

# **Chapter 6**

## **Conclusion, Discussion, Limitations, and Recommendations**

This study identifies international trade as an important component of a nation's economy. Countries become economic interdependency. The pressure of trade liberalization forces countries, industries, and companies within each country to continually develop and enhance their operations in order to survive and compete internationally. Those who fail to hold their competitive advantage face the threat of losing their markets to competitors. Thai financial crisis in 1997 had shown lack of strong economic foundation. Problems base on facts that Thai competitiveness is non-sustainable. Thai exports heavily on resources and labor intensive products. Thai products lack in competitive advantage. Its exports are easily challenged by other low cost competitors. To obtain a long term economic stability and growth, it is necessary that Thai develop sustainable competitiveness.

This paper attempts to select and study an industry with potential to develop its internationally competitiveness. The selected industry is the Thai food export industry. The study verifies whether Porter's diamond model can be used to identify the competitiveness of Thai food export industry, and to what extent. Weaknesses and strengths of the industry are identified. Suggestions for further improvement are provided.

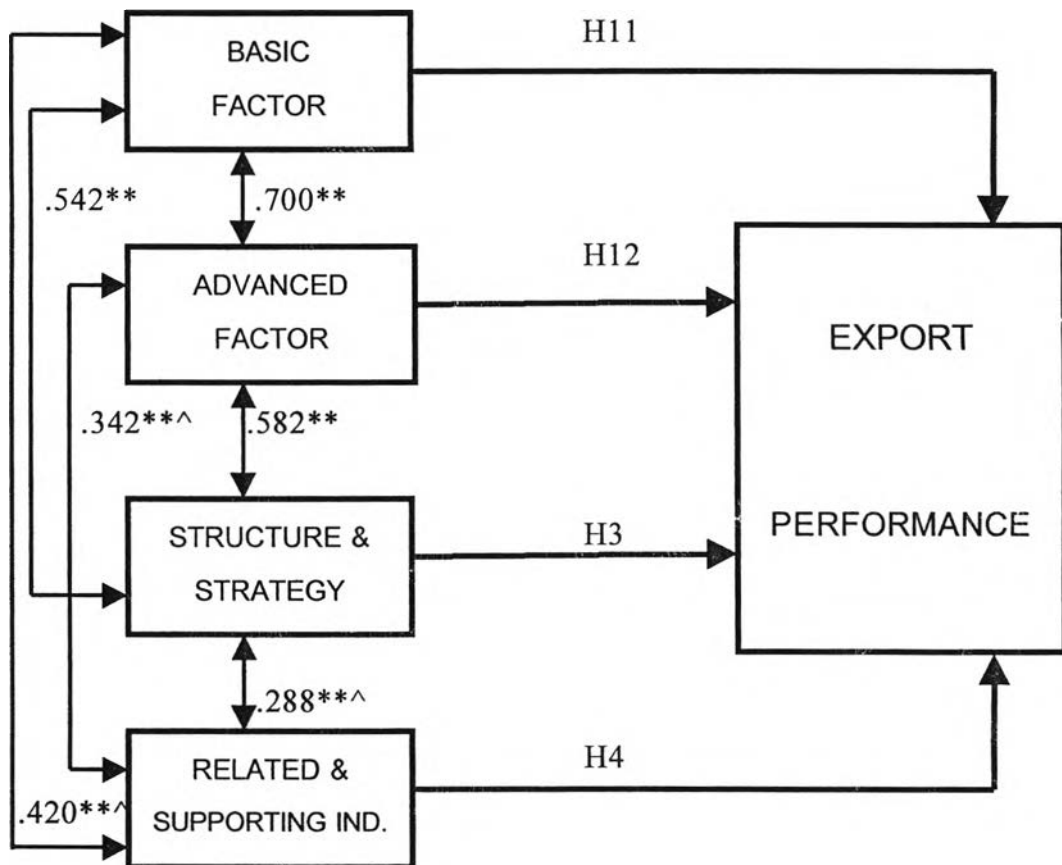
### **Conclusion**

The study tests Porter's diamond framework. Export profit and sales growth are used as measures of export performance. The framework's constructs are factor conditions, demand conditions, company's strategy, structure, and rivalry, and related and supporting industries. The external

environment attributes to export success are government policies and chance events.

The study shows applicable framework for Thai food export performance differs from the framework suggested by Porter's. Figure 6.1 presents the framework for Thai food export performance.

**Figure 6.1** Framework of Thai Food Export Performance



Note : \*\* Correlation is significant at the 0.01 level (1-tail)

^ Kendall's tau b correlation coefficient is applied

The survey identifies export performance constructs as basic factor conditions, advanced factor conditions, company's structure and strategy, and related and supporting industries. Factor analysis is applied to identify measures of each of these constructs.

Basic factor construct consists of resources and labor attributes.

Resources attributes are quantity availability of resources, quality of resources, and cost of resources. Labor attributes are quantity availability of labor, quality of labor, and cost of labor. Basic factor construct is identified by the composite mean scores of these measures.

Advanced factor conditions consist of human resources and production and technology attributes. Human resources are identified as competence employees, competence research and development personnel and department, and human resources training. Production and technology attributes include production technology, technology development, and products standard.

Advanced factor construct is identified by the composite mean scores of these measures.

