

Survey on Business Sentiment of Japanese Corporations in Thailand for the 2nd Half of 2018

JCC Economic Survey Team

Press Release Date: February 4, 2019

Record

Survey Period

Questionnaire distribution date: November 1, 2018

Questionnaire submission deadline: December 4, 2018

Survey Response

Number of questionnaires distributed:

1,761 JCC member companies

(excluding 12 governmental organisations)

Number of respondents:

509 firms

Response rate:

28.9%

Number of Firms		
Industry		No.
Manufacturing	Food	12
	Textile	13
	Chemical	42
	Steel/Non-ferrous metal	37
	General machinery	23
	Electrical/Electronic machinery	46
	Transportation machinery	60
	Others	30
Manufacturing sector total		263
Non-manufacturing	Trading	85
	Retail	8
	Finance/Insurance/Securities	24
	Construction/Civil engineering	30
	Transportation/Communication	33
	Others	66
	Non-manufacturing sector total	
Total		509

Remarks

- Due to the small number of firms responding to some questions, it may not be advisable to evaluate the situation by referring only to the response percentage.

Survey Result Report

Please refer to the following pages.

1. BUSINESS SENTIMENT

(1) Overview

Business sentiment (DI) was 34 in the first half of 2018 (same as the second half of 2017), 29 in the second half of 2018, and 25 in the first half of 2019 (forecast). DI has been positive for the latest seven consecutive terms since the first half of 2016 (which means the overall trend of business sentiment is improving), reflecting the fact that the Thai economy is generally getting better. Although the DI itself (34 →29→25) tends to shrink slightly, it is due to the large increase in the proportion of companies indicating “No change” in their business sentiment (from 33% in the second half of 2018 to 45% in the first half of 2019). Therefore, it does not imply that the overall sentiment is worsening. (Table 1-1)

(Table 1-1) Business Sentiment

Unit: %

	Past Surveys									Previous Survey			Current Survey		
	Results									Result	Forecast		Result		Forecast
	13	14		15		16		17	17	18		18		19	
	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	
Improving	35	30	32	28	30	38	38	39	37	50	49	49	52	48	40
No change	28	20	35	35	36	33	39	37	34	34	38	41	30	33	45
Deteriorating	37	50	33	37	34	29	23	25	16	13	9	18	19	15	
(Ref.) DI	▲ 2	▲ 20	▲ 1	▲ 9	▲ 4	9	15	14	34	36	40	34	29	25	

*(Note) 1. DI = “Improving” - (minus) “Deteriorating”

2. As the decimals of percentages are rounded off, the total may not equal 100 percent. This also applies to tables below.

*(Note) To determine whether business performance is “Improving” or “Deteriorating,” business performance in a six-month term is compared with the corresponding previous term. If DI, a deduction balance of “Improving” and “Deteriorating,” is positive, it indicates that business performance is improving for the larger number of respondent firms; if DI is negative, business performance is deteriorating for the larger number of firms, in comparison to the previous term.

(2) The first half of 2018 (January - June)

The percentage of firms reporting their business sentiment was “Improving” increased by 2 points to 52% from the previous term (50%), while the number of those indicating their business sentiment was “Deteriorating” also increased by 2 points from the previous term (16%) to 18%. As a result, the Diffusion Index (DI), a deduction balance of “Improving” and “Deteriorating”, equalled +34, unchanged from the previous term (+34). (Table 1-1)

In the manufacturing sector, the DI showed negative value in textile industry (▲69), while it turned out positive in the others. As a result, the overall DI in the manufacturing sector remained at +31, unchanged from the previous term (+31). In the non-manufacturing sector, the DI was positive for most industries, except for retail (▲12), therefore, the overall DI in the non-manufacturing sector decreased by 1 point from the previous term (+38) to +37. (Table 1-2)

(3) The second half of 2018 (July - December) - Forecast

The percentage of firms indicating that their business sentiment is “Improving” decreased by 4 points from the previous term (52%) to 48%, whereas those reporting “Deteriorating” business sentiment increased by 1 point from the previous term (18%) to 19%. As a result, the overall DI is forecasted to decrease by 5 points from the previous term (+34) to +29. (Table 1-1)

In the manufacturing sector, the DI is positive in most industries, but negative in textiles (▲31), resulting in a decrease in the overall DI forecast for the manufacturing sector by 8 points from the previous term (+31) to +23. As for the non-manufacturing sector, DI turned positive in retail, causing the DI for all industries to be positive. However, the DI figures significantly shrink in finance/insurance/securities as well as construction/civil engineering industries, which caused the overall DI forecast to fall by 2 points from the previous term (+37) to +35. (Table 1-2)

(4) The first half of 2019 (January - June) - Forecast

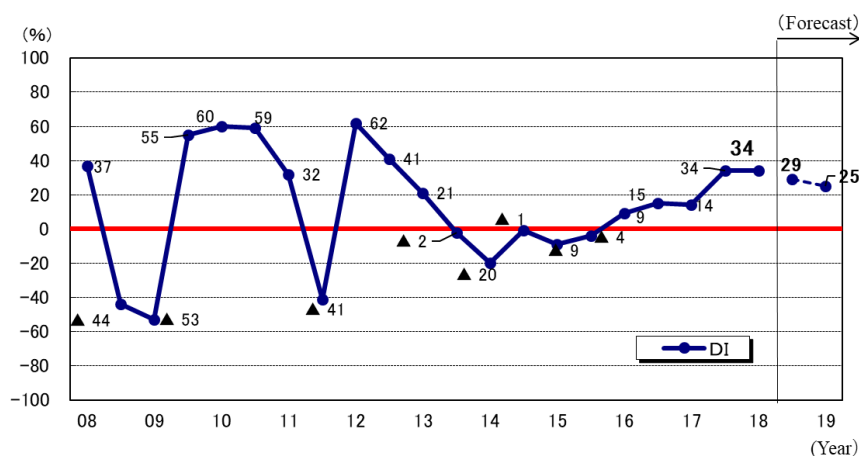
The percentage of firms expecting “Improving” business sentiment decreased by 8 points from the previous term (48%) to 40%, while the percentage of firms expecting “Deteriorating” sentiment also decreased by 4 points from the previous term (19%) to 15%. Thus, the overall DI forecast fell by 4 points from the previous term (+29) to +25. (Table 1-1)

For firms in the manufacturing sector, DI turned positive in textiles, as well as in all industries. The overall DI, therefore, is forecasted to rise by 1 point from the previous term (+23) to +24. For the non-manufacturing sector, however, the DI is forecasted to shrink in all industries, except for construction/civil engineering and other industries, resulting in an 8-point decrease in the overall DI (+35→+27). (Table 1-2)

(Table 1-2) Business Sentiment (DI) by Industry (“Improving” - “Deteriorating”)

Industry	Past Surveys								Current Survey			
	Results						Forecast		Result			
	15H1	15H2	16H1	16H2	17H1	17H2	18H1	18H2	18H1	18H2	19H1	
Manufacturing	Food	38	23	57	70	0	▲ 14	54	54	25	50	50
	Textile	▲ 40	41	7	0	▲ 24	0	▲ 8	42	▲ 69	▲ 31	15
	Chemical	2	15	37	7	0	43	50	36	50	14	19
	Steel/Non-ferrous metal	▲ 9	▲ 15	10	20	26	25	28	31	30	24	16
	General machinery	▲ 31	▲ 37	22	11	9	10	21	37	22	17	26
	Electrical/Electronic machinery	4	11	▲ 6	24	11	30	34	29	20	10	11
	Transportation machinery	▲ 18	▲ 16	7	4	29	50	31	37	48	35	42
	Others	▲ 12	11	10	9	▲ 4	24	26	36	40	47	10
	Manufacturing sector total	▲ 10	1	12	16	11	31	32	36	31	23	24
Non-manufacturing	Trading	▲ 8	6	19	27	22	43	50	57	45	41	25
	Retail	25	▲ 11	10	0	7	29	50	64	▲ 12	38	25
	Finance/Insurance/Securities	▲ 6	▲ 25	▲ 22	21	26	35	41	35	63	38	25
	Construction/Civil engineering	▲ 54	▲ 50	▲ 39	0	7	34	34	17	24	7	14
	Transportation/Communication	▲ 18	▲ 22	18	▲ 4	24	51	39	41	21	49	33
	Others	19	11	9	9	14	27	32	44	38	30	33
	Non-manufacturing sector total	▲ 7	▲ 10	5	13	18	38	41	45	37	35	27
Total	▲ 9	▲ 4	9	15	14	34	36	40	34	29	25	

(Figure 1) Historical Change of DI According to the Surveys on Business Sentiment of Japanese Corporations



*(Note) Diffusion Index (DI) = Business sentiment is “Improving” – “Deteriorating” (compared to the previous term)

2. SALES

Regarding the forecast of total sales for fiscal year 2018, the percentage of firms expecting sales “Increase” fell by 1 point from the previous year (65%) to 64% and the percentage of firms expecting “More than 20% increase” in their total sales decreased by 2 points to 12%, compared to the previous year (14%). (Table 2-1, 2-2)

Regarding the total sales forecast for 2019, the percentage of firms anticipating sales “Increase” shrank by 8 points from the previous year (64%) to 56% and the percentage of firms anticipating “More than 20% increase” also decreased by 6 points to 6%, compared to the previous year (12%). (Table 2-1, 2-3)

(Table 2-1) Change in Total Sales

Unit: %

	Past Surveys						Previous Survey		Current Survey	
	Results						Result	Forecast	Forecast	
Fiscal year	11	12	13	14	15	16	17	18	18	19
Sales increase	54	73	52	50	45	54	65	70	64	56
"More than 20% increase"	13	34	17	13	13	15	14	11	12	6

*(Note) Years are based on the financial year of each corporation

(Table 2-2) Total Sales Forecast for Fiscal Year 2018

Unit : No. of firms and (%)

Industry	Increase			No change	Decrease					
	More than 20%	10~20%	Less than 10%		Less than 10%	10~20%	More than 20%			
Manufacturing	Food	10 (91)	3 (27)	1 (9)	6 (55)	1 (9)	0 (0)	0 (0)	0 (0)	0 (0)
	Textile	5 (42)	0 (0)	4 (33)	1 (8)	4 (33)	3 (25)	2 (17)	1 (8)	0 (0)
	Chemical	31 (76)	3 (7)	13 (32)	15 (37)	5 (12)	5 (12)	4 (10)	1 (2)	0 (0)
	Steel/Non-ferrous metal	20 (56)	1 (3)	7 (19)	12 (33)	9 (25)	7 (19)	5 (14)	1 (3)	1 (3)
	General machinery	12 (57)	4 (19)	2 (10)	6 (29)	5 (24)	4 (19)	0 (0)	1 (5)	3 (14)
	Electric/Electronic machinery	23 (50)	5 (11)	4 (9)	14 (30)	9 (20)	14 (30)	8 (17)	4 (9)	2 (4)
	Transportation machinery	40 (68)	0 (0)	12 (20)	28 (47)	12 (20)	7 (12)	6 (10)	0 (0)	1 (2)
	Others	21 (70)	3 (10)	9 (30)	9 (30)	3 (10)	6 (20)	3 (10)	2 (7)	1 (3)
	Manufacturing sector total	162 (63)	19 (7)	52 (20)	91 (36)	48 (19)	46 (18)	28 (11)	10 (4)	8 (3)
Non-manufacturing	Trading	63 (74)	12 (14)	26 (31)	25 (29)	13 (15)	9 (11)	3 (4)	2 (2)	4 (5)
	Retail	4 (50)	0 (0)	1 (13)	3 (38)	1 (13)	3 (38)	1 (13)	1 (13)	1 (13)
	Finance/Insurance/Securities	11 (52)	3 (14)	1 (5)	7 (33)	7 (33)	3 (14)	3 (14)	0 (0)	0 (0)
	Construction/Civil engineering	14 (48)	11 (38)	1 (3)	2 (7)	6 (21)	9 (31)	3 (10)	6 (21)	0 (0)
	Transportation/Communication	19 (59)	3 (9)	2 (6)	14 (44)	3 (9)	10 (31)	3 (9)	4 (13)	3 (9)
	Others	46 (70)	13 (20)	19 (29)	14 (21)	12 (18)	8 (12)	3 (5)	2 (3)	3 (5)
	Non-manufacturing sector total	157 (65)	42 (17)	50 (21)	65 (27)	42 (17)	42 (17)	16 (7)	15 (6)	11 (5)
	Total	319 (64)	61 (12)	102 (21)	156 (31)	90 (18)	88 (18)	44 (9)	25 (5)	19 (4)

