

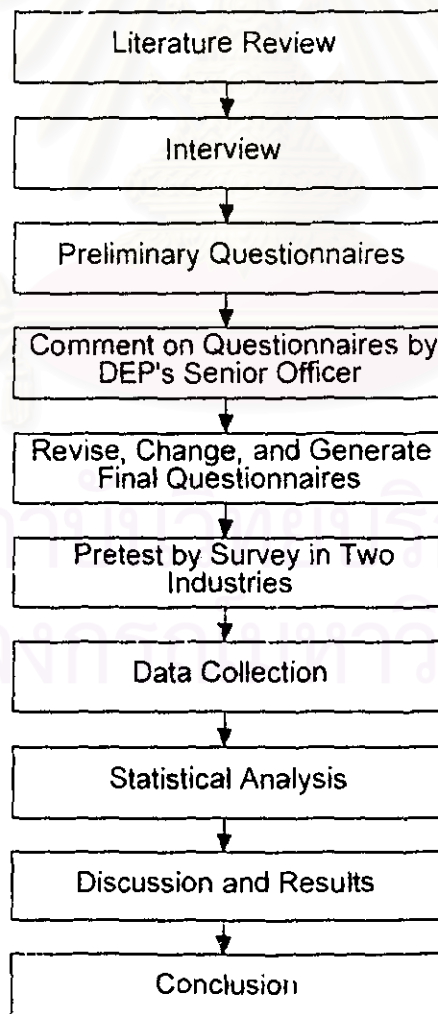
## CHAPTER FOUR METHODOLOGY

In this chapter, research design, pretest, sample sizes, response rate, questionnaires, items, and variables are presented in details in order to test all hypotheses that are stated in previous chapter.

### Research Design

The study will employ a questionnaire survey to test a relationship of firm-specific resources on various types of performances under different ownership structures between joint venture and non-joint venture. The steps for this research are shown in Figure 4.1 below.

Figure 4.1: Research Design



First, items in a preliminary questionnaire are formulated by reviewing the literature and interviewing few managing directors of the selected companies, such as Sri-trang Agro-based Public Co., LTD. Second, a sample set of questionnaires is sent to the Department of Export Promotion's senior officers to be commented and followed with an interview. Third, after reviewing these changes, questionnaires are corrected and pretested by distributing to two pretest industries. After receiving responses, statistical techniques, such as principal component factor analysis, correlation coefficient and multiple regression are used for analysis. Next step is an analysis and discussion of the results in the following chapter. Finally, the conclusion of the study is summarized. This includes recommendations, implication, limitation and future research.

### **Pretest**

Two industries, Agro-based industry and the Mining, Ceramics and Basic Metal industry were used for the pretest. Eighty-seven questionnaires were sent to both industries. A letter of support from the Deputy Director General of the Department of Export Promotion (DEP) was attached to each pretest questionnaire. 15 questionnaires were returned due to wrong addresses or closure of these companies. 25 questionnaires were returned, but only 20 questionnaires had complete and sufficient information. Therefore, the response rate for the pretest yielded 28.73%.

Not all respondents would answer every item in the questionnaire. The response of pretest showed that some questions about figures or financial data have been blank because respondents did not understand the question, were not willing to answer, or were simply indifferent to responding to entire questionnaires. Or, some questions were not clear to respondents. This made respondents unable to complete questionnaires and left them blank. After further consultation/comment and adjusting all weakness of the pretest questionnaires, final questionnaires were sent to two selected industries in the agro-based industry (Food) and the light industry (Garment and Textile). Most of the questionnaire questions were requested respondents to check (✓) in the appropriate box and only few questions for a necessary analysis were asked to fill in the number or amount.

The lists of company profile were from Department of Export Promotion (DEP), Board of Investment (BOI) and Board of Trade of Thailand's Directory 1998-1999. After checking for all existing companies, types of ownership structures (JV-NJV), present status (Open-Close) and repetition of companies by calling each firm, the final population company profiles were created. These two industries are Garment & Textile and Food. In order to increase the response rate, a number of repetition addresses, firm closures, changing addresses or unable contacted addresses were removed and separated out as shown in Table 4.1: The Population Size. This category of addresses was ignored when questionnaires were sent during data collection by questionnaire survey.

These two industries were selected to test the hypotheses because there were enough sample sizes to be studied for firm performance difference between joint venture and 100% Thai ownership structure. Both industries are also acknowledged and supported by the government's Seventh National Economic and Social Development Plan (7th NESDP). Moreover, both industries were in the top ten major export items in term of total export sales and shares of Thailand since 1994. Furthermore, both the Ministry of Commerce and Ministry of Industry support these two industries in term of export promotion and technology and Research & Development (R&D) respectively. The companies that were used in the pilot test in agro-based industry were ignored and deleted out from the list of population size in order to minimize bias in the study.

