
Figure 4.1 The Result CFA for Firm's Resources

The test of goodness-of-fit was conducted. The results of the assessment were as follows: Chi-Square = 4.916, Degree of freedom = 2, Chi-Square/Degree of freedom = 2.458, p-value = 0.086, GFI = 0.993, AGFI = 0.963, RMSEA = 0.067, NFI = 0.994 and CFI = 0.997. Therefore, It can be conclude the latent variable measurement model of

Firm's resources (FR) is consistent with empirical data. The summary and the comparison with acceptable level for each value, as shown in in table 4.8.

Firm's resources (FR) construct is measured by four observed variable which are product and technology (Product), human experience (Human), Planning (Planning) and Capital (Capital). Figure 4.1 shown that the construct had factor loading values ranged from 0.83 to 0.86, all observed variables are higher than 0.6 and statistical significant at 0.05. Therefore it can be conclude that all of the item variable are measuring Firm's resources.

Table 4.8 Model Fit Analysis for Firm's Resources (FR) Construct

Model Fit Criteria	Value	Acceptable level
Chi-Square	4.916	-
Degree of freedom	2	-
Chi-Square/ df	2.458	< 2
p-value	0.086	$p > 0.05$
GFI	0.993	≥ 0.90
AGFI	0.963	≥ 0.80
RMSEA	0.067	< 0.10
NFI	0.994	> 0.90
CFI	0.997	> 0.90

4.6.2 Firm's Capabilities
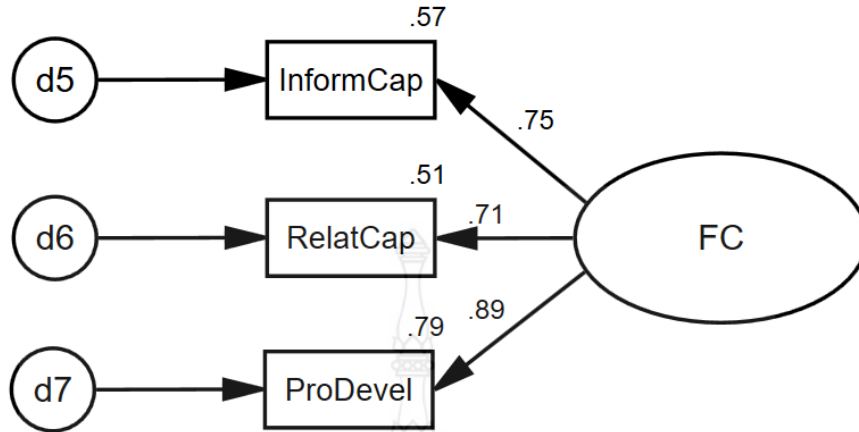
Figure 4.2 The Result CFA for Firm's Capabilities

The test of goodness-of-fit of latent variable measurement model was conducted. The results of the assessment were as follows: Chi-Square = 2.338, Degree of freedom = 1, Chi-Square/Degree of freedom = 2.338, p-value = 0.126, GFI = 0.995, AGFI = 0.971, RMSEA = 0.064, NFI = 0.994 and CFI = 0.996. It can be conclude the latent variable measurement model of Firm's capabilities (FC) is consistent with empirical data. The summary and the comparison with acceptable level for each value, as shown in in table 4.9.

Firm's capabilities (FC) construct is measured by three observed variable which are information capabilities (InformCap), Relationship Capabilities (RelatCap) and Production Development Capabilities (ProDevl). Figure 4.2 shown that the construct had factor loading values ranged from 0.71 to 0.89, all observed variables are higher than 0.6 and statistical significant at 0.05. Therefore, it can be conclude that all of four factors are the components observed variables of Firm's capabilities

Table 4.9 Model Fit Analysis for Firm's Capabilities (FC) Construct

Model Fit Criteria	Value	Acceptable level
Chi-Square	2.338	-
Degree of freedom	1	-
Chi-Square/ df	2.338	< 2
p-value	0.126	$p > 0.05$
GFI	0.995	≥ 0.90
AGFI	0.971	≥ 0.80
RMSEA	0.064	< 0.10
NFI	0.994	> 0.90
CFI	0.996	> 0.90

4.6.3 Export Marketing Strategy

Figure 4.3 The Result CFA for Export Marketing Strategy

The test of goodness-of-fit of latent variable measurement model was conducted. The results of the assessment were as follows: Chi-Square = 1.093, Degree of freedom = 2, Chi-Square/Degree of freedom = 0.546, p-value = 0.579, GFI = 0.998, AGFI = 0.993, RMSEA = 0.000, NFI = 0.999 and CFI = 1.000. It can be conclude the latent variable measurement model of Export Marketing Strategy (EMS) is consistent with empirical data. The summary and the comparison with acceptable level for each value, as shown in in table 4.10.

Export Marketing Strategy (EMS) construct is measured by four observed variable which are product strategy (ProdST), price strategy (PricSt), promotion strategy (PromST) and Distribution strategy (DisSt). Figure 4.3 shown that the construct had factor loading values ranged from 0.83 to 0.93, all observed variables are higher than 0.6 and statistical significant at 0.05. Therefore, it can be conclude that all of four factors are the components observed variables of export marketing strategy.

Table 4.10 Model Fit Analysis for Export Marketing Strategy (EMS) Construct

Model Fit Criteria	Value	Acceptable level
Chi-Square	1.093	-
Degree of freedom	2	-
Chi-Square/ df	0.546	< 2
p-value	0.579	$p > 0.05$
GFI	0.998	≥ 0.90
AGFI	0.993	≥ 0.80
RMSEA	0.000	< 0.10
NFI	0.999	> 0.90
CFI	1.000	> 0.90

4.6.4 Export Performance

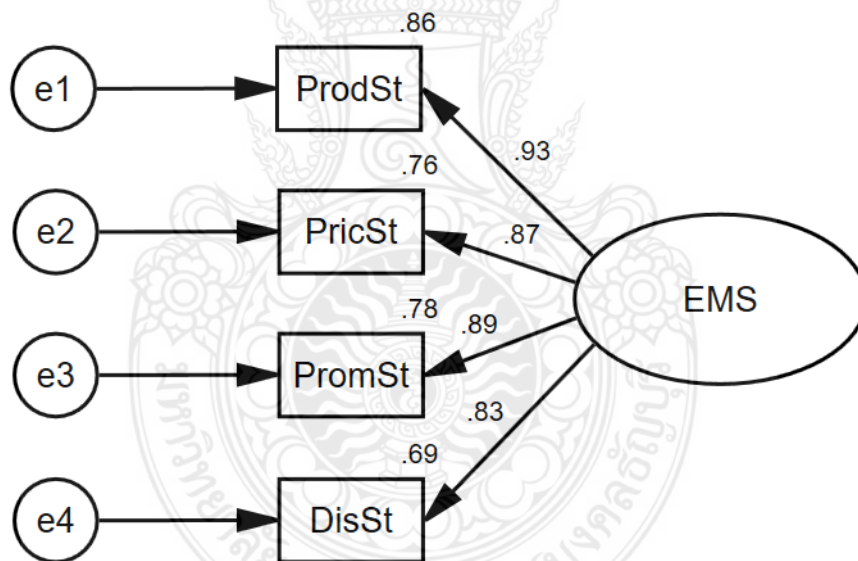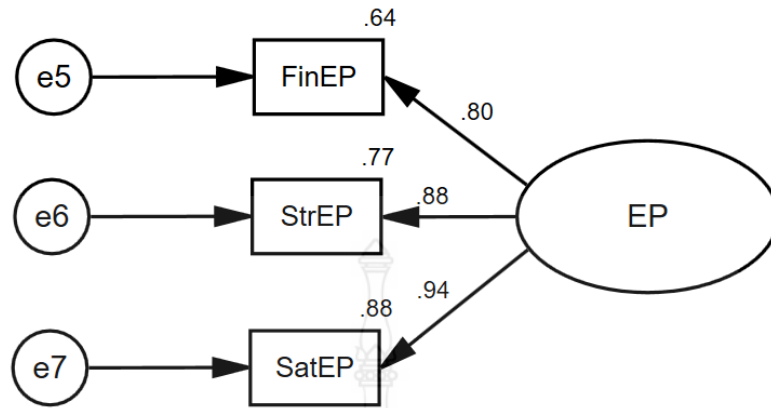**Figure 4.4** The Result CFA for Export Performance

The test of goodness-of-fit of latent variable measurement model was conducted. The results of the assessment were as follows: Chi-Square = 0.003, Degree of freedom = 1, Chi-Square/Degree of freedom = 0.003, p-value = 0.959, GFI = 1.000, AGFI = 1.000, RMSEA = 0.000, NFI = 1.000 and CFI = 1.000. It can be conclude the latent variable measurement model of Export performance (EP) is consistent with empirical data. The summary and the comparison with acceptable level for each value, as shown in in table 4.11.

Export performance (EP) construct is measured by three observed variable which are financial export performance (FinEP), strategic export performance (StrEP) and satisfaction with export performance (SatEP). Figure 4.4 shown that the construct had factor loading values ranged from 0.71 to 0.89, all observed variables are higher than 0.6 and statistical significant at 0.05. Therefore it can be conclude that all of four factors are the components observed variables of export performance.

