Survey of Business Sentiment by Japanese Corporations in Thailand for the 2nd half of 2017

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JCC Economic Survey Team

Press Release: 2 February, 2018

Record

Survey Period

Questionnaire distribution date: 6 November, 2017

Questionnaire submission deadline: 1 December, 2017

Survey Response

The questionnaire was distributed to

1,752 JCC member firms.

(12 governmental organisations were excluded)

Number of firms responding to the questionnaire was

583 firms

The response percentage was

33.3%

No. of firms

Industry		No.
Manufacturing	Food	10
	Textiles	17
	Chemicals	47
	Steel/Non-ferrous Metal	51
	General Machinery	26
	Electrical/Electronic Machinery	56
	Transportation Machinery	71
	Others	47
	Manufacturing Sector Total	325
Non-manufacturing	Trading	88
	Retail	14
	Finance/Insurance/Securities	27
	Construction/Civil Engineering	35
	Transportation/Communications	34
	Others	60
	Non-Manufacturing Sector Total	258
Total		583

Note

- 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 Report

Please refer to the following pages.

1. BUSINESS SENTIMENT

(1) Summary

The business sentiment in the first half of 2017, compared to the second half of 2016, generally continued to improve (15→14) within a similar range as in the second half of 2016. The business sentiment in the second half of 2017 showed a significant improvement (14→29), and further improvement is forecast for the first half of 2018 (29→37). (Table 1-1)

(Table 1-1) Business Sentiment

Unit: %

	Past Surveys								Previous Survey			This Survey		
	Results								Results	Forecast		Results	Forecast	
	12/2	13/1	13/2	14/1	14/2	15/1	15/2	16/1	16/2	17/1	17/2	17/1	17/2	18/1
Improving	60	46	35	30	32	28	30	38	38	43	41	39	47	48
No change	21	28	28	20	35	35	36	33	39	34	44	37	35	42
Deteriorating	19	25	37	50	33	37	34	29	23	23	15	25	18	11
(Ref) DI	41	21	▲ 2	▲20	▲ 1	▲ 9	▲ 4	9	15	20	26	14	29	37

***(Note)** 1. DI = “Improving” minus “Deteriorating”
2. As the fraction of a percentage is rounded off, the total may not equal 100 percent. This also applies to the tables below.

***(Note)** To determine whether business performance is “Improving” or “Deteriorating”, business performance is compared between the six-month term and the corresponding previous term. If DI, the deduction balance of “Improving” answers and “Deteriorating” answers, is positive, it signifies that the business performance of many respondent firms is improving; if negative, it is deteriorating.

(2) The first half of 2017 (January - June)

The percentage of firms reporting that business sentiment was “Improving” increased by 1 point to 39% from the previous term (38%), and those reporting “Deteriorating” increased by 2 points from the previous term (23%) to 25%. As a result, the Diffusion Index (DI), the deduction balance of “Improving” and “Deteriorating”, was +14, 1 point lower than the previous term (+15). (Table 1-1)

In the manufacturing sector, the DI turned positive in Transportation Machinery and Steel/Non-ferrous Metal, but negative for Textiles, and unchanged for Food and Chemicals, and as a result the overall DI in the Manufacturing Sector decreased by 5 points to +11 (+16). In the Non-Manufacturing Sector, the DI increased in all industries, as well as a significant improvement in the Transportation/Communications sector. The overall DI in the Non-Manufacturing Sector increased by 5 points from the previous term (+13) to +18. (Table 1-2)

(3) The second half of 2017 (July - December) - Forecast

The percentage of firms reporting that business sentiment is “Improving” increased by 8 points from the previous term (39%) to 47%, whereas those reporting “Deteriorating” decreased by 7 points from the previous term (25%) to 18%. As a result, the overall DI is forecast to increase by 15 points from the previous term (+14) to +29. (Table 1-1)

In the Manufacturing Sector, the DI indicates a smaller range of improvement in Steel/Non-ferrous Metal, whereas it significantly improved in all other industries. As a result, the overall DI in the Manufacturing Sector is forecast to increase significantly from the previous term (+11) to +27. For the Non-Manufacturing Sector, the DI continues to be positive in all industries and the overall DI is forecast to increase by 14 points from the previous term (+18) to +32. (Table 1-2)

(4) The first half of 2018 (January - June) - Forecast

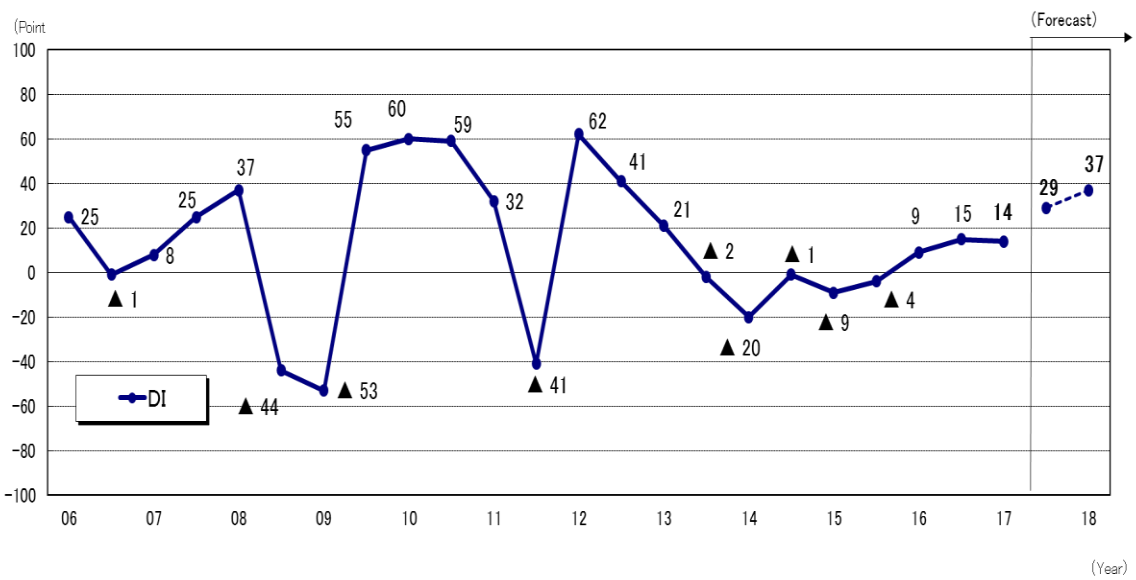
The percentage of firms forecasting “Improving” business sentiment increased by 1 point from the previous term (47%) to 48%, and the percentage of firms reporting “Deteriorating” decreased by 7 points from the previous term (18%) to 11%. As a result, the overall DI increased by 8 points from the previous term (+29) to +37. (Table 1-1)

In the Manufacturing Sector, the DI decreased somewhat in the Chemicals and Transportation Machinery sectors, and it increased in the Food, Textiles, Steel/ Non-ferrous Metal, General Machinery and Electrical/ Electronic Machinery sectors. As a result, the overall DI increased by 5 points from the previous term (+27) to +32. As for the Non-Manufacturing Sector, the DI increased in all industries, resulting in an increase by 12 points overall (+32→+44). (Table 1-2)

(Table 1-2) Business Sentiments by sector (“Improving”-“Deteriorating”)

	Industry	Past Surveys								Survey this time		
		Result						Forecast		Result	Forecast	
		14H1	14H2	15H1	15H2	16H1	16H2	17H1	17H2	17H1	17H2	18H1
Manufacture	Food	40	▲ 50	38	23	57	70	30	50	0	11	33
	Textile	47	16	▲ 40	41	7	0	▲ 5	21	▲ 24	11	25
	Chemical	▲ 15	13	2	15	37	7	11	34	0	41	33
	Steel/Non-ferrous metal	▲ 13	▲ 25	▲ 9	▲ 15	10	20	15	15	26	6	28
	General machinery	▲ 24	33	▲ 31	▲ 37	22	11	36	18	9	21	34
	Electric/Electronics mavhinery	9	23	4	11	▲ 6	24	17	11	11	25	31
	Transportation machinery	▲ 62	▲ 23	▲ 18	▲ 16	7	4	16	17	29	43	34
	Others	▲ 19	▲ 5	▲ 12	11	10	9	6	22	▲ 4	23	32
	Manufacturing sector total	▲ 17	▲ 1	▲ 10	1	12	16	15	21	11	27	32
Non-manufacture	Trading	▲ 16	2	▲ 8	6	19	27	34	43	22	46	54
	Retailer	▲ 42	11	25	▲ 11	10	0	25	50	7	15	25
	Finance/Insurance/Securities	▲ 24	▲ 20	▲ 6	▲ 25	▲ 22	21	14	29	26	25	35
	Construction/Civil engineering	▲ 56	▲ 15	▲ 54	▲ 50	▲ 39	0	9	27	7	26	42
	Transportation/Communication	▲ 35	▲ 10	▲ 18	▲ 22	18	▲ 4	▲ 4	11	24	25	36
	Others	▲ 7	7	19	11	9	9	33	22	14	27	43
	Non-Manufacturing sector total	▲ 26	▲ 2	▲ 7	▲ 10	5	13	23	31	18	32	44
Total		▲ 20	▲ 1	▲ 9	▲ 4	9	15	20	26	14	29	37

(Figure 1) Historical change in the DI in the business sentiment surveys of Japanese corporations



*(**Note**) Diffusion Index (DI) = Improving — Deteriorating (Compared with the previous term)

2. SALES

Regarding the total sales result for 2017, the percentage of firms reporting an “Increase” rose by 17 points from the previous year (54%) to 71%. The percentage of firms reporting “more than 20% increase” in their total sales decreased by 2 points from the previous year (15%) to 13%. (Tables 2-1, 2-2)