Company's structure and strategy construct is the composite scores of the three dimensional representation of the construct. Company's structure is represented by the existence of export department and management exports commitment. Company's strategy has two dimensions. One is the export sales plan, export customers plan, prompt delivery, quantity and quality control, and customer relation strategies. The other is the cost and differentiated strategies.

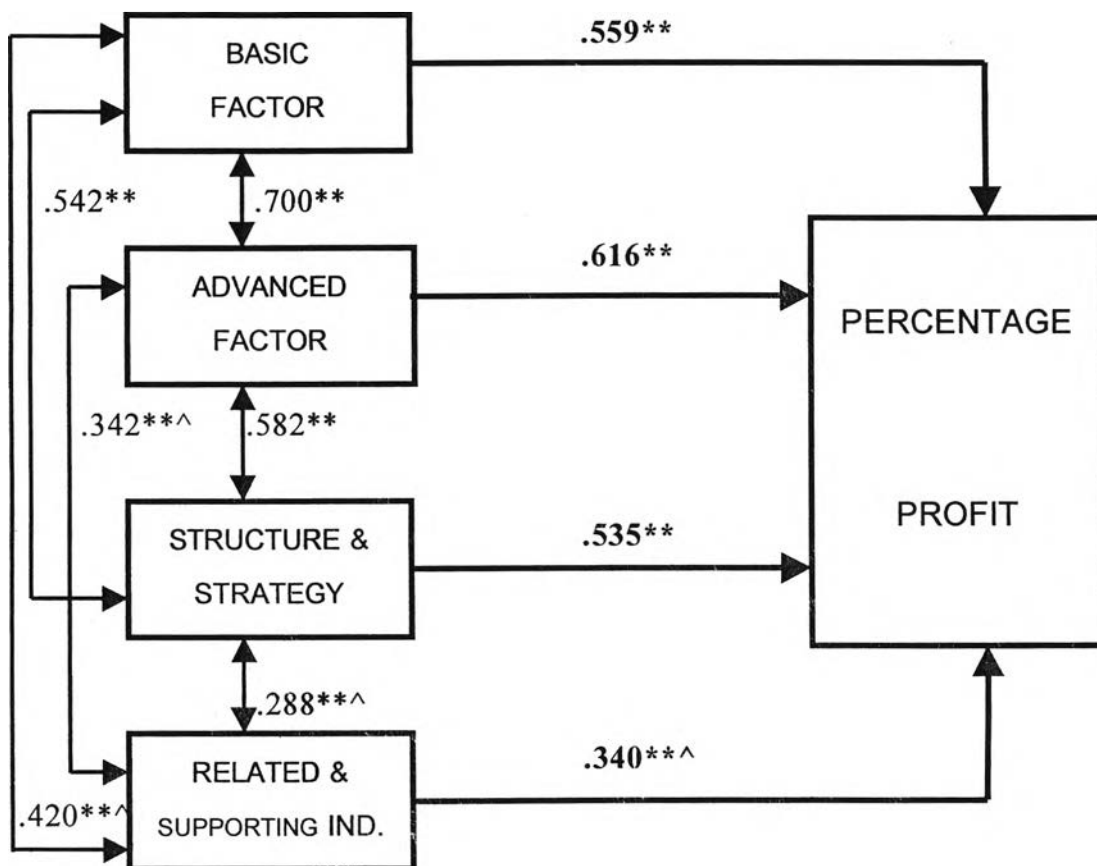
Related and supporting industries construct consists of domestic transportation system, international transportation system, finance and banking system, and packaging industries. These four industries are closely linked industries identified by food exporters as having contributions towards their food export performance.

Statistics shows correlation among all of these export performance constructs. All constructs except related and supporting industries are normally distributed. The Pearson's product moment correlation coefficients are used to represent the level of relationship among basic factor construct, advanced factor construct, and company's structure and strategy construct. The Kendall's tau b is applied to measure the level of relationship between related and supporting industries construct and other constructs.

All constructs show significant correlation at 0.01 level. Basic factor construct has high correlation with advanced factor construct at 0.700. It has mid level correlation with company's structure and strategy construct, and related and supporting industries construct, at 0.542 and 0.420 respectively. Advanced factor has mid level correlation with company's structure and strategy construct. It has low level correlation with related and supporting industries construct. Company's structure and strategy has low level correlation with related and supporting industries construct.

Test of relationships among measures of export performance and their constructs is performed. These measures of export performance are export percentage profit, and export percentage sales growth. Respondents are asked to identify other measures of export performance. Identified measures of export performance are exporting sales value, management satisfaction, customer satisfaction, and growth in number of customers or growth in number of company's exporting countries. The scope of this study limits to two measures, the export percentage profit, and the export percentage sales growth. Figure 6.2 shows framework for export percentage profit and figure 6.3 shows framework for export percentage sales growth.

**Figure 6.2** Framework of Thai Food Export Performance : Percentage Profit



Note : \*\* Correlation is significant at the 0.01 level (2-tail)

$\wedge$  Kendall's tau b correlation coefficient is applied

Financial crisis in Thailand in 1997 has profounded effect on Thai export performance. The baht devaluation is considered a chance events effecting the level of export profit. There are gains and losses on export products due to the currency fluctuation. In the attempt to minimize the effect of currency fluctuation on export performance, this study uses a five-year-average percentage profit, using data from year 1994 to 1998, to represent the export percentage profit.