Table 4.11 Model Fit Analysis for Export Performance (EP) Construct

Model Fit Criteria	Value	Acceptable
Chi-Square	0.003	-
Degree of freedom	1	-
Chi-Square/ df	0.003	< 2
p-value	0.959	$p > 0.05$
GFI	1.000	≥ 0.90
AGFI	1.000	≥ 0.80
RMSEA	0.000	< 0.10
NFI	1.000	> 0.90
CFI	1.000	> 0.90

4.7 Convergent and Construct Validity: Confirmatory Factor Analysis (CFA) of Overall Construct
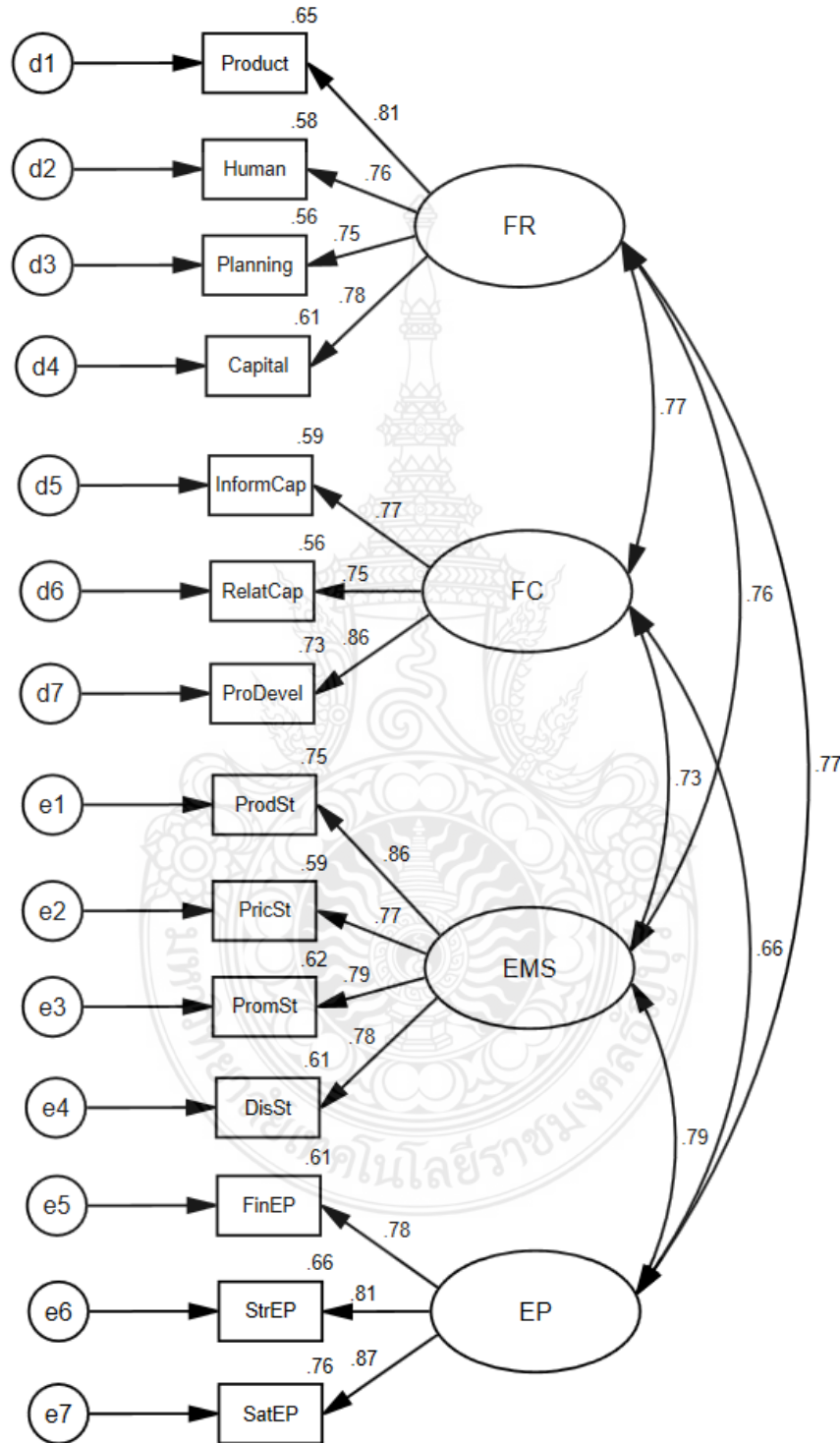
Figure 4.5 Measurement Model of all Latent Variables

Figure 4.5 shows the Shows the measuring model of all latent variables which are firm's resources (FR), firm's capability (FC), export marketing strategy (EMS) and export performance (EP) by using confirmatory component analysis. The results of testing shown that Chi-Square = 589.353, Degree of freedom = 71, Chi-Square/Degree of freedom = 8.301, p-value = 0.000, GFI = 0.787, AGFI = 0.685, RMSEA = 0.151, NFI = 0.872 and CFI = 0.885 which higher than the acceptable level at 0.10. The result of model fit revealed that all latent variables is inconsistent with the empirical data as shown in table 4.12. The results from table 4.12 reveal that many criteria did not pass conditions of model fit. Therefore the model need to be adjusted according to the modification Indices.

Table 4.12 Model Fit Analysis all Latent Variables

Model Fit Criteria	Value	Acceptable level
Chi-Square	589.353	-
Degree of freedom	71	-
Chi-Square/ df	8.301	< 2
p-value	0.000	$p > 0.05$
GFI	0.787	≥ 0.90
AGFI	0.685	≥ 0.80
RMSEA	0.151	< 0.10
NFI	0.872	> 0.90
CFI	0.885	> 0.90
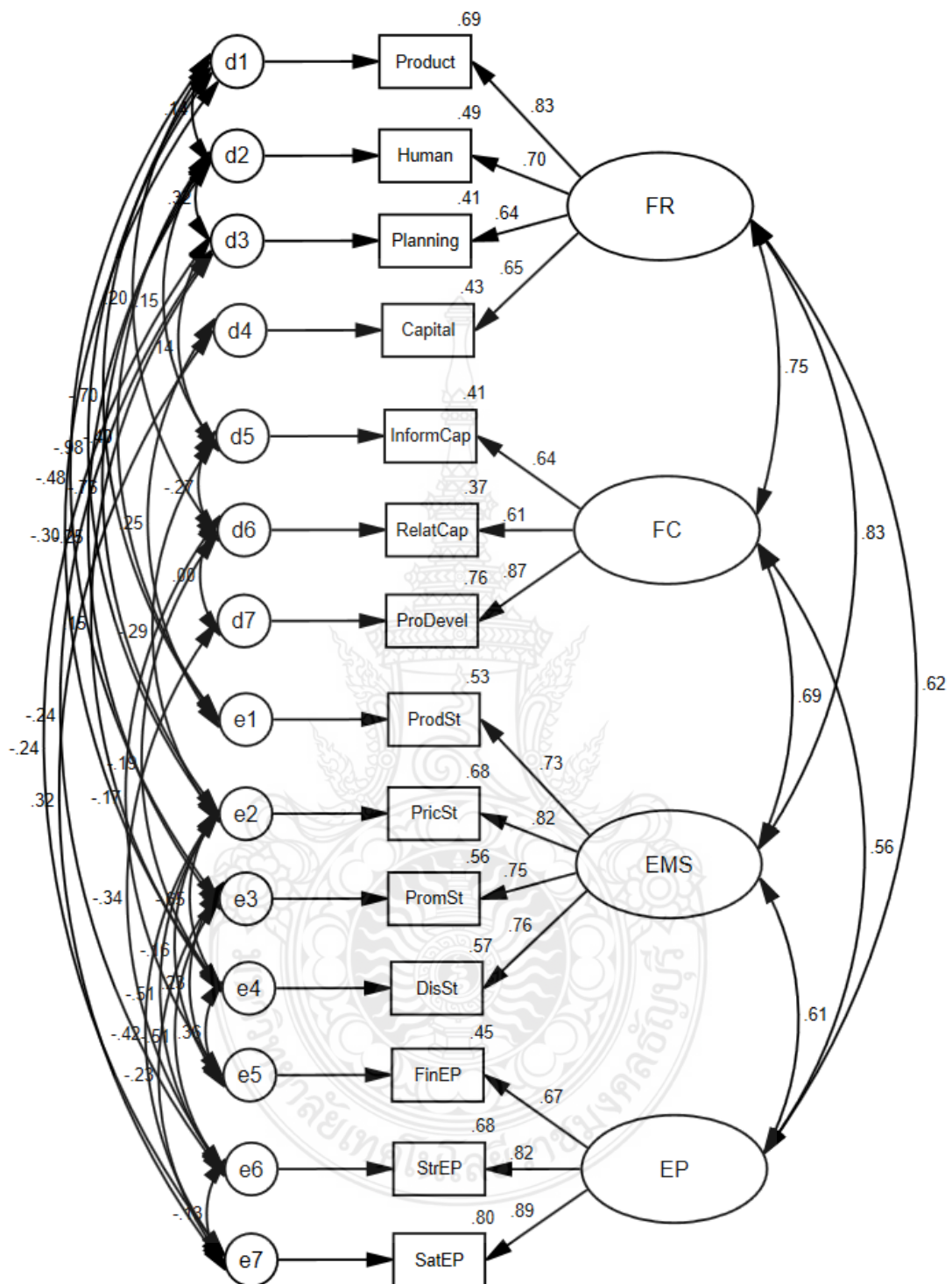
Figure 4.6 Measurement Model of all Latent Variables (with modification indices)

Figure 4.6 shows the Shows the measuring model of all latent variables which are firm's resources (FR), firm's capability (FC), export marketing strategy (EMS) and

export performance (EP) by using confirmatory component analysis. The model were adjusted by using modification indices, the covariance between residual error; e3 and e6, d2 and e2, d1 and e1, d3 and d2, d2 and e1, e4 and e2, d1 and e2, d1 and d6, d7 and d6, d5 and e2, d6 and e5, d4 and e7, d4 and e5, e3 and e5, d2 and d1, d7 and e6, e7 and e6, e2 and e5, d1 and e3, d2 and e3, d3 and e4, d6 and e4, d1 and e4, d3 and d5, e2 and e6, e3 and e7, d3 and e6, d3 and e7, d6 and d5, d2 and d5, e2 and e7, d4 and e1 are added. The criteria after modification were met and suggested model fit, as followed: Chi-Square = 54.029, Degree of freedom = 39, Chi-Square/Degree of freedom = 1.385, p-value = 0.055, GFI = 0.978, AGFI = 0.940, RMSEA = 0.035, NFI = 0.988, CFI = 0.997. Therefore, it can be concluded that the structural model satisfactorily fits to the data, as shown in table 4.13.