(Table 2-3) Total Sales Forecast for Fiscal Year 2019

Unit : No. of firms and (%)

Industry	Increase			No change	Decrease					
	More than 20%	10~20%	Less than 10%		Less than 10%	10~20%	More than 20%			
Manufacturing	Food	7 (64)	0 (0)	3 (27)	4 (36)	3 (27)	1 (9)	0 (0)	1 (9)	0 (0)
	Textile	6 (50)	0 (0)	1 (8)	5 (42)	4 (33)	2 (17)	2 (17)	0 (0)	0 (0)
	Chemical	26 (63)	4 (10)	9 (22)	13 (32)	10 (24)	5 (12)	4 (10)	0 (0)	1 (2)
	Steel/Non-ferrous metal	18 (51)	1 (3)	3 (9)	14 (40)	12 (34)	5 (14)	5 (14)	0 (0)	0 (0)
	General machinery	14 (67)	1 (5)	4 (19)	9 (43)	3 (14)	4 (19)	2 (10)	0 (0)	2 (10)
	Electric/Electronics machinery	22 (48)	1 (2)	7 (15)	14 (30)	13 (28)	11 (24)	6 (13)	4 (9)	1 (2)
	Transportation machinery	30 (51)	0 (0)	5 (8)	25 (42)	23 (39)	6 (10)	3 (5)	2 (3)	1 (2)
	Others	16 (53)	0 (0)	4 (13)	12 (40)	9 (30)	5 (17)	3 (10)	1 (3)	1 (3)
	Manufacturing sector total	139 (55)	7 (3)	36 (14)	96 (38)	77 (30)	39 (15)	25 (10)	8 (3)	6 (2)
Non-manufacturing	Trading	43 (51)	5 (6)	16 (19)	22 (26)	27 (32)	15 (18)	8 (9)	3 (4)	4 (5)
	Retail	4 (50)	1 (13)	0 (0)	3 (38)	4 (50)	0 (0)	0 (0)	0 (0)	0 (0)
	Finance/Insurance/Securities	12 (57)	2 (10)	1 (5)	9 (43)	7 (33)	2 (10)	2 (10)	0 (0)	0 (0)
	Construction/Civil engineering	10 (34)	0 (0)	6 (21)	4 (14)	12 (41)	7 (24)	4 (14)	3 (10)	0 (0)
	Transportation/Communication	22 (69)	2 (6)	8 (25)	12 (38)	5 (16)	5 (16)	4 (13)	0 (0)	1 (3)
	Others	46 (73)	12 (19)	20 (32)	14 (22)	14 (22)	3 (5)	2 (3)	0 (0)	1 (2)
	Non-manufacturing sector total	137 (58)	22 (9)	51 (21)	64 (27)	69 (29)	32 (13)	20 (8)	6 (3)	6 (3)
	Total	276 (56)	29 (6)	87 (18)	160 (32)	146 (30)	71 (14)	45 (9)	14 (3)	12 (2)

3. PRE-TAX PROFIT/LOSS

Regarding pre-tax profit/loss for 2018, the ratio of firms reporting “Profit” reached 80%. Additionally, firms reporting an “Increase” in their pre-tax profit (including cases of diminishing loss and balance resulting from vanishing loss) accounted for 43%, while 31% reported a “Decrease” in profit. (Table 3-1)

As for 2019 forecast, 82% of the respondents anticipated “Profit” and those anticipating an “Increase” in their pre-tax profit amounted 33%, while 27% anticipated a “Decrease” in profit. (Table 3-2)

(Table 3-1) Forecast of Pre-Tax Profit/Loss for 2018 (Year-to-Year Comparison)

Unit : No. of firms and (%)

Industry		Profit	Balance	Loss	Total	Increase in profit	No change in profit	Decrease in profit
Manufacturing	Food	7 (64)	2 (18)	2 (18)	11	7 (64)	1 (9)	3 (27)
	Textile	9 (75)	1 (8)	2 (17)	12	2 (17)	2 (17)	8 (67)
	Chemical	34 (83)	1 (2)	6 (15)	41	18 (44)	10 (24)	13 (32)
	Steel/Non-ferrous metal	32 (89)	1 (3)	3 (8)	36	6 (17)	11 (31)	19 (53)
	General machinery	16 (76)	1 (5)	4 (19)	21	7 (33)	8 (38)	6 (29)
	Electrical/Electronic machinery	41 (89)	2 (4)	3 (7)	46	16 (35)	16 (35)	14 (30)
	Transportation machinery	55 (95)	1 (2)	2 (3)	58	28 (48)	14 (24)	16 (28)
	Others	23 (77)	3 (10)	4 (13)	30	15 (50)	7 (23)	8 (27)
	Manufacturing sector total	217 (85)	12 (5)	26 (10)	255	99 (39)	69 (27)	87 (34)
Non-manufacturing	Trading	67 (79)	4 (5)	14 (16)	85	41 (48)	20 (24)	24 (28)
	Retail	6 (75)	0 (0)	2 (25)	8	3 (38)	2 (25)	3 (38)
	Finance/Insurance/Securities	16 (76)	1 (5)	4 (19)	21	11 (52)	7 (33)	3 (14)
	Construction/Civil engineering	15 (52)	9 (31)	5 (17)	29	12 (41)	9 (31)	8 (28)
	Transportation/Communication	27 (84)	2 (6)	3 (9)	32	13 (41)	5 (16)	14 (44)
	Others	48 (74)	2 (3)	15 (23)	65	35 (54)	17 (26)	13 (20)
	Non-manufacturing sector total	179 (75)	18 (8)	43 (18)	240	115 (48)	60 (25)	65 (27)
Total	396 (80)	30 (6)	69 (14)	495	214 (43)	129 (26)	152 (31)	

*(Note) 1. "Increase" indicates either expanding profit, turning to the black, diminishing loss, or moving up to the break-even point.

2. "No change" indicates that a business remains at the same level whether they were in the black, at the break-even point, or in the red.

3. "Decrease" indicates either diminishing profit, falling into the red, expanding loss, or moving down to the break-even point.

(Table 3-2) Forecast of Pre-Tax Profit/Loss for 2019 (Year-to-Year Comparison)

Unit : No. of firms and (%)

Industry		Profit	Balance	Loss	Total	Increase in profit	No change in profit	Decrease in profit
Manufacturing	Food	7 (64)	2 (18)	2 (18)	11	4 (36)	5 (45)	2 (18)
	Textile	9 (75)	3 (25)	0 (0)	12	5 (42)	5 (42)	2 (17)
	Chemical	35 (85)	3 (7)	3 (7)	41	11 (27)	11 (27)	19 (46)
	Steel/Non-ferrous metal	33 (92)	2 (6)	1 (3)	36	10 (28)	14 (39)	12 (33)
	General machinery	16 (76)	1 (5)	4 (19)	21	7 (33)	8 (38)	6 (29)
	Electrical/Electronic machinery	39 (87)	3 (7)	3 (7)	45	14 (31)	18 (40)	13 (29)
	Transportation machinery	55 (95)	1 (2)	2 (3)	58	12 (21)	28 (48)	18 (31)
	Others	25 (83)	2 (7)	3 (10)	30	9 (30)	12 (40)	9 (30)
	Manufacturing sector total	219 (86)	17 (7)	18 (7)	254	72 (28)	101 (40)	81 (32)
Non-manufacturing	Trading	65 (76)	12 (14)	8 (9)	85	32 (38)	28 (33)	25 (29)
	Retail	6 (75)	1 (13)	1 (13)	8	4 (50)	3 (38)	1 (13)
	Finance/Insurance/Securities	17 (77)	1 (5)	4 (18)	22	5 (23)	14 (64)	3 (14)
	Construction/Civil engineering	16 (55)	9 (31)	4 (14)	29	9 (31)	12 (41)	8 (28)
	Transportation/Communication	29 (91)	3 (9)	0 (0)	32	12 (38)	11 (34)	9 (28)
	Others	53 (84)	3 (5)	7 (11)	63	27 (43)	28 (44)	8 (13)
	Non-manufacturing sector total	186 (78)	29 (12)	24 (10)	239	89 (37)	96 (40)	54 (23)
Total	405 (82)	46 (9)	42 (9)	493	161 (33)	197 (40)	135 (27)	

*(Note) Same as Table 3-1

4. CAPITAL INVESTMENT (MANUFACTURING SECTOR)

Amount of capital investment (manufacturing sector) planned for 2019 is expected to decrease by 10.2% from 2018 (the total number of firms responding was 252). 30% of these firms anticipated an “Increase” in their capital investment in 2019, while 22% anticipated a “Decrease”. (Table 4-1)

As for the details of the investment, “Replacement” is the predominant form of capital investment in both 2018 and 2019. (Table 4-2, 4-3)

(Table 4-1) Capital Investment Plan for 2018 and 2019 (Manufacturing Sector)

Unit : Million Baht, %, No. of firms, and (%)

Industry	2018	2019		No. of firms					Total
	Amount	Amount	Increase rate	Increase	No change	Decrease	Undecided		
Food	542	700	29.2	4 (36)	7 (64)	0 (0)	0 (0)	11	
Textile	1,718	1,265	▲ 26.4	0 (0)	6 (50)	2 (17)	4 (33)	12	
Chemical	5,876	6,712	14.2	12 (29)	16 (39)	11 (27)	2 (5)	41	
Steel/Non-ferrous metal	3,029	3,982	31.5	12 (33)	16 (44)	7 (19)	1 (3)	36	
General machinery	2,400	4,884	103.5	3 (15)	13 (65)	2 (10)	2 (10)	20	
Electrical/Electronic machinery	20,218	11,906	▲ 41.1	13 (29)	17 (38)	12 (27)	3 (7)	45	
Transportation machinery	21,166	19,557	▲ 7.6	24 (42)	15 (26)	17 (30)	1 (2)	57	
Others	3,027	3,081	1.8	8 (27)	16 (53)	5 (17)	1 (3)	30	
Manufacturing sector total	57,975	52,087	▲ 10.2	76 (30)	106 (42)	56 (22)	14 (6)	252	

*(Note) Figures above only demonstrate the totals of the data collected from firms responding to the questionnaire.

Therefore, the amount of capital investment above does not reflect the investment of Japanese firms as a whole.