Medium levels of correlation are found between export percentage profit and its constructs of basic factor, advanced factor, and company's structure and

strategy. The Pearson's product moment correlation coefficients are 0.559, 0.616, and 0.535, respectively. Low level of correlation is found between export percentage profit and related and supporting industries construct. The Kendall's tau b correlation coefficient is 0.340.

The framework identifies the existence of relationships among export profit and its constructs. Correlation coefficient shows how each construct individually explains the export percentage profit. Multiple regression analysis is used to test the combined effects of these constructs on the export performance.

The input dependent variable is the five-year average export percentage profit. The selected independent variables are basic factor construct, advanced factor construct, and company's structure and strategy construct. Since related and supporting industries construct is not normally distributed, it is excluded from the analysis.

The mathematical function for export percentage profit is

$$\text{Percentage Profit} = -5.790 + 1.023 \text{ BF} + 1.735 \text{ AF} + 1.763 \text{ SS}$$

where BF = basic factor construct

AF = advanced factor construct

SS = company's structure and strategy construct

The F value is 34.80. The coefficient of determination has the value of 0.444. It implies that 44.4 percent of the variation in percentage profit is explained by basic factor, advanced factor, and company's structure and strategy constructs.

The study further tests to see whether differences in export product categories provide differences in export percentage profit function. Dummy variables are additionally input as independent variables to represent company's product classifications.

The derived function for percentage profit becomes

$$\text{Percentage Profit} = -4.900 + 1.018 \text{ BF} + 1.624 \text{ AF} + 1.708 \text{ SS} - 1.540\text{U}$$

where BF = basic factor

AF = advanced factor

SS = structure and strategy

U = 1, when classified as unprocessed.

The mathematical function for export percentage profit for company classified as unprocessed is

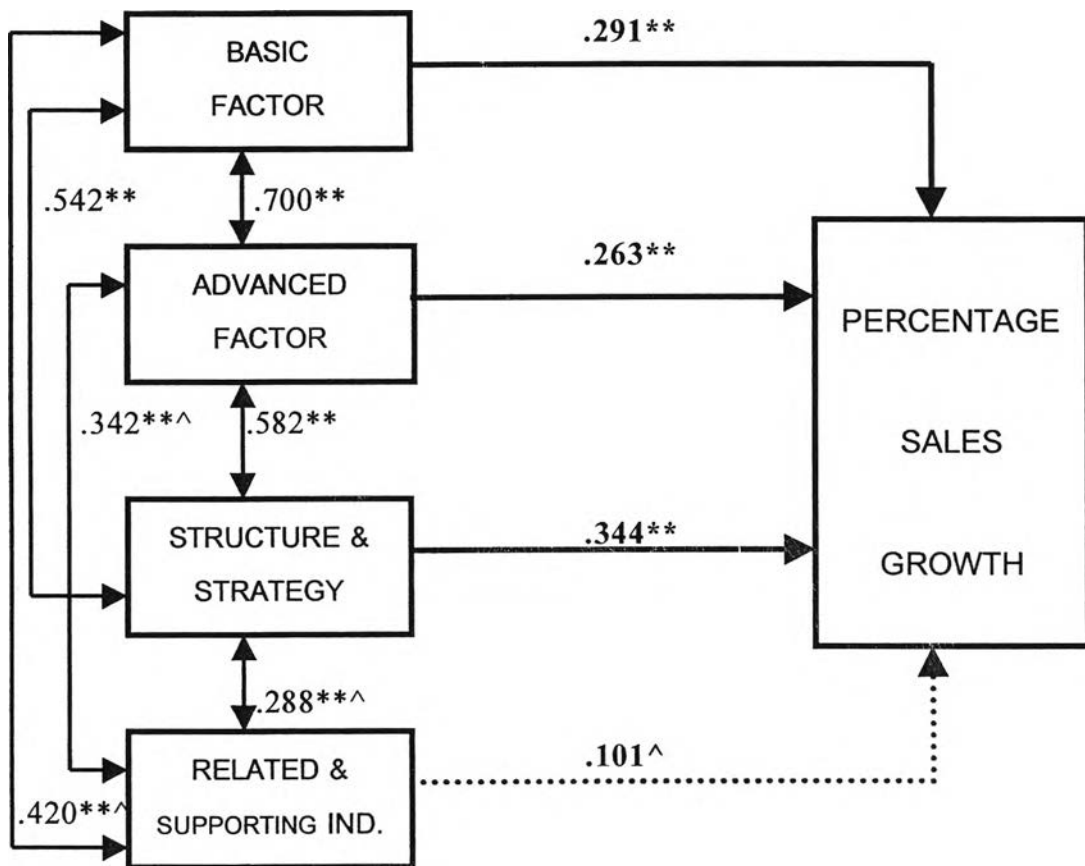
$$\text{Percentage Profit} = -6.440 + 1.018 \text{ BF} + 1.624 \text{ AF} + 1.708 \text{ SS}$$

The mathematical function for export percentage profit for other company classifications are

$$\text{Percentage Profit} = -4.900 + 1.018 \text{ BF} + 1.624 \text{ AF} + 1.708 \text{ SS}$$

The F value is 31.00. The coefficient of determination has the value of 0.488. It implies that 48.8 percent of the variation in percentage profit is explained by basic factor construct, advanced factor construct, and structure and strategy construct, with control variable being company's classification. Including the control variable, company's classification, improves the explained variation of percentage profit by 4.4 percent. It is also implied that, holding other external environments constant, exporter of processed products is likely to obtained lower percentage profit than exporting other products' classification by approximately 1.54 percent.