Table 4.13 Model Fit Analysis all Latent (with modification indices)

Model Fit Criteria	Value	Acceptable level
Chi-Square	54.029	-
Degree of freedom	39	-
Chi-Square/ df	1.385	< 2
p-value	0.055	$p > 0.05$
GFI	0.978	≥ 0.90
AGFI	0.940	≥ 0.80
RMSEA	0.035	< 0.10
NFI	0.988	> 0.90
CFI	0.997	> 0.90

Table 4.14 Factor Loading, Average Variance Extracted (AVE), Composite Reliability (CR) and R^2

Variables	Factor loading	R^2	CR	AVE
Firm's resources			0.801	0.505
- Production and technology	0.831	0.691		
- Human experience	0.698	0.487		
- Planning	0.644	0.415		
- Capital	0.653	0.426		
Firm's Capabilities			0.758	0.517
- Information capability	0.643	0.413		
- Relationship capability	0.611	0.373		
- Product development capability	0.874	0.764		
Export Marketing Strategy			0.849	0.585
- Product strategy	0.730	0.533		
- Pricing strategy	0.822	0.676		
- Promotion strategy	0.747	0.558		
- Distribution strategy	0.756	0.572		
Export Performance			0.840	0.640
- Financial Export Performance	0.669	0.448		
- Strategic export performance	0.822	0.676		
- Satisfaction with export performance	0.893	0.797		

R^2 = Factor loading squared
CR = Composite reliability
AVE = average variance extracted

      Firm's resources (FR) construct had factor loading value ranged from 0.644 to 0.831, which were all higher than 0.6, and the R^2 values range between 0.415 to 0.691, which are within the acceptable range (higher than 0.7). Composite reliability at 0.801 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & larker, 1981; Hair, et al., 2010), the AVE from the model was 0.505 also indicated acceptability of the construct reliability.

Firm's capability (FC) construct had factor loading value ranged from 0.611 to 0.874, which were all higher than 0.6, and the R^2 values range between 0.373 to 0.764, which are within the acceptable range (higher than 0.7). Composite reliability at 0.758 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & larker, 1981; Hair, et al., 2010), the AVE from the model was 0.517 also indicated acceptability of the construct reliability.

Export Marketing strategy (EMS) construct had factor loading value ranged from 0.730 to 0.822, which were all higher than 0.6, and the R^2 values range between 0.533 to 0.676, which are within the acceptable range (higher than 0.7). Composite reliability at 0.849 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & larker, 1981; Hair, et al., 2010), the AVE from the model was 0.585 also indicated acceptability of the construct reliability.

Export performance (EP) construct had factor loading value ranged from 0.669 to 0.893, which were all higher than 0.6, and the R^2 values range between 0.448 to 0.797, which are within the acceptable range (higher than 0.7). Composite reliability at 0.840 indicated the acceptability of construct reliability. The acceptable AVE value must be higher 0.5 (Fornell & larker, 1981; Hair, et al., 2010), the AVE from the model was 0.640 also indicated acceptability of the construct reliability.

4.8 Discriminant Validity

The correlation values were ranged from 0.559 to 0.828 which were equal or more than 0.2 but not over 1.00. The testing result of correlation was then accepted. This kind of discriminant validity could be checked from the comparison between square root of AVE value and the correlation (Hair, 2010). Finally, the researcher proved on the discriminant validity of the instrument by examining the Square root of AVE which should be more than the correlation as recommended by Fornell and Larcker (1981). The testing results showed that the values as obtained supported the discriminant validity as shown in table 4.15. The value Square root of AVE for each construct was greater than correlation coefficient involving the construct.

Table 4.15 Discriminant Validity

	FR	FC	EMS	EP
FR	**0.710**			
FC	0.745	**0.719**		
EMS	0.828	0.691	**0.765**	
EP	0.622	0.559	0.609	**0.800**

Diagonal numbers = squared correlation
Off-diagonal numbers= Square root of AVE

4.9 Proposed Structural Model Analysis

This section presented the analysis of the proposed model through SEM analysis as to test the hypotheses and identify the answers for research questions.

A goodness-of-fit test was carried out as to measure how well the observed data corresponded to the proposed model. The goodness-of-fit test was used to compare the observed values to the predicted values. The criteria for assessment goodness-of-fit are Chi-square test (x^2), Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Normative Fit Index (NFI), Adjusted Goodness of Fit Index (AGFI) and Root Mean square Error of Approximation (RMSEA) (Hair ex al, 2010). According to Hair et al. (2010), p-value should higher than 0.05 or give non- significant result which means that we cannot reject the mull hypothesis. Thus, there is no difference between the observed and the estimate covariance matrix. In addition, CFI, GFI, NFI should be more than a recommended value at 0.09 and AGFI should be more than 0.08 and RMSEA should be less than 0.08 (Hair et al, 2010).

For this study, the two structural models had been proposed. The structural model one was to evaluate the direct effects of the constructs and variables, and the structural model two was to evaluate the direct effects and indirect effects of the constructs and variables through the mediating variables.

4.9.1 Structural Model
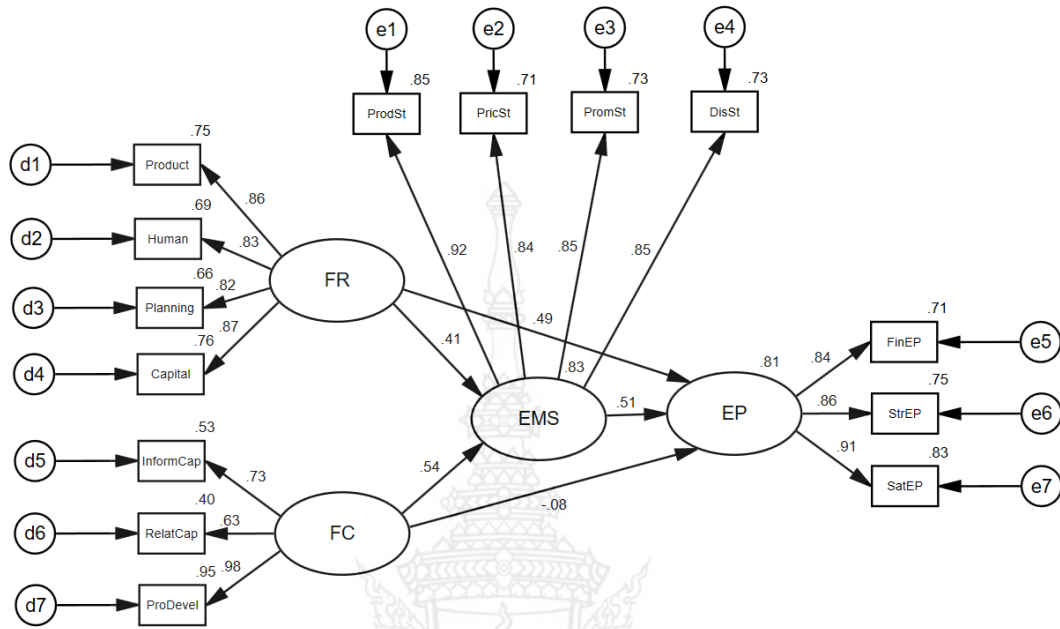
Figure 4.7 Structural Model

The structural model was to investigate the direct effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) and the indirect effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) through export marketing strategy (EMS) as the mediating variable.

The test of goodness-of-fit was conducted. The results of the assessment were as follows: Chi-Square = 592.457, Degree of freedom = 72, Chi-Square/Degree of freedom = 8.229, p-value = 0.000, GFI = 0.787, AGFI = 0.689, RMSEA = 0.150, NFI = 0.871 and CFI = 0.884 the summary and the comparison with acceptable level for each value, as shown in in table 4.15.