Regarding the total sales forecast for 2018, the number of firms anticipating an “Increase” decreased by 3 points from the previous year (71%) to 68%, and the percentage of firms anticipating “More than 20% increase” decreased by 6 points to 7%, from the previous year’s 13%. (Tables 2-1, 2-3)

(Table 2-1) Change in total sales

Unit：%

	Past result						Previous survey		This survey	
	Result						Result	Forecast	Forecast	
Fiscal years	10	11	12	13	14	15	16	17	17	18
Sales increase	82	54	73	52	50	45	87	310	71	68
"More than 20% increase"	46	13	34	17	13	13	4	14	13	7

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

(Table 2-2) Sales result for 2017

Unit: No. of firms and (%)

	Industry	Increase	More than 20%	10-20%	Less than 10%	No change	Decrease	Less than 10%	10-20%	More than 20%
Manufacture	Food	4 (50)	0 (0)	1 (13)	3 (38)	3 (38)	1 (13)	1 (13)	0 (0)	0 (0)
	Textile	10 (67)	2 (13)	1 (7)	7 (47)	3 (20)	2 (13)	1 (7)	1 (7)	0 (0)
	Chemical	30 (73)	5 (12)	14 (34)	11 (27)	6 (15)	5 (12)	4 (10)	1 (2)	0 (0)
	Steel/Non-ferrous metal	33 (77)	5 (12)	8 (19)	20 (47)	8 (19)	2 (5)	1 (2)	0 (0)	1 (2)
	General machinery	16 (67)	4 (17)	5 (21)	7 (29)	7 (29)	1 (4)	0 (0)	1 (4)	0 (0)
	Electric/Electronics machinery	36 (72)	6 (12)	10 (20)	20 (40)	9 (18)	5 (10)	4 (8)	1 (2)	0 (0)
	Transportation machinery	50 (79)	5 (8)	9 (14)	36 (57)	10 (16)	3 (5)	2 (3)	1 (2)	0 (0)
	Others	24 (60)	3 (8)	9 (23)	12 (30)	10 (25)	6 (15)	3 (8)	2 (5)	1 (3)
	Manufacturing sector total	203 (71)	30 (11)	57 (20)	116 (41)	56 (20)	25 (9)	16 (6)	7 (2)	2 (1)
Non-manufacture	Trading	60 (78)	10 (13)	20 (26)	30 (39)	13 (17)	4 (5)	1 (1)	2 (3)	1 (1)
	Retailer	9 (69)	0 (0)	2 (15)	7 (54)	2 (15)	2 (15)	1 (8)	0 (0)	1 (8)
	Finance/Insurance/Securities	12 (60)	2 (10)	3 (15)	7 (35)	7 (35)	1 (5)	0 (0)	1 (5)	0 (0)
	Construction/Civil engineering	14 (52)	6 (22)	3 (11)	5 (19)	3 (11)	10 (37)	2 (7)	2 (7)	6 (22)
	Transportation/Communication	19 (63)	3 (10)	8 (27)	8 (27)	9 (30)	2 (7)	1 (3)	1 (3)	0 (0)
	Others	29 (74)	15 (38)	13 (33)	1 (3)	10 (26)	0 (0)	0 (0)	0 (0)	0 (0)
	Non-Manufacturing	143 (69)	36 (17)	49 (24)	58 (28)	44 (21)	19 (9)	5 (2)	6 (3)	8 (4)
Total		346 (71)	66 (13)	106 (22)	174 (36)	100 (20)	44 (9)	21 (4)	13 (3)	10 (2)

(Table 2-3) Sales forecast for 2018

Unit: No. of firms and (%)

	Industry	Increase	More than 20%	10-20%	Less than 10%	No change	Decrease	Less than 10%	10-20%	More than 20%
Manufacture	Food	7 (88)	0 (0)	1 (13)	6 (75)	1 (13)	0 (0)	0 (0)	0 (0)	0 (0)
	Textile	13 (81)	0 (0)	5 (31)	8 (50)	2 (13)	1 (6)	1 (6)	0 (0)	0 (0)
	Chemical	28 (67)	2 (5)	6 (14)	20 (48)	11 (26)	3 (7)	3 (7)	0 (0)	0 (0)
	Steel/Non-ferrous metal	29 (63)	1 (2)	7 (15)	21 (46)	17 (37)	0 (0)	0 (0)	0 (0)	0 (0)
	General machinery	18 (75)	3 (13)	6 (25)	9 (38)	6 (25)	0 (0)	0 (0)	0 (0)	0 (0)
	Electric/Electronics machinery	37 (67)	4 (7)	11 (20)	22 (40)	10 (18)	8 (15)	5 (9)	3 (5)	0 (0)
	Transportation machinery	40 (60)	6 (9)	10 (15)	24 (36)	24 (36)	3 (4)	2 (3)	1 (1)	0 (0)
	Others	27 (66)	2 (5)	6 (15)	19 (46)	9 (22)	5 (12)	2 (5)	3 (7)	0 (0)
	Manufacturing sector total	199 (67)	18 (6)	52 (17)	129 (43)	80 (27)	20 (7)	13 (4)	7 (2)	0 (0)
Non-manufacture	Trading	63 (73)	6 (7)	29 (34)	28 (33)	20 (23)	3 (3)	1 (1)	2 (2)	0 (0)
	Retailer	10 (71)	0 (0)	3 (21)	7 (50)	2 (14)	2 (14)	1 (7)	1 (7)	0 (0)
	Finance/Insurance/Securities	11 (52)	2 (10)	1 (5)	8 (38)	7 (33)	3 (14)	2 (10)	1 (5)	0 (0)
	Construction/Civil engineering	18 (56)	3 (9)	8 (25)	7 (22)	10 (31)	4 (13)	1 (3)	1 (3)	2 (6)
	Transportation/Communication	20 (65)	0 (0)	5 (16)	15 (48)	8 (26)	3 (10)	3 (10)	0 (0)	0 (0)
	Others	28 (100)	9 (32)	18 (64)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Non-Manufacturing sector total	150 (71)	20 (9)	64 (30)	66 (31)	47 (22)	15 (7)	8 (4)	5 (2)	2 (1)
Total		349 (68)	38 (7)	116 (23)	195 (38)	127 (25)	35 (7)	21 (4)	12 (2)	2 (0)

3. PRE-TAX PROFIT/LOSS

Regarding 2017 pre-tax profit/loss, the ratio of firms reporting “Profit” reached 75%. Firms reporting an “Increase” in their pre-tax profit (including cases that the loss will diminish, vanish, or balance be achieved) accounted for 40%, while 35% reported a “Decrease”. (Table 3-1)

Regarding 2018, a high ratio of 81% anticipate a “Profit”. Firms anticipating an “Increase” in their pre-tax profit are 41% while 23% anticipate a “Decrease”. (Table 3-2)

(Table 3-1) Pre-tax profit/loss in 2017 (Year-to-year comparison)

Unit：No. of firms and （%）

Industry		Profit	Balance	Loss	Total	Increase	No change	Decrease
Manufacture	Food	6 (75)	0 (0)	2 (25)	8	2 (25)	1 (13)	5 (63)
	Textile	13 (81)	2 (13)	1 (6)	16	7 (44)	1 (6)	8 (50)
	Chemical	42 (93)	0 (0)	3 (7)	45	18 (40)	7 (16)	20 (44)
	Steel/Non-ferrous metal	37 (77)	4 (8)	7 (15)	48	21 (44)	15 (31)	12 (25)
	General machinery	16 (64)	4 (16)	5 (20)	25	11 (44)	8 (32)	6 (24)
	Electric/Electronics machinery	43 (74)	5 (9)	10 (17)	58	18 (31)	17 (29)	23 (40)
	Transportation machinery	60 (87)	1 (1)	8 (12)	69	26 (38)	21 (30)	22 (32)
	Others	33 (72)	4 (9)	9 (20)	46	16 (35)	8 (17)	22 (48)
	Manufacturing sector total	250 (79)	20 (6)	45 (14)	315	119 (38)	78 (25)	118 (37)
Non-manufacture	Trading	61 (71)	7 (8)	18 (21)	86	42 (49)	16 (19)	28 (33)
	Retailer	7 (54)	0 (0)	6 (46)	13	1 (8)	10 (77)	2 (15)
	Finance/Insurance/Securities	14 (70)	1 (5)	5 (25)	20	11 (55)	3 (15)	6 (30)
	Construction/Civil engineering	15 (50)	6 (20)	9 (30)	30	10 (33)	3 (10)	17 (57)
	Transportation/Communication	25 (83)	2 (7)	3 (10)	30	14 (47)	11 (37)	5 (17)
	Others	38 (68)	3 (5)	15 (27)	56	25 (45)	17 (30)	14 (25)
	Non-Manufacturing sector total	160 (68)	19 (8)	56 (24)	235	103 (44)	60 (26)	72 (31)
Total		410 (75)	39 (7)	101 (18)	550	222 (40)	138 (25)	190 (35)

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

2. No change indicates either remaining at the same level as before regardless if in the black, at the break-even point, or in the red.