**Table 4.1:** The Population Size

No. of each Category	Industry Type			
	Garment	Textile	Canned Food	Food
<b>Joint Venture</b>	154 firms	62 firms	73 firms	40 firms
<b>100% Thai Ownership</b>	501 firms	160 firms	263 firms	123 firms
Repetition, Closure, Change addresses	391 firms	89 firms	142 firms	409 firms
Total	1,046 firms	311 firms	478 firms	572 firms
<b>Total Population</b>	655 firms	222 firms	336 firms	163 firms

A total of 2,407 firms were from the three list of the company profiles in two industries. After checking for firm closure, repetition addresses, and changing addresses, only 1,376 firms were the population in this study. Therefore, a total of 1,376 questionnaires were distributed in order to collect the most possible return of questionnaires. There were three language versions of questionnaires: Thai, English and Japanese (See Appendix 2: Samples of Questionnaires in Three Version).

The data were gathered via a survey methodology. The survey instrument consisted an extensive mail questionnaire. Each questionnaire was mailed to managing director of each company including a self-introduction letter and a recommendation letter from the Deputy Director General of the Department of Export Promotion. Each questionnaire was coded with a unique set of numbers so that non-respondents could be traced and contacted later. A follow-up letter or a reminder card were sent to those firms that did not respond questionnaires back two weeks after its distribution date. Four weeks after the original surveys were mailed, second surveys with a letter asking for their cooperation were mailed. The final phase of the survey involved telephoning to all firms that had not been responded questionnaires back after two months since initial mailing to insist, persuade or beg them to complete the questionnaires and respond them back by fax or mail.

Due to the severe Asian financial and economic crises since 1997, many companies could not survive. As a consequence, these companies had to be closed or bankrupted. According to Ratchada Singhalvanich, deputy director general of the Ministry's Department of Industrial Works, cashflow problems, debts, heavy losses and slumping consumer demand lead to most closures. Despite predictions that Thailand's economy will begin recovering in the second half of 1999, a survey conducted by the industrial ministry indicated that more than 2,000 factories will close this year. As time goes, more firms would be closed. In order to receive enough questionnaires back from respondents for further and reliable analysis, the whole population had to be used in this study by sending questionnaires to all these firms.

### **Sample Size**

The sample size used in multiple regression analysis is perhaps the most influential single element under the control of the analyst in designing the analysis. The

researcher always tries to obtain the highest cases-per-variable ratio to minimize the chance of overfitting the data. In addition to sample size's role in determining statistical power, it also affects the generalizability of the results by the ratio of observations to independent variables. A general rule is that the ratio should never fall below five, meaning that there should be five observations for each independent variable in the variate. As this ratio falls below five, the analyst encounters the risk of overfitting the variate to the sample, making the result too specific to the sample and thus lacking generalizability.

According to Hair, Anderson, Tatham and Black (1995), they suggest that the desired level is between 15 to 20 observations for each independent variable when using multiple regression analysis. This study will use 15 observations for each variable. There are total of 8 independent variables that are used in this study. Therefore, total desired sample size for regression are 120.

Regarding the sample size question, the researcher generally would not factor analyze a sample of fewer than 50 observations, and preferably the sample size should be 100 or larger. Hair, Anderson, Tatham and Black (1995) recommend that the more acceptable range for factor analysis would be a ten-to-one ratio. Therefore, the total sample size of 140 can cover for both factor and mediator regression analysis and for both validity and reliability test.

### **Response Rate**

Anticipation response rate as mentioned above is 20%. After finishing collecting data, there were 160 questionnaires back from the total population of 1,376 companies in both industries. This generated the response rate at 12% which was below from expected 8%. There were 12 return-questionnaires due to the incorrect addresses, closure, bankruptcy, and domestic sales greater than 50% of total sales. Another 8 return-questionnaires were not the two selected industries that this research had looked for. When parts of each questionnaire were missing or unclear, a call was made to those firms to ask for the missing parts and validity of these questionnaires. Therefore, the total of 140 responded questionnaires were used for the analysis.

## Questionnaire

There are 7 pages that include five main parts as follows:

In Part I, general information, functional implementation and market characteristics are asked: ownership structures, the primary reason for choosing joint venture arrangement, industry type, government incentive, majority of shares besides Thai shareholders, overseas experiences, year started exporting and established, number of employees, overseas markets and destination, management style, environment factors, changing in competition, and financial status such as sales revenues, capital, assets, and profitability. The demographic characteristics of respondents show frequency and percentage will be exhibited in Table 4.2.