(Table 4-2) Details of the Capital Investment in 2018 (Multiple Answers)

Unit : No. of firms and (%)

Industry	New	Expansion	Replacement	Streamlining	Others	Total	No. of firms
Food	5 (50)	1 (10)	7 (70)	1 (10)	0 (0)	14	10
Textile	3 (23)	5 (38)	11 (85)	4 (31)	0 (0)	23	13
Chemical	1 (3)	4 (10)	4 (10)	1 (3)	2 (5)	12	40
Steel/Non-ferrous metal	9 (26)	5 (15)	26 (76)	10 (29)	0 (0)	50	34
General machinery	9 (47)	3 (16)	9 (47)	6 (32)	1 (5)	28	19
Electrical/Electronic machinery	17 (39)	14 (32)	24 (55)	17 (39)	2 (5)	74	44
Transportation machinery	32 (56)	15 (26)	37 (65)	23 (40)	1 (2)	108	57
Others	8 (31)	12 (46)	15 (58)	6 (23)	0 (0)	41	26
Manufacturing sector total	84 (35)	59 (24)	133 (55)	68 (28)	6 (2)	350	243

(Table 4-3) Details of the Capital Investment in 2019 (Multiple Answers)

Unit : No. of firms and (%)

Industry	New	Expansion	Replacement	Streamlining	Others	Total	No. of firms
Food	3 (33)	1 (11)	7 (78)	4 (44)	0 (0)	15	9
Textile	2 (18)	1 (9)	10 (91)	6 (55)	0 (0)	19	11
Chemical	9 (23)	12 (30)	25 (63)	10 (25)	2 (5)	58	40
Steel/Non-ferrous metal	14 (40)	5 (14)	23 (66)	13 (37)	0 (0)	55	35
General machinery	6 (33)	4 (22)	7 (39)	5 (28)	1 (6)	23	18
Electrical/Electronic machinery	16 (37)	13 (30)	26 (60)	19 (44)	1 (2)	75	43
Transportation machinery	33 (58)	17 (30)	36 (63)	24 (42)	1 (2)	111	57
Others	6 (22)	9 (33)	20 (74)	5 (19)	0 (0)	40	27
Manufacturing sector total	89 (37)	62 (26)	154 (64)	86 (36)	5 (2)	396	240

5. EXPORT TREND

The percentage of firms anticipating an “Increase” in exports in the second half of 2018 (in comparison to the same period of the previous year) is 31%, exceeding those expecting a “Decrease” (17%) by 14 points. As for the 2018 full-year exports, the number of firms anticipating an “Increase” accounted for 34%, exceeding those anticipating a “Decrease” (17%) by 17 points. Similarly, the percentage of firms expecting an “Increase” in exports in the first half of 2019 is 34%, exceeding those expecting a “Decrease” (16%) by 18 points. (Table 5-1, 5-2, 5-3)

(Table 5-1) Export Trend in 2018 (Second Half)

Industry	Unit: No. of firms and (%)									No. of firms
	Increase			No change	Decrease					
	More than 20%	10~20%	Less than 10%		Less than 10%	10~20%	More than 20%			
Food	5 (45)	1 (9)	2 (18)	2 (18)	5 (45)	1 (9)	0 (0)	1 (9)	0 (0)	11
Textile	3 (27)	0 (0)	1 (9)	2 (18)	3 (27)	5 (45)	5 (45)	0 (0)	0 (0)	11
Chemical	17 (41)	3 (7)	3 (7)	11 (27)	16 (39)	8 (20)	4 (10)	1 (2)	3 (7)	41
Steel/Non-ferrous metal	8 (25)	4 (13)	0 (0)	4 (13)	22 (69)	2 (6)	1 (3)	0 (0)	1 (3)	32
General machinery	2 (11)	0 (0)	2 (11)	0 (0)	14 (78)	2 (11)	1 (6)	1 (6)	0 (0)	18
Electrical/Electronic machinery	15 (34)	2 (5)	3 (7)	10 (23)	20 (45)	9 (20)	6 (14)	2 (5)	1 (2)	44
Transportation machinery	15 (27)	0 (0)	6 (11)	9 (16)	25 (45)	16 (29)	9 (16)	4 (7)	3 (5)	56
Others	14 (52)	3 (11)	4 (15)	7 (26)	11 (41)	2 (7)	2 (7)	0 (0)	0 (0)	27
Manufacturing sector total	79 (33)	13 (5)	21 (9)	45 (19)	116 (48)	45 (19)	28 (12)	9 (4)	8 (3)	240
Trading	19 (25)	3 (4)	5 (7)	11 (14)	47 (62)	10 (13)	5 (7)	2 (3)	3 (4)	76
Retail	3 (60)	0 (0)	1 (20)	2 (40)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	5
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	1 (20)	0 (0)	0 (0)	1 (20)	5
Others	2 (22)	0 (0)	0 (0)	2 (22)	6 (67)	1 (11)	1 (11)	0 (0)	0 (0)	9
Non-manufacturing sector total	24 (25)	3 (3)	6 (6)	15 (16)	59 (62)	12 (13)	6 (6)	2 (2)	4 (4)	95
Total	103 (31)	16 (5)	27 (8)	60 (18)	175 (52)	57 (17)	34 (10)	11 (3)	12 (4)	335

*(Note) Compared to the same period of the previous year

(Table 5-2) Export Trend in 2018 (Full Year)

Industry	Unit: No. of firms and (%)									No. of firms
	Increase			No change	Decrease					
	More than 20%	10~20%	Less than 10%		Less than 10%	10~20%	More than 20%			
Food	4 (40)	0 (0)	3 (30)	1 (10)	5 (50)	1 (10)	0 (0)	1 (10)	0 (0)	10
Textile	3 (27)	0 (0)	1 (9)	2 (18)	3 (27)	5 (45)	4 (36)	1 (9)	0 (0)	11
Chemical	18 (44)	3 (7)	3 (7)	12 (29)	15 (37)	8 (20)	4 (10)	1 (2)	3 (7)	41
Steel/Non-ferrous metal	8 (25)	4 (13)	1 (3)	3 (9)	21 (66)	3 (9)	1 (3)	0 (0)	2 (6)	32
General machinery	3 (17)	1 (6)	1 (6)	1 (6)	13 (72)	2 (11)	1 (6)	0 (0)	1 (6)	18
Electrical/Electronic machinery	20 (44)	2 (4)	1 (2)	17 (38)	15 (33)	10 (22)	6 (13)	3 (7)	1 (2)	45
Transportation machinery	17 (30)	0 (0)	6 (11)	11 (20)	25 (45)	14 (25)	7 (13)	5 (9)	2 (4)	56
Others	16 (59)	3 (11)	4 (15)	9 (33)	9 (33)	2 (7)	2 (7)	0 (0)	0 (0)	27
Manufacturing sector total	89 (37)	13 (5)	20 (8)	56 (23)	106 (44)	45 (19)	25 (10)	11 (5)	9 (4)	240
Trading	21 (28)	5 (7)	7 (9)	9 (12)	46 (61)	9 (12)	2 (3)	1 (1)	6 (8)	76
Retail	3 (60)	0 (0)	1 (20)	2 (40)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	5
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	1 (20)	0 (0)	0 (0)	1 (20)	5
Others	2 (22)	0 (0)	0 (0)	2 (22)	6 (67)	1 (11)	1 (11)	0 (0)	0 (0)	9
Non-manufacturing sector total	26 (27)	5 (5)	8 (8)	13 (14)	58 (61)	11 (12)	3 (3)	1 (1)	7 (7)	95
Total	115 (34)	18 (5)	28 (8)	69 (21)	164 (49)	56 (17)	28 (8)	12 (4)	16 (5)	335

*(Note) Compared to the same period of the previous year

(Table 5-3) Export Trend in 2019 (First Half)

Industry	Unit: No. of firms and (%)									No. of firms
	Increase			No change	Decrease					
	More than 20%	10~20%	Less than 10%		Less than 10%	10~20%	More than 20%			
Food	3 (30)	0 (0)	1 (10)	2 (20)	6 (60)	1 (10)	0 (0)	1 (10)	0 (0)	10
Textile	5 (45)	0 (0)	1 (9)	4 (36)	5 (45)	1 (9)	1 (9)	0 (0)	0 (0)	11
Chemical	19 (48)	3 (8)	8 (20)	8 (20)	16 (40)	5 (13)	2 (5)	2 (5)	1 (3)	40
Steel/Non-ferrous metal	9 (28)	4 (13)	0 (0)	5 (16)	20 (63)	3 (9)	2 (6)	1 (3)	0 (0)	32
General machinery	3 (18)	0 (0)	0 (0)	3 (18)	11 (65)	3 (18)	3 (18)	0 (0)	0 (0)	17
Electrical/Electronic machinery	18 (41)	0 (0)	5 (11)	13 (30)	17 (39)	9 (20)	5 (11)	4 (9)	0 (0)	44
Transportation machinery	15 (27)	0 (0)	2 (4)	13 (23)	28 (50)	13 (23)	8 (14)	1 (2)	4 (7)	56
Others	10 (37)	0 (0)	2 (7)	8 (30)	11 (41)	6 (22)	5 (19)	1 (4)	0 (0)	27
Manufacturing sector total	82 (35)	7 (3)	19 (8)	56 (24)	114 (48)	41 (17)	26 (11)	10 (4)	5 (2)	237
Trading	23 (31)	4 (5)	7 (9)	12 (16)	40 (53)	12 (16)	8 (11)	2 (3)	2 (3)	75
Retail	3 (60)	0 (0)	1 (20)	2 (40)	2 (40)	0 (0)	0 (0)	0 (0)	0 (0)	5
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	1 (20)	0 (0)	1 (20)	0 (0)	5
Others	3 (33)	0 (0)	1 (11)	2 (22)	6 (67)	0 (0)	0 (0)	0 (0)	0 (0)	9
Non-manufacturing sector total	29 (31)	4 (4)	9 (10)	16 (17)	52 (55)	13 (14)	8 (9)	3 (3)	2 (2)	94
Total	111 (34)	11 (3)	28 (8)	72 (22)	166 (50)	54 (16)	34 (10)	13 (4)	7 (2)	331

*(Note) Compared to the same period of the previous year

6. POTENTIAL EXPORT MARKETS IN THE FUTURE

Regarding potential export markets in the future (multiple answers), “Vietnam” (46%) tops the list of potential export markets from Thailand, followed by “India” (34%), “Indonesia” (33%), “Myanmar” (22%), and “Japan” (20%) respectively. (Table 6)

(Table 6) Potential Export Markets in the Future (Multiple Answers)

			Manufacturing										Non-manufacturing					Grand total
The survey before last	Last survey	Current survey		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electric/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Others	Non-manufacturing sector total	Grand total
1	2	1	Vietnam	6 (55)	3 (25)	21 (53)	13 (54)	7 (41)	14 (31)	18 (35)	10 (37)	92 (40)	44 (59)	5 (100)	2 (40)	5 (45)	56 (59)	148 (46)
3	1	2	India	0 (0)	5 (42)	17 (43)	9 (38)	6 (35)	13 (29)	16 (31)	8 (30)	74 (32)	30 (41)	1 (20)	1 (20)	4 (36)	36 (38)	110 (34)
2	3	3	Indonesia	5 (45)	0 (0)	19 (48)	10 (42)	4 (24)	6 (13)	24 (46)	8 (30)	76 (33)	28 (38)	1 (20)	0 (0)	3 (27)	32 (34)	108 (33)
4	4	4	Myanmar	2 (18)	2 (17)	9 (23)	5 (21)	5 (29)	10 (22)	6 (12)	4 (15)	43 (19)	20 (27)	3 (60)	3 (60)	3 (27)	29 (31)	72 (22)
5	5	5	Japan	3 (27)	4 (33)	3 (8)	3 (13)	3 (18)	16 (36)	8 (15)	7 (26)	47 (21)	10 (14)	0 (0)	2 (40)	5 (45)	17 (18)	64 (20)
8	7	6	China	2 (18)	5 (42)	4 (10)	4 (17)	3 (18)	16 (36)	5 (10)	5 (19)	44 (19)	6 (8)	0 (0)	0 (0)	0 (0)	6 (6)	50 (15)
10	7	7	Malaysia	2 (18)	0 (0)	9 (23)	3 (13)	2 (12)	3 (7)	7 (13)	6 (22)	32 (14)	12 (16)	2 (40)	0 (0)	0 (0)	14 (15)	46 (14)
6	9	7	Philippines	1 (9)	1 (8)	4 (10)	3 (13)	5 (29)	7 (16)	8 (15)	5 (19)	34 (15)	10 (14)	1 (20)	0 (0)	1 (9)	12 (13)	46 (14)
7	6	9	Cambodia	3 (27)	1 (8)	7 (18)	4 (17)	3 (18)	5 (11)	5 (10)	3 (11)	31 (14)	11 (15)	1 (20)	2 (40)	0 (0)	14 (15)	45 (14)
9	10	10	U.S.A.	2 (18)	5 (42)	5 (13)	1 (4)	3 (18)	10 (22)	4 (8)	3 (11)	33 (14)	3 (4)	0 (0)	0 (0)	2 (18)	5 (5)	38 (12)
12	11	11	Laos	2 (18)	0 (0)	4 (10)	2 (8)	2 (12)	2 (4)	3 (6)	1 (4)	16 (7)	7 (9)	1 (20)	2 (40)	0 (0)	10 (11)	26 (8)
11	14	12	Europe	0 (0)	5 (42)	5 (13)	1 (4)	2 (12)	3 (7)	3 (6)	4 (15)	23 (10)	2 (3)	0 (0)	0 (0)	0 (0)	2 (2)	25 (8)
15	16	13	Africa	0 (0)	0 (0)	1 (3)	4 (17)	1 (6)	2 (4)	5 (10)	0 (0)	13 (6)	6 (8)	0 (0)	0 (0)	0 (0)	6 (6)	19 (6)
16	13	14	Bangladesh	0 (0)	2 (17)	2 (5)	1 (4)	2 (12)	0 (0)	0 (0)	0 (0)	7 (3)	8 (11)	0 (0)	1 (20)	1 (9)	10 (11)	17 (5)
17	17	15	Singapore	3 (27)	0 (0)	1 (3)	1 (4)	1 (6)	2 (4)	2 (4)	1 (4)	11 (5)	1 (1)	1 (20)	0 (0)	0 (0)	2 (2)	13 (4)
17	12	16	Pakistan	0 (0)	0 (0)	3 (8)	1 (4)	2 (12)	1 (2)	1 (2)	1 (4)	9 (4)	3 (4)	0 (0)	0 (0)	0 (0)	3 (3)	12 (4)
13	17	17	Middle East	2 (18)	0 (0)	1 (3)	0 (0)	0 (0)	4 (9)	2 (4)	1 (4)	10 (4)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	11 (3)
14	15	18	Latin America	0 (0)	0 (0)	1 (3)	1 (4)	1 (6)	1 (2)	3 (6)	1 (4)	8 (4)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	9 (3)
19	19	19	Oceania	0 (0)	1 (8)	2 (5)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	5 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (2)
20	20	20	Russia	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	1 (2)	0 (0)	0 (0)	2 (1)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	3 (1)
20	20	21	Sri Lanka	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
—	—	—	Others	1 (9)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	3 (6)	0 (0)	5 (2)	2 (3)	0 (0)	0 (0)	0 (0)	2 (2)	7 (2)
Total				33	35	118	66	53	118	120	68	616	204	16	13	24	259	875
No. of firms				11	12	40	24	17	45	52	27	228	74	5	5	11	95	323 (100)