**Figure 6.3** Framework of Thai Food Export Performance : Percentage Sales Growth



Note : **\*\*** Correlation is significant at the 0.01 level (2-tail)  
 $\wedge$  Kendall's tau b correlation coefficient is applied

As mention earlier, a five-year-average percentage sales growth, using data from year 1994 to 1998, is used to represent the export percentage sales growth.

Even though, correlation among export percentage sales growth and its constructs of basic factor, advanced factor, and company's structure and strategy exist at 0.01 level of significance. Low levels of correlation are found between them. The Pearson's product moment correlation coefficients are 0.291, 0.263, and 0.344, respectively. Export percentage sales growth is not significantly correlated with related and supporting industries construct. The Kendall's tau b correlation coefficient is 0.101.



Multiple regression analysis is used to test the combined effects of these significantly related constructs on the export performance.

The input dependent variable is the five-year average export percentage sales growth. The selected independent variables are basic factor construct, advanced factor construct, and company's structure and strategy construct.

The mathematical function for export percentage sales growth is

$$\text{Percentage Sales Growth} = -3.203 + 3.598 \text{ SS}$$

where

SS = structure and strategy.

The F value is 17.90. The coefficient of determination has the value of 0.119. It implies that 11.9 percent of the variation in percentage sales growth is explained by company's structure and strategy. The function suggests that only company's structure and strategy construct, not the basic factor or the advanced factor constructs, is suitable for predicting the percentage sales growth.

The study further tests to see whether differences in export product categories provide differences in export percentage sales growth function. Dummy variables are additionally input as independent variables to represent company's product classifications.

The derived function for percentage sales growth becomes

$$\text{Percentage Sales Growth} = -3.122 + 3.737 \text{ SS} - 2.000 \text{ R}$$

where

SS = structure and strategy

R = 1, when classified as ready-to-serve.

The mathematical function for export percentage sales growth for company classified as exporting ready-to-serve products is

$$\text{Percentage Sales Growth} = -5.122 + 3.737 \text{ SS}$$

The mathematical function for export percentage sales growth for other company classifications are

$$\text{Percentage Sales Growth} = -3.122 + 3.737 \text{ SS}$$

The F value is 13.37. The coefficient of determination has the value of 0.168. It implies that 16.8 percent of the variation in percentage sales growth is explained by structure and strategy with control variable being company's classification. Including the control variable, company's classification, improves the explained variation of percentage sales growth by 4.9 percent. It can also be implied that, holding other external environments constant, exporter of ready-to-serve products is likely to obtained lower percentage sales growth than exporting other products' classifications by 2 percent.

## **Discussion**

Information gained from comparing data between important scores and present conditions can be used to identify weaknesses and strength of exporting companies and its environment. Correlation between present conditions and export performance can be use to compare the actual level of relationship among export performance and factor determining it.

Table 6.1 shows a comparison between the importance scores and the present condition of export success factors. It also includes correlation between each factor and export performance measures.

**Table 6.1** Composite Scores Comparison of Export Success Factors

<b>Dimensions</b>	<b>Cl.</b>	<b>Mean Important Score</b>	<b>Mean Actual Score</b>	<b>Mean Difference Score</b>	<b>Sig. (2-tail)</b>	<b>% Mean Important Score</b>	<b>% Mean Actual Score</b>	<b>% Mean Difference Score</b>	<b>Correlation with % Profit</b>	<b>Correlation with % Sal.Gr.</b>
Raw material	Ex.	4.101	3.235	0.866	.000	82%	65%	17%	.370**	.234**
<b>Company's structure</b>	<b>In.</b>	<b>3.956</b>	<b>4.600</b>	<b>-0.644</b>	.000	<b>79%</b>	<b>92%</b>	<b>-13%</b>	<b>.102</b>	<b>.191**</b>
Labor	Ex.	3.511	3.178	0.333	.000	70%	64%	6%	.449**	.146*
<b>Planning, Q.C., and service</b>	<b>In.</b>	<b>3.443</b>	<b>3.139</b>	<b>0.304</b>	.000	<b>69%</b>	<b>63%</b>	<b>6%</b>	<b>.425**</b>	<b>.242**</b>
<b>Price-differentiated strategy</b>	<b>In.</b>	<b>3.363</b>	<b>3.063</b>	<b>0.300</b>	.000	<b>67%</b>	<b>61%</b>	<b>6%</b>	<b>.276**</b>	<b>.081</b>
<b>Human resources</b>	<b>In.</b>	<b>3.284</b>	<b>2.909</b>	<b>0.375</b>	.009	<b>66%</b>	<b>58%</b>	<b>8%</b>	<b>.444**</b>	<b>.215**</b>
<b>Product &amp; Technology</b>	<b>In.</b>	<b>3.252</b>	<b>3.059</b>	<b>0.193</b>	.000	<b>65%</b>	<b>61%</b>	<b>4%</b>	<b>.537**</b>	<b>.160*</b>
Related & Supporting industries	Ex.	3.011	2.607	0.404	.015	60%	52%	8%	.340**	.101
Domestic competition	Ex.	<b>0.870</b>	2.950	-2.080	.000	17%	59%	-42%	-.036	.075
Demand condition	Ex.	<b>0.832</b>	1.272	-0.440	.000	17%	25%	-8%	-.135*	.014