3. Profit 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 2018 (Year-to-year comparison)

Unit：No. of firms and （%）

Industry		Profit	Balance	Loss	Total	Increase	No change	Decrease
Manufacture	Food	7 (88)	1 (13)	0 (0)	8	2 (25)	4 (50)	2 (25)
	Textile	15 (94)	1 (6)	0 (0)	16	10 (63)	4 (25)	2 (13)
	Chemical	41 (93)	0 (0)	3 (7)	44	17 (39)	18 (41)	9 (20)
	Steel/Non-ferrous metal	39 (81)	4 (8)	5 (10)	48	16 (33)	16 (33)	16 (33)
	General machinery	18 (72)	5 (20)	2 (8)	25	12 (48)	6 (24)	7 (28)
	Electric/Electronics machinery	47 (82)	5 (9)	5 (9)	57	25 (44)	20 (35)	12 (21)
	Transportation machinery	61 (88)	3 (4)	5 (7)	69	21 (30)	30 (43)	18 (26)
	Others	36 (80)	5 (11)	4 (9)	45	20 (44)	16 (36)	9 (20)
	Manufacturing sector total	264 (85)	24 (8)	24 (8)	312	123 (39)	114 (37)	75 (24)
Non-manufacture	Trading	7 (50)	3 (21)	4 (29)	14	8 (57)	3 (21)	3 (21)
	Retailer	14 (67)	2 (10)	5 (24)	21	6 (29)	8 (38)	7 (33)
	Finance/Insurance /Securities	20 (69)	5 (17)	4 (14)	29	14 (48)	7 (24)	8 (28)
	Construction/Civil engineering	28 (90)	1 (3)	2 (6)	31	11 (35)	14 (45)	6 (19)
	Transportation machinery	1 (50)	1 (50)	0 (0)	2	1 (50)	0 (0)	1 (50)
	Others	42 (76)	5 (9)	8 (15)	55	26 (47)	20 (36)	9 (16)
	Non-Manufacturing sector total	112 (74)	17 (11)	23 (15)	152	66 (43)	52 (34)	34 (22)
Total		376 (81)	41 (9)	47 (10)	464	189 (41)	166 (36)	109 (23)

*(**Note**) Same as Table 3-1

4. CAPITAL INVESTMENT (MANUFACTURING SECTOR)

The amount of planned capital investment (in the Manufacturing Sector) in 2018 is forecast to increase by 1.8% from 2017 (The total number of firms responding was 295). The ratio of firms anticipating an “Increase” in their capital investment in 2018 is 34%, and those anticipating a “Decrease” 29%. (Table 4-1)

“Replacement” is the predominant reason for capital investment in both 2017 and 2018. (Tables 4-2 and 4-3)

(Table 4-1) Planned capital investment for 2017 and 2018 (Manufacturing)

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

Industry	2017	2018		No. of firms								
	Amount	Amount	Increase	Increase		No change		Decrease		Undecided		Total
Food	1,807	3,922	117.0	5	(50)	2	(20)	3	(30)	0	(0)	10
Textile	2,642	2,665	0.9	5	(31)	7	(44)	3	(19)	1	(6)	16
Chemical	5,515	5,928	7.5	14	(34)	8	(20)	12	(29)	7	(17)	41
Steel/Non-ferrous metal	6,305	3,926	▲ 37.7	17	(35)	14	(29)	17	(35)	0	(0)	48
General machinery	1,876	2,266	20.7	10	(43)	7	(30)	3	(13)	3	(13)	23
Electric/Electronics machinery	9,424	8,830	▲ 6.3	9	(19)	12	(25)	16	(33)	11	(23)	48
Transportation machinery	28,941	31,192	7.8	27	(42)	15	(23)	17	(26)	6	(9)	65
Others	3,778	2,649	▲ 29.9	12	(27)	11	(25)	15	(34)	6	(14)	44
Manufacturing sector total	60,288	61,377	1.8	99	(34)	76	(26)	86	(29)	34	(12)	295

(Note)The figures in the above table show just totaling the data from corporations responding the questionnaire. The capital-investment amount in the above does not equal to that of the Japanese

(Table 4-2) Details of actual capital investment in 2017 (Check all that apply)

Unit: No. of firms and (%)

Industry	New		Expansion		Replacement		Streamlining		Other		Total	No. of firms
Food	4	(44)	5	(56)	6	(67)	2	(22)	0	0	17	9
Textile	3	(18)	4	(24)	11	(65)	4	(24)	0	0	22	17
Chemical	15	(33)	10	(22)	28	(61)	10	(22)	2	(4)	65	46
Steel/Non-ferrous metal	18	(36)	12	(24)	28	(56)	13	(26)	3	(6)	74	50
General machinery	12	(48)	2	(8)	8	(32)	5	(20)	2	(8)	29	25
Electric/Electronics machinery	22	(38)	15	(26)	33	(57)	19	(33)	4	(7)	93	58
Transportation machinery	35	(51)	12	(17)	43	(62)	25	(36)	4	(6)	119	69
Others	14	(31)	12	(27)	26	(58)	18	(40)	1	(2)	71	45
Manufacturing sector total	123	(39)	72	(23)	183	(57)	96	(30)	16	(5)	490	319

(Table 4-3) Details of actual capital investment in 2018 (Check all that apply)

Unit: No. of firms and (%)

Industry	New		Expansion		Replacement		Streamlining		Other		Total	No. of firms
Food	4	(44)	4	(44)	6	(67)	3	(33)	0	0	17	9
Textile	2	(12)	2	(12)	11	(65)	9	(53)	1	(6)	25	17
Chemical	10	(22)	11	(24)	29	(63)	10	(22)	1	(2)	61	46
Steel/Non-ferrous metal	14	(28)	11	(22)	27	(54)	18	(36)	2	(4)	72	50
General machinery	11	(44)	2	(8)	8	(32)	7	(28)	2	(8)	30	25
Electric/Electronics machinery	19	(33)	18	(31)	33	(57)	21	(36)	3	(5)	94	58
Transportation machinery	38	(54)	18	(26)	44	(63)	32	(46)	1	(1)	133	70
Others	14	(30)	10	(21)	30	(64)	19	(40)	1	(2)	74	47
Manufacturing sector total	112	(35)	76	(24)	188	(58)	119	(37)	11	(3)	506	322

5. EXPORT TREND

The percentage of firms reporting an “Increase” in exports in the second half of 2017 is 34%, and that in the first half of 2018 is 37%, and both significantly exceed “Decrease” of their term. As for the 2017 full-year exports, the number firms anticipating an “Increase” account for 34%, exceeding “Decrease” (17%) by 17 points. (Tables 5-1, 5-2, and 5-3)

(Table 5-1) Exports in 2017 (Second half)

Unit: No. of firms and (%)

Industry	Increase				No change	Decrease				No.of firm
		More than 20%	10-20%	Less than 10%			Less than 10%	10-20%	More than 20%	
Food	3 (50)	1 (17)	0 (0)	2 (33)	1 (17)	2 (33)	2 (33)	0 (0)	0 (0)	6
Textile	5 (50)	2 (20)	0 (0)	3 (30)	3 (30)	2 (20)	1 (10)	0 (0)	1 (10)	10
Chemical	7 (30)	3 (13)	0 (0)	4 (17)	13 (57)	3 (13)	2 (9)	1 (4)	0 (0)	23
Steel/Non-ferrous metal	7 (23)	1 (3)	1 (3)	5 (17)	17 (57)	6 (20)	1 (3)	2 (7)	3 (10)	30
General machinery	5 (36)	2 (14)	1 (7)	2 (14)	7 (50)	2 (14)	0 (0)	2 (14)	0 (0)	14
Electric/Electronics machinery	16 (48)	2 (6)	6 (18)	8 (24)	13 (39)	4 (12)	1 (3)	2 (6)	1 (3)	33
Transportation machinery	13 (34)	2 (5)	4 (11)	7 (18)	16 (42)	9 (24)	8 (21)	1 (3)	0 (0)	38
Others	12 (40)	2 (7)	3 (10)	7 (23)	13 (43)	5 (17)	3 (10)	2 (7)	0 (0)	30
Manufacturing sector total	68 (37)	15 (8)	15 (8)	38 (21)	83 (45)	33 (18)	18 (10)	10 (5)	5 (3)	184
Trading	13 (25)	3 (6)	4 (8)	6 (12)	26 (51)	12 (24)	7 (14)	4 (8)	1 (2)	51
Retailer	3 (43)	0 (0)	1 (14)	2 (29)	4 (57)	0 (0)	0 (0)	0 (0)	0 (0)	7
Others	8 (24)	2 (6)	2 (6)	4 (12)	20 (61)	5 (15)	3 (9)	2 (6)	0 (0)	33
Non−Manufacturing sector total	29 (29)	6 (6)	7 (7)	16 (16)	55 (54)	17 (17)	10 (10)	6 (6)	1 (1)	101
Total	97 (34)	21 (7)	22 (8)	54 (19)	138 (48)	50 (18)	28 (10)	16 (6)	6 (2)	285

(Table 5-2) Exports in 2018 (First half)

Unit: No. of firms and (%)

Industry	Increase				No change	Decrease				No.of firm
		More than 20%	10-20%	Less than 10%			Less than 10%	10-20%	More than 20%	
Food	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	1
Textile	4 (57)	1 (14)	1 (14)	2 (29)	2 (29)	1 (14)	1 (14)	0 (0)	0 (0)	7
Chemical	13 (48)	2 (7)	6 (22)	5 (19)	11 (41)	3 (11)	1 (4)	1 (4)	1 (4)	27
Steel/Non-ferrous metal	8 (30)	2 (7)	1 (4)	5 (19)	17 (63)	2 (7)	0 (0)	1 (4)	1 (4)	27
General machinery	6 (40)	0 (0)	1 (7)	5 (33)	8 (53)	1 (7)	0 (0)	1 (7)	0 (0)	15
Electric/Electronics machinery	17 (44)	0 (0)	6 (15)	11 (28)	16 (41)	6 (15)	1 (3)	4 (10)	1 (3)	39
Transportation machinery	18 (40)	4 (9)	5 (11)	9 (20)	20 (44)	7 (16)	5 (11)	1 (2)	1 (2)	45
Others	9 (33)	0 (0)	2 (7)	7 (26)	14 (52)	4 (15)	3 (11)	1 (4)	0 (0)	27
Manufacturing sector total	75 (40)	9 (5)	22 (12)	44 (23)	89 (47)	24 (13)	11 (6)	9 (5)	4 (2)	188
Trading	22 (33)	2 (3)	8 (12)	12 (18)	39 (58)	6 (9)	5 (7)	0 (0)	1 (1)	67
Retailer	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	1 (20)	1 (20)	0 (0)	0 (0)	5
Others	2 (33)	0 (0)	0 (0)	2 (33)	4 (67)	0 (0)	0 (0)	0 (0)	0 (0)	6
Non−Manufacturing sector total	25 (32)	2 (3)	9 (11)	14 (18)	47 (59)	7 (9)	6 (8)	0 (0)	1 (1)	79
Total	100 (37)	11 (4)	31 (12)	58 (22)	136 (51)	31 (12)	17 (6)	9 (3)	5 (2)	267