7. EXCHANGE RATES USED IN BUSINESS PLANNING

(1) Thai Baht/US Dollar

Regarding the exchange rates used in business planning (Thai Baht/US Dollar), the predominant rate used is “A range between no less than 32.5 but less than 33.0” (32.4%), followed by “No less than 33.0 but less than 33.5” (26.9%) and the overall median rate is at 32.7. (Table 7-1)

(Table 7-1) Exchange Rates Used in Business Planning (Thai Baht/US Dollar)

Unit: Thai Baht/US Dollar, No. of firms, and (%)

Industry Baht/US dollar	Manufacturing									Non-manufacturing				Grand total	
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total		
No less than 29 but less than 29.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 29.5 but less than 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 30 but less than 30.5	0	0	0	0	1	0	0	0	1	1	0	1	2	3	(1.4)
No less than 30.5 but less than 31	0	0	0	0	0	0	0	0	0	0	0	1	1	1	(0.5)
No less than 31 but less than 31.5	0	0	0	0	0	2	0	3	5	1	0	0	1	6	(2.8)
No less than 31.5 but less than 32	0	0	1	0	0	2	2	0	5	2	1	1	4	9	(4.2)
No less than 32 but less than 32.5	2	1	8	1	1	10	2	5	30	7	0	2	9	39	(18.1)
No less than 32.5 but less than 33	2	5	11	4	4	13	3	6	48	17	2	3	22	70	(32.4)
No less than 33 but less than 33.5	2	3	6	4	4	9	0	6	34	19	1	4	24	58	(26.9)
No less than 33.5 but less than 34	0	0	0	3	1	1	0	2	7	3	0	0	3	10	(4.6)
No less than 34 but less than 34.5	0	0	1	0	2	1	0	0	4	2	0	1	3	7	(3.2)
No less than 34.5 but less than 35	2	0	0	0	2	0	0	0	4	0	0	0	0	4	(1.9)
No less than 35 but less than 35.5	0	0	1	0	1	0	0	0	2	3	1	0	4	6	(2.8)
No less than 35.5 but less than 36	0	0	0	0	0	0	2	0	2	0	0	0	0	2	(0.9)
No less than 36 but less than 36.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 36.5 but less than 37	0	0	0	0	0	0	0	0	0	1	0	0	1	1	(0.5)
No less than 37 but less than 37.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 37.5 but less than 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 38 but less than 38.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No. of firms	8	9	28	12	16	38	9	22	142	56	5	13	74	216	
Average	33.08	32.73	32.61	32.89	33.26	32.58	32.74	32.52	32.73	32.87	33.00	32.38	32.79	32.76	
Median	32.80	32.70	32.50	33.00	33.15	32.50	32.50	32.50	32.60	32.85	32.60	32.60	32.70	32.70	
Mode	33.00	32.50	32.50	33.00	34.00	32.50	32.50	32.50	32.50	32.50	#N/A	33.00	33.00	32.50	

*(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregularly low/ high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates all respondents' values differ.

(At the time of the last survey)

Industry Baht/US dollar	Manufacturing									Non-manufacturing				Grand total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total	
Average	32.70	32.14	32.38	32.45	32.52	31.71	32.44	32.33	32.25	32.42	32.65	29.75	32.04	32.19
Median	32.50	31.95	32.05	32.10	32.00	32.25	32.10	32.50	32.25	32.25	32.30	32.50	32.30	32.30
Mode	32.50	31.50	32.50	32.00	34.00	32.00	32.00	32.50	32.00	32.00	32.50	33.00	32.00	32.00

*(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregularly low/ high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates all respondents' values differ.

(2) Japanese Yen/Thai Baht

Regarding the exchange rates used in business planning (Japanese Yen/Thai Baht), the predominant rate used is “A range between no less than 3.4 but less than 3.5” (43.4%), followed by “No less than 3.3 but less than 3.4” (28.1%) and “No less than 3.5 but less than 3.6” (12.0%). The overall median rate is at 3.40. (Table 7-2)

(Table 7-2) Exchange Rates Used in Business Planning (Japanese Yen/Thai Baht)

Unit: Japanese Yen/Thai Baht, No. of firms, and (%)

Yen/Baht \ Industry	Manufacturing									Non-manufacturing				Grand total	
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electric/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total		
No less than 2.6 but less than 2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 2.7 but less than 2.8	0	0	1	0	0	0	0	0	1	0	0	0	0	1	(0.4)
No less than 2.8 but less than 2.9	0	0	0	0	0	0	1	0	1	1	0	0	1	2	(0.7)
No less than 2.9 but less than 3	0	0	0	0	0	0	0	0	0	0	1	0	1	1	(0.4)
No less than 3.0 but less than 3.1	0	1	1	2	0	3	2	0	9	0	0	1	1	10	(3.6)
No less than 3.1 but less than 3.2	0	0	0	0	0	1	5	0	6	5	0	0	5	11	(4.0)
No less than 3.2 but less than 3.3	0	0	3	1	2	5	2	2	15	4	1	1	6	21	(7.7)
No less than 3.3 but less than 3.4	2	1	6	8	9	12	9	8	55	17	1	4	22	77	(28.1)
No less than 3.4 but less than 3.5	5	9	21	12	4	13	11	9	84	23	3	9	35	119	(43.4)
No less than 3.5 but less than 3.6	2	0	3	5	1	3	6	5	25	5	0	3	8	33	(12.0)
No less than 3.6 but less than 3.7	0	1	0	0	0	0	0	0	1	1	0	0	1	2	(0.7)
No less than 3.7 but less than 3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 3.8 but less than 3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 3.9 but less than 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(0.0)
No less than 4.0 but less than 4.1	0	0	0	0	1	0	0	0	1	0	0	0	0	1	(0.4)
No. of firms	9	12	35	28	17	37	36	24	196	56	6	18	78	274	
Average	3.40	3.38	3.34	3.35	3.36	3.32	3.33	3.37	3.35	3.74	3.27	3.36	3.64	3.49	
Median	3.40	3.40	3.40	3.40	3.30	3.30	3.30	3.40	3.40	3.40	3.35	3.40	3.40	3.40	
Mode	3.40	3.40	3.40	3.40	3.30	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	

*(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregular low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates all respondents' values differ.

At the time of the last survey

Yen/Baht \ Industry	Manufacturing									Non-manufacturing				Grand total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electric/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total	
Average	3.37	3.38	3.35	3.35	3.18	3.36	3.34	3.35	3.34	3.75	3.36	3.29	3.65	3.43
Median	3.40	3.40	3.40	3.40	3.30	3.40	3.40	3.40	3.40	3.40	3.40	3.30	3.40	3.40
Mode	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40

*(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregular low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates all respondents' values differ.

8. PROCUREMENT SOURCES FOR PARTS/MATERIALS

Regarding the ratios of procurement sources for parts/materials in 2018 (a simple average of the respondents' answers), "ASEAN" accounted for 54.0% of parts/material supply, of which 46.4% was procured from "Thailand". (Table 8-1)

As for procurement plans in 2019, procurement from "ASEAN" accounts for 56.9%, of which 49.9% will be procured domestically in "Thailand", a 3.5-point increase from the previous year. (Table 8-2)

(Table 8-1) Procurement Sources for Parts/Materials in 2018

Industry		ASEAN			Japan	China	Others	Total	No.of firms
		Thailand	ASEAN (Other than Thailand)						
Manufacturing	Food	73.7	69.9	3.8	1.5	4.9	19.9	100.0	9
	Textile	37.2	17.0	20.2	1.6	6.1	55.1	100.0	11
	Chemical	57.0	49.1	7.9	33.8	3.4	5.7	100.0	37
	Steel/Non-ferrous metal	54.9	48.5	6.4	36.7	3.3	5.1	100.0	32
	General machinery	69.9	64.7	5.2	20.1	6.4	3.6	100.0	18
	Electrical/Electronic machinery	48.9	42.4	6.5	35.7	12.7	2.8	100.0	41
	Transportation machinery	61.5	57.6	4.0	31.8	3.2	3.4	100.0	52
	Others	46.8	43.9	3.0	33.8	6.3	13.1	100.0	26
Manufacturing sector total		56.2	49.1	7.1	24.4	5.8	13.6	100.0	226
Non-Manufacturing	Trading	42.5	34.5	8.1	37.5	10.1	9.9	100.0	79
	Retail	36.7	23.3	13.3	63.3	0.0	0.0	100.0	6
	Construction/Civil engineering	65.6	62.0	3.6	29.1	3.6	1.7	100.0	7
	Others	61.9	55.0	6.9	27.5	10.6	0.0	100.0	8
	Non-manufacturing sector total		51.7	43.7	8.0	39.4	6.1	2.9	100.0
Total		54.0	46.4	7.5	31.9	5.9	8.2	100.0	326

*(Note) The ratios indicate the simple average of the respondents' answers.

(Table 8-2) Procurement Sources for Parts/Materials in 2019

Industry		ASEAN			Japan	China	Others	Total	No.of firms
		Thailand	ASEAN (Other than Thailand)						
Manufacturing	Food	72.2	71.6	0.7	11.8	6.9	9.1	100.0	9
	Textile	61.4	55.3	6.1	20.1	17.0	1.5	100.0	11
	Chemical	58.8	50.7	8.0	31.9	3.5	5.8	100.0	37
	Steel/Non-ferrous metal	54.7	48.4	6.3	37.4	2.5	5.4	100.0	32
	General machinery	70.1	66.8	3.3	21.6	6.1	2.2	100.0	16
	Electrical/Electronic machinery	50.3	43.5	6.8	34.4	12.5	2.8	100.0	41
	Transportation machinery	62.7	58.2	4.5	30.5	3.5	3.3	100.0	52
	Others	47.9	45.0	3.0	32.6	6.5	13.0	100.0	26
Manufacturing sector total		59.7	54.9	4.8	27.5	7.3	5.4	100.0	224
Non-Manufacturing	Trading	43.5	35.1	8.3	35.4	8.9	12.2	100.0	78
	Retail	37.5	24.2	13.3	62.5	0.0	▲ 0.0	100.0	6
	Construction/Civil engineering	72.1	66.4	5.7	22.6	3.6	1.7	100.0	7
	Others	63.1	53.8	9.4	26.3	10.6	0.0	100.0	8
	Non-manufacturing sector total		54.1	44.9	9.2	36.7	5.8	3.5	100.0
Total		56.9	49.9	7.0	32.1	6.6	4.4	100.0	323

*(Note) The ratios indicate the simple average of the respondents' answers.

9. CHALLENGES FOR CORPORATE MANAGEMENT

Regarding challenges for corporate management (multiple answers), the predominant response is “Severe competition with competitors” (69%), followed by “Increase of total labor cost” (45%), “Surge in material prices” (32%), and “Shortage of engineers” (28%).