**Table 4.2: The Demographic Characteristics of Respondents of 140 Firms (N=140)**

<b>Demographic Characteristics</b>	<b>n</b>	<b>%</b>
<b>1. Company Type</b>		
1.1 Non-foreign Joint Venture	90	64.3
1.2 Joint Venture	50	35.7
1.2.1 Primary reason for choosing JV arrangement		
1.2.1.1 Management	3	2.1
1.2.1.2 Marketing	10	7.1
1.2.1.3 Technology	0	0
1.2.1.4 Production	5	3.6
1.2.1.5 Risk sharing	5	3.6
1.2.1.6 Capital	2	1.4
1.2.1.7 Management, Marketing, Technology, Production	16	11.4
1.2.1.8 Technology, Production	3	2.1
1.2.1.9 Management, Risk sharing	4	2.9
1.2.1.10 Marketing, Technology	2	1.4
1.2.2 Ownership majority besides Thai partners		
1.2.2.1 Japan	24	17.1
1.2.2.2 Taiwan	7	5.0
1.2.2.3 U.S.A.	2	1.4
1.2.2.4 India	3	2.1
1.2.2.5 Europe	3	2.1
1.2.2.6 Others (Hong Kong, Malaysia, Singapore...)	11	7.9
<b>2. Industry Type</b>		
2.1 Agro-based Industry (Foodstuff, Canned Food, Frozen Chicken or Shrimp.....)	62	44.3
2.2 Light Industry (Garment, Textile, Wool.....)	78	55.7
<b>3. Company Management Style</b>		
3.1 Family Business	52	37.1
3.2 Professional (Standard)	24	17.1
3.2 Mixed between Family and Professional	63	45.0
3.4 Others (Japanese System)	1	0.7

<b>Demographic Characteristics (Continue)</b>	<b>n</b>	<b>%</b>
<b>4. Overseas Markets</b>		
4.1 North America (USA, Canada, and Mexico)	11	7.9
4.2 Central and South America (Caribbean countries, Brazil,.....)	1	0.7
4.3 Europe (Germany, France, Australia,.....)	8	5.7
4.4 Africa (Egypt, Kenya,.....)	5	3.6
4.5 Asian (Malaysia, Philippines, Indonesia,.....)	7	5.0
4.6 Asia and Pacific (Japan, China, Korea, Australia, New Zealand....)	20	14.3
4.7 North America, Europe, Asian	12	8.6
4.8 North America, Europe, Asian, Asia and Pacific	36	25.7
4.9 Europe, Asian, Asia and Pacific	16	11.4
4.10 North America, Central and South America, Europe	4	2.9
4.11 Middle East	1	0.7
4.12 Europe, Asia and Pacific	4	2.9
4.13 All	15	10.7
<b>5. Company are affected by Trade Barrier (Import tariffs, discriminatory rules, strict import regulations, export quota for overseas markets)</b>		
5.1 Affected	62	44.3
5.2 Not Affected	78	55.7
<b>6. Company are affected by BOI Privileges (receive government incentives, tax reduction for imported machinery)</b>		
6.1 Received	54	38.6
6.2 Not Received	86	61.4
<b>7. Company are affected by the removal of GSP benefits</b>		
7.1 Affected	45	32.1
7.2 Not Affected	95	67.9
<b>8. Company Experiences in the Competition</b>		
8.1 Low competition	3	2.1
8.2 Somewhat low competition	5	3.6
8.3 Neither low or high competition	31	22.1
8.4 Somewhat high competition	73	52.1
8.5 High competition	28	20.0
<b>9. Company Received Certified Management Standard (ISO's series)</b>		
9.1 Receive ISO 9000 series	10	7.1
9.2 Not Receive	99	70.7
9.3 Others (Receive Good Manufacturing Practice (GMP), from Thai Industrial Standards Institute, Ministry of Industry; Hazardous Analytical Critical Control Point (HACCP) from Camden Institute, England; Applying for one	31	22.2
<b>10. No. of times for outsourcing R&amp;D personnel, if no R&amp;D personnel</b>	<b>per year</b>	
10.1 No outsourcing	123	87.9
10.2 One time	6	4.3
10.3 Two times	3	2.1
10.4 Three times	1	0.7
10.5 More than four times a year	5	3.6
10.6 Whole year	2	1.4
<b>11. Average Profit After Tax for the last 3 years (Unit in Million Baht)</b>		
11.1 Loss 0 million baht - less than 3 million baht	15	10.7
11.2 Loss 3 million baht - 6 million baht and above	25	17.9
11.3 Profit 0 million baht - less than 3 million baht	49	35.0
11.4 Profit 3 million baht - less than 6 million baht	22	15.7
11.5 Profit 6 million baht - less than 9 million baht	3	2.1
11.5 Profit 9 million baht - less than 12 million baht	6	4.3
11.6 Profit 12 million baht and above	18	12.9
11.7 Other (even)	2	1.4

Demographic Characteristics (Continue)	n	%
12. Full-time Equivalent of Employees	>200 persons	(61.43.6)
12.1 Management Team (from Division heads up to Managing Directors)	12 persons	-
12.2 Marketing Personnel (only in Marketing Department)	6 persons	-
12.3 Research & Development Personnel	3 persons	-
12.4 Technician or Technological Personnel	5 persons	-