(Table 5-3) Exports in 2017 (Full year)

Unit: No. of firms and (%)

Industry	Increase				No change	Decrease				No.of firm
		More than 20%	10-20%	Less than 10%			Less than 10%	10-20%	More than 20%	
Food	1 (100)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1
Textile	3 (43)	0 (0)	1 (14)	2 (29)	2 (29)	2 (29)	1 (14)	0 (0)	1 (14)	7
Chemical	13 (50)	3 (12)	5 (19)	5 (19)	13 (50)	0 (0)	0 (0)	0 (0)	0 (0)	26
Steel/Non-ferrous metal	7 (25)	1 (4)	2 (7)	4 (14)	16 (57)	5 (18)	0 (0)	2 (7)	3 (11)	28
General machinery	7 (47)	1 (7)	3 (20)	3 (20)	7 (47)	1 (7)	0 (0)	1 (7)	0 (0)	15
Electric/Electronics machinery	15 (38)	2 (5)	4 (10)	9 (23)	16 (40)	9 (23)	2 (5)	5 (13)	2 (5)	40
Transportation machinery	18 (41)	2 (5)	6 (14)	10 (23)	18 (41)	8 (18)	6 (14)	1 (2)	1 (2)	44
Others	9 (36)	1 (4)	3 (12)	5 (20)	9 (36)	7 (28)	4 (16)	3 (12)	0 (0)	25
Manufacturing sector total	73 (39)	10 (5)	24 (13)	39 (21)	81 (44)	32 (17)	13 (7)	12 (6)	7 (4)	186
Trading	16 (24)	2 (3)	5 (7)	9 (13)	41 (61)	10 (15)	5 (7)	3 (4)	2 (3)	67
Retailer	0 (0)	0 (0)	0 (0)	0 (0)	4 (80)	1 (20)	1 (20)	0 (0)	0 (0)	5
Others	1 (17)	0 (0)	0 (0)	1 (17)	4 (67)	1 (17)	1 (17)	0 (0)	0 (0)	6
Non−Manufacturing sector total	18 (23)	2 (3)	5 (6)	11 (14)	49 (62)	12 (15)	7 (9)	3 (4)	2 (3)	79
Total	91 (34)	12 (5)	29 (11)	50 (19)	130 (49)	44 (17)	20 (8)	15 (6)	9 (3)	265

Note: Compared to the same period last year

6. PROSPECTIVE FUTURE MARKETS

The prospective future markets (check all that apply) are “Vietnam” (43%), “Indonesia” (36%), “India” (35%), “Myanmar” (20%), and “Japan” (17%). (Table 6)

(Table 6) Prospective future markets (check-all-that-apply question)

Unit: No. of firms and (%)

The time before last	Last time	This time		Manufacturing									Non-manufacturing					
				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	1	1	Vietnam	4 (44)	9 (53)	17 (41)	18 (45)	10 (50)	17 (33)	23 (35)	13 (34)	111 (40)	42 (53)	2 (25)	0 (0)	7 (64)	51 (52)	162 (43)
2	2	2	Indonesia	3 (33)	8 (47)	9 (22)	20 (50)	8 (40)	13 (25)	36 (55)	11 (29)	108 (38)	27 (34)	0 (0)	0 (0)	3 (27)	30 (30)	138 (36)
3	3	3	India	2 (22)	7 (41)	19 (46)	20 (50)	7 (35)	17 (33)	23 (35)	9 (24)	104 (37)	26 (33)	0 (0)	0 (0)	2 (18)	28 (28)	132 (35)
4	4	4	Myanmar	2 (22)	0 (0)	13 (32)	6 (15)	3 (15)	14 (27)	8 (12)	6 (16)	52 (19)	20 (25)	3 (38)	0 (0)	2 (18)	25 (25)	77 (20)
5	5	5	Japan	3 (33)	5 (29)	9 (22)	4 (10)	3 (15)	11 (22)	10 (15)	3 (8)	48 (17)	16 (20)	0 (0)	0 (0)	0 (0)	16 (16)	64 (17)
7	6	6	Philippines	1 (11)	2 (12)	7 (17)	3 (8)	4 (20)	7 (14)	17 (26)	6 (16)	47 (17)	9 (11)	1 (13)	0 (0)	2 (18)	12 (12)	59 (16)
6	7	7	Cambodia	2 (22)	1 (6)	5 (12)	5 (13)	1 (5)	10 (20)	7 (11)	5 (13)	36 (13)	14 (18)	3 (38)	0 (0)	2 (18)	19 (19)	55 (14)
11	9	8	China	2 (22)	3 (18)	7 (17)	1 (3)	0 (0)	14 (27)	7 (11)	6 (16)	40 (14)	9 (11)	0 (0)	1 (100)	0 (0)	10 (10)	50 (13)
8	10	9	USA	1 (11)	4 (24)	7 (17)	4 (10)	2 (10)	11 (22)	9 (14)	6 (16)	44 (16)	4 (5)	0 (0)	0 (0)	0 (0)	4 (4)	48 (13)
9	8	10	Malaysia	2 (22)	1 (6)	5 (12)	1 (3)	3 (15)	8 (16)	5 (8)	4 (11)	29 (10)	7 (9)	1 (13)	0 (0)	2 (18)	10 (10)	39 (10)
12	10	11	Europe	0 (0)	3 (18)	3 (7)	5 (13)	2 (10)	12 (24)	9 (14)	1 (3)	35 (12)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	35 (9)
10	12	12	Laos	1 (11)	0 (0)	6 (15)	2 (5)	1 (5)	4 (8)	2 (3)	3 (8)	19 (7)	6 (8)	1 (13)	1 (100)	1 (9)	9 (9)	28 (7)
13	13	13	Middle East	0 (0)	2 (12)	2 (5)	1 (3)	0 (0)	7 (14)	8 (12)	1 (3)	21 (7)	3 (4)	1 (13)	0 (0)	0 (0)	4 (4)	25 (7)
14	14	14	Latin America	0 (0)	0 (0)	4 (10)	2 (5)	1 (5)	3 (6)	5 (8)	4 (11)	19 (7)	1 (1)	0 (0)	0 (0)	1 (9)	2 (2)	21 (6)
15	18	15	Africa	0 (0)	0 (0)	4 (10)	3 (8)	1 (5)	4 (8)	5 (8)	1 (3)	18 (6)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	19 (5)
17	15	16	Bangladesh	0 (0)	3 (18)	2 (5)	0 (0)	0 (0)	1 (2)	1 (2)	1 (3)	8 (3)	9 (11)	0 (0)	0 (0)	0 (0)	9 (9)	17 (4)
18	17	17	Singapore	2 (22)	1 (6)	2 (5)	0 (0)	0 (0)	3 (6)	0 (0)	1 (3)	9 (3)	5 (6)	0 (0)	0 (0)	1 (9)	6 (6)	15 (4)
16	16	17	Pakistan	0 (0)	0 (0)	3 (7)	2 (5)	2 (10)	2 (4)	3 (5)	1 (3)	13 (5)	1 (1)	0 (0)	1 (100)	0 (0)	2 (2)	15 (4)
18	18	19	Oceania	1 (11)	1 (6)	2 (5)	1 (3)	1 (5)	0 (0)	3 (5)	2 (5)	11 (4)	1 (1)	0 (0)	0 (0)	1 (9)	2 (2)	13 (3)
21	21	20	Russia	0 (0)	0 (0)	0 (0)	1 (3)	1 (5)	0 (0)	3 (5)	0 (0)	5 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (1)
20	20	20	Sri Lanka	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (3)	3 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)
–	–	–	Others	0 (0)	1 (6)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	1 (3)	4 (1)	0 (0)	1 (13)	0 (0)	0 (0)	1 (1)	5 (1)
			Total	26	51	126	99	50	158	185	85	784	201	12	3	24	241	1,025
			No. of firms	9	17	41	40	20	51	65	38	281	79	8	1	11	99	380 (100)

7. EXCHANGE RATES USED FOR BUSINESS PLANS

(1) Thai Baht/ US dollar

Regarding the exchange rate used for business plans (Thai Baht/US Dollar), the predominant response is “A range between not less than 33.0 but less than 33.5” (35.5%), followed by “Not less than 34.0 but less than 34.5” (19.0%). The median rate is 33.30 overall. (Table 7-1)

(Table 7-1) Exchange rate used for business plans (Thai Baht/UD Dollar)