The results from the first attempt of structural model testing suggested that the model did not meet the criteria of model fit as some of the indicators were still unfavorable to the acceptable level. The Chi-Square/ Degree of freedom was 8.229, while the acceptable level at < 2. GFI value at 0.787, AGIF value at 0.689, NFI value at 0.871 and CFI value at 0.884 which all lower than the acceptable level at 0.90.The RMSEA was

0.150, which higher than the acceptable level at 0.10. Therefore the model need to be adjusted according to the modification Indices.
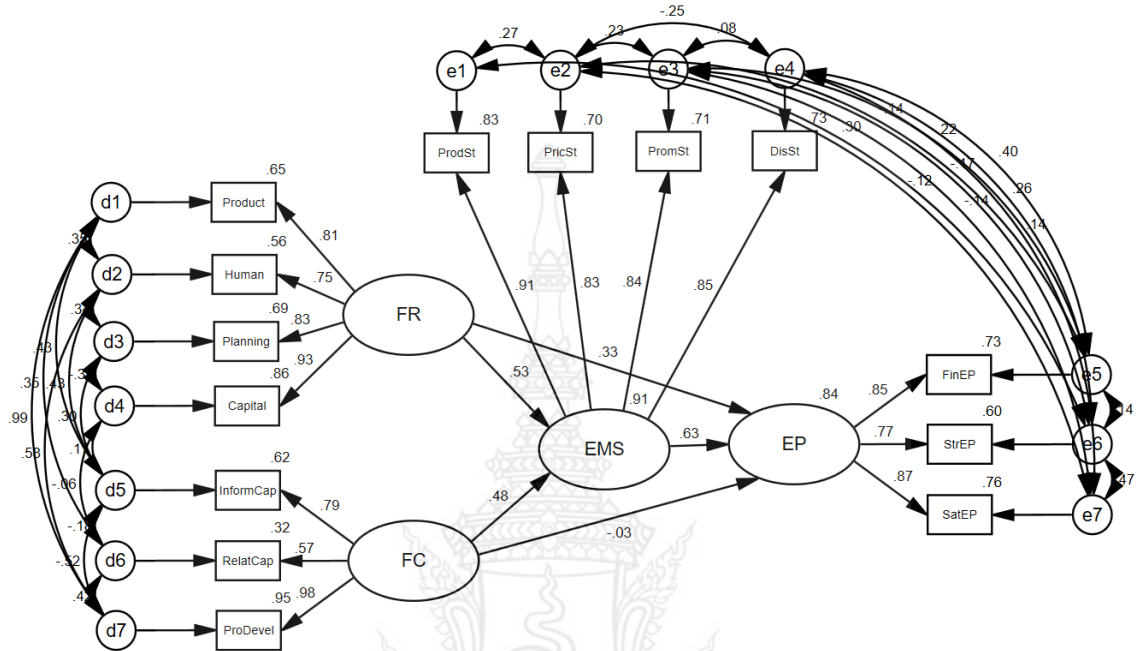
Figure 4.8 Structural Model (with modification indices)

Figure 4.7 shows the direct effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) and indirect effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) through export marketing strategy (EMS) as the mediating variable. The model were adjusted by using modification indices, the covariance between residual error; e6 and e3, e2 and e4, d3 and d2, d1 and d6, e5 and e4, d2 and d1, e5 and e3, d6 and d5, d7 and d5, e6 and e7, d2 and d5, d3 and d5, d1 and d5, d1 and d7, d2 and d7, e2 and e3, e1 and e6, e1 and e2, e6 and e4, d7 and d6, d4 and d3, e7 and e4, d4 and d5, e5 and e2, e7 and e2, e5 and e6, d4 and d6, e7 and e3 are added. The criteria after modification were met and suggested model fit, as followed: Chi-Square = 227.311. Degree of freedom = 43, Chi-Square/Degree of freedom =5.286, p-value = 0.000, GFI = 0.919, AGFI = 0.801, RMSEA = 0.115, NFI = 0.951, CFI = 0.959. Therefore, it can be concluded that the structural model satisfactorily fits to the data.

The summary and the comparison with acceptable level for each value, as shown in table 4.16.

Table 4.16 Model Fit Analysis for the Conceptual Model

Model Fit Criteria	Value	Acceptable level
Chi-Square	227.311	-
Degree of freedom	43	-
Chi-Square/ df	5.286	< 2
p-value	0.000	$p > 0.05$
GFI	0.919	≥ 0.90
AGFI	0.801	≥ 0.80
RMSEA	0.115	< 0.10
NFI	0.951	> 0.90
CFI	0.959	> 0.90

Table 4.17 Hypothesis Testing of Model

			Estimate	S.E.	β	C.R.
FR	→	EMS	0.54	0.05	0.53	10.026***
	→	EP	0.33	0.12	0.33	2.608**
FC	→	EMS	0.49	0.05	0.48	10.087***
	→	EP	-0.03	0.10	-0.03	-0.257
EMS	→	EP	0.61	0.20	0.63	3.093**

***p*-value < 0.001 (statistical significance at 0.001 level)
** *p*-value < 0.01 (statistical significance at 0.01 level)
* *p*-value < 0.05 (statistical significance at 0.05 level)

Table 4.17 shows the hypothesis testing result of direct effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) and indirect effects of firm's resources (FR) and firm's capabilities (FC) on export performance (EP) through export marketing strategy (EMS) as the mediating variable.

Firm's resources (FR) firm's resources had a significant positive effects on export marketing strategy and have a significant positive effects on export performance.

Firm's capabilities (FC) firm's capabilities had a significant positive effects on export marketing strategy but has no significant effect on export performance.

Export Marketing Strategy (EMS) export marketing strategy had a significant direct effects on export performance.

Table 4.18 Standardized Direct, Indirect and Total Effects among Variables

Independent Variable	Effect	Dependent Variable	
		Export Marketing Strategy	Export Performance
Firm's resources	DE	0.53***	0.33**
	IE	-	0.33**
	TE	0.53***	0.66***
Firm's Capabilities	DE	0.48***	-0.03
	IE	-	0.30*
	TE	0.48***	0.27*
Export Marketing Strategy	DE	-	0.63**
	IE	-	-
	TE	-	0.63**

DE = Direct Effect, IE = Indirect Effect, TE = Total Effect

Table 4.18 shows the result of direct effects, indirect effect and overall effect of the structural equation model.

Firm's resources (FR) firm's resources had a significant direct effects on export marketing strategy at $\beta = 0.53$ and export performance at $\beta = 0.33$ and had a significant indirect effects on export performance through export marketing strategy at $\beta = 0.33$. The overall influence of firm's resources on export performance was $\beta = 0.66$.

Firm's capabilities (FC) firm's capabilities had a significant direct effects on export marketing strategy at $\beta = 0.48$ and export performance at $\beta = -0.03$ and had a significant indirect effects on export performance through export marketing strategy at $\beta = 0.30$. The overall influence of firm's capabilities on export Performance was $\beta = 0.27$.

Export Marketing Strategy (EMS) export marketing strategy had direct effects on export performance at β = 0.63.

4.10 Hypothesis Testing

The following research questions were raised in the earlier discussion whether, do core export marketing strategy and export performance relate, do firm's performance, firm's capabilities and export performance relate and do export marketing strategy mediate core firm's performance, firm's capabilities and export performance.

Table 4.19 Summary of Research Questions, Tested Hypotheses and Results

Hypothesis	Result
H1: There is a positive relationship between firm resources and export performance of gems and jewelry industries in Thailand.	Supported
H2: There is a positive relationship between firm resources and export marketing strategy of gems and jewelry industries in Thailand.	Supported
H3: There is a positive relationship between firm capabilities and export performance of gems and jewelry industries in Thailand.	Not Supported
H4: There is a positive relationship between firm capabilities and export marketing strategy of gems and jewelry industries in Thailand.	Supported
H5: Export marketing strategy mediate the relationship between firm resources and firm capabilities and export performance of gems and jewelry industries in Thailand.	Supported

H1: There is a positive relationship between firm's resources and export performance of gems and jewelry industries in Thailand.

The analysis of the relationship between firm's resources (FR) and export performance (EP) indicated that there was a positive relationship between FR and EP. Table 4.17 shown the path coefficient between FR and EP was 0.33, standard error (S.E.)

was 0.12, critical ratio (C.R.) was 2.608 and the *p*-value was lower than 0.05. Table 4.13 factor loading values for each item of the observed variables, which were Production and technology, Human experience, Planning and Capital were 0.808, 0.762, 0.746 and 0.784 respectively. These values indicated significant positive relationship between firm's resources and export performance. Therefore, the hypothesis H1 was supported.

H2: There is a positive relationship between firm's resources and export marketing strategy of gems and jewelry industries in Thailand.

The results indicated that the path coefficient between firm's resources (FR) and export marketing strategy (EMS) indicated that there was a positive relationship between FR and EMS. Table 4.17 shown the path coefficient between FR and EP was 0.54, standard error (S.E.) was 0.05, critical ratio (C.R.) was 10.026 and the *p*-value was lower than 0.001. Table 4.13 factor loading values for each item of the observed variables, which were Production and technology, Human experience, Planning and Capital were 0.808, 0.762, 0.746 and 0.784 respectively. These values indicated significant positive relationship between firm's resources and export performance. Therefore, the hypothesis H2 was supported.

H3: There is a positive relationship between firm's capabilities and export performance of gems and jewelry industries in Thailand.