### 13. Financial Status (Unit in US \$)

Year	1996 (25Baht/\$)	1997 (40Baht/\$)	1998 (35Baht/\$)
Total sales	17,256,508	14,680,635	17,151,898
Export sales	15,857,049	13,667,448	15,783,420
Domestic sales	1,399,459	1,013,187	1,368,478
Capital	5,445,548	4,541,150	5,152,318
Assets	21,544,650	17,246,657	25,877,724

In Part II, there is a three-item, 7-point Guttman scale for the rating level of management, marketing and technological resources as compared to the average level of the industry (1=Well Below Average, 2=Below Average, 3=Somewhat Below Average, 4=Average, 5=Somewhat Above Average, 6=Above Average, 7=Well Above Average). The characteristics of respondents for FSRs, compared to the average level of the industry show frequency and percentage (n.%) is shown below in Table 4.3.

**Table 4.3: Characteristics of Respondents for Perceived Firm-Specific Resources to the Average Level of its Industry**

	Well Below Average	Below Average	Somewhat Below Average	Average	Somewhat Above Average	Above Average	Well Above Average
	1	2	3	4	5	6	7
1. Level of management resources	(6.4.3)	(13.9.3)	(39.27.9)	(55.39.3)	(23.16.4)	(3.2.1)	(1.0.7)
2. Level of marketing resources	(6.4.3)	(14.10.0)	(30.21.4)	(50.35.7)	(29.20.7)	(10.7.1)	(1.0.7)
3. Level of technological resources	(4.2.9)	(19.13.6)	(33.23.6)	(38.27.1)	(37.26.4)	(7.5.0)	(2.1.4)

### Items

In Part III, both qualitative and quantitative questions related to management, marketing, and technological resource factors are asked. There are thirty five questions, related to these three resource factors. Both management and marketing resource factors are measured with a twelve-item, 7-point scale, and technological resource factors are measured with an eleven-item, 7-point scale. It has been reported elsewhere that the three scaling formats used show no real overall difference (Menezes and Elbert,



1979). As a consequence, respondents marked on a seven-item scale, as recommended by Cox (1980). If each question is asked about the level of skills for each firm in both industries, this seven-item scale is as follows: 1=Very Low, 2=Low, 3=Somewhat Low, 4=Average, 5=Somewhat High, 6= High, 7=Very High. The characteristics of respondents for show frequency and percentage (n,%) will be exhibited in Table 4.4.

**Table 4.4:** Characteristic of Respondents for Comparative Firm-Specific Resources (FSRs)

(Well Below Average=1, Below Average=2, Somewhat Below Average=3, Average=4, Somewhat Above Average=5, Above Average=6, Well Above Average=7)