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

Industry / Baht/US dollar	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	
Not less than 29 but less than 29.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 29.5 but less than 30	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 30 but less than 30.5	0	0	0	0	1	1	0	0	2	0	0	0	0	2 (0.8)
Not less than 30.5 but less than 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 31 but less than 31.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 31.5 but less than 32	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 32 but less than 32.5	1	1	1	0	0	0	0	1	4	3	2	0	5	9 (3.6)
Not less than 32.5 but less than 33	0	0	4	0	0	1	0	1	6	0	0	0	0	6 (2.4)
Not less than 33 but less than 33.5	1	10	14	3	4	14	0	10	56	31	0	1	32	88 (35.5)
Not less than 33.5 but less than 34	0	1	4	6	0	2	0	3	16	2	1	0	3	19 (7.7)
Not less than 34 but less than 34.5	2	3	3	10	4	5	4	6	37	7	1	2	10	47 (19.0)
Not less than 34.5 but less than 35	0	0	1	2	0	3	4	1	11	1	0	0	1	12 (4.8)
Not less than 35 but less than 35.5	1	1	4	2	2	5	7	3	25	7	0	1	8	33 (13.3)
Not less than 35.5 but less than 36	0	0	1	2	3	5	5	1	17	7	0	1	8	25 (10.1)
Not less than 36 but less than 36.5	0	0	1	0	1	0	1	0	3	3	0	1	4	7 (2.8)
Not less than 36.5 but less than 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 37 but less than 37.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 37.5 but less than 38	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not 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	5	16	33	25	15	36	21	26	177	61	4	6	71	248
Average	33.60	33.35	33.50	33.79	31.91	33.92	34.95	33.72	33.48	32.25	34.73	34.44	32.58	33.96
Median	34.00	33.10	33.00	33.70	34.00	34.00	35.00	33.60	33.50	33.25	33.67	34.00	33.30	33.30
Mode	34.00	33.00	33.00	34.00	34.00	33.00	35.00	33.00	33.00	33.00	32.00	34.00	33.00	33.00

*(**Note**) The median indicates the value located at the center of the distribution excluding any deviation due to the number of respondents or the lowest/ highest value as much as possible. #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	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing	
Average	36.07	34.80	34.83	34.59	34.72	35.13	34.80	34.47	34.86	35.07	34.43	34.76	35.02	34.81
Median	35.00	35.00	35.00	35.00	34.20	35.00	35.00	34.55	35.00	35.00	35.00	35.00	35.00	35.00
Mode	35.00	35.00	35.00	35.00	34.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00

*(**Note**) The median indicates the value located at the center of the distribution, excluding any deviation due to the number of respondents or the lowest/ highest value as much as possible. #N/A (not applicable) indicates that all the respondents’ values differ.

(2) Japanese Yen/ Thai Baht

Regarding the exchange rate used for the business plans (Japanese Yen/ Thai Baht), the predominant response is “Not less than 3.3 but less than 3.4” (33.3%), followed by “Not less than 3.2 but less than 3.3” (28.1%), and “Not less than 3.4 but less than 3.5” (16.7%). The median rate is 3.30 overall. (Table 7-2)

(Table 7-2) Exchange rates used in business plans (Japanese Yen/Thai Baht)

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

Industry / Yen/Baht	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	
Not 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)
Not 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)
Not less than 2.8 but less than 2.9	0	0	0	0	0	0	0	0	0	1	0	0	1	1 (0.4)
Not less than 2.9 but less than 3	0	1	0	1	0	1	0	0	3	0	0	2	2	5 (1.9)
Not less than 3 but less than 3.1	0	1	3	6	4	5	0	3	22	3	3	2	8	30 (11.1)
Not less than 3.1 but less than 3.2	0	2	2	3	1	4	7	3	22	2	0	1	3	25 (9.3)
Not less than 3.2 but less than 3.3	1	2	9	8	8	8	16	8	60	14	0	2	16	76 (28.1)
Not less than 3.3 but less than 3.4	3	3	9	13	2	10	11	9	60	23	2	5	30	90 (33.3)
Not less than 3.4 but less than 3.5	3	3	5	4	4	6	5	6	36	7	2	0	9	45 (16.7)
Not less than 3.5 but less than 3.6	0	1	1	0	0	0	0	0	2	1	0	0	1	3 (1.1)
Not less than 3.6 but less than 3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not 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)
Not 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)
Not less than 3.9 but less than 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
Not less than 4 but less than 4.1	0	0	0	0	1	0	0	0	1	0	0	0	0	1 (0.4)
No. of firms	7	13	30	35	20	34	39	29	203	51	7	12	67	270

Average	3.33	3.25	3.25	3.22	2.60	3.23	3.25	4.31	3.30	3.83	3.20	3.16	3.55	3.42
Median	3.30	3.30	3.30	3.26	3.20	3.27	3.24	3.30	3.24	3.30	3.30	3.20	3.30	3.30
Mode	3.30	3.40	3.30	3.30	3.20	3.30	3.30	3.30	3.30	3.30	3.00	3.30	3.30	3.30

*(**Note**) The median indicates the value located at the center of the distribution, excluding deviation due to the number of respondents or the lowest/ highest value as much as possible. #N/A (not applicable) indicates that all the respondents’ values differ.

At the time of the last survey

Industry / Yen/Baht	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	3.09	3.18	3.14	3.20	3.17	3.13	3.10	3.17	3.14	3.14	3.15	3.14	3.15	3.14
Median	3.10	3.20	3.20	3.21	3.20	3.10	3.11	3.18	3.20	3.20	3.20	3.08	3.20	3.20
Mode	3.20	3.20	3.20	3.20	3.20	3.00	3.20	3.20	3.20	3.20	3.20	#N/A	3.20	3.20

*(**Note**) The median indicates the value located at the center of the distribution, excluding deviation due to the number of respondents or the lowest/ highest value as much as possible. #N/A (not applicable) indicates that all the respondents’ values differ.

8. PROCUREMENT SOURCES FOR PARTS/ MATERIALS

Regarding the procurement sources in 2017 (simple average of the respondents), "ASEAN" accounts for 53.4%, of which 46.7% is "Thailand". (Table 8-1)

As for the planned procurement sources in 2018, "ASEAN" accounts for 54.7%, of which 47.3% is "Thailand", a 0.6-point increase from the previous term. (Table 8-2)

(Table 8-1) Suppliers of parts and materials in 2017

Unit: %

Industry		ASEAN			Japan	China	Others	Total	No.of firms
			Thailand	ASEAN (Other than Thailand)					
Manufacture	Food	84.4	84.4	0.0	11.3	0.6	3.8	100.0	8
	Textile	55.3	47.9	7.4	16.4	15.5	12.8	100.0	15
	Chemical	52.8	44.5	8.2	22.2	6.4	18.6	100.0	42
	Steel/Non-ferrous metal	45.3	37.4	7.9	31.8	5.8	17.1	100.0	45
	General machinery	59.0	55.4	3.6	30.2	5.3	5.5	100.0	22
	Electric/Electronics machinery	47.8	40.7	7.1	26.9	10.7	14.5	100.0	54
	Transportation machinery	58.1	52.4	5.7	34.5	1.9	5.6	100.0	62
	Others	54.6	48.3	6.3	27.9	1.7	15.8	100.0	40
	Manufacturing sector total	57.2	51.4	5.8	25.2	6.0	11.7	100.0	288
Non-Manufacture	Trading	42.5	33.3	9.1	34.2	9.8	13.5	100.0	85
	Retailer	47.5	36.9	10.6	39.4	0.6	12.5	100.0	8
	Construction/Civil engineering	65.0	54.0	11.0	10.0	25.0	0.0	100.0	2
	Others	44.0	43.6	0.4	55.4	0.7	0.0	100.0	5
	Non-Manufacturing sector tota	49.7	41.9	7.8	34.7	9.0	6.5	100.0	100
Total		53.4	46.7	6.8	30.0	7.5	9.1	100.0	388

*(**Note**) The ratio indicates the simple average of the respondents.

(Table 8-2) Suppliers of parts and materials in 2018

Unit: %

Industry		ASEAN			Japan	China	Others	Total	No.of firms
			Thailand	ASEAN (Other than Thailand)					
Manufacture	Food	84.4	84.4	0.0	10.0	0.6	5.0	100.0	8
	Textile	54.7	47.3	7.4	16.4	14.9	14.1	100.0	15
	Chemical	52.4	44.2	8.1	22.3	6.7	18.6	100.0	42
	Steel/Non-ferrous metal	44.4	37.7	6.8	33.1	5.6	16.9	100.0	45
	General machinery	59.3	55.7	3.5	29.5	5.8	5.5	100.0	22
	Electric/Electronics machinery	46.9	40.0	6.9	24.2	10.7	18.2	100.0	54
	Transportation machinery	56.9	51.2	5.8	33.7	1.9	7.4	100.0	62
	Others	54.4	48.1	6.3	28.2	1.6	15.8	100.0	40
	Sub total	56.7	51.1	5.6	24.7	6.0	12.7	100.0	288
Non-Manufacture	Trading	43.4	33.8	9.6	31.4	9.7	15.4	100.0	85
	Retailer	47.5	36.9	10.6	38.8	1.3	12.5	100.0	8
	Construction/Civil engineering	75.0	59.0	16.0	10.0	15.0	0.0	100.0	2
	Others	45.0	44.6	0.4	53.4	0.6	1.0	100.0	5
	Sub total	52.7	43.6	9.2	33.4	6.6	7.2	100.0	100
Total		54.7	47.3	7.4	29.0	6.3	10.0	100.0	388

*(**Note**) Same as Table 8-1.

9.CHALLENGES FOR CORPORATE MANAGEMENT

Regarding the challenges for corporate management (check all that apply), the predominant response is “Severe competition by competitors” (73%), followed by “Increase in total labor cost” (40%), “Lack of human resources at engineer-level” (30%), “Quality management” (27%), “Surge in material prices” (26%) and “Changes in products/ users’ needs” (26%).