The results from table 4.17 indicated that the path coefficient between firm's capabilities (FC) and export performance (EP) was low (β = -0.03), standard error (S.E.) is 0.10, critical ratio (C.R.) is -0.257 and the p-value is higher than 0.05. The factor loading values for each item of the observed variables, which were information capabilities, relationship capabilities, product development and capabilities were 0.767, 0.750 and 0.856 respectively. It was found that the *p*-value which was the means to measure the evidence against the null hypothesis, whereby the smaller the *p*-value indicated stronger evidence against the null. The *p*-value for this relationship was greater than 0.05, this suggested that the result did not have statistically significance and indicated that hypothesis H3 was not supported.

H4: There is a positive relationship between firm capabilities and export marketing strategy of gems and jewelry industries y in Thailand.

The analysis of the relationship between firm's capabilities (FC) and export marketing strategy (EMS) indicated that there was a positive relationship between FC and EMS. Table 4.17 shown the path coefficient between FC and EMS was 0.49, standard error (S.E.) was 0.05, critical ratio (C.R.) was 10.087 and the *p*-value was lower than 0.001. Table 4.13 factor loading values for each item of the observed variables, which were information capabilities, relationship capabilities, product development and capabilities were 0.767, 0.750 and 0.856 respectively. These values indicated significant positive relationship between firm's capabilities and export marketing strategy. Therefore, the hypothesis H4 was supported.

H5: Export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand.

The analysis of the relationship between export marketing strategy (EMS) and export performance (EP) indicated that there was a positive relationship between EMS and EP. Table 4.17 shown the path coefficient between FR and EP was 0.61, standard error (S.E.) was 0.20, critical ratio (C.R.) was 3.093 and the *p*-value was lower than 0.05. Table 4.13 factor loading values for each item of the observed variables, which were product strategy, pricing strategy, promotion strategy and distribution strategy were 0.863, 0.770, 0.789 and 0.782 respectively. These values indicated significant positive relationship between firm's resources and export performance. Therefore, the hypothesis H5 was supported.

CHAPTER 5
CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presented the discussion of the empirical findings for research questions posited for this study from data analysis in the preceding chapter, as well as, the discussion of the consistency and contradiction with the relevant studies and existing literature, followed by theoretical contribution and practical implications in the next section. This chapter was then concluded with limitation of the study and

Referring to the purposes which aim to investigate the determinants of export performance from the RBV perspective. The comprehensive review of the RBV - grounded theoretical and empirical research on competitive advantage, international marketing and export performance to determine the export performance models and frameworks. This research includes firm's resources and firm's capability on sustainable growth through export marketing strategy as mediating influences to export performance determination. The key research question is how corporate innovation has an effect on sustainable growth. The specific questions are as follows: (1) Does the firm's resources influence on export performance of gems and jewelry industries in Thailand? (2) Does the firm's resources influence on export marketing strategy of gems and jewelry industries in Thailand? (3) Does the firm's capability influence on export performance of gems and jewelry industries in Thailand? (4) Does the firm's capability influence on export marketing strategy of gems and jewelry industries in Thailand? And (5) Does the export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand?

5.2 Summary of the Findings

This study was based on the Resource-Based View (RBV) perspective with the objectives to extend knowledge in the field of marketing by empirically examining the relationship between firm's resource, firm' capability, export marketing strategy and export performance with the emphasis on the analysis of the mediating effects of export

marketing strategy and its impact on export performance of gem and jewelry industry in Thailand.

To accomplish the study's objectives, this study deployed Structural Equation Model (SEM) analysis which had the capacity to address structural relationships through the estimation of the multiple and interrelated variables. The empirical findings from this study had both consistency and contradiction with relevant studies in the existing literature. The results were conformed to the RBV perspective and emphasized the importance of export performance. The high level of significance from this study lends high credibility to the empirical results obtained.

Although the conceptual framework is constructed from the study of others in various in industry, the subject of the study is the gem and jewelry industry in Thailand. The result of the relationship is different from those other industry in foreign countries. Figure 5.1 shows the results of the study. A solid line represents support results, while a dotted line represents results that were not supported.

Figure 5.1 Result of the Study

Table 5.1 Summary of Hypothesis Testing

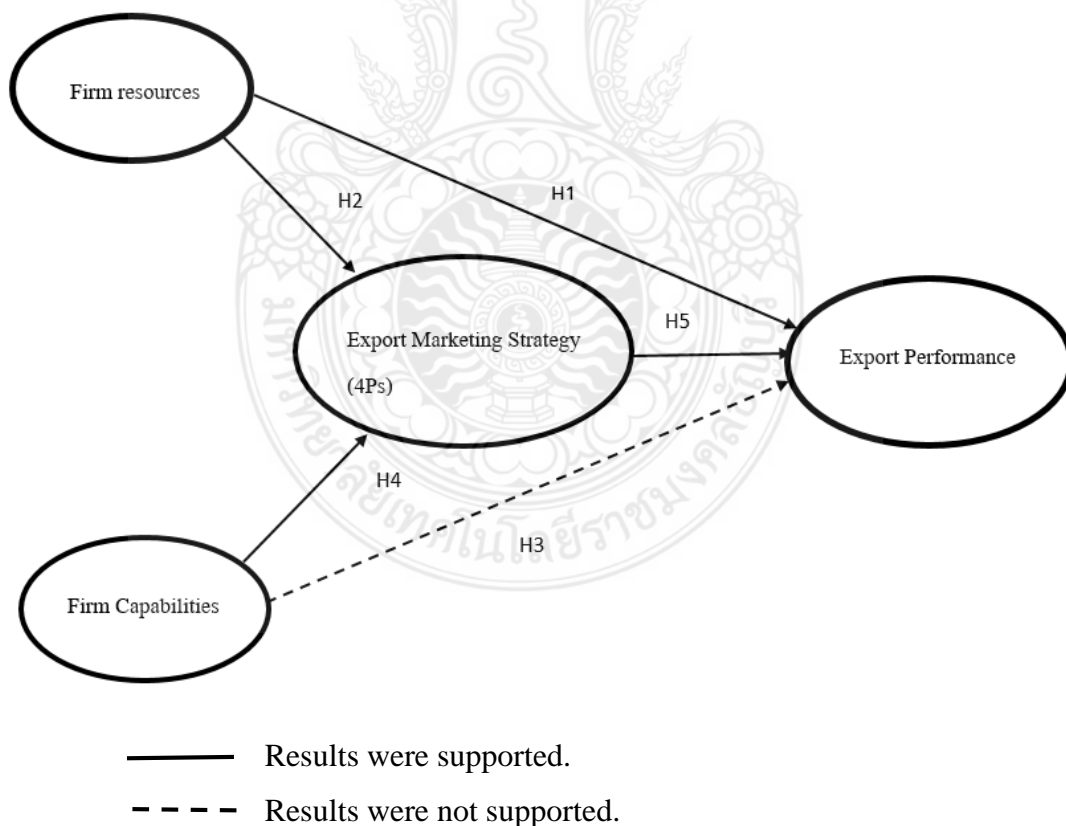| Hypothesis	Result
H1: There is a positive relationship between firm resources and export performance of gems and jewelry industries in Thailand.	Supported
H2: There is a positive relationship between firm resources and export marketing strategy of gems and jewelry industries in Thailand.	Supported
H3: There is a positive relationship between firm capabilities and export performance of gems and jewelry industries in Thailand.	Not Supported
H4: There is a positive relationship between firm capabilities and export marketing strategy of gems and jewelry industries in Thailand.	Supported
H5: Export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand.	Supported

Table 5. 1 present the summary of the hypothesis. There are five hypothesizes in the study (H1, H2, H3, H4 and H5). It appears that interfunctional coordination have relationship with business performance. Nonetheless in considering indirect effect, there are some effects between independent variables and the mediator. The detail in hypothesis testing is discussed next section below.

5.3 Discussion and Conclusion of the Findings

This section explores the theoretical background of this study together with the research findings in order to further understand and resolve the research question proposed for this research

This study had earlier raised three major research questions which were:

RQ1**.** Does the firm's resources influence on export performance of gems and jewelry industries in Thailand?

RQ2**.** Does the firm's resources influence on export marketing strategy of gems and jewelry industries in Thailand?

RQ3. Does the firm's capability influence on export performance of gems and jewelry industries in Thailand?

RQ4. Does the firm's capability influence on export marketing strategy of gems and jewelry industries in Thailand?

RQ5. Does the export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand?

Five hypotheses were developed and tested in order to determine answers for the above research questions, the answers were as shown below:

Table 5.2 Summary of Results in all Hypotheses Testing

Research Questions	Hypotheses	Conclusion	Results
RQ1. Does the firm's resources influence on export performance of gems and jewelry industries in Thailand?	H1	Hypotheses 1 are supported.	Yes
RQ2. Does the firm's resources influence on export marketing strategy of gems and jewelry industries in Thailand?	H2	Hypotheses 2 are supported.	Yes
RQ3. Does the firm's capability influence on export performance of gems and jewelry industries in Thailand?	H3	Hypotheses 3 are not supported.	No
RQ4. Does the firm's capability influence on export marketing strategy of gems and jewelry industries in Thailand?	H4	Hypotheses 4 are supported.	Yes
RQ5. Does the export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand?	H2,H4,H5	Hypotheses 2, 4, 5 are supported.	Yes

5.3.1 Discussion of Research Question One: Does the firm's resources influence on export performance of gems and jewelry industries in Thailand?

Hypothesis H1 Testing

H1 : There is a positive relationship between firm resources and export performance of gems and jewelry industries in Thailand.