	1	2	3	4	5	6	7
Management overseas experiences (MG1)	(2.1.4)	(1.0.7)	(5.3.6)	(13.9.3)	(38.27.1)	(30.21.4)	(51.36.6)
Level of management education (MG2)	(1.0.7)	(3.2.1)	(8.5.7)	(10.7.1)	(104.74.3)	(14.10.0)	(0.0)
Frequency in hire specialists, experts.....in management (MG3)	(111.79.3)	(9.6.4)	(8.5.7)	(2.1.4)	(0.0)	(2.1.4)	(8.5.7)
Days per year for management training (MG4)	(39.27.9)	(57.40.7)	(25.17.9)	(12.8.6)	(4.2.9)	(0.0)	(3.2.1)
Management commitment/involvement with export activity (MG5)	(1.0.7)	(1.0.7)	(4.2.9)	(39.27.9)	(38.27.1)	(32.22.9)	(25.17.9)
Management attitude toward exporting to overseas market (MG6)	(0.0)	(2.1.0)	(3.2.0)	(31.22.1)	(42.30.0)	(39.27.9)	(25.17.9)
English language proficiency of the managers or executive (MG7)	(2.1.4)	(2.1.4)	(6.4.3)	(46.32.9)	(42.30.0)	(33.23.6)	(9.6.4)
Magnitude of personal contacts with foreign customers (MG8)	(0.0)	(3.2.1)	(12.8.6)	(35.25.0)	(38.27.1)	(41.29.3)	(11.7.9)
Ability of manager to response the changing markets (MG9)	(0.0)	(3.2.1)	(14.10.0)	(35.25.0)	(40.28.6)	(36.25.7)	(12.8.6)
Executive flexibility decision making in chg. environment (MG10)	(0.0)	(0.0)	(9.6.4)	(53.37.9)	(40.28.6)	(34.24.3)	(4.2.9)
Management connection between firm and outside parties (MG11)	(13.9.3)	(26.18.6)	(33.23.6)	(51.36.4)	(12.8.6)	(5.3.6)	(0.0)
Receive certified management standard (MG12)	(75.53.6)	(37.26.4)	(13.9.3)	(9.6.4)	(5.3.6)	(1.0.7)	(0.0)
Budget for advertising and promotion:% of company sales (MK1)	(35.25.0)	(46.32.9)	(34.24.3)	(14.10.0)	(5.3.6)	(1.0.7)	(5.3.6)
Frequency in hire specialists, experts.....in marketing (MK2)	(120.85.7)	(8.5.7)	(4.2.9)	(0.0)	(0.0)	(0.0)	(8.5.7)
Expenses for research and development in marketing (MK3)	(60.42.9)	(45.32.1)	(24.17.1)	(7.5.0)	(2.1.4)	(2.1.4)	(0.0)
Overseas market coverage or no. of foreign markets (MK4)	(7.5.0)	(11.7.9)	(13.9.3)	(17.12.1)	(11.7.9)	(4.2.9)	(77.55.5)
Days per year for marketing training for sales personnel (MK5)	(52.37.1)	(49.35.0)	(21.15.0)	(10.7.1)	(2.1.4)	(2.1.4)	(4.2.9)
Number of unique product line (MK6)	(23.16.4)	(23.16.4)	(26.18.6)	(21.15.0)	(7.5.0)	(3.2.1)	(37.26.4)
Number of awards, certificates, medals be obtained (MK7)	(104.74.3)	(9.6.4)	(11.7.9)	(9.6.4)	(2.1.4)	(1.0.7)	(4.2.9)
Number of members of association or institution, obtained (MK8)	(14.10.0)	(29.20.7)	(29.20.7)	(35.25.0)	(13.9.3)	(8.5.7)	(12.8.6)
Level of market knowledge of overseas markets (MK9)	(2.1.4)	(5.3.6)	(13.9.3)	(60.42.9)	(40.28.6)	(16.11.4)	(4.2.9)
Customer complaints in after sales services (MK10)	(3.2.1)	(7.5.0)	(5.3.6)	(9.6.4)	(16.11.4)	(67.47.9)	(33.23.6)
Marketing policies/planning for export (MK11)	(2.1.4)	(6.4.3)	(17.12.1)	(56.40.0)	(35.25.0)	(21.15.0)	(3.2.1)
New markets extension (MK12)	(13.9.3)	(10.7.1)	(41.29.3)	(32.22.9)	(14.10.0)	(5.3.6)	(25.17.9)
Frequency in hire specialists, experts.....in technology (T1)	(89.63.6)	(15.10.7)	(13.9.3)	(4.2.9)	(3.2.1)	(4.2.9)	(12.8.6)
Number of product lines that your firm exports (T2)	(8.5.7)	(48.34.3)	(37.26.4)	(23.16.4)	(6.4.3)	(6.4.3)	(12.8.6)
Ability in innovation of new product (T3)	(38.27.1)	(56.40.0)	(20.14.3)	(13.9.3)	(4.2.9)	(2.1.4)	(7.5.0)
Days per year for technology training for technician (T4)	(54.38.6)	(41.29.3)	(18.12.9)	(16.11.4)	(3.2.1)	(0.0)	(8.5.7)
Reduction in operational costs (T5)	(26.18.6)	(28.20.0)	(36.25.7)	(29.20.7)	(8.5.7)	(4.2.9)	(9.6.4)
Technological advancement of company (T6)	(4.2.9)	(12.8.6)	(21.15.0)	(69.49.3)	(27.19.3)	(6.4.3)	(1.0.7)
Level of difficulty to imitate products from competitors (T7)	(8.5.7)	(13.9.3)	(10.7.1)	(59.42.1)	(40.28.6)	(9.6.4)	(1.0.7)
Degree of new product adaptation of company (T8)	(2.1.4)	(6.4.3)	(7.5.0)	(64.45.7)	(47.33.6)	(13.9.3)	(1.0.7)
Degree of product development of company (T9)	(3.2.1)	(3.2.1)	(14.10.0)	(63.45.0)	(39.27.9)	(17.12.1)	(1.0.7)
Degree of product differentiation of your firm (T10)	(5.3.6)	(6.4.3)	(18.12.9)	(66.47.1)	(30.21.4)	(14.10.0)	(1.0.7)
Budget for research and development: % of total sales (T11)	(43.30.7)	(52.37.1)	(28.20.0)	(10.7.1)	(6.4.3)	(1.0.7)	(0.0)

In Part IV, there are total of 22 questions related to financial performance and subjective performance. Five questions are related to financial performance: ROI, ROA, ROS, ROE, and Profitability; and seventeen questions are related to how satisfied the firm has been with each item in subjective performance: Sales level,

Increase in market share, Transfer of knowledge and skills, R&D, Technology, Marketing, and Management development, Cost control, Customer service, Distribution system, Product design, Exploit economies of scale, Manufacturing quality control, Logistics policy related to near to raw material, labor force and market, and Overall performance. The characteristics of respondents show frequency and percentage (n,%) will be exhibited in Table 4.5 and Table 4.6 respectively.