By industry, the other major response by the Manufacturing Sector is “Foreign exchange fluctuation” (31%), and by in the Non-Manufacturing Sector “Lack of human resources at manager level” (22%), and “Job hopping by employees” (22%). (Table 9)

(Table 9) Challenges for corporate management (check all that apply)

Unit: No. of firms and (%)

Last time	This time		Manufacturing: Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Non-manufacturing: Trading	Retails	Finance/ Insurance	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	1	Excessive competition with competitors	6 (67)	13 (76)	31 (67)	37 (74)	18 (72)	44 (76)	49 (70)	32 (70)	230 (72)	73 (83)	12 (86)	19 (73)	29 (83)	27 (84)	32 (54)	192 (76)	422 (73)
2	2	Increased in total labor cost	2 (22)	8 (47)	20 (43)	17 (34)	11 (44)	31 (53)	37 (53)	18 (39)	144 (45)	29 (33)	3 (21)	13 (50)	11 (31)	12 (38)	17 (29)	85 (33)	229 (40)
3	3	Lack of human resources at engineer-level	2 (22)	8 (47)	21 (46)	20 (40)	14 (56)	27 (47)	36 (51)	15 (33)	143 (45)	7 (8)	1 (7)	0 (0)	15 (43)	1 (3)	7 (12)	31 (12)	174 (30)
8	4	Quality management	3 (33)	10 (59)	7 (15)	23 (46)	9 (36)	27 (47)	27 (39)	20 (43)	126 (39)	10 (11)	0 (0)	0 (0)	5 (14)	7 (22)	6 (10)	28 (11)	154 (27)
10	5	Changes in products/ users’ needs	6 (67)	8 (47)	10 (22)	17 (34)	7 (28)	18 (31)	14 (20)	13 (28)	93 (29)	33 (38)	2 (14)	6 (23)	4 (11)	7 (22)	4 (7)	56 (22)	149 (26)
5	6	Hike in material prices	5 (56)	12 (71)	21 (46)	18 (36)	5 (20)	22 (38)	25 (36)	14 (30)	122 (38)	19 (22)	1 (7)	1 (4)	2 (6)	1 (3)	3 (5)	27 (11)	149 (26)
7	7	Foreign exchange fluctuation	2 (22)	12 (71)	14 (30)	12 (24)	4 (16)	20 (34)	23 (33)	13 (28)	100 (31)	28 (32)	4 (29)	1 (4)	0 (0)	2 (6)	5 (8)	40 (16)	140 (24)
9	8	Lack of human resources of manager-level	0 (0)	3 (18)	4 (9)	11 (22)	3 (12)	10 (17)	21 (30)	10 (22)	62 (19)	15 (17)	5 (36)	3 (12)	4 (11)	18 (56)	11 (19)	56 (22)	118 (21)
6	9	Job hopping of employee	0 (0)	2 (12)	5 (11)	7 (14)	9 (36)	10 (17)	10 (14)	10 (22)	53 (17)	22 (25)	3 (21)	8 (31)	6 (17)	7 (22)	10 (17)	56 (22)	109 (19)
4	10	Sluggish domestic demand	0 (0)	4 (24)	8 (17)	9 (18)	5 (20)	7 (12)	16 (23)	3 (7)	52 (16)	17 (19)	4 (29)	0 (0)	10 (29)	2 (6)	0 (0)	33 (13)	85 (15)
12	11	Excessive employment	0 (0)	0 (0)	4 (9)	6 (12)	1 (4)	5 (9)	14 (20)	10 (22)	40 (12)	4 (5)	1 (7)	1 (4)	3 (9)	3 (9)	2 (3)	14 (6)	54 (9)
11	12	Lack of human resources of workers/ staffs-level	3 (33)	2 (12)	3 (7)	3 (6)	4 (16)	5 (9)	5 (7)	4 (9)	29 (9)	3 (3)	3 (21)	3 (12)	4 (11)	5 (16)	5 (8)	23 (9)	52 (9)
13	13	Difficulty in collecting money from customers	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	3 (5)	1 (1)	5 (11)	10 (3)	5 (6)	0 (0)	4 (15)	5 (14)	0 (0)	1 (2)	15 (6)	25 (4)
16	14	Increase in energy cost	1 (11)	1 (6)	4 (9)	5 (10)	1 (4)	1 (2)	5 (7)	0 (0)	18 (6)	0 (0)	1 (7)	0 (0)	1 (3)	0 (0)	1 (2)	3 (1)	21 (4)
15	15	Excessive capital investment	0 (0)	1 (6)	0 (0)	3 (6)	0 (0)	1 (2)	10 (14)	0 (0)	15 (5)	1 (1)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (1)	17 (3)
18	16	Rent hike	1 (11)	0 (0)	1 (2)	0 (0)	1 (4)	2 (3)	0 (0)	0 (0)	5 (2)	1 (1)	0 (0)	5 (19)	3 (9)	0 (0)	3 (5)	12 (5)	17 (3)
14	16	Employment condition in relation with in obtaining Visas and Work permits	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	1 (1)	0 (0)	2 (1)	7 (8)	1 (7)	1 (4)	2 (6)	0 (0)	3 (5)	14 (6)	16 (3)
16	18	Environment protection measures	0 (0)	1 (6)	2 (4)	3 (6)	2 (8)	0 (0)	5 (7)	1 (2)	14 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	14 (2)
19	19	Infringement of intellectual property rights	0 (0)	0 (0)	2 (4)	1 (2)	1 (4)	4 (7)	0 (0)	0 (0)	8 (2)	3 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)	11 (2)
19	20	Waste disposal	1 (11)	0 (0)	4 (9)	1 (2)	1 (4)	1 (2)	1 (1)	0 (0)	9 (3)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	2 (1)	11 (2)
19	21	Difficulty in obtaining financial support	0 (0)	1 (6)	0 (0)	2 (4)	1 (4)	0 (0)	3 (4)	1 (2)	8 (2)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	2 (1)	10 (2)
22	22	Stable supply of electricity	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	1 (2)	1 (1)	3 (7)	7 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (1)
-	-	Others	0 (0)	0 (0)	1 (2)	2 (4)	2 (8)	4 (7)	3 (4)	0 (0)	12 (4)	2 (2)	0 (0)	4 (15)	4 (11)	1 (3)	2 (3)	13 (5)	25 (4)
		Total	32	87	161	197	98	239	304	172	1302	278	41	66	106	92	111	707	2,009
		No. of firms	9	17	46	50	25	58	70	46	321	88	14	26	35	32	59	254	575 (100)

10. REQUESTS TO THE THAI GOVERNMENT

(1) Request to the Thai government

Regarding requests to the Thai Government (check all that apply), the predominant response is “Customs-related systems and their implementation” (50%), followed by, “Promotion of economic measures (Development of public infrastructure)” (49%), “Development of infrastructure in the Bangkok metropolitan area” (48%), “Implementation of tax related systems” (30%), etc.

By industry, the other major responses by the Manufacturing Sector are “Improvement of education/human resource development” (30%), “Stability in foreign exchange rates” (30%), and by the Non-Manufacturing Sector “Relaxation of the Foreign Business Act” (33%) and “Work permit/visa related issues” (29%). (Table 10-1)

(Table 10-1) Requests to the Thai government (check all that apply)

Unit: No. of firms and (%)