Note : n = 135

Cl. = In. represents factor internal to firm ; Cl. = Ex. represents factor external to firm

Mean Important Score = factor's important level for export success

Mean Actual Score = score identified current actual condition

Mean Difference Score = differences between the mean important score and the mean actual score

Respondents identify external to firm factor, raw material, as the most important factor towards export success. Second most important factor is internal to firm factor, the existence of company's structure. Third most important factor is external to firm factor, labor. Following four important factors are internal to firm factors, planning, quality control, and service strategy, price differentiated strategy, human resources, and product and technology. The next important factor is external to firm factor, related and supporting industry. The last two external to firm factors are defined as unimportant or unrelated to export success, the domestic competition and domestic demand condition.

Of the three most important factors defined by respondents, two are external to firm factors, raw material and labor. They are not readily be changed or improved by exporting firms. Another one is internal to firm, company's structure. Company's structure is the easiest to change or improve should the need for it arises. Next important factors viewed by exporters are strategy factors. Various strategies are tools for short-term success. The more fundamental factors, human resources, and product and technology, are viewed as having less importance towards export success. These are factors that can strengthen company's long-term competitiveness. Note that product and technology factor includes production and production technology measures but not the product innovation measure because of the low important score. When compare respondents' view on important factors towards export success with Porter's stages of development, Thai food exports should be in factor driven stage moving on to investment driven stage. Most exporters are, at this stage, not aware or ready for the innovation driven stage.

The comparisons between importance levels and present conditions are performed on all factors except the two unrelated factors, the domestic competition and the domestic demand condition. The mean different scores are used to identify where improvements are needed. The correlation between factor and export performance is used to identify how improvement in each factor would effect the export performance.

Present condition of company's structure scores highest among all present conditions and scores higher than its defined important level. There is no need for improvement on this factor. There is no significant correlation between company's structure and export percentage profit. Significant at 5 percent level, but low level of correlation is found between company's structure and export percentage sales growth. The correlation implies that improvement in company's structure would not result in improvement in export performance.

The two basic factor conditions are factors external to firm. Raw material has highest mean different score of 0.866 or 17 percent different. The correlation between raw material and export percentage profit is significant at 1 percent level with the correlation of .370. The correlation between raw material and export percentage sales growth is significant at 1 percent level with the correlation of .234. Improvement in raw material conditions, lower cost, quantity availability, and improved quality, can improve export performance in both profit and sales growth dimensions. Mean different score for labor is 0.333 or 7 percent. The correlation between labor and export percentage profit is significant at 1 percent level with the correlation of 0.449. The correlation between labor and export percentage profit is significant at 1 percent level with the correlation of 0.449. The correlation between labor and export percentage sales growth is significant at 5 percent level with the correlation of 0.146. Improvement in labor conditions, lower cost, quantity availability, and improved quality, can apparently improve export percentage profit. Improvement in export sales growth, on the other hand, may not be obvious. Since both factors are external to firm factors, exporting companies cannot directly improve or enhance these factors.

Both dimensions of strategy factor show mean different scores close to 0.300 or 6 percent. The correlation for export percentage profit and planning, Q.C., and service is significant at 1 percent level with the value of 0.425. The correlation for export percentage sales growth and planning, Q.C., and service is significant at 1 percent level with the value of 0.242. The correlation for export percentage profit and price-differentiated is significant at 1 percent level

with the value of 0.276. There is no significant correlation between export percentage sales growth and price-differentiated.

Companies can adjust, improve, and enhance their strategies to improve their export performance. Correlation of each item of strategy is used to identify important strategies affecting export performance. The improvement in export percentage profit would be more readily seen, while improvement in export sales growth may not be prominent.

Human resources, and product and technology are the two dimension of advanced factor. The correlation between advanced factors and export percentage profit is the highest when compares with other factors. This means that advanced factor effect export performance more than other factors. Respondents, however, identify it as least important internal to firm factor. The result suggests that respondents fail to identify advanced factor as critical success factor for export performance.

Related and supporting industry is identified as the least important factor towards export performance. The correlation between related and supporting industry is significant at 1 percent level with the value of 0.340. Improvement in related and supporting industries can improve exporters percentage profit.

### **Effect of Factor Conditions**

H<sub>A11</sub>: Basic factor conditions are positively related to the Thai food export performance.

The composite score of raw material factor and labor factor identifies basic factor. Statistical test finds a 1 percent significant medium-level correlation between basic factor and export percentage profit. The test for correlation with export percentage sales growth concludes a 1 percent significant low level of correlation. The statistical tests reject the null

hypothesis and conclude that basic factor conditions are positively related to the both measures of Thai food export performance.

H<sub>A12</sub>: Advanced factor conditions are positively related to the Thai food export performance.