The result indicated that there was positive relationship between firm's resources and export performance. This finding supported the study of Huang, Soutar & Brown (2002) and Leonidou (2004) which discussed that the possession of resources that rival firms are unable to acquire and deploy of such assets allows the exporter to identify the idiosyncrasies in export markets, develop appropriate strategies, and execute these strategies efficiently and effectively. Hence, the resources devoted to the development of export operations can and do significantly affect the level of a firm's export performance (Srivastava, Fayey & Christensen 2001).

5.3.2 Discussion of Research Question Two: Does the firm's resources influence on export marketing strategy of gems and jewelry industries in Thailand?

Hypothesis H2 Testing

H2 : There is a positive relationship between firm's resources and export marketing strategy of gems and jewelry industries in Thailand.

The result finds that firm's resources has an effect on export marketing strategy. It became clear from that international experience enables export managers to gain insights and knowledge of an export market. The result was consistent with the study of Cavusgil & Zou (1994) and Li & Ogunmokum(2001) which found that the international market knowledge is crucial for firms to be successful in export market activities. In fact firms accumulate knowledge of foreign markets through experience. Therefore the more understanding of an export market, the more a firm can develop activities that suits the characteristics of the market. Dhanaraj and Beamish (2003) develop a causal model of export strategy and export performance. The model testing was conducted the data from US and Canadian SME exporters. The tests of the causal relationships revealed that enterprise resources, technological intensity, and firm size are good predictors of export strategy, and export strategy has been positively influence on firm performance.

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5.3.3 Discussion of Research Question Three: Does the firm's capability influence on export performance of gems and jewelry industries in Thailand?

Hypothesis H3 Testing

H3 : There is a positive relationship between firm's capability and export performance of gems and jewelry industries in Thailand.

The results indicate that firm's capability did not have direct relationship with export performance. The non significance direct effect of firm's capabilities on export performance among the firms surveyed of this study, this finding was supported the study of Porter (1991) which discussed that despite the need for firms to adopt and secure capabilities to enhance the business success, failure in designing and implementing with adequate combination of these capabilities can cause firm a poor performance. Smith (2008) found that A large, low-cost manufacturing company typically has significant capabilities, but without either unique competencies or abundant resources. As noted, all three must be aligned to effectively penetrate the market (Smith, 2008). Beleska-Spasova (2009) confirm that in manager's view organizational capabilities in providing good quality of products and customer service are the most important determinants of export outcomes. These results indicate that firm's capability alone would not generate the successful of export performance. To success the company objectives in the international market, firms need to manage valuable resources that firm possess to drive the capabilities (Information capability, Relationship capability and Production capability) to response market needs by integrate firm's capabilities accordance with the export marketing strategy, firm will therefore achieve the export objectives.

Inan and Bititci (2015) has suggested that the owner of micro companies do not share their knowledge and not open for new ideas from employees. Thus, to develop learning capabilities management should support employees for learning, organization should focus on same objectives, owner and managers should be open minded for new ideas, and finally knowledge and experiences should be openly shared within the firm (Inan & Bititci, 2015). As to consider to the sample of these research, 67.5% of the sample have a bachelor's degree and 67.2 % had experience in exporting between 5-15 years. It reveals that most of the sample of these study may not have known-how or experience in managing the organization's capabilities. As to consider the size of the firm, 45.8% are

small firm with less than 50 employees. These indicate that most of the sample are small firm that the owner take control in every organization activity. It obstructing opportunities for employees to learn in develop their capabilities. "Owners control everything in organization, employees do what owners says. This prevent micro companies to develop capabilities such as learning, innovation and continues improvement capabilities" (Inan & Bititci, 2015).

5.3.4 Discussion of Research Question Four: Does the firm's capabilities influence on export marketing strategy of gems and jewelry industries in Thailand?

Hypothesis H4 Testing

H4 : There is a positive relationship between firm's capability and export marketing strategy of gems and jewelry industries in Thailand.

The result finds that firm's capability has an effect on export marketing strategy. This finding is consistent with Ritter (2006) and Casselman and Samson (2007) who reasoned that firm output was a function of firm specific technologies, production related skills and supportive technical and managerial capabilities. Following this insight, it is logical to conjecture that firm competencies have performance effects on a firm's level of exports.

Kubo T. (2015) examines the effects which organizational capabilities exert on firm's marketing strategy and performance, and classifies organizational capability concepts, the study found that activity-based capability and market sensing capability give a positive effect to firm performance, and that market orientation effects change with the degree of competitiveness of the industry. Johanson and Vahlne (2006) also acknowledged the influence of relationship capability and have in fact, extended their internationalization theory to include the interplay between potential and existing partner relationships and the opportunities that are likely to develop as a result of these interactions. Furthermore with the increasing complexity in the international business environment, greater emphasis has been placed on the importance of building these relationships with foreign parties (Ambler & Styles 2000; Loane & Bell 2006; Panayides 2006; Pressey & Tzokas 2004). These results are certainly consistent with Li and Ogunmokun (2001) where Relationships were found to have the most impact on a firm's strategic export performance outcomes.

5.3.5 Discussion of Research Question Five: Does the export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand?

Hypothesis H2, H4 and H5 Testing

H2 : There is a positive relationship between firm resources and export marketing strategy of gems and jewelry industries in Thailand.

H4: There is a positive relationship between firm capability and export marketing strategy of gems and jewelry industries in Thailand.

H5: Export marketing strategy mediate the relationship between firm resource and firm capabilities and export performance of gems and jewelry industries in Thailand.

Research questions five was the most critical question, to seek for answer for this study. The main objective of this study was to determine the impact of mediator between firm's resources, firm's capability and export performance.

Three hypotheses were developed as to investigate direct relationship, indirect relationship between firm's resources, firm's capability and export performance. This emphasized on the analysis of the mediating effect of export marketing strategy. These indicated that export marketing strategy has been affected by firm's resources and firm's capability. As for the relationship of export marketing strategy and export performance, the results also showed positive relationship and indicated that export marketing strategy had an influence on export performance.

The comparison of the two structural models, with and without the presence of export marketing strategy had indicated the mediating effect of export marketing strategy, in other word, export marketing strategy mediated firm's resources and firm's capability and finally have an influence on export performance.

These results supported the empirical study of Thirkell & Dau (1998) and Zou & Stan (1998) that has examined the central role of export marketing strategy in export performance of firms. This was also consistent with the study of Cicic et al. (2002) which analyzed the factor influencing international performance depicted strategy as an outcome of a firm's skills and resources, environmental opportunities and managerial preferences. The study found that a firm's export marketing strategy is linked to management attitude and competencies.

5.4 Theoretical Contribution

This research makes significant contributions for the business in the global context. The research provided further evidence that supported the Resource-Based View of the firm perspective which had been well accepted as the basis for business performance successful. The RBV explains how firms achieve their competitive advantage over competing firms by develop their resources and capabilities on the basis of unique firms resources and capabilities which are valuable, rare, difficult to imitate, and non-substitutable by other resources and capabilities. To the extension of the RBV framework by adding and clarifying the marketing strategy as having mediating effects between RBV and performance of the firms. The results of this study provide further support for the RBV relative to the widely held marketing theoretical perspective where the key driven export activities to achieve the successful of export performance.

The evidence of significant direct and indirect effects that firm's resources has effect on export performance, it reinforces the argument that availability of potential resources is one of the key success factors in the firm's international operations. Organization resources enhances the export performance of the firms both indirectly by creating export marketing strategies and directly by managing successfully international operations. Management resources also strengthen the ability of the firm to spread its operations across a wider geographic area and enter an increasing number of foreign markets (Beleska-Spasova, 2009). These findings support the research of (Aaby and Slater, 1989; Chetty and Hamilton, 1993; Ford and Leonidou, 1991; Leonidou and Katsikeas, 1996; Zou and Stan, 1998).

This study further addressed the concerns of some scholars who have argued that export performance literature has reached a level of sophistication where researchers should examine the complex impact of direct, indirect and mediating effects of variables to bring additional insights to the theory. Overall, this study has extended export performance literature to Thailand. Results of the study are useful in advancing theory in determining export success practices, particularly in emerging economies.

5.5 Managerial Contribution

Drawing from the resource-based view of the firm, this research investigated determinants of export performance of firms in the gem and industries in Thailand to gain a competitive advantage in foreign markets. This research provided further evidence that supported the Resource-Based View of the firm perspective on the importance of key resources and capabilities in facilitating successful export performance. The finding of this study could be used as a set of benchmarks by exporters in evaluate their composition of resources and capabilities that may confine their international expansion and exporting success. As it had been well accepted that RBV was the basis for successful firm to develop their distinctive and unique capabilities, more specifically, Wernerfelt (1984) asserted that RBV was an efficiency-based of the firm performance. This research, the hypotheses testing proved that RBV had created superior export performance through the export marketing strategy.

The findings of this study imply that well-established exporters that proactively seek international opportunities are the ones with higher export intensity and market spread. Managers responsible for exporting that envision their companies as successful exporters should direct their efforts to strengthening their company's offensive capabilities in pursuing future export ventures. In achieving this they need to build their attitudes toward international operations, seek foreign opportunities through efficient management of marketing information, and develop network relationships. However, this aggressive export behavior will facilitate export development and success only if the company already possesses a clear competitive advantage that is internationally marketable. The findings may be particularly beneficial for those sporadic exporters that adopt passive and opportunistic export behavior but who may decide to pursue more regular exporting activities. The study provides a guideline that may help them to develop a strategy to migrate their activities from a passive response to unsolicited orders and customer followership to an active pursuit of international opportunities.