Last time	This time		Manufacturing									Non-manufacturing							
			Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Trading	Retails	Finance/ Insurance	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	1	Customs-related systems and their implementation	5 (50)	8 (47)	26 (55)	35 (69)	15 (58)	33 (59)	37 (52)	16 (34)	175 (54)	60 (68)	6 (43)	5 (19)	3 (9)	24 (71)	21 (35)	119 (46)	294 (50)
2	2	Promotion of economic measures (public infrastructure development etc.)	2 (20)	11 (65)	20 (43)	28 (55)	11 (42)	29 (52)	49 (69)	21 (45)	171 (53)	37 (42)	8 (57)	10 (37)	17 (49)	21 (62)	22 (37)	115 (45)	286 (49)
3	3	Development of transport infrastructure in	4 (40)	8 (47)	20 (43)	22 (43)	14 (54)	25 (45)	27 (38)	21 (45)	141 (43)	42 (48)	6 (43)	15 (56)	16 (46)	19 (56)	38 (63)	136 (53)	277 (48)
5	4	Implementation of tax-related systems (Corporate Tax etc.)	2 (20)	3 (18)	12 (26)	14 (27)	9 (35)	17 (30)	21 (30)	10 (21)	88 (27)	32 (36)	2 (14)	12 (44)	12 (34)	10 (29)	17 (28)	85 (33)	173 (30)
7	5	Improvement of education/human resource development	2 (20)	7 (41)	8 (17)	9 (18)	7 (27)	22 (39)	25 (35)	17 (36)	97 (30)	15 (17)	0 (0)	6 (22)	8 (23)	7 (21)	19 (32)	55 (21)	152 (26)
13	6	Stability in foreign exchange rates	3 (30)	10 (59)	14 (30)	15 (29)	6 (23)	22 (39)	16 (23)	12 (26)	98 (30)	27 (31)	1 (7)	1 (4)	3 (9)	1 (3)	9 (15)	42 (16)	140 (24)
6	7	Implementation of flood prevention measures	4 (40)	4 (24)	9 (19)	15 (29)	8 (31)	18 (32)	20 (28)	15 (32)	93 (29)	13 (15)	1 (7)	8 (30)	7 (20)	10 (29)	8 (13)	47 (18)	140 (24)
4	8	Public security and safety	1 (10)	3 (18)	6 (13)	9 (18)	7 (27)	18 (32)	20 (28)	8 (17)	72 (22)	23 (26)	4 (29)	5 (19)	10 (29)	9 (26)	10 (17)	61 (24)	133 (23)
9	9	Relaxation of the Foreign Business Act	3 (30)	1 (6)	4 (9)	10 (20)	5 (19)	6 (11)	8 (11)	7 (15)	44 (14)	29 (33)	1 (7)	15 (56)	13 (37)	7 (21)	19 (32)	84 (33)	128 (22)
10	10	Work permit/visa-related issues	2 (20)	0 (0)	5 (11)	5 (10)	5 (19)	7 (13)	5 (7)	6 (13)	35 (11)	26 (30)	3 (21)	5 (19)	12 (34)	8 (24)	21 (35)	75 (29)	110 (19)
8	11	Promotion of economic ties e.g. FTA, EPA etc.	2 (20)	4 (24)	9 (19)	10 (20)	7 (27)	8 (14)	20 (28)	5 (11)	65 (20)	23 (26)	2 (14)	4 (15)	1 (3)	6 (18)	4 (7)	40 (16)	105 (18)
11	12	Logistical infrastructure development linking Thailand with neighboring countries(CLMV and India etc.)	0 (0)	6 (35)	13 (28)	4 (8)	4 (15)	13 (23)	9 (13)	10 (21)	59 (18)	13 (15)	1 (7)	5 (19)	1 (3)	15 (44)	7 (12)	42 (16)	101 (17)
12	13	Development of the communication infrastructure	0 (0)	3 (18)	6 (13)	9 (18)	4 (15)	8 (14)	12 (17)	9 (19)	51 (16)	8 (9)	3 (21)	3 (11)	5 (14)	5 (15)	14 (23)	38 (15)	89 (15)
14	14	Continuity of government policies	1 (10)	3 (18)	5 (11)	8 (16)	10 (38)	8 (14)	8 (11)	7 (15)	50 (15)	12 (14)	1 (7)	6 (22)	4 (11)	2 (6)	4 (7)	29 (11)	79 (14)
15	15	Prevention of labor disputes	1 (10)	1 (6)	3 (6)	6 (12)	3 (12)	6 (11)	18 (25)	8 (17)	46 (14)	6 (7)	1 (7)	1 (4)	2 (6)	5 (15)	2 (3)	17 (7)	63 (11)
16	16	Promotion of employment of foreign labour	1 (10)	0 (0)	6 (13)	7 (14)	0 (0)	7 (13)	7 (10)	4 (9)	32 (10)	4 (5)	1 (7)	3 (11)	5 (14)	3 (9)	6 (10)	22 (9)	54 (9)
18	17	Implementation of drought control measures	1 (10)	0 (0)	2 (4)	2 (4)	2 (8)	4 (7)	5 (7)	3 (6)	19 (6)	2 (2)	1 (7)	2 (7)	0 (0)	3 (9)	1 (2)	9 (3)	28 (5)
19	18	Promotion of regional operating headquarters function (e.g. IHQ, ITC)	0 (0)	1 (6)	1 (2)	1 (2)	1 (4)	2 (4)	5 (7)	2 (4)	13 (4)	2 (2)	2 (14)	3 (11)	1 (3)	0 (0)	5 (8)	13 (5)	26 (4)
17	19	Protection of intellectual property rights	0 (0)	0 (0)	1 (2)	1 (2)	1 (4)	2 (4)	2 (3)	2 (4)	9 (3)	5 (6)	1 (7)	1 (4)	1 (3)	0 (0)	2 (3)	10 (4)	19 (3)
-	-	Others	0 (0)	1 (6)	4 (9)	2 (4)	1 (4)	2 (4)	5 (7)	1 (2)	16 (5)	2 (2)	0 (0)	3 (11)	1 (3)	1 (3)	2 (3)	9 (3)	25 (4)
Total			34	74	174	212	120	257	319	184	1374	381	45	113	122	156	231	1048	2,422
No. of firms			10	17	47	51	26	56	71	47	325	88	14	27	35	34	60	258	583 (100)

(2) Recent improvements in the policies concerning the corporate investment environment (Policy evaluation)

Regarding recent improvements of the Government's policies, the predominant responses are “Promotion of economic measures (public infrastructure development etc.)” (28%), followed by “Maintenance of social security and safety” (25%), “Customs related systems and implementation” (17%), “Work permit/visa related issues” (16%), and “Promotion of the Regional Operating Headquarters function (e.g. IHQ, ITC)” (15%). (Table 10-2)

(Table 10-2) Recent improvements of the Government's policies (check all that apply)

Unit: No. of firms and (%)

Last time	This time		Manufacturing									Non-manufacturing							Grand total
			Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Trading	Retails	Finance/ Insurance	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	
1	1	Promotion of economic measures (public infrastructure development etc.)	0 (0)	2 (14)	8 (22)	10 (24)	3 (18)	13 (25)	24 (39)	8 (23)	68 (26)	30 (41)	2 (22)	8 (35)	10 (38)	6 (25)	7 (16)	63 (31)	131 (28)
2	2	Maintenance of social security and safety	2 (33)	5 (36)	13 (35)	10 (24)	5 (29)	13 (25)	10 (16)	10 (29)	68 (26)	17 (23)	1 (11)	5 (22)	7 (27)	12 (50)	8 (18)	50 (25)	118 (25)
8	3	Customs-related systems and their implementation	3 (50)	0 (0)	5 (14)	5 (12)	5 (29)	10 (20)	11 (18)	10 (29)	49 (19)	17 (23)	0 (0)	1 (4)	2 (8)	6 (25)	2 (4)	28 (14)	77 (17)
7	4	Work permit/visa-related issues	2 (33)	0 (0)	6 (16)	5 (12)	9 (53)	6 (12)	12 (20)	5 (14)	45 (17)	14 (19)	2 (22)	0 (0)	2 (8)	3 (13)	8 (18)	29 (14)	74 (16)
3	5	Promotion of regional operating headquarters function (e.g. IHQ, ITC)	0 (0)	1 (7)	6 (16)	3 (7)	3 (18)	11 (22)	10 (16)	3 (9)	37 (14)	12 (16)	1 (11)	3 (13)	1 (4)	6 (25)	8 (18)	31 (15)	68 (15)
10	5	Continuity of government policies	0 (0)	0 (0)	9 (24)	3 (7)	2 (12)	10 (20)	6 (10)	2 (6)	32 (12)	13 (18)	2 (22)	6 (26)	4 (15)	3 (13)	3 (7)	31 (15)	63 (14)
5	7	Development of transport infrastructure in the Bangkok metropolitan area	1 (17)	5 (36)	3 (8)	6 (14)	4 (24)	7 (14)	8 (13)	4 (11)	38 (14)	7 (9)	1 (11)	5 (22)	4 (15)	2 (8)	5 (11)	24 (12)	62 (13)
5	8	Development of the communication infrastructure	1 (17)	2 (14)	2 (5)	5 (12)	4 (24)	8 (16)	6 (10)	4 (11)	32 (12)	10 (14)	1 (11)	0 (0)	5 (19)	2 (8)	10 (22)	28 (14)	60 (13)
4	9	Stability in foreign exchange rates	0 (0)	0 (0)	5 (14)	8 (19)	1 (6)	3 (6)	8 (13)	2 (6)	27 (10)	12 (16)	0 (0)	5 (22)	4 (15)	1 (4)	5 (11)	27 (13)	54 (12)
13	10	Implementation of flood prevention measures	0 (0)	2 (14)	5 (14)	7 (17)	3 (18)	8 (16)	8 (13)	6 (17)	39 (15)	4 (5)	2 (22)	0 (0)	0 (0)	0 (0)	7 (16)	13 (6)	52 (11)
9	11	Promotion of economic ties e.g. FTA, EPA etc.	1 (17)	0 (0)	6 (16)	1 (2)	3 (18)	7 (14)	7 (11)	0 (0)	25 (10)	9 (12)	3 (33)	1 (4)	2 (8)	4 (17)	1 (2)	20 (10)	45 (10)
11	12	Logistical infrastructure development linking Thailand with neighboring countries(CLMV and India	0 (0)	0 (0)	5 (14)	1 (2)	4 (24)	5 (10)	3 (5)	3 (9)	21 (8)	5 (7)	2 (22)	5 (22)	5 (19)	2 (8)	4 (9)	23 (11)	44 (9)
12	13	Implementation of tax-related systems	2 (33)	2 (14)	3 (8)	1 (2)	1 (6)	6 (12)	8 (13)	5 (14)	28 (11)	3 (4)	0 (0)	1 (4)	0 (0)	0 (0)	4 (9)	8 (4)	36 (8)
14	14	Improvement of education/human resource development	0 (0)	0 (0)	1 (3)	2 (5)	1 (6)	6 (12)	2 (3)	0 (0)	12 (5)	4 (5)	1 (11)	0 (0)	0 (0)	0 (0)	3 (7)	8 (4)	20 (4)
16	15	Promotion of employment of foreign labour	1 (17)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	4 (7)	1 (3)	8 (3)	2 (3)	0 (0)	1 (4)	4 (15)	0 (0)	2 (4)	9 (4)	17 (4)
15	16	Prevention of labor disputes	0 (0)	0 (0)	2 (5)	1 (2)	3 (18)	2 (4)	0 (0)	0 (0)	8 (3)	3 (4)	0 (0)	0 (0)	1 (4)	0 (0)	1 (2)	5 (2)	13 (3)
18	16	Relaxation of the Foreign Business Act	0 (0)	0 (0)	1 (3)	0 (0)	1 (6)	1 (2)	4 (7)	0 (0)	7 (3)	1 (1)	0 (0)	1 (4)	1 (4)	1 (4)	0 (0)	4 (2)	11 (2)
16	18	Implementation of drought control measures	1 (17)	0 (0)	1 (3)	1 (2)	1 (6)	2 (4)	1 (2)	0 (0)	7 (3)	2 (3)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	4 (2)	11 (2)
19	19	Protection of intellectual property rights	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (3)	0 (0)	3 (1)	0 (0)	0 (0)	1 (4)	0 (0)	2 (8)	0 (0)	3 (1)	6 (1)
-	-	Others	1 (17)	1 (7)	2 (5)	4 (10)	0 (0)	1 (2)	0 (0)	1 (3)	10 (4)	3 (4)	0 (0)	1 (4)	1 (4)	1 (4)	1 (2)	7 (3)	17 (4)
Total			15	20	85	73	53	120	134	64	564	168	18	44	53	51	81	415	979
No. of firms			6	14	37	42	17	51	61	35	263	74	9	23	26	24	45	201	464 (100)