Other major responses in the manufacturing sector are “Quality management” (35%) and “Fluctuation of foreign exchange rates” (28%), while many in the non-manufacturing sector cited “Changes in products/users’ needs” (26%), and “Employee’s job hopping” (25%). (Table 9)

(Table 9) Challenges for Corporate Management (Multiple Answers)

Unit : No. of firms and (%)

Previous survey	Current survey	Manufacturing										Non-manufacturing							Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total		
1	1	6 (50)	9 (69)	11 (26)	25 (69)	16 (76)	34 (76)	45 (76)	21 (72)	167 (65)	67 (80)	4 (50)	17 (74)	25 (83)	27 (84)	38 (59)	178 (74)	345 (69)	
2	2	8 (67)	8 (62)	3 (7)	17 (47)	7 (33)	26 (58)	39 (66)	19 (66)	127 (49)	28 (33)	3 (38)	7 (30)	12 (40)	21 (66)	26 (41)	97 (40)	224 (45)	
3	3	4 (33)	8 (62)	7 (17)	16 (44)	8 (38)	23 (51)	24 (41)	16 (55)	106 (41)	30 (36)	2 (25)	0 (0)	9 (30)	7 (22)	7 (11)	55 (23)	161 (32)	
4	4	1 (8)	4 (31)	2 (5)	16 (44)	10 (48)	25 (56)	28 (47)	15 (52)	101 (39)	7 (8)	2 (25)	2 (9)	15 (50)	1 (3)	13 (20)	40 (17)	141 (28)	
6	5	5 (42)	5 (38)	2 (5)	11 (31)	9 (43)	16 (36)	27 (46)	16 (55)	91 (35)	4 (5)	4 (50)	0 (0)	7 (23)	8 (25)	11 (17)	34 (14)	125 (25)	
9	6	5 (42)	6 (46)	5 (12)	8 (22)	7 (33)	9 (20)	13 (22)	5 (17)	58 (23)	25 (30)	2 (25)	7 (30)	7 (23)	6 (19)	15 (23)	62 (26)	120 (24)	
5	7	2 (17)	6 (46)	5 (12)	6 (17)	5 (24)	21 (47)	18 (31)	10 (34)	73 (28)	33 (39)	0 (0)	1 (4)	0 (0)	2 (6)	5 (8)	41 (17)	114 (23)	
8	8	2 (17)	3 (23)	4 (10)	5 (14)	6 (29)	10 (22)	4 (7)	7 (24)	41 (16)	22 (26)	2 (25)	9 (39)	5 (17)	7 (22)	16 (25)	61 (25)	102 (20)	
7	9	4 (33)	3 (23)	0 (0)	7 (19)	3 (14)	11 (24)	15 (25)	8 (28)	51 (20)	9 (11)	2 (25)	5 (22)	3 (10)	11 (34)	16 (25)	46 (19)	97 (19)	
11	10	0 (0)	2 (15)	0 (0)	5 (14)	8 (38)	3 (7)	4 (7)	3 (10)	25 (10)	9 (11)	2 (25)	2 (9)	7 (23)	3 (9)	6 (9)	29 (12)	54 (11)	
10	11	3 (25)	3 (23)	1 (2)	4 (11)	3 (14)	3 (7)	5 (8)	3 (10)	25 (10)	6 (7)	0 (0)	0 (0)	6 (20)	2 (6)	7 (11)	21 (9)	46 (9)	
12	12	1 (8)	3 (23)	0 (0)	3 (8)	0 (0)	5 (11)	11 (19)	2 (7)	25 (10)	2 (2)	1 (13)	2 (9)	3 (10)	3 (9)	3 (5)	14 (6)	39 (8)	
13	13	0 (0)	0 (0)	1 (2)	1 (3)	1 (5)	0 (0)	1 (2)	1 (3)	5 (2)	7 (8)	0 (0)	3 (13)	4 (13)	2 (6)	2 (3)	18 (7)	23 (5)	
14	14	1 (8)	1 (8)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (2)	5 (6)	0 (0)	3 (13)	0 (0)	3 (9)	3 (5)	14 (6)	18 (4)	
20	15	0 (0)	0 (0)	1 (2)	1 (3)	0 (0)	0 (0)	1 (2)	1 (3)	4 (2)	2 (2)	1 (13)	2 (9)	2 (7)	2 (6)	3 (5)	12 (5)	16 (3)	
15	15	2 (17)	2 (15)	1 (2)	2 (6)	0 (0)	1 (2)	5 (8)	2 (7)	15 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (0)	16 (3)	16 (3)	
14	17	1 (8)	0 (0)	1 (2)	4 (11)	0 (0)	1 (2)	4 (7)	1 (3)	12 (5)	1 (1)	0 (0)	1 (4)	1 (3)	0 (0)	0 (0)	3 (1)	15 (3)	
16	17	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	1 (0)	4 (5)	0 (0)	0 (0)	2 (7)	0 (0)	8 (13)	14 (6)	15 (3)	
16	19	1 (8)	1 (8)	1 (2)	4 (11)	0 (0)	0 (0)	1 (2)	1 (3)	9 (4)	1 (1)	1 (13)	0 (0)	0 (0)	2 (3)	4 (2)	13 (3)	13 (3)	
19	20	1 (8)	0 (0)	1 (2)	0 (0)	0 (0)	1 (2)	4 (7)	1 (3)	8 (3)	1 (1)	0 (0)	0 (0)	1 (3)	0 (0)	1 (2)	3 (1)	11 (2)	
18	21	0 (0)	0 (0)	2 (5)	0 (0)	1 (5)	1 (2)	2 (3)	2 (7)	8 (3)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	1 (0)	9 (2)	9 (2)	
21	22	0 (0)	0 (0)	1 (2)	0 (0)	1 (5)	1 (2)	0 (0)	0 (0)	3 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)	
-	-	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	2 (3)	0 (0)	3 (1)	5 (6)	0 (0)	2 (9)	3 (10)	0 (0)	5 (8)	15 (6)	18 (4)	
Total		47	64	51	135	85	193	253	134	962	268	26	64	112	105	188	763	1,725	
No. of firms		12	13	42	36	21	45	59	29	257	84	8	23	30	32	64	241	498 (100)	

10. REQUESTS TO THE THAI GOVERNMENT

(1) Requests to the Thai government

Concerning requests to the Thai government (multiple answers), most of the firms cited “Customs-related systems and their implementation” (51%), followed by “Development of transportation infrastructure in Bangkok metropolitan area” (46%), “Promotion of economic stimulus measures (e.g. public infrastructure development)” (43%), and “Implementation of tax-related systems (e.g. Corporate Tax)” (35%).

Looking closer by sector, “Stabilization of foreign exchange rates” (35%) and “Improvement of education/human resource development” (34%) are predominant for companies in the manufacturing sector, while “Relaxation of the Foreign Business Act” (36%) and “Work permit/visa-related issues” (31%) are predominant among companies in the non-manufacturing sector. (Table 10-1)

(Table 10-1) Requests to the Thai Government (Multiple Answers)

Unit : No. of firms and (%)

Previous survey	Current survey	Manufacturing									Non-manufacturing							Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	1	8 (67)	2 (17)	26 (63)	23 (66)	10 (48)	26 (58)	37 (63)	11 (38)	143 (56)	59 (70)	4 (50)	2 (9)	7 (23)	19 (59)	17 (27)	108 (45)	251 (51)
3	2	6 (50)	7 (58)	17 (41)	17 (49)	15 (71)	18 (40)	23 (39)	14 (48)	117 (46)	37 (44)	5 (63)	8 (36)	12 (40)	18 (56)	29 (46)	109 (46)	226 (46)
2	3	3 (25)	4 (33)	20 (49)	18 (51)	8 (38)	14 (31)	31 (53)	16 (55)	114 (45)	37 (44)	6 (75)	8 (36)	15 (50)	10 (31)	24 (38)	100 (42)	214 (43)
4	4	3 (25)	3 (25)	15 (37)	10 (29)	6 (29)	19 (42)	19 (32)	13 (45)	88 (35)	30 (36)	1 (13)	7 (32)	13 (43)	16 (50)	20 (32)	87 (36)	175 (35)
5	5	2 (17)	4 (33)	19 (46)	14 (40)	6 (29)	21 (47)	13 (22)	10 (34)	89 (35)	33 (39)	3 (38)	2 (9)	2 (7)	1 (3)	9 (14)	50 (21)	139 (28)
6	6	2 (17)	5 (42)	13 (32)	11 (31)	9 (43)	13 (29)	19 (32)	15 (52)	87 (34)	13 (15)	1 (13)	4 (18)	4 (13)	5 (16)	11 (17)	38 (16)	125 (25)
7	7	4 (33)	0 (0)	8 (20)	5 (14)	3 (14)	8 (18)	7 (12)	2 (7)	37 (15)	25 (30)	2 (25)	11 (50)	15 (50)	10 (31)	24 (38)	87 (36)	124 (25)
9	8	3 (25)	4 (33)	5 (12)	4 (11)	2 (10)	9 (20)	11 (19)	3 (10)	41 (16)	18 (21)	3 (38)	8 (36)	10 (33)	9 (28)	25 (40)	73 (31)	114 (23)
8	9	3 (25)	6 (50)	12 (29)	9 (26)	3 (14)	9 (20)	20 (34)	3 (10)	65 (26)	28 (33)	1 (13)	2 (9)	3 (10)	8 (25)	3 (5)	45 (19)	110 (22)
10	10	1 (8)	1 (8)	7 (17)	11 (31)	10 (48)	11 (24)	11 (19)	5 (17)	57 (22)	10 (12)	3 (38)	2 (9)	7 (23)	4 (13)	7 (11)	33 (14)	90 (18)
12	11	1 (8)	2 (17)	8 (20)	8 (23)	3 (14)	7 (16)	12 (20)	5 (17)	46 (18)	9 (11)	0 (0)	4 (18)	6 (20)	3 (9)	9 (14)	31 (13)	77 (16)
13	12	1 (8)	5 (42)	7 (17)	2 (6)	1 (5)	10 (22)	6 (10)	3 (10)	35 (14)	15 (18)	1 (13)	2 (9)	4 (13)	13 (41)	4 (6)	39 (16)	74 (15)
11	13	1 (8)	4 (33)	4 (10)	5 (14)	7 (33)	10 (22)	15 (25)	6 (21)	52 (20)	7 (8)	1 (13)	2 (9)	2 (7)	3 (9)	4 (6)	19 (8)	71 (14)
14	14	1 (8)	1 (8)	8 (20)	3 (9)	2 (10)	6 (13)	6 (10)	4 (14)	31 (12)	9 (11)	0 (0)	6 (27)	5 (17)	3 (9)	14 (22)	37 (15)	68 (14)
15	15	2 (17)	1 (8)	6 (15)	7 (20)	5 (24)	6 (13)	15 (25)	6 (21)	48 (19)	4 (5)	1 (13)	0 (0)	1 (3)	4 (13)	4 (6)	14 (6)	62 (13)
16	16	2 (17)	0 (0)	1 (2)	2 (6)	0 (0)	5 (11)	4 (7)	1 (3)	15 (6)	6 (7)	0 (0)	0 (0)	7 (23)	3 (9)	6 (10)	22 (9)	37 (8)
17	17	0 (0)	3 (25)	1 (2)	0 (0)	0 (0)	2 (4)	3 (5)	0 (0)	9 (4)	5 (6)	1 (13)	2 (9)	1 (3)	2 (6)	6 (10)	17 (7)	26 (5)
19	18	1 (8)	0 (0)	5 (12)	0 (0)	1 (5)	1 (2)	0 (0)	0 (0)	8 (3)	1 (1)	0 (0)	0 (0)	1 (3)	1 (3)	1 (2)	4 (2)	12 (2)
18	19	1 (8)	0 (0)	1 (2)	0 (0)	0 (0)	1 (2)	2 (3)	2 (7)	7 (3)	1 (1)	0 (0)	2 (9)	0 (0)	0 (0)	1 (2)	4 (2)	11 (2)
-	-	1 (8)	2 (17)	3 (7)	0 (0)	1 (5)	2 (4)	0 (0)	0 (0)	9 (4)	0 (0)	0 (0)	4 (18)	2 (7)	1 (3)	4 (6)	11 (5)	20 (4)
Total		46	54	186	149	92	198	254	119	1098	347	33	76	117	133	222	928	2,026
No. of firms		12	12	41	35	21	45	59	29	254	84	8	22	30	32	63	239	493 (100)