The results where firm's capabilities did not directly support the export performance (as there were no direct relationship between them) indicated that firm cannot rely on their capabilities alone but rather firm needed to collaborate or integrate the firm's resources, firm's capabilities and marketing strategy together in order success

the export performance. As for firm's resources showed both direct and indirect relationship with export performance. The observed significant positive effects of advanced firm's resources on export performance suggest that export-oriented firms would significantly benefit from a strategic investment in advancing of firm' resources which comprising with human resources, capital resources, production technology and organization management. This direct positive relationship, with no mediating effect by marketing strategy, implied that resources has played an important role of businesses and would be difficult to separate, this might also be a reason why firm's resource still has relationship with performance of the firms even without the presence of marketing strategy. Furthermore, firms need to prioritize their investment in managerial staff that would possess pro-exporting attributes such as international orientation and experience. Having a managerial team experienced in international operations will strengthen the firm's ability to handle the increased complexity of managing operations in geographically diverse markets.

From the finding of this study, this research suggests the implementation into practicing for Thai gem and jewelry exporters as follows. 1) As the export marketing strategy, is the mediator between firm's resources, firm's capabilities and export performance and had significantly positive effect on export strategy. The Empirical findings of this study suggest that a high degree of export marketing strategy adaptation is associated with export performance. The finding indicate that export marketing strategy had play the major role that forces to meet the objectives of the export venture. Therefore, Thai gem and jewelry exporters need to adapt their marketing mix strategy (product strategies, pricing strategy, distribution strategy and promotion strategy according to the export market needs. Firm need to study the customer needs to design and creating the innovations and adding value on both products and services as to create viable growth opportunities for the firm. Further, to increase competitiveness firm need to provide the efficiency inventory system and trustworthy shipping system to enhance the competitiveness of firm. 2) As the study found the positive effect of firm's resource on both export marketing strategy and export performance, these finding is consistent with past existing research. The finding strongly confirm that Thai gem and jewelry exporters need to have potential management system in order to maintain firm's resources (Human resource, capital resource, physical resource and organization resource) them to be

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value, rare, difficult to imitate and non-substitutable, as the four essential characteristics of firm's resource is force to the development of marketing mix and the successful of exporting objective.

5.6 Limitation of the Study

Although the researcher tries to make sure that the results are valid and reliable, still this research has some limitations that require caution for other researcher who interest in conducting similar studies in this topic and using a similar group of subject. This research has only focused on the internal environment factor that effect on export performance. The external factor such as economic condition or political condition should be conducted to determine as the predictors of export performance construct where, the economic condition decline or political conflict also have an impact on many businesses especially those luxuries goods like Gems and Jewelry.

5.7 Suggestion for Future Research

The study results and limitations provide several questions unanswered and research gaps, which suggests future research.

Firstly, this study employed the RBV approach in identifying the key advantage- generating resources with significant positive export performance implications. The study does not take into account the influences of the external environment. Future researchers should consider the specific characteristics of the external environment, both the domestic environment and the export market environment and their influence on export performance. Furthermore, the views of government agencies and policymakers providing export promotion programs to compare the impact on export performance at the firm level. This can lead to greater precision in delineating and understanding the impact of different environmental forces on export performance.

Secondly, this study has developed a conceptual model that contributed to measuring and identifying key determinants of export performance through intervening variables. It was suggested that future researchers should consider other industry or conducting similar studies with other samples of firms in different geographic contexts which might have different nature and characteristics. The results of the study between

different contexts or different business environment might yield different insight from the study results.

Thirdly, although firm's capabilities prove to have no significant direct effect on export performance in this study, another avenue for future research would be to investigate the causal relationship of firm size, firm experience or manager educational on firm's capabilities.

Lastly, this study used only quantitative data to test the conceptual model. Therefore, the conclusion of this study was depended only on the structural equation modell (SEM) testing perspective. Future research should conduct mix-method research design to interview in-depth and discuss to affirm the results from the quantitative research**.**

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APPENDICES

APPENDIX A

Questionnaire
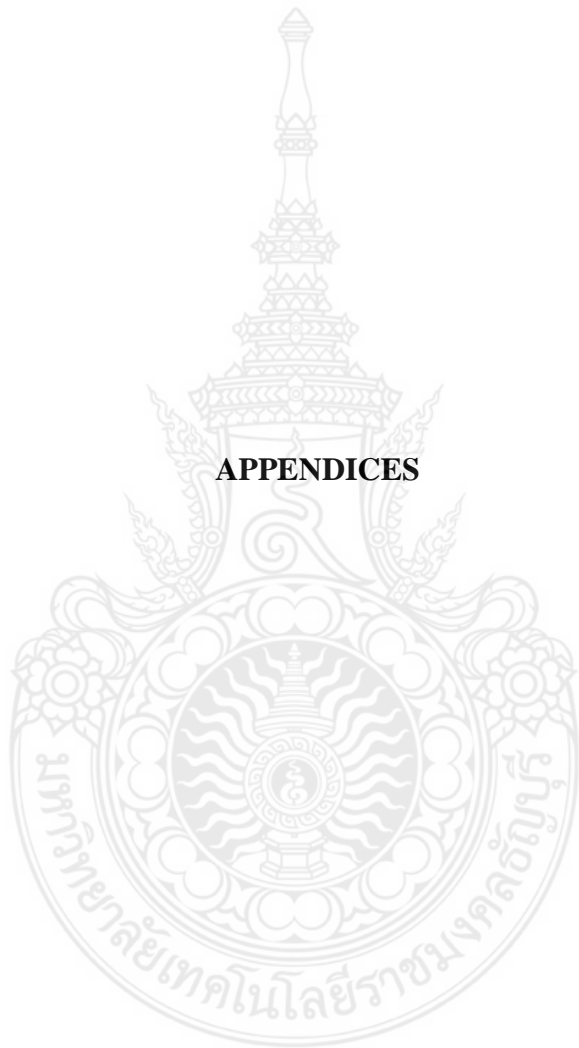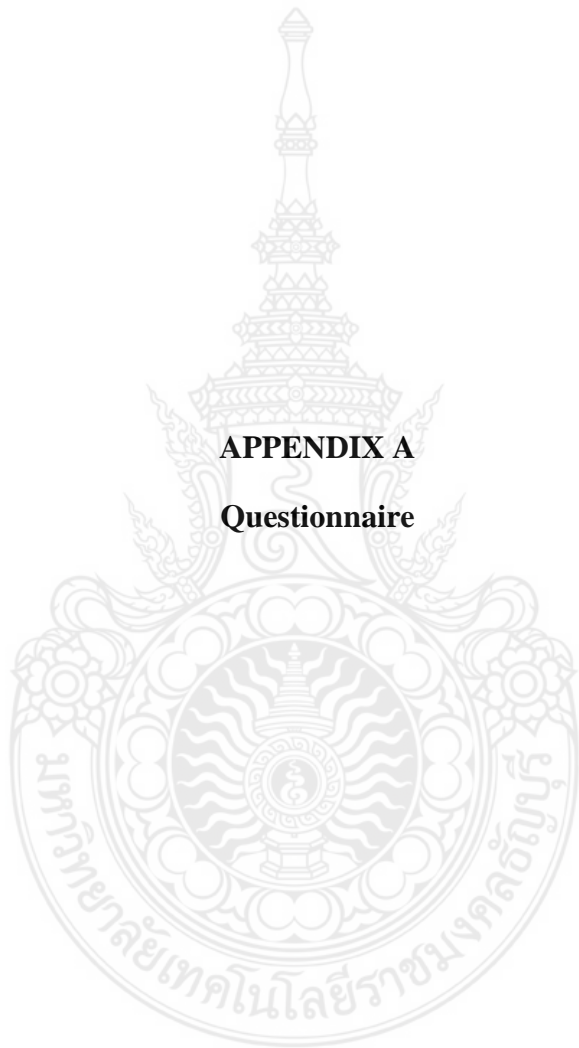
Dear respondent,

This academic research is part of the effort to contribute to the performance of Firms in Thailand. Kindly spare some time to respond to the following questions. There is no right or wrong answers. We are interested in your general impressions. The information provided will be used for academic purpose only and shall be treated with utmost confidentiality.

…………………………………………………………………

SECTION 1- GENERAL INFORMATION ABOUT YOUR FIRM

1. How many years has your company been in the export business? (please tick only one)

☐ Less than 5 years   ☐ 5-10 years

☐ 10-15 years   ☐ 10 years and over

2. How many employees work in your firm? (please tick only one)

☐ Less than 50 employees   ☐ 50-200 employees

☐ 200 employees and over

3. Kindly specify the form of ownership of your firm? (please tick only one)

☐ Thai owned   ☐ Foreign owned

☐ Joint foreign and Thai owned

4. What level of education do managers in your company have, on average? (please tick only one)

☐ Below degree level   ☐ BA/BSc degree   ☐ MBA/Master degree or higher

5. Where are your main export markets region? (please tick only one)

☐ Asia   ☐ European Union

☐ The United States   ☐ Others pleasespecify……………………

7. What is the main product you export to this country? (please tick only one)

☐ Gem   ☐ Jewelry

SECTION 2: FIRM'S RESOURCES

This section includes questions about the resources available to your firm for your main export country. With regards to your firm's resources, please indicate CIRCLING how much you agree or disagree with the following statements

1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree.