The composite score of human resources and product and technology identifies advanced factor. Statistical test finds a 1 percent significant high-level correlation between advanced factor and export percentage profit. The test for correlation with export percentage sales growth concludes a 1 percent significant low level of correlation. The statistical tests reject the null hypothesis and conclude that advanced factor conditions are positively related to the both export percentage profit and export percentage sales growth.

### **Effect of Domestic Market Conditions**

Both domestic demand condition and domestic competition level are classified together as domestic market conditions. Respondents indicate differences in domestic demand and exporting demand, domestic taste differs from international market. Thai exporters do not view export market as extension of domestic market. Because of the different nature of domestic and export market, domestic operators concentrate on domestic market, and exporters concentrate on exporting market. While respondents agree on high level of domestic competition, this is not the reason for exporting. Exporters identify reasons for exporting, not as extension of domestic market, but because it produces higher profit.

H<sub>A2</sub>: Specific demand conditions are positively related to the Thai Food export performance.

The composite score of domestic demand conditions include size of domestic market, growth rate of domestic market, and level of demand sophistication. Statistical test fails to reject null hypothesis. It concludes that

demand condition is not positively related to the both export percentage profit and export percentage sales growth.

H<sub>A4</sub>: Level of domestic competition is positively related to the Thai food export performance.

Statistical test fails to reject null hypothesis. It concludes that level of domestic competition is not positively related to the both export percentage profit

### **Effect of Company's Structure and Strategy**

H<sub>A3</sub>: Company's structure and strategy are positively related to the Thai food export performance.

The composite score of company's structure, planning, Q.C., and service, and price-differentiated strategy identifies company's structure and strategy. Statistical test finds a 1 percent significant medium-level correlation between company's structure and strategy and export percentage profit. The test for correlation with export percentage sales growth concludes a 1 percent significant low level of correlation. The statistical tests reject the null hypothesis and conclude that company's structure and strategy is positively related to the both export percentage profit and export percentage sales growth.

### **Effect of Related and Supporting Industries**

H<sub>A5</sub>: Competence related and supporting industries' competitiveness is positively related to the Thai food export performance.

Statistical test shows a 1 percent significant low level correlation between related and supporting industries and export percentage profit. The test rejects null hypothesis and concludes that related and supporting industries' competitiveness is positively related to export percentage profit. For export



percentage sales growth, the study fails to reject the null hypothesis. It concludes that related and supporting industries' competitiveness is not positively related to export percentage sales growth.

### **Effect of Environmental Factors**

H<sub>A6</sub>: Government policies are related to the Thai Food export performance.

Though respondents agree on the influence government roles and policies have on export operation and export performance. Government roles and policies are not directly or immediately affect the export performance. It is difficult to quantify the effect of influence government roles and policies. Chi-square test rejects null hypothesis and concludes that government roles and policies are related to the Thai food export performance.

H<sub>A7</sub>: Chance events are related to the Thai Food export performance.

Chance events are similar to government roles and policies in term that chance events are identified to affect export performance, but it is difficult to quantify such effects. Chi-square test rejects null hypothesis and concludes that chance events are related to the Thai food export performance.

### **Export Percentage Profit**

The study identifies 4 constructs of export performance. These constructs are basic factor, advanced factor, company's structure and strategy, and related and supporting industries construct. All of these constructs show significant correlation at 1 percent level when compare with the export percentage profit.

There is a medium level correlation between basic factor construct and the export percentage profit. The Pearson's product moment correlation

coefficient is 0.559. In another word, basic factor construct individually can explain 31 percent of the variation in export percentage profit.

There is a high level correlation between advanced factor construct and the export percentage profit. The Pearson's product moment correlation coefficient is 0.616. That is, advanced factor construct individually can explain 38 percent of the variation in export percentage profit.

There is a medium level correlation between company's structure and strategy construct and the export percentage profit. The Pearson's product moment correlation coefficient is 0.535. This implies that, company's structure and strategy construct individually can explain 29 percent of the variation in export percentage profit.

Related and supporting industries construct is not normally distributed. Therefore, test for correlation using the Kendall's tau b correlation coefficient is more appropriate. There is a low level correlation between related and supporting industries construct and the export percentage profit. The Kendall's tau b correlation coefficient is 0.340.

### **Export Percentage Sales Growth**

The study identifies three constructs of export performance, the basic factor, advanced factor, company's structure and strategy construct, as having significant correlation at 1 percent level when compare with the export percentage sales growth. Related and supporting industries construct is not significantly correlated with the export percentage sales growth.

There is a low level correlation between basic factor construct and the export percentage sales growth. The Pearson's product moment correlation coefficient is 0.291. In another word, basic factor construct individually can explain 8.5 percent of the variation in export percentage sales growth.

There is a low level correlation between advanced factor construct and the export percentage sales growth. The Pearson's product moment correlation coefficient is 0.263. That is, advanced factor construct individually can explain 6.9 percent of the variation in export percentage sales growth.

There is a low level correlation between company's structure and strategy construct and the export percentage sales growth. The Pearson's product moment correlation coefficient is 0.344. This implies that, company's structure and strategy construct individually can explain 11.8 percent of the variation in export percentage sales growth.

Related and supporting industries construct is not normally distributed. Therefore, test for correlation using the Kendall's tau b correlation coefficient is more appropriate. There is a low level and insignificant correlation between related and supporting industries construct and the export percentage sales growth. The Kendall's tau b correlation coefficient is 0.101.