(2) Recent improvement in investment environment (policy evaluation)

Regarding the government's policies that Japanese firms saw some improvement recently (multiple answers), the predominant response is "Promotion of economic stimulus measures (e.g. public infrastructure development)" (30%), followed by "Maintenance of public security and safety" (18%), "Work permit/visa-related issues" (17%), "Development of transportation infrastructure in Bangkok metropolitan area" (17%), and "Stabilization of foreign exchange rates" (15%). (Table 10-2)

(Table 10-2) Recent Policy Improvement (Multiple Answers)

Previous survey	Current survey		Manufacturing									Non-manufacturing							Grand total
			Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	1	Promotion of economic stimulus measures (e.g. public infrastructure development)	1 (11)	1 (8)	9 (24)	10 (37)	4 (25)	11 (27)	22 (42)	5 (25)	63 (29)	19 (27)	1 (33)	8 (40)	11 (42)	10 (38)	6 (19)	55 (31)	118 (30)
2	2	Maintenance of public security and safety	2 (22)	5 (42)	5 (14)	8 (30)	2 (13)	8 (20)	8 (15)	3 (15)	41 (19)	13 (18)	0 (0)	3 (15)	6 (23)	4 (15)	4 (13)	30 (17)	71 (18)
5	3	Work permit/visa-related issues	2 (22)	3 (25)	9 (24)	1 (4)	3 (19)	11 (27)	7 (13)	6 (30)	42 (20)	10 (14)	0 (0)	1 (5)	4 (15)	3 (12)	7 (23)	25 (14)	67 (17)
3	4	Development of transportation infrastructure in Bangkok metropolitan area	1 (11)	3 (25)	7 (19)	2 (7)	2 (13)	5 (12)	8 (15)	3 (15)	31 (14)	11 (15)	0 (0)	6 (30)	6 (23)	7 (27)	5 (16)	35 (20)	66 (17)
8	5	Stabilization of foreign exchange rates	2 (22)	0 (0)	7 (19)	5 (19)	3 (19)	1 (2)	3 (6)	4 (20)	25 (12)	16 (23)	0 (0)	6 (30)	4 (15)	3 (12)	3 (10)	32 (18)	57 (15)
5	5	Customs-related systems and their implementation	1 (11)	1 (8)	5 (14)	5 (19)	3 (19)	4 (10)	13 (25)	2 (10)	34 (16)	11 (15)	0 (0)	1 (5)	3 (12)	4 (15)	2 (6)	21 (12)	55 (14)
4	7	Development of communication infrastructure	2 (22)	1 (8)	4 (11)	2 (7)	3 (19)	6 (15)	4 (8)	5 (25)	27 (13)	7 (10)	1 (33)	3 (15)	0 (0)	3 (12)	12 (39)	26 (15)	53 (14)
10	8	Promotion of economic ties (e.g. FTA, EPA)	2 (22)	3 (25)	6 (16)	3 (11)	1 (6)	3 (7)	13 (25)	0 (0)	31 (14)	11 (15)	1 (33)	0 (0)	2 (8)	3 (12)	2 (6)	19 (11)	50 (13)
7	9	Continuity of the government's policies	0 (0)	2 (17)	4 (11)	5 (19)	1 (6)	1 (2)	8 (15)	2 (10)	23 (11)	7 (10)	0 (0)	4 (20)	3 (12)	1 (4)	2 (6)	17 (10)	40 (10)
9	10	Promotion of regional operating headquarter function (e.g. IHQ, ITC)	0 (0)	2 (17)	2 (5)	1 (4)	3 (19)	2 (5)	5 (10)	1 (5)	16 (7)	12 (17)	0 (0)	3 (15)	0 (0)	4 (15)	4 (13)	23 (13)	39 (10)
11	11	Implementation of flood prevention measures	0 (0)	2 (17)	2 (5)	3 (11)	0 (0)	8 (20)	6 (12)	2 (10)	23 (11)	4 (6)	0 (0)	1 (5)	0 (0)	2 (8)	2 (6)	9 (5)	32 (8)
13	12	Development of logistics infrastructure connecting Thailand and the neighboring countries (e.g. CLMV and India)	2 (22)	1 (8)	1 (3)	0 (0)	1 (6)	0 (0)	4 (8)	1 (5)	10 (5)	2 (3)	2 (67)	1 (5)	2 (8)	0 (0)	5 (16)	12 (7)	22 (6)
12	13	Implementation of tax-related systems (e.g. Corporate Tax)	0 (0)	0 (0)	2 (5)	1 (4)	1 (6)	2 (5)	5 (10)	0 (0)	11 (5)	5 (7)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	6 (3)	17 (4)
15	14	Prevention of labor disputes	1 (11)	0 (0)	1 (3)	0 (0)	1 (6)	2 (5)	3 (6)	2 (10)	10 (5)	5 (7)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	6 (3)	16 (4)
17	15	Promotion of foreign labor	0 (0)	0 (0)	1 (3)	1 (4)	0 (0)	2 (5)	0 (0)	4 (20)	8 (4)	1 (1)	0 (0)	2 (10)	2 (8)	0 (0)	2 (6)	7 (4)	15 (4)
16	16	Relaxation of the Foreign Business Act	0 (0)	0 (0)	2 (5)	2 (7)	0 (0)	1 (2)	2 (4)	1 (5)	8 (4)	2 (3)	0 (0)	1 (5)	1 (4)	0 (0)	2 (6)	6 (3)	14 (4)
14	16	Improvement of education/human resource development	0 (0)	0 (0)	0 (0)	1 (4)	1 (6)	2 (5)	3 (6)	0 (0)	7 (3)	3 (4)	0 (0)	0 (0)	2 (8)	1 (4)	0 (0)	6 (3)	13 (3)
19	18	Implementation of drought prevention measures	0 (0)	0 (0)	1 (3)	1 (4)	0 (0)	0 (0)	1 (2)	0 (0)	3 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)
18	19	Protection of intellectual property rights	1 (11)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)
-	-	Others	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	5 (2)	3 (4)	0 (0)	0 (0)	0 (0)	0 (0)	3 (2)	8 (2)	
Total			17	24	71	51	29	72	115	41	420	142	5	40	47	45	59	338	758
No. of firms			9	12	37	27	16	41	52	20	214	71	3	20	26	26	31	177	391 (100)

11. US-CHINA TRADE WAR

(1) Effect of the US-China Trade War

Regarding the effect of the US-China Trade War, the percentage of the companies which “Received positive effect” or “Expect positive effect” totalled 13%, while those who “Received negative effect” or “Expect negative effect” amounted to 32%. On the other hand, 37% reported "No effect" and 17% “Uncertain”. (Table 11-1)

(Table 11-1) Effect of the US-China Trade War

Industry		Positive effect		Negative effect		No effect	Uncertain	No. of firms
		Received positive effect	Expect positive effect	Received negative effect	Expect negative effect			
Manufacturing	Food	1 (8)	0 (0)	0 (0)	1 (8)	5 (42)	5 (42)	12
	Textile	1 (8)	2 (17)	0 (0)	3 (25)	6 (50)	0 (0)	12
	Chemical	0 (0)	6 (14)	5 (12)	13 (31)	14 (33)	4 (10)	42
	Steel/Non-ferrous metal	0 (0)	3 (9)	1 (3)	16 (46)	7 (20)	8 (23)	35
	General machinery	0 (0)	1 (5)	1 (5)	5 (24)	9 (43)	5 (24)	21
	Electrical/Electronic machinery	1 (2)	8 (17)	6 (13)	15 (33)	11 (24)	5 (11)	46
	Transportation machinery	0 (0)	6 (10)	1 (2)	25 (42)	20 (34)	7 (12)	59
	Others	1 (3)	3 (10)	2 (7)	6 (21)	6 (21)	3 (10)	29
Manufacturing sector total		4 (2)	29 (11)	16 (6)	84 (33)	78 (30)	37 (14)	256
Non-manufacturing	Trading	0 (0)	12 (14)	3 (4)	22 (26)	32 (38)	15 (18)	84
	Retail	0 (0)	1 (13)	0 (0)	1 (13)	6 (75)	0 (0)	8
	Finance/Insurance/Securities	0 (0)	0 (0)	0 (0)	9 (38)	7 (29)	8 (33)	24
	Construction/Civil engineering	0 (0)	1 (3)	0 (0)	3 (10)	16 (53)	10 (33)	30
	Transportation/Communication	3 (9)	9 (28)	0 (0)	5 (16)	11 (34)	4 (13)	32
	Others	2 (3)	2 (3)	1 (2)	14 (23)	31 (51)	11 (18)	61
	Non-manufacturing sector total		5 (2)	25 (10)	4 (2)	54 (23)	103 (43)	48 (20)
Total		9 (2)	54 (11)	20 (4)	138 (28)	181 (37)	85 (17)	495
		63	(13)	158	(32)			

(2) Specific effects of the US-China Trade War (multiple answers)

Regarding some specific effects of the US-China Trade War (multiple answers), “Decrease in export volume” (36%) is most cited by the respondents, followed by “Decrease in domestic sales volume” (32%), and “Increase in purchase price” (22%), which are all negative effects. As for positive effects, “Shift of production facilities from China to Thailand” is cited most at 21%. (Table 11-2)

(Table 11-2) Specific Effects of the US-China Trade War (Multiple Answers)

Ranking		Manufacturing									Non-manufacturing						Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Decrease in export volume	1 (50)	2 (33)	13 (59)	3 (15)	1 (14)	17 (57)	19 (58)	7 (58)	63 (48)	7 (19)	0 (0)	0 (0)	4 (24)	5 (18)	16 (18)	79 (36)
2	Decrease in domestic sales volume	2 (100)	2 (33)	8 (36)	9 (45)	3 (43)	5 (17)	11 (33)	1 (8)	41 (31)	15 (41)	1 (50)	2 (50)	0 (0)	11 (39)	29 (33)	70 (32)
3	Increase in purchase price	0 (0)	1 (17)	4 (18)	3 (15)	1 (14)	6 (20)	8 (24)	2 (17)	25 (19)	15 (41)	0 (0)	2 (50)	2 (12)	4 (14)	23 (26)	48 (22)
4	Shift of production facilities from China to Thailand	0 (0)	0 (0)	2 (9)	4 (20)	1 (14)	8 (27)	5 (15)	3 (25)	23 (17)	10 (27)	0 (0)	2 (50)	6 (35)	6 (21)	24 (27)	47 (21)
5	Decrease in sales price	1 (50)	3 (50)	6 (27)	6 (30)	1 (14)	5 (17)	4 (12)	1 (8)	27 (20)	3 (8)	0 (0)	0 (0)	0 (0)	2 (7)	5 (6)	32 (15)
6	Increase in export volume	0 (0)	2 (33)	1 (5)	1 (5)	1 (14)	4 (13)	5 (15)	2 (17)	16 (12)	4 (11)	1 (50)	0 (0)	9 (53)	0 (0)	14 (16)	30 (14)
7	Increase in transportation cost and delay in transportation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (10)	2 (6)	0 (0)	5 (4)	4 (11)	0 (0)	0 (0)	4 (24)	3 (11)	11 (13)	16 (7)
8	Increase in domestic sales volume	0 (0)	1 (17)	1 (5)	1 (5)	0 (0)	2 (7)	1 (3)	1 (8)	7 (5)	3 (8)	1 (50)	1 (25)	0 (0)	3 (11)	8 (9)	15 (7)
9	Changes in other production plan (e.g. production item/volume)	0 (0)	0 (0)	1 (5)	2 (10)	1 (14)	3 (10)	2 (6)	0 (0)	9 (7)	4 (11)	0 (0)	0 (0)	0 (0)	2 (7)	6 (7)	15 (7)
10	Increase in sales price	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (1)	1 (3)	0 (0)	0 (0)	0 (0)	1 (4)	2 (2)	3 (1)
11	Decrease in purchase price	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12	Others	0 (0)	0 (0)	1 (5)	2 (10)	0 (0)	1 (3)	1 (3)	0 (0)	5 (4)	0 (0)	0 (0)	0 (0)	1 (6)	3 (11)	4 (5)	9 (4)
Total		4	11	37	31	9	55	58	17	222	66	3	7	26	40	142	364
No. of firms		2	6	22	20	7	30	33	12	132	37	2	4	17	28	88	220