**Table 4.5: Characteristic of Respondents for Financial Performance**

	<b>Financial Performance</b>	Bottom 10%	Bottom 30%	Average 50%	Top 70%	Top 90%
1	ROI (Return on Investment) ผลตอบแทนเมื่อเทียบกับเงินลงทุน	(52,37.1)	(48,34.3)	(22,15.7)	(9,6.4)	(9,6.4)
2	ROA (Return on Asset) ผลตอบแทนเมื่อเทียบกับสินทรัพย์	(64,45.7)	(35,25.0)	(29,20.7)	(9,6.4)	(3,2.1)
3	ROS (Return on Sales) ผลตอบแทนเมื่อเทียบกับยอดขาย	(57,40.7)	(41,29.3)	(27,19.3)	(8,5.7)	(7,5.0)
4	ROE (Return on Equity) ผลตอบแทนเมื่อเทียบกับผู้ถือหุ้น	(64,45.7)	(34,24.3)	(26,18.6)	(9,6.4)	(7,5.0)
5	Profit after taxes กำไรหลังหักภาษี	(80,57.1)	(29,20.7)	(19,13.6)	(7,5.0)	(5,3.6)

**Table 4.6: Characteristic of Respondents for Subjective Performance**

	<b>Subjective Performance</b>	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied
1	Sales Level ระดับยอดขาย	(10,7.1)	(44,31.4)	(19,13.6)	(62,44.3)	(5,3.6)
2	Increase in Market Share การเพิ่มขึ้นของส่วนแบ่งตลาด	(10,7.1)	(39,27.9)	(34,24.3)	(53,37.9)	(4,2.9)
3	Transfer of knowledge and skills การถ่ายทอดความรู้และทักษะในการดำเนินงาน	(5,3.6)	(36,25.7)	(43,30.7)	(51,36.4)	(5,3.6)
4	Research & Development การวิจัย&พัฒนา	(13,9.3)	(37,26.4)	(52,37.1)	(35,25.0)	(3,2.1)
5	Technology development การพัฒนาด้านเทคโนโลยี	(13,9.3)	(37,26.4)	(51,36.4)	(36,25.7)	(3,2.1)
6	Marketing development การพัฒนาด้านการตลาด	(8,5.7)	(35,25.0)	(43,30.7)	(50,35.7)	(4,2.9)
7	Management development การพัฒนาด้านการจัดการ	(9,6.4)	(28,20.0)	(47,33.6)	(52,37.1)	(4,2.9)
8	Cost control การควบคุมต้นทุน	(5,3.6)	(45,32.1)	(24,17.1)	(58,41.4)	(8,5.7)
9	Customer service การให้บริการลูกค้า	(1,0.7)	(7,5.0)	(35,25.0)	(79,56.4)	(18,12.9)
10	Distribution system ระบบการกระจายสินค้า	(4,2.9)	(21,15.0)	(55,39.3)	(58,41.4)	(2,1.4)
11	Product design การออกแบบผลิตภัณฑ์	(5,3.6)	(27,19.3)	(50,35.7)	(52,37.1)	(6,4.3)
12	Exploit economy of scale เกิดการประหยัดจากขนาด	(4,2.9)	(32,22.9)	(53,37.9)	(43,30.7)	(8,5.7)
13	Manufacturing/ Quality Control การควบคุมคุณภาพการผลิต	(1,0.7)	(30,21.4)	(31,22.1)	(69,49.5)	(9,6.4)

	<b>Subjective Performance (Continue)</b>	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied
14	Logistics Policy: near to Raw Material การเลือกที่ตั้งใกล้แหล่งวัตถุดิบ	(2,1.4)	(16,11.4)	(55,39.3)	(55,39.3)	(12,8.6)
15	Logistics Policy: near to Labor Force การเลือกที่ตั้งใกล้แหล่งแรงงาน	(4,2.9)	(12,8.6)	(50,35.7)	(63,45.0)	(11,7.9)
16	Logistics Policy: near to the Market การเลือกที่ตั้งใกล้แหล่งตลาด	(5,3.6)	(24,17.1)	(71,50.7)	(33,23.6)	(7,5.0)
17	Overall Performance ภาพรวมการดำเนินงาน	(3,2.1)	(35,25.0)	(27,19.3)	(68,48.6)	(7,5.0)

In Part V. it is an open-ended question to be asked by requesting respondents to describe in one's own words what one thinks makes one's company unique and further comments on the questionnaire. In other words, Part V contains additional opinions. Respondents are requested to identify unique qualifications of their firms that make their firms different from competitors. These unique qualifications can be analyzed by the **content analysis** and grouped in 4 factors as follows:

#### Marketing Resource Factors:

- 1). more diversified and flexible products
- 2). design and export under one's own brand
- 3). quality and unique products (store at room temperature for 2 years)
- 4). consistent product development each year
- 5). better quality and marketing skills than competitors
- 6). skills and long reputation of the firm
- 7). emphasize in quality control, cleanness, environment protection, cost reduction, product development
- 8). flexible and fast product development
- 9). delivery products in short times and understanding for seasoning timing, such as clothing
- 10). leader in product design, introduce new design
- 11). receive quality certification from International Organization for Standardization
- 12). customer appraisal in presentation for order taking
- 13). good after-sales service, punctual delivery
- 14). produce only high-end quality product
- 15). keep promise, do business fairly, create one's own brand
- 16). high quality, cost competitive
- 17). consistent in standard, receive ISO in quality service
- 18). price-wise, design, quality, style & color
- 19). have their own brand, quality award (Spain): food
- 20). price competitive (food) with good and clean quality
- 21). niche market, Islamic food, infant clothing
- 22). develop new product for foreign competition
- 23). understand what customers want and satisfy them
- 24). quality product, price competitive, and good service (QPS)
- 25). aggressive marketing to search for what customers need by trading firms
- 26). one-stop service, for example, trading, weaving, spinning, bleaching, dyeing, printing
- 27). various tastes with product quality, new product development and differentiation in frozen food products
- 28). ability to take small order and short lead time in delivery (Garment) with good quality
- 29). better in sewing quality in autumn-winter clothing and less competitors from domestic due to

- difficulty in process which result in less production cost
- 30).marketing team can satisfy customers through the designers who design according to what market need
- 31).good reputation of company or reputation from joint venture

### **Management Resource Factors:**

- 1). Professional management with various skills in different fields
- 2). have standard internal auditing system
- 3). Experienced and expert in management level
- 4). have flexibility and adjust/adapt to curtain situation well
- 5). high commitment/ good attitude in management
- 6). have a complete circle in manufacturing, export without agents
- 7). good/close relationship and communication with foreign purchasers/customer (partnership relationship)
- 8). dynamic scale of production, more product variety , short lead time delivery
- 9). younger teamwork with energetic mindset under clear objectives
- 10).better and new management style, better in manufacturing process
- 11).high responsibility for the agreement
- 12).ready to changes
- 13).Total Quality Management (TQM): empowerment, re-engineering, bench marking
- 14).adjust organization to standard
- 15).clear policy in quality of product and customer oriented
- 16).have lots of experiences and understanding, teamwork management
- 17).receive Good Manufacturing Practice (GMP) from Thai Industrial Standards Institute, Ministry of Industry
- 18).receive Hazardous Analytical Critical Control Point (HACCP) from Camden Institute, England
- 19).receive pre-certificate from Japan, HACCP from USA, Certificate from MOU, Canada
- 20).good management with effective coordination in the company among different departments
- 21).economies of scale, quick communication and response
- 22).flexibility in management, quick decision making from sole ownership
- 23).long time experiences (expertise) in seafood industry, know what customers want
- 24).quick response to markets and flexible design due to changing Japanese teenager's style
- 25).good relationship with employee, better compensation to employee
- 26).flexibility in management and sales, knowledge and ability of management team in export, technology, communication (English, Chinese), understand foreign culture and new technology, more experiences in business
- 27).be a few of manufacturers to follow the rule of Word Trade such as eco label, toxic issues
- 28).fast decision making, good management and vision under Japanese partners; expert in technology, job rotation every 6 months, control check every step in production
- 29).consistent human resource development and efficient working

### **Technological Resource Factors:**

- 1). high capital and technology make less new comers
- 2). updated technology, modern equipment in production
- 3). new technology to produce the flexibility width between 44 and 120 inches of home textile
- 4). better technology from joint venture partner
- 5). ability to produce new product development with new technology

### **Other Resource Factors:**

- 1). high loyalty to the company
- 2). strong financial status (Low interest rate in loans)
- 3). Success knowledge transfer from partners/ Thai foremen level can work without foreign partners after learning from them
- 4). skilled labor, able to dye most of raw material in cotton, polyester, rayon, acrylic, wool, silk
- 5). overseas training, good location logistics, close to raw material location, labor location,
- 6). high employee morale, team work

- 7). skilled labor, help from joint venture
- 8). combine real core purposes of our joint venture, both parties are willing to keep our relationship for a long term basis, both see the same objective and understand same vision toward our company structure, strategies and products, with high and healthy financial ratio
- 9). complete cycle in the food, R&D
- 10).better manufacturing than competitors
- 11).complete cycle in garment industry (weaving, print, nit, cut, pack, market)
- 12).small business and flexible in the economic crisis
- 13).import raw material and chemical from better and quality foreign sources
- 14).hire expert to train in the chemical use every 1-3 months and follow up by the results
- 15).emphasize in the small manufacturing and better flexibility in production process
- 16).cheaper capital sources
- 17).cheap raw material by purchasing with cash only

## Variables

Export performance is used as one of dependent variables. There are several ways to measure export performance, such as export problems (Aaby and Slater, 1989), export sales volumes (Douglas, 1996; Bijmolt, Tammo and Zwart, 1994), propensity to export (Reid, 1986; Bilkey, 1985), exporters versus non-exporters (Keng and Jiuan, 1989; Burton and Schlegelmilch, 1987), and etc. According to Axinn's study (1988) export performance is measured by the percentage of sales which a firm obtain by exporting. Percentage of sales is selected because it provides a good indication of both how deeply involved a exporting firm is, and how successful the exporting firm is.