Respondents identify themselves as successful exporter regardless of their export profit level or their export sales growth level. Companies interpret their current existing as successful and those companies cease from existence as failure. The argument is that they have the flexibility to survive the country's 1997 financial crisis. Companies, however, are substantially affected by the crisis and accept the facts that their past export success is not a sustainable one.

### **Multiple Regression Results**

The regression result shows that the studied constructs are a better representation of percentage profit than the percentage sales growth. Explanation could lie in the facts that profit is more internally determined by company's competencies and sales growth is more externally determined by global demand and supply. Food is considered a major commodity being traded internationally. Major determinants of short-term export sales volume are the size of global demand and the availability of competitors' supplies. Chance

events such as natural disaster, epidemic break out can significantly influences the import or export volume of any country. The framework being studied is more concerned with internal to firm factors or factors external to firms but within the nation in which firm operates in. While the framework can identify closed to 50 percent of the variation in export profits, it can identify less than 17 percent variation in export sales growth.

Means comparison among average profit of different product categories shows a significantly lower level of profit of unprocessed products compare to other categories. The multiple regression function for export percentage profit, with product classifications as control variable, shows interesting result. The regression function identifies differences in export percentage profit on companies exporting different product classifications. It confirms lower export profit level for exporters of unprocessed products when compare with exporters of processed, ready-to-serve, and mixed products. Holding other things constant, exporters of unprocessed products realize approximately 1.54 percent lower profit than exporters of other three categories of products. No significant different in export percentage profit among exporters of other categories. The study concludes that, on average, unprocessed products cannot demand as high level of profit as the value added processed products.

The multiple regression function for export percentage sales growth, with product classifications as control variable, also identifies the effect of different product classifications on the resulting function. The function confirms lower export sales growth level for exporters of ready-to-serve products when compare with exporters of unprocessed, processed, and mixed products. Holding other things constant, exporters of ready-to-serve products have an approximately 2 percent lower sales growth than exporters of other three categories of products. No significant different in export percentage profit among exporters of other categories. This can be explained by two rationales. First is that ready-to-serve products involve substantial value added to the products. Exporting products undergo highly processed operation. The operation is more complex than other product classifications, so they are slower and more rigid to increase production capacity when compare with other

product classifications. Second rationale is that natural disaster or epidemic break through in either importing countries or export competing countries often causes most sudden increase in international demand for food products. The increase in demand from such reasons is usually the demand for unprocessed or semi-processed products.

## **Limitations**

Limitations of study are identified firstly by the time of study. The survey is performed after the financial crisis. The export performance and measures is effected by the currency devaluation. The external environment influences performance extensively. The five-year-average percentage profit and sales growth are used as measures of performance to lessen the impact of the crisis. The comparison of year to year performances cannot be performed. Thus, the study cannot measures performance trends whether exporters' performance improves from year to year.

Second limitation lies in that the paper, in order to identify specific factors governing the success of a potentially successful Thai export industry, studies is performed on only one industry. Therefore, any generalization beyond the food industry in Thailand must be made with caution.

Third limitation generates from the nature of the business operators. Majority of companies is reluctant to provide information to research studies. They express concerns over exposing specific information as render their competitiveness to competitors.

Fourth limitation lies in statistical measures of the effect of government roles and policies and the effect of chance events. While exporters indicate that both government roles and policies, and chance event influence export performance, they fail to identify these influences numerically.

## **Recommendations**

The study reviews weaknesses in planning and operating of food exporting companies. Most companies concentrate on short-term operation and sales. Companies compete on the existing comparative advantages. These advantages are raw material factor and labor factor. The two factors are factors external to firm. Companies have no control over these factors. The past success relies heavily on uncontrollable external factors. While exporters are aware of influences chance events have on export operation and performance, there are no precaution measures or rectifying plan prepared for such events.

While exporters enjoy current export profit and sales growth, it is important to develop competitive advantage to maintain long-term surviving and prosperity. Exporters are required to improve and enhance factors internal to firms. Government roles and policies are in supporting and assisting factors external to firm.

### **Suggestion for Thai Food Exporters**

Companies' improvements and enhancements must be based on developing both short term and long term competitiveness. Short term success of company lies in planning and developing appropriate marketing strategies. Improvement and investment on advanced factors are more fundamental to the long term sustainable competitiveness.

For short term recommendation, correlation tests show that improvements are required on company's strategies. The study shows that performance related strategies ranked by their importance are differentiated strategy, quantity and quality control, sales planning, prompt delivery, and customer planning. Improvements should be developed following these strategies.

In term of cost-differentiated strategy, differentiate product strategy is more important than low price strategy. Companies using differentiated strategy perform better than companies using low price strategy. Companies' performance can be improved through developing and providing their exporting markets with differentiated products.

International market places high value on quantity and quality control of products. There are more international competitors competing in low quality products market. Thailand has lost its competitiveness in such market and must move to high quality products. To secure international trading position, food exporters are required to provide operational processes to ensure high standard of quantity and quality control.