(3) Specific impacts on business with China (multiple answers)

Regarding specific impacts on business with China (multiple answers), “Nothing in particular” (64%) was most cited by the respondents, followed by “Exports to China decreased (or expected to decrease)” (8%) and “Shifted (or considering a shift of) production facilities from Chinese affiliates to Thailand (e.g. expansion of production lines)” (5%). (Table 11-3)

(Table 11-3) Specific Impacts on Business with China (Multiple Answers)

Ranking		Manufacturing									Non-manufacturing						Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Nothing in particular	6 (86)	6 (60)	5 (19)	5 (50)	10 (83)	28 (70)	13 (42)	11 (79)	84 (56)	35 (74)	2 (100)	4 (67)	14 (88)	9 (82)	64 (78)	148 (64)
2	Exports to China decreased (or expected to decrease)	1 (14)	2 (20)	2 (8)	2 (20)	0 (0)	7 (18)	2 (6)	2 (14)	18 (12)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	18 (8)	
3	Shifted (or considering a shift of) production facilities from Chinese affiliates to Thailand (e.g. expansion of production lines)	0 (0)	0 (0)	1 (4)	1 (10)	2 (17)	4 (10)	0 (0)	0 (0)	8 (5)	2 (4)	0 (0)	0 (0)	1 (6)	1 (9)	12 (5)	
4	Imports from China increased (or expected to increase)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	1 (3)	0 (0)	1 (7)	4 (3)	5 (11)	0 (0)	0 (0)	1 (6)	0 (0)	10 (4)	
5	Imports from China decreased (or expected to decrease)	0 (0)	1 (10)	0 (0)	1 (10)	0 (0)	0 (0)	2 (6)	0 (0)	4 (3)	2 (4)	0 (0)	1 (17)	1 (6)	1 (9)	9 (4)	
6	Exports to China increased (or expected to increase)	0 (0)	1 (10)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	2 (4)	0 (0)	1 (17)	0 (0)	0 (0)	5 (2)	
-	Others ()	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (1)	1 (0)	
Total		7	10	9	11	12	40	17	14	120	47	2	6	17	11	203	
No. of firms		7	10	26	10	12	40	31	14	150	47	2	6	16	11	232	

(4) Specific impacts on business with the US (multiple answers)

Regarding specific impacts on business with the US (multiple answers), the predominant response is “Nothing in particular” (80%), followed by “Exports to the US increased (or expected to increase)” (10%) and “Exports to the US decreased (or expected to decrease)” (6%). (Table 11-4)

(Table 11-4) Specific Impacts on Business with the US (Multiple Answers)

Ranking		Manufacturing									Non-manufacturing						Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Nothing in particular	4 (80)	7 (88)	16 (76)	4 (57)	8 (100)	21 (70)	20 (80)	13 (93)	93 (79)	25 (86)	2 (100)	4 (100)	9 (60)	9 (100)	49 (83)	142 (80)
2	Exports to the US increased (or expected to increase)	1 (20)	1 (13)	3 (14)	1 (14)	0 (0)	4 (13)	2 (8)	1 (7)	13 (11)	0 (0)	0 (0)	0 (0)	4 (27)	0 (0)	17 (10)	
3	Exports to the US decreased (or expected to decrease)	0 (0)	0 (0)	2 (10)	2 (29)	0 (0)	3 (10)	2 (8)	0 (0)	9 (8)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	10 (6)	
4	Imports from the US decreased (or expected to decrease)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	2 (2)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	3 (2)	
5	Imports from the US increased (or expected to increase)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	1 (1)		
6	Shifted (or considering a shift of) production facilities from affiliates in the US to Thailand (e.g. expansion of production lines)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	1 (1)	
7	Change in the supply chain from countries other than the US (e.g. shift of production facilities from Mexico to Thailand)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	
-	Others ()	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (1)	1 (3)	0 (0)	0 (0)	1 (7)	2 (3)	3 (2)	
Total		5	8	21	7	8	30	26	14	119	29	2	4	15	9	178	
No. of firms		5	8	21	7	8	30	25	14	118	29	2	4	15	9	177	

(5) Specific impacts resulting from prolonged US-China Trade War (multiple answers)

Regarding specific impacts resulting from prolonged US-China Trade war (multiple answers), the most cited impact is “Sales decrease due to Thailand’s economic slowdown” (41%), followed by “Decrease in exports (sales) to countries/territories other than North America and China due to the global economic downturn” (29%), while 21% answered “Nothing in particular”. (Table 11-5)

(Table 11-5) Specific Impacts Resulting from Prolonged US-China Trade War (Multiple Answers)

Ranking		Manufacturing										Non-manufacturing					Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Sales decrease due to Thailand's economic slowdown	5 (42)	3 (23)	16 (38)	14 (29)	7 (33)	11 (24)	31 (53)	8 (30)	95 (36)	36 (43)	5 (63)	20 (69)	8 (25)	42 (51)	111 (47)	206 (41)
2	Decrease in exports (sales) to countries/territories other than North America and China due to the global economic downturn	3 (25)	5 (38)	11 (26)	10 (21)	6 (29)	21 (47)	29 (49)	8 (30)	93 (35)	29 (35)	1 (13)	2 (7)	11 (34)	12 (14)	55 (23)	148 (29)
3	Nothing in particular	5 (42)	3 (23)	13 (31)	2 (4)	7 (33)	5 (11)	7 (12)	7 (26)	49 (18)	11 (13)	3 (38)	7 (24)	6 (19)	28 (34)	55 (23)	104 (21)
4	Fall in sales prices due to inflow of products from other countries (e.g. China)	1 (8)	5 (38)	12 (29)	12 (25)	4 (19)	10 (22)	5 (8)	4 (15)	53 (20)	19 (23)	0 (0)	3 (10)	7 (22)	2 (2)	31 (13)	84 (17)
5	Decrease in exports (sales) to North America and China	1 (8)	2 (15)	8 (19)	4 (8)	4 (19)	15 (33)	11 (19)	8 (30)	53 (20)	13 (16)	0 (0)	1 (3)	9 (28)	6 (7)	29 (12)	82 (16)
6	The need to readjust the supply chain	1 (8)	4 (31)	7 (17)	2 (4)	2 (10)	10 (22)	8 (14)	3 (11)	37 (14)	18 (22)	0 (0)	2 (7)	5 (16)	4 (5)	29 (12)	66 (13)
7	The need to revise the business strategy	0 (0)	2 (15)	2 (5)	3 (6)	2 (10)	3 (7)	4 (7)	1 (4)	17 (6)	6 (7)	0 (0)	4 (14)	2 (6)	8 (10)	20 (9)	37 (7)
-	Others	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	4 (5)	0 (0)	0 (0)	0 (0)	1 (1)	5 (2)	7 (1)
Total		16	24	70	48	32	75	95	39	399	136	9	39	48	103	335	734
No. of firms		12	13	42	48	21	45	59	27	267	83	8	29	32	83	235	502

12. PERSONNEL SHORTAGE

(1) Personnel shortage

Regarding a question whether the respondents are facing personnel shortage, 65% answered they are experiencing “Shortage of workforce,” while 34% stated they have no such issue. (Table 12-1)

(Table 12-1) Personnel Shortage

		Unit : No. of firms and (%)			
Industry		Experiencing shortage of workforce	No shortage of workforce	Others	No. of firms
Manufacturing	Food	9 (75)	2 (17)	1 (8)	12
	Textile	8 (62)	5 (38)	0 (0)	13
	Chemical	23 (56)	18 (44)	0 (0)	41
	Steel/Non-ferrous metal	16 (48)	17 (52)	0 (0)	33
	General machinery	19 (86)	3 (14)	0 (0)	22
	Electrical/Electronic machinery	30 (68)	14 (32)	0 (0)	44
	Transportation machinery	37 (65)	19 (33)	1 (2)	57
	Others	22 (81)	5 (19)	0 (0)	27
Manufacturing sector total		164 (66)	83 (33)	2 (1)	249
Non-manufacturing	Trading	39 (48)	40 (49)	2 (2)	81
	Retail	6 (75)	2 (25)	0 (0)	8
	Finance/Insurance/Securities	14 (58)	10 (42)	0 (0)	24
	Construction/Civil engineering	23 (79)	6 (21)	0 (0)	29
	Transportation/Communication	24 (75)	8 (25)	0 (0)	32
	Others	45 (75)	15 (25)	0 (0)	60
Non-manufacturing sector total		151 (65)	81 (35)	2 (1)	234
Total		315 (65)	164 (34)	4 (1)	483

(2) Types of job facing personnel shortage

Regarding types of human resources, which companies are experiencing short supply (multiple answers), the predominant response is “Engineers (total)” (57%), followed by “Management executives” (47%) and “Clerical managers” (31%). In the engineer category, the predominant response is “Production management engineers” (24%), followed by “Plant management engineers” (23%), “Quality control engineers” (20%), and “Sales engineers” (20%), respectively. (Table 12-2)

(Table 12-2) Types of Job Facing Personnel Shortage (Multiple Answers)

Ranking		Manufacturing										Non-manufacturing					Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Engineer (total)	5 (45)	7 (88)	19 (76)	15 (83)	14 (74)	26 (81)	31 (79)	19 (83)	136 (78)	16 (37)	2 (33)	13 (57)	4 (17)	17 (28)	52 (33)	188 (57)
	Production management engineer (*1)	1 (9)	6 (75)	12 (48)	12 (67)	7 (37)	11 (34)	15 (38)	9 (39)	73 (42)	1 (2)	0 (0)	5 (22)	0 (0)	1 (2)	7 (4)	80 (24)
	Plant management engineer (*2)	3 (27)	4 (50)	10 (40)	8 (44)	4 (21)	12 (38)	18 (46)	8 (35)	67 (38)	0 (0)	0 (0)	5 (22)	1 (4)	2 (3)	8 (5)	75 (23)
	Quality control engineer (*3)	1 (9)	4 (50)	8 (32)	10 (56)	5 (26)	9 (28)	12 (31)	8 (35)	57 (33)	2 (5)	1 (17)	5 (22)	0 (0)	2 (3)	10 (6)	67 (20)
	Sales engineer	1 (9)	1 (13)	7 (28)	6 (33)	8 (42)	6 (19)	5 (13)	3 (13)	37 (21)	15 (35)	2 (33)	3 (13)	2 (9)	8 (13)	30 (19)	67 (20)
	System engineer	1 (9)	0 (0)	1 (4)	3 (17)	4 (21)	7 (22)	3 (8)	3 (13)	22 (13)	0 (0)	0 (0)	3 (13)	1 (4)	12 (20)	16 (10)	38 (11)
	Research & development engineer	2 (18)	1 (13)	4 (16)	2 (11)	1 (5)	4 (13)	5 (13)	4 (17)	23 (13)	1 (2)	0 (0)	0 (0)	0 (0)	2 (3)	3 (2)	26 (8)
2	Management executives	4 (36)	5 (63)	14 (56)	9 (50)	8 (42)	14 (44)	18 (46)	6 (26)	78 (45)	20 (47)	3 (50)	8 (35)	12 (52)	33 (54)	76 (49)	154 (47)
3	Clerical manager	4 (36)	4 (50)	4 (16)	7 (39)	3 (16)	6 (19)	11 (28)	9 (39)	48 (27)	11 (26)	1 (17)	4 (17)	14 (61)	25 (41)	55 (35)	103 (31)
4	Clerk with Japanese language skills	1 (9)	0 (0)	4 (16)	1 (6)	3 (16)	4 (13)	7 (18)	4 (17)	24 (14)	5 (12)	0 (0)	2 (9)	3 (13)	9 (15)	19 (12)	43 (13)
5	Technician	1 (9)	0 (0)	4 (16)	4 (22)	3 (16)	1 (3)	6 (15)	5 (22)	24 (14)	4 (9)	1 (17)	3 (13)	1 (4)	2 (3)	11 (7)	35 (11)
6	Worker	5 (45)	4 (50)	4 (16)	1 (6)	3 (16)	1 (3)	2 (5)	2 (9)	22 (13)	0 (0)	1 (17)	4 (17)	5 (22)	3 (5)	13 (8)	35 (11)
7	Staff (accounting, administrative)	0 (0)	2 (25)	1 (4)	3 (17)	1 (5)	3 (9)	3 (8)	3 (13)	16 (9)	5 (12)	1 (17)	2 (9)	2 (9)	8 (13)	18 (12)	34 (10)
8	Staff (other than accounting and administrative)	4 (36)	2 (25)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	4 (17)	12 (7)	5 (12)	0 (0)	4 (17)	2 (9)	6 (10)	17 (11)	29 (9)
9	Designer	0 (0)	1 (13)	0 (0)	0 (0)	1 (5)	1 (3)	1 (3)	0 (0)	4 (2)	1 (2)	0 (0)	3 (13)	0 (0)	1 (2)	5 (3)	9 (3)
10	Driver	1 (9)	2 (25)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	4 (2)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	1 (1)	5 (2)
-	Others	0 (0)	0 (0)	0 (0)	1 (6)	1 (5)	1 (3)	1 (3)	0 (0)	4 (2)	3 (7)	0 (0)	3 (13)	0 (0)	2 (3)	8 (5)	12 (4)
	Total	20	20	31	27	23	33	49	33	236	54	7	33	40	89	223	459
	No. of firms	11	8	25	18	19	32	39	23	175	43	6	23	23	61	156	331

*1) Production management engineer is an engineer who manages the production processes including quality control and cost control.