In this study, the ratio of export sales to total sales is asked in the questionnaire and then multiplies this ratio with sales growth. It will be proper to use this as the export performance in this study. This is because many scholars (Gemunden, 1991; Lee and Yang, 1990; Madsen, 1989; Axinn, 1988; Cooper and Kleinschmidt, 1985; Reid, 1982; Czinkota and Johnston, 1981; Cavusgil and Nevin, 1981; Kirplani and MacIntosh, 1980) use this export growth as a measurement for export performance. Moreover, only ratio of export sales to total sales is not proper to use for measuring export performance in Thailand because BOI gives incentive for new companies to invest in Thailand by setting the level of this ratio. This makes many companies have the fixed ratio of export sales to total sales.

In this study, two industries are agro-based and light industries. It is possible that one industry may have systematically higher export level than another. To get rid of the systematic variation caused by industry level factors and to make sure that this effect is not the reason why the independent variables are significant, therefore, the

ratio of total export sales to total sales multiplied with the sales growth are used as export performance.

Objective and subjective performance (Geringer and Herbert, 1991; Contractor and Lorange, 1988; Dess and Robinson, 1984) are also used to measure as dependent variables. Subjective performance includes overall performance, satisfaction performance, and financial performance. Objective performance is the sales growth.

**Dependent Variable** : Export Performance, Subjective and Objective Performance

**Export Performance**

-Ratio of export sales to total sales and multiplies with sales growth

**Subjective Performance**

-Overall Performance

-Satisfaction Performance

-Financial Performance: ROI, ROA, ROS, ROE, Profit after taxes

**Objective Performance**

-sales growth

**Independent Variable** : Ownership Structures (JV, fully Thai Owned Firms)

**Intervening Variable** : Firm-Specific Resources Factors

(Management, Marketing, and Technological Resource Factors)

**Management Resource Factors**

- The level of overseas experiences of firm's executives
- The level of management education in the firm
- The frequency of hire in management experts (specialists) or consultants
- The number of management training days in the firm
- The management commitment to exporting/ the involvement with export activities
- The management attitude toward exporting to overseas markets
- The English language proficiency of the firm's managers or executives
- The magnitude of personal contacts with foreign customers
- The ability of managers to respond to the changing markets
- The flexibility of the firm in the changing environments or flexibility of executives in decision making
- The management connection between the firm and outside parties
- The certified management standard
- The number of management personnel in the firm

**Marketing Resource Factors**

- The budget to spend on advertising/promotion of the firm
- The frequency of hire in marketing experts (specialists) or consultants
- The level of export market research of the firm
- The overseas market coverage of the firm
- The number of sales force training days in the firm
- The number of unique products of the firm
- The corporate reputation and image of the firm
- The level of foreign market knowledge
- The quality of after sales services of the firm
- The marketing policies/planning for export of the firm
- The efficiency of managers to look for new markets
- The number of marketing personnel in the firm

### **Technological Resource Factors**

- The frequency of hire in technological experts (specialists) or consultants
- The number of product lines of the firm
- The degree of innovation of the firm
- The number of technical personnel training days in the firm
- The ability to reduce operational costs with technology of the firm
- The technological advancement of the firm
- The level of difficulty to imitate or copy the products by competitors
- The degree of product adaptation of the firm
- The ability of product development of the firm
- The number of product differentiation of the firm
- The budget for R&D expenditures of the firm
- The number of technical staffs/technicians in the firm

There are 35 items to be measured for the firm-specific resource factors from literature review in Chapter Two. Respondents are asked to rate their firm against the industry average using 7-point Guttman scale or the proxy number or value for each item. These items are grouped into three important factors which are management, marketing and technological resource factors. Each factor is classified into objective and subjective according to objective or subjective questions.

**Extraneous variable** : Industry type, Firm sizes, Environmental factors (Trade barriers, BOI privileges, and Removal of GSP benefits)  
Years of Operation

### **Control Variables**

Six control variables were used in the primary analysis. Firm sizes, measured by numbers of employees, were controlled in this study. Previous research has indicated that size was associated with performance differences (Katsikeas, 1994; Axinn, 1988; Bilkey, 1978). Moreover, this research includes other control variables: industry type, environment factors, such as Board of Investment (BOI) privileges, generalized system of preferences (GSP) benefits, trade barriers, and years of operation. I considered them important to also control for possible confounding influences associated with other independent variables.

After receiving responses, editing data, handling blank responses, coding data, creating data files, and programming are the next steps. The next chapter includes the detail discussions, interpretation of results of the methodologies and statistical tests that have been described in this chapter.