Production and technology							
1. The firm incorporates the latest technology in their manufacturing processes.	1	2	3	4	5	6	7
2. Our firm is recognized in our main export country for products that are technologically superior.	1	2	3	4	5	6	7
3. Our firm has sufficient manufacturing capacity to meet export orders as required	1	2	3	4	5	6	7
Human experience							
4. Our key people responsible for our main export market have extensive knowledge of this market.	1	2	3	4	5	6	7
5. Our key people responsible for our main export country have extensive export experience.	1	2	3	4	5	6	7
6. Our firm is experienced in exporting.	1	2	3	4	5	6	7
Planning							
7. Our firm carried out informal planning activities for this export venture.	1	2	3	4	5	6	7
8. We planned extensively in advance for this export venture.	1	2	3	4	5	6	7
9. In our main export country, our planning activities extend beyond 12 months.	1	2	3	4	5	6	7
Capital							
10. Our firm can offer competitive credit terms in our main export country.	1	2	3	4	5	6	7
11. Our firm has working capital to finance export business in our main export country.	1	2	3	4	5	6	7
12. Our firm can meet competitive prices of other domestic and overseas suppliers in our main export country.	1	2	3	4	5	6	7

Source: Freeman, (2009) 12-items firm's resource scale

SECTION 3: FIRM'S CAPABILITY

In this section, questions are asked about your firm's capabilities in developing and maintaining your main export country. With regards to your firm's capabilities, please indicate CIRCLING how much you agree or disagree with the following statements.

1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree.

Information capability							
1. Our firm keeps up to date with relevant export market information.	1	2	3	4	5	6	7
2. Our firm monitors competitive products in our main export country.	1	2	3	4	5	6	7
3. Our firm stays in touch and understands export customer requirements.	1	2	3	4	5	6	7
Relationship capability							
4. Our firm develops and maintains good relationships with export customers.	1	2	3	4	5	6	7
5. Our firm regularly makes contact with our export customers.	1	2	3	4	5	6	7
6. Our firm cooperates with export customers when making changes to our product or strategy.	1	2	3	4	5	6	7
Product development							
7. Our firm improves and modifies existing products for export customers.	1	2	3	4	5	6	7
8. Our firm develops new products for export customers when required.	1	2	3	4	5	6	7
9. Our firm adopts new methods and ideas in our manufacturing process when needed.	1	2	3	4	5	6	7
10. Our product development efforts give us an edge in our main export country.	1	2	3	4	5	6	7
11. Our product development efforts are more responsive to customer needs than our competitors when developing a new product or modifying our existing product.	1	2	3	4	5	6	7

Source: Freeman, (2009) 11-items firm's capability scale

SECTION 4: ADAPTATION OF THE MARKETING MIX STRATEGY

Considering your export activity at the firm level, to what extent have you adapted the following in your major foreign markets? Please indicate CIRCLING the number from 1 to 5 that best represents your choice. Using the scale

1 = not at all adapted, 2 = barely adapted, 3 = somewhat adapted, 4= moderately adapted, 5= very adapted, 6 = adapted to a greater extent, 7 = fully adapted.

Current adaptation of product strategy							
1. product brand name	1	2	3	4	5	6	7
2. products design	1	2	3	4	5	6	7
3. Product labeling	1	2	3	4	5	6	7
4. Variety of the main exporting product line.	1	2	3	4	5	6	7
5. Product quality	1	2	3	4	5	6	7
Current adaptation of Pricing Strategy							
6. Determinant of pricing strategy	1	2	3	4	5	6	7
7. Concession of credit	1	2	3	4	5	6	7
8. price discount policy	1	2	3	4	5	6	7
9. margins	1	2	3	4	5	6	7
Current adaptation of Promotion Strategy							
10. Advertising theme /message	1	2	3	4	5	6	7
11. Media channels for advertising.	1	2	3	4	5	6	7
12. promotion objectives	1	2	3	4	5	6	7
13. Budget for promotion.	1	2	3	4	5	6	7
14. sales promotion	1	2	3	4	5	6	7
Current adaptation of Distribution Strategy							
15. Criteria of selection	1	2	3	4	5	6	7
16. Transportation strategy	1	2	3	4	5	6	7
17. Distribution budget	1	2	3	4	5	6	7
18. Distribution network	1	2	3	4	5	6	7

Source: Lages & Montgomery, (2004) 18-items export marketing strategy scale

SECTION 5: EXPORT PERFORMANCE OF THE FIRM

To the best of your knowledge, how would you rate your firm's export performance based on the following objectives? Please indicate CIRCLING the number from 1 to 5 that best represents your choice. Using the scale
1= strongly disagree, 2= disagree, 3=somewhat disagree, 4= neutral, 5=somewhat agree, 6=agree, 7= strongly agree.

Financial Export Performance							
1. Our firm has been very profitable.	1	2	3	4	5	6	7
2. Our firm has generated a high volume of sales.	1	2	3	4	5	6	7
3. Our firm has achieved rapid growth.	1	2	3	4	5	6	7
Strategic export performance							
4. Our firm has improved our global competitiveness	1	2	3	4	5	6	7
5. Our firm has strengthened our strategic position.	1	2	3	4	5	6	7
6. Our firm has significantly increased our global market share.	1	2	3	4	5	6	7
Satisfaction with export performance							
7. The performance of our firm has been very satisfactory.	1	2	3	4	5	6	7
8. Our firm has been very successful.	1	2	3	4	5	6	7
9. Our firm has fully met our expectations.	1	2	3	4	5	6	7

Source: Zou, Taylor, and Osland's (1998) 9-items export performance scale

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คณะบริหารธุรกิจ
มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี
ตำบลคลองหก อำเภอธัญบุรี
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เรื่อง ขอความอนุเคราะห์ตอบแบบสอบถาม เพื่อประกอบการทำวิจัย

เรียน ท่านผู้ตอบแบบสอบถาม

สิ่งที่ส่งมาด้วย แบบสอบถามดุษฎีนิพนธ์

      ด้วยคณะบริหารธุรกิจ มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี ได้เปิดสอนระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาบริหารธุรกิจ ตั้งแต่ปีการศึกษา 2551 แล้วนั้น ขอรับรองว่า นางสาวนุชนภา เลขาวิจิตร รหัสนักศึกษา 125690509002-0 เป็นนักศึกษาหลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาบริหารธุรกิจ วิชาเอกบริหารธุรกิจระหว่างประเทศ เป็นผู้จัดทำดุษฎีนิพนธ์ เรื่อง DETERMINANTS OF EXPORT PERFORMANCE: THE CASE OF THAILAND GEM AND JEWELRY INDUSTRY

      จึงเรียนมาเพื่อโปรดให้ความอนุเคราะห์ ให้ข้อมูลประกอบการทำวิจัย ให้เกิดความสำเร็จเพื่อ เผยแพร่ผลงานวิจัยที่เป็นคุณูปการแก่องค์กรและผู้สนใจต่อไป

ขอแสดงความนับถือ

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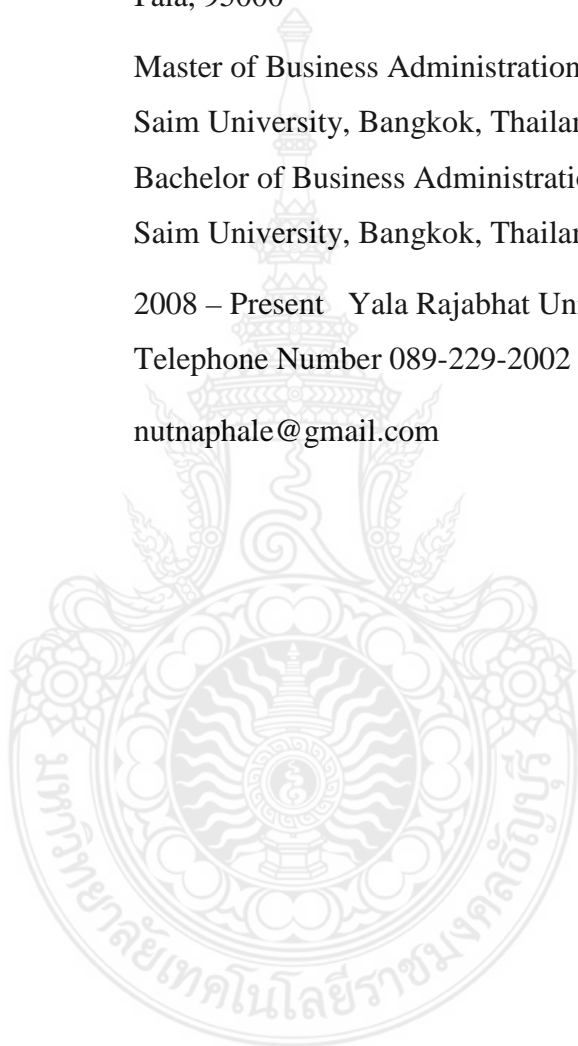
Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and beliefs, contains on material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my dissertation, when deposited in the university library, being available for loan and photocopying.

Nutnapha Lekhawichit