*2) Plant management engineer is an engineer who manages the production equipment from its design/layout to maintenance.

*3) Quality control engineer is an engineer who conducts tests, analyzes, and inspections to ensure compliance with the product warranty.

13. FAVORABLE EEC POLICY

(1) Favorable EEC policy (firms with businesses in the targeted industries)

Regarding a question whether the companies have any business in the targeted industries, 24% of respondents stated they “Have (business in the targeted industries)” while 76% stated they “Do not have (business in the targeted industries)”. (Table 13-1)

(Table 13-1) Existence of Business in the Targeted Industries in Your Company

Unit : No. of firms and (%)

Industry		Yes (there is business in the targeted)		No (there is no business in the targeted)		No. of firms
Manufacturing	Food	3	(25)	9	(75)	12
	Textile	0	(0)	11	(100)	11
	Chemical	8	(19)	34	(81)	42
	Steel/Non-ferrous metal	3	(9)	31	(91)	34
	General machinery	11	(50)	11	(50)	22
	Electrical/Electronic machinery	17	(37)	29	(63)	46
	Transportation machinery	18	(31)	41	(69)	59
	Others	3	(11)	25	(89)	28
	Manufacturing sector total	63	(25)	191	(75)	254
Non-manufacturing	Trading	26	(31)	58	(69)	84
	Retail	0	(0)	8	(100)	8
	Finance/Insurance/Securities	2	(9)	21	(91)	23
	Construction/Civil engineering	3	(10)	27	(90)	30
	Transportation/Communication	13	(41)	19	(59)	32
	Others	10	(17)	49	(83)	59
	Non-manufacturing sector total	54	(23)	182	(77)	236
Total	117	(24)	373	(76)	490	

Regarding favorable EEC policy (multiple answers), respondents predominantly appraised “Infrastructure investment plans in the EEC (e.g. High-speed railway, Laem Chabang Port expansion, Map Ta Phut Port expansion, U-Tapao International Airport expansion, etc.)” (56%), followed by “Exemption of corporate income tax for up to 13 years” (26%), and “Exemption of import duty for machinery, etc.” (26%).

(Table 13-2) Favorable EEC Policy (Firms with Businesses in the Targeted Industries, Multiple Answers)

Unit : No. of firms and (%)

Ranking		Manufacturing									Non-manufacturing						Grand total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Infrastructure investment plans in the EEC (e.g. High-speed railway, Laem Chabang Port expansion, Map Ta Phut Port expansion, U-Tapao International Airport expansion, etc.)	1 (33)	0 (0)	5 (63)	2 (67)	6 (55)	5 (29)	12 (67)	2 (67)	33 (52)	17 (65)	0 (0)	2 (67)	10 (77)	3 (25)	32 (59)	65 (56)
2	Exemption of corporate income tax for up to 13 years	1 (33)	0 (0)	3 (38)	3 (100)	4 (36)	4 (24)	5 (28)	0 (0)	20 (32)	8 (31)	0 (0)	1 (33)	2 (15)	0 (0)	11 (20)	31 (26)
3	Exemption of import duty for machinery, etc.	1 (33)	0 (0)	3 (38)	2 (67)	4 (36)	2 (12)	10 (56)	1 (33)	23 (37)	7 (27)	0 (0)	0 (0)	0 (0)	1 (8)	8 (15)	31 (26)
4	Nothing in particular	0 (0)	0 (0)	2 (25)	0 (0)	3 (27)	7 (41)	0 (0)	0 (0)	12 (19)	4 (15)	0 (0)	0 (0)	2 (15)	2 (17)	8 (15)	20 (17)
5	One-stop service for administrative procedures	1 (33)	0 (0)	0 (0)	0 (0)	0 (0)	3 (18)	2 (11)	0 (0)	6 (10)	3 (12)	0 (0)	1 (33)	2 (15)	6 (50)	12 (22)	18 (15)
6	Establishment of the Digital Park, EECi (the Innovation Hub), EECa (Aviation Industry City), etc.	1 (33)	0 (0)	1 (13)	0 (0)	1 (9)	3 (18)	2 (11)	0 (0)	8 (13)	3 (12)	0 (0)	2 (67)	3 (23)	1 (8)	9 (17)	17 (15)
7	Other human resource development policies (e.g. attracting universities to the EEC area)	0 (0)	0 (0)	1 (13)	0 (0)	2 (18)	0 (0)	6 (33)	0 (0)	9 (14)	3 (12)	0 (0)	0 (0)	1 (8)	1 (8)	5 (9)	14 (12)
8	Reduction of income tax rate to 17% for highly specialized personnel	0 (0)	0 (0)	2 (25)	0 (0)	1 (9)	1 (6)	2 (11)	0 (0)	6 (10)	0 (0)	0 (0)	1 (33)	1 (8)	0 (0)	2 (4)	8 (7)
9	Smart visa for highly specialized personnel	0 (0)	0 (0)	0 (0)	0 (0)	2 (18)	1 (6)	2 (11)	0 (0)	5 (8)	0 (0)	0 (0)	0 (0)	1 (8)	1 (8)	2 (4)	7 (6)
10	Establishment of the Industry Transformation Center (ITC) to support advancement of small to medium enterprises	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	2 (3)	1 (4)	0 (0)	1 (33)	2 (15)	0 (0)	4 (7)	6 (5)
11	Provision of leasehold for 50 years	0 (0)	0 (0)	0 (0)	1 (33)	1 (9)	0 (0)	0 (0)	0 (0)	2 (3)	0 (0)	0 (0)	1 (33)	1 (8)	0 (0)	2 (4)	4 (3)
-	Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Total	5	0	18	8	24	27	41	3	126	46	0	9	25	15	95	221
	No. of firms	3	0	8	3	11	17	18	3	63	26	0	3	13	12	54	117 (100)

(2) Favorable EEC policy (firms with business bases within the EEC)

Regarding a question whether the companies have business bases within the EEC, 32% of the firms confirmed that they “Have (business base within the EEC)” while 68% “Do not have (business base within the EEC)”.

(Table 13-3) Existence of Business Base within the EEC

Unit : No. of firms and (%)

Industry		Yes (there is business base within the EEC)		No (there is no business base within the EEC)		No. of firms
Manufacturing	Food	1	(8)	11	(92)	12
	Textile	3	(30)	7	(70)	10
	Chemical	18	(45)	22	(55)	40
	Steel/Non-ferrous metal	12	(36)	21	(64)	33
	General machinery	5	(25)	15	(75)	20
	Electrical/Electronic machinery	9	(20)	35	(80)	44
	Transportation machinery	36	(62)	22	(38)	58
	Others	11	(39)	17	(61)	28
Manufacturing sector total		95	(39)	150	(61)	245
Non-manufacturing	Trading	15	(18)	68	(82)	83
	Retail	1	(13)	7	(88)	8
	Finance/Insurance/Securities	5	(21)	19	(79)	24
	Construction/Civil engineering	9	(30)	21	(70)	30
	Transportation/Communication	14	(44)	18	(56)	32
	Others	14	(24)	44	(76)	58
	Non-manufacturing sector total		58	(25)	177	(75)
Total		153	(32)	327	(68)	480

Regarding favorable EEC policy (multiple answers), respondents predominantly appraised “Infrastructure investment plans in the EEC (e.g. High-speed railway, Laem Chabang Port expansion, Map Ta Phut Port expansion, U-Tapao International Airport expansion, etc.)” (69%), followed by “Exemption of import duty for machinery, etc.” (25%) and “Exemption of corporate income tax for up to 13 years” (24%). (Table 13-4)

(Table 13-4) Favorable EEC Policy (Firms with Business Bases within the EEC, Multiple Answers)

Unit : No. of firms and (%)

Ranking		Manufacturing									Non-manufacturing					Grand total	
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others		Non-manufacturing sector total
1	Infrastructure investment plans in the EEC (e.g. High-speed railway, Laem Chabang Port expansion, Map Ta Phut Port expansion, U-Tapao International Airport expansion, etc.)	1 (100)	3 (100)	14 (78)	9 (75)	4 (80)	6 (67)	20 (56)	9 (82)	66 (69)	11 (73)	1 (100)	7 (78)	10 (71)	10 (53)	39 (67)	105 (69)
2	Exemption of corporate income tax for up to 13 years	1 (100)	1 (33)	5 (28)	5 (42)	1 (20)	1 (11)	11 (31)	4 (36)	29 (31)	5 (33)	0 (0)	1 (11)	0 (0)	2 (11)	9 (16)	38 (25)
3	Exemption of import duty for machinery, etc.	0 (0)	1 (33)	4 (22)	5 (42)	2 (40)	1 (11)	9 (25)	3 (27)	25 (26)	4 (27)	0 (0)	2 (22)	0 (0)	5 (26)	11 (19)	36 (24)
4	Nothing in particular	1 (100)	0 (0)	3 (17)	1 (8)	1 (20)	3 (33)	6 (17)	5 (45)	20 (21)	2 (13)	0 (0)	3 (33)	0 (0)	3 (16)	8 (14)	28 (18)
5	One-stop service for administrative procedures	0 (0)	0 (0)	3 (17)	2 (17)	0 (0)	1 (11)	9 (25)	0 (0)	15 (16)	2 (13)	0 (0)	1 (11)	0 (0)	5 (26)	10 (17)	25 (16)
6	Establishment of the Digital Park, EECi (the Innovation Hub), EECa (Aviation Industry City), etc.	0 (0)	0 (0)	3 (17)	1 (8)	1 (20)	0 (0)	9 (25)	2 (18)	16 (17)	2 (13)	0 (0)	0 (0)	0 (0)	2 (11)	5 (9)	21 (14)
7	Other human resource development policies (e.g. attracting universities to the EEC area)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	1 (11)	1 (3)	0 (0)	3 (3)	1 (7)	0 (0)	2 (22)	0 (0)	5 (26)	10 (17)	13 (8)
8	Reduction of income tax rate to 17% for highly specialized personnel	0 (0)	0 (0)	3 (17)	0 (0)	0 (0)	1 (11)	4 (11)	0 (0)	8 (8)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	1 (2)	9 (6)
9	Smart visa for highly specialized personnel	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	1 (11)	1 (3)	0 (0)	4 (4)	1 (7)	0 (0)	1 (11)	0 (0)	1 (5)	3 (5)	7 (5)
10	Provision of leasehold for 50 years	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	2 (2)	0 (0)	0 (0)	1 (11)	0 (0)	1 (5)	4 (7)	6 (4)
11	Establishment of the Industry Transformation Center (ITC) to support advancement of small to medium enterprises	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (11)	1 (3)	1 (9)	3 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	1 (2)	4 (3)
-	Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total		3	5	39	23	9	16	72	24	191	28	1	18	10	36	101	292
No. of firms		1	3	18	12	5	9	36	11	95	15	1	9	14	19	58	153 (100)