It is important to properly lay out systematic marketing and sales plan. Management should study information on importers' market and sales conditions and lay out plan to expand and increase sales accordingly. Strengths, weaknesses, opportunities, and threats of each market must be analyzed. Detail operational plan on marketing mix for each market must be determined. As chance events influence performance, company's marketing and sales plan should include periodical monitoring and controlling procedure so that company is aware of any changes occurred in its competing market. Early detection of difficulty enables company to rectify problems quickly. Identification of opportunity allows company to take advantage of the situation before its competitors.

Exporters should expand their selling markets to cover customers in many countries in order to diversify selling risk. Exporters should increase the number of customers in each of their exporting country in order to reduce company's dependency on customer. Customer satisfaction is required in order to maintain existing market position. Sufficient level of customer service and good customer relationship must be established in order to keep existing customers.

Companies should develop foundation for long term sustainable competitiveness. Companies are required to strengthen their competencies in term of human resources, products, and technology. Important human resources developments lie in creating strong research and development personnel, competence employees, and skilled labors. Research and development department is crucial in order to develop process innovation and product invention. Competencies in term of marketing, sales, and management provide competitive edge over competitors. Skilled labors can improve productivity, and lower the cost of production.

The study shows higher relationship between performance and product differentiation than between performance and low price product. Therefore, companies should concentrate on improving product quality. Long term sustainable competitiveness lies in providing differentiated product through product innovation.

While cost of material, cost of labor and cost of operation continue to increase, Thailand lost cost competitiveness to lower cost competitors, such as Vietnam, Indonesia, Philippines, India, and PR China. To remain competitive, Thai food exporters must reduce their production cost through improvement of productivity levels. Productivity improvement can be achieved through skilled labor and appropriate production technology.

The study shows that present production technology scores highest in term of correlation with export percentage profit. Wilcoxon Signed Rank Tests show that for both present production technology and production standards measures, the present condition scores are not significantly lower than its importance level. This implies that exporters view their present production technology and production standard as sufficient for present competition. Exporters maintain their productivity level and competitiveness by acquiring technology used by competitors. Companies are not seeking to improve their competitiveness over their competitors. Suggestion for exporters in term of production technology is in investing and developing more advanced



production technology in order to obtain competitive edge over the competitors.

Long term sustainable competitiveness lies in company's improvement, enhancement, and development of its various factors. Key to long term success lies, firstly, in being competence followers, then further develop to acquire market leader position. Company should aim to develop and maintain the leader position in term of production standards, productivity level, product innovation and invention.

### **Suggestion for the Government Sector**

The promotion of "Thailand Best" logo in the exporter's view is regarded as unimportant. Exporters are more concerned with more fundamental supports. Suggestions from exporters to government sector are for government supporting of institutional R&D projects to improve food products and processed, supporting in term of information such as domestic and international resources information, domestic and international production information, and domestic and international trade information. Government supports in education and labors' skill training are basic foundation for industry's development. Improvement in government administration can also facilitate exports' operation.

In term of raw material and labor, low cost of raw material and low cost of labor are the most desirable improvements required on basic factors to improve export performance. Sufficient information on supply and demand condition can be used to determine appropriate production level. Thus, the equilibrium in supply and demand level can be achieved. Quality and quantity improvements on both raw material and labor factors can contribute to the export success. Conflicts of interest may be founded here. While food exporters gain from low cost of basic factors, upstream suppliers and labors suffer the consequence. A win-win situation can be achieved through government supports in investment for development in productivity improvement.

Establishment of future market in agricultural products can provide solution for both upstream suppliers and downstream producers. Upstream suppliers can utilize information gained from future market in term of determining appropriate production level. Downstream producers use information gained from future market in determining their basic factor costs. A central market for agricultural products can benefit both upstream suppliers and downstream producers since it remove the cost of middlemen.

The study shows that domestic market condition is not the source for export competitiveness. Government can, however, impose high standard on products and production processed. The standard imposition can create competitive environment that forces food producers to improve their production standards in term of hygiene and nutritional value of Thai food products.

Exporters define finance and banking system as the most important supporting industry for export success. Majorities of respondents agree that improvement is needed in finance and banking system. Government supports through loan and credit policies can increase flexibility among exporters. Other important related and supporting industry effecting export performance that requires improvement is domestic transportation system. High cost of domestic transportation can render company's competitiveness.

### **Suggestion for Future Researches**

Theoretical contribution of the study is in identifying the applicability of Porter's export success framework to an industry in the developing country environment. The result of the study questions the generalizability of Porter's framework of export success. Demand condition construct is discarded from the framework. The study finds that export performance is independent of domestic market conditions. Rationales for exports are not the extension of domestic market. Companies are purposefully set up to operate as food exporters. Thai food export companies are entirely independent of the domestic food companies, which contradict to Porter's suggestion. The study shows agreeing

finding to Porter's suggestion that potential improvement lie in developing companies advanced factors and strategies.

The export performance framework studies in the paper can reasonably be used to explain percentage profit measure of export performance. The export sales growth measure of export performance is not well represented by the framework. Suggestion for future research is to explore constructs for other dimensions of export success.

Timing of the study is such that external environment has substantial influences on export performance. Future repeated study of food exporting industry could be performed to confirm the finding of this study. Further study in Thai food exporting industry in term of process and product innovation could be performed to gain more insight understanding in the more sustainable development directions. Researches on other industries in Thailand can be conduct to compare similarities and differences among different industries under the same environment.