11. CUSTOMS AND TRADE RELATED SYSTEMS

(1) Improvement of the Customs and trade related systems

Regarding improvement of the Customs and trade related systems, the predominant response was "Nothing in particular" (58%), followed by "Revised Customs Act (including easing of the penal provisions and incentive schemes, also clarification of transit freight transport)" (21%), and "Advanced ruling system (the system was renewed in 2015. HS code for import cargo can be checked in advance)" (13%). (Table 11-1)

(Table 11-1) Improvement of the Customs and trade related systems

Unit: No. of firms and (%)

This time		Manufacturing: Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Non-manufacturing: Trading	Retails	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	Nothing in particular	5 (56)	12 (86)	22 (59)	27 (63)	11 (55)	24 (46)	30 (49)	18 (51)	149 (55)	42 (52)	7 (88)	9 (56)	14 (70)	31 (84)	103 (64)	252 (58)
2	Revised Customs Act (including easing of penal provisions and incentive schemes, also clarification of transit freight transport)	0 (0)	0 (0)	8 (22)	8 (19)	3 (15)	15 (29)	18 (30)	8 (23)	60 (22)	20 (25)	2 (25)	5 (31)	2 (10)	3 (8)	32 (20)	92 (21)
3	Advanced ruling system (system was renewed in 2015. HS code for import cargo can be checked in advance)	0 (0)	1 (7)	3 (8)	4 (9)	4 (20)	8 (15)	11 (18)	6 (17)	37 (14)	12 (15)	0 (0)	2 (13)	5 (25)	1 (3)	20 (12)	57 (13)
4	Thailand trade repository (import and export information, such as tariff rates and rules of origin can be sourced collectively on the Web)	0 (0)	1 (7)	2 (5)	2 (5)	2 (10)	7 (13)	6 (10)	4 (11)	24 (9)	10 (12)	0 (0)	3 (19)	0 (0)	2 (5)	15 (9)	39 (9)
5	Customs alliance system (system in which a specific Customs officer responds to registered companies on a one-stop basis)	0 (0)	2 (14)	2 (5)	2 (5)	3 (15)	7 (13)	2 (3)	3 (9)	21 (8)	11 (14)	1 (13)	2 (13)	2 (10)	0 (0)	16 (10)	37 (9)
6	Operation of free zones (clarification of added value standards when importing goods into the county from a designated free zone)	0 (0)	0 (0)	1 (3)	0 (0)	3 (15)	3 (6)	7 (11)	1 (3)	15 (6)	8 (10)	1 (13)	1 (6)	5 (25)	2 (5)	17 (10)	32 (7)
7	"HS Check" application(Item which allows reference to the preliminary teaching results or the previous content of consultation by individual companies regarding Customs matters)	1 (11)	1 (7)	4 (11)	1 (2)	3 (15)	2 (4)	4 (7)	0 (0)	16 (6)	5 (6)	1 (13)	2 (13)	0 (0)	1 (3)	9 (6)	25 (6)
—	Others	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	1 (1)	2 (0)
	Total	6	17	42	45	29	66	78	40	323	108	12	24	29	40	213	536
	No. of firms	9	14	37	43	20	52	61	35	271	81	8	16	20	37	162	433 (100)

(2) Matters for which improvement is desired with the procedures related to Customs

Regarding matters for which improvement is desired with the procedures related to Customs, the predominant response was "Different decisions are made on the Customs tariff classification (tax rate) or tariff assessment (including addition of royalty and license fees) depending on which Customs office and official" (42%), followed by "Nothing in particular" (34%) and "It takes time to receive refund for tariffs after their payment (E.g. Customs Act Article 19 BIS)" (33%), and "Indication of minor mistakes is frequently made regarding items entered in invoices, origin certificates, shipping documents, etc. It takes time to apply the corrections (goods are held during that period)" (30%). (Table 11-2)

(Table 11-2) Matters for which improvement is desired with the procedures related to Customs

Unit: No. of firms and (%)

This time		Manufacturing: Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Non-manufacturing: Trading	Retails	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	Different decisions are made on the Customs tariff classification (tax rate) or tariff assessment (including addition of royalty and license fees) depending on which Customs office and officials.	1 (11)	5 (36)	14 (38)	21 (49)	6 (30)	20 (38)	28 (46)	0 (0)	110 (41)	32 (40)	2 (25)	10 (63)	11 (55)	15 (41)	70 (43)	180 (42)
2	Nothing in particular.	4 (44)	5 (36)	15 (41)	11 (26)	9 (45)	18 (35)	15 (25)	0 (0)	85 (31)	25 (31)	6 (75)	8 (50)	5 (25)	20 (54)	64 (40)	149 (34)
3	It takes time to receive refund for tariffs after their payment (E.g. Customs Act Article 19 BIS)	2 (22)	8 (57)	9 (24)	16 (37)	7 (35)	13 (25)	23 (38)	0 (0)	91 (34)	24 (30)	3 (38)	7 (44)	12 (60)	6 (16)	52 (32)	143 (33)
4	Indication of minor mistakes is frequently made regarding items to be entered in invoices, origin certificates, shipping documents, etc. It takes time to make the corrections (goods are held during that period).	0 (0)	5 (36)	15 (41)	12 (28)	7 (35)	13 (25)	16 (26)	0 (0)	80 (30)	26 (32)	2 (25)	7 (44)	7 (35)	9 (24)	51 (31)	131 (30)
5	There is a problem about submitting the certificate of origin to apply the Japan-Thailand Economic Partnership Agreement (JTEPA) and the ASEAN Goods Trade Agreement(ATIGA). (E.g. Third country invoice, cargo split, etc.)	0 (0)	2 (14)	1 (3)	6 (14)	1 (5)	7 (13)	7 (11)	0 (0)	29 (11)	10 (12)	2 (25)	4 (25)	0 (0)	3 (8)	19 (12)	48 (11)
6	Difference in the interpretation by the related organizations (such as IEAT, Customs, Revenue Bureau, etc.) regarding operation of free zones. (Handling of non-resident inventory, tax system problem during freight transportation between free zones, etc.)	0 (0)	1 (7)	2 (5)	0 (0)	0 (0)	6 (12)	9 (15)	0 (0)	19 (7)	7 (9)	0 (0)	1 (6)	6 (30)	3 (8)	17 (10)	36 (8)
7	Bribes are requested.	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	3 (6)	0 (0)	0 (0)	7 (3)	3 (4)	0 (0)	1 (6)	3 (15)	3 (8)	10 (6)	17 (4)
-	Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (5)	1 (13)	0 (0)	0 (0)	0 (0)	5 (3)	5 (1)
	Total	7	26	56	68	30	80	98	0	421	131	16	38	44	59	288	709
	No. of firms	9	14	37	43	20	52	61	35	271	81	8	16	20	37	162	433 (100)

12. HUMAN RESOURCES ISSUES

(1) Lack of human resources

Regarding positions for which human resources are lacking, the predominant response was "Engineer (non-IT)" (44%), followed by "Clerical manager" (26%), "Salespersons (non-technical)" (20%), and "Salespersons (technical)" (20%). In the Manufacturing Sector, the predominant response was "Technician" (21%). (Table 12-1)

(Table 12-1) Positions for which human resources are lacking (check all that apply)

Unit: No. of firms and (%)

Last time	This time		Manufacturing: Food	Manufacturing: Textile	Manufacturing: Chemical	Manufacturing: Steel/ Non-ferrous metal	Manufacturing: General machinery	Manufacturing: Electric/ Electronic machinery	Manufacturing: Transportation machinery	Manufacturing: Others	Manufacturing setor total	Non-manufacturing: Trading	Non-manufacturing: Retails	Non-manufacturing: Construction/ Civil engineering	Non-manufacturing: Transportation/ Communication	Non-manufacturing: Others	Non-manufacturing sector total	Grand total
1	1	Engineer (non- IT)	5 (50)	8 (47)	28 (60)	31 (61)	18 (69)	44 (79)	53 (75)	0 (0)	211 (65)	10 (11)	3 (21)	25 (71)	1 (3)	8 (9)	47 (18)	258 (44)
2	2	Clerical manager	1 (10)	3 (18)	7 (15)	15 (29)	7 (27)	13 (23)	21 (30)	0 (0)	85 (26)	17 (19)	3 (21)	7 (20)	18 (53)	19 (22)	64 (25)	149 (26)
5	3	Salespersons (non-technical)	2 (20)	4 (24)	6 (13)	13 (25)	5 (19)	4 (7)	11 (15)	0 (0)	55 (17)	25 (28)	5 (36)	4 (11)	11 (32)	18 (21)	63 (24)	118 (20)
3	4	Salespersons (technical)	2 (20)	3 (18)	13 (28)	9 (18)	4 (15)	10 (18)	18 (25)	0 (0)	69 (21)	30 (34)	2 (14)	7 (20)	1 (3)	9 (10)	49 (19)	118 (20)
4	5	Employees with Japanese language skills	1 (10)	3 (18)	6 (13)	10 (20)	3 (12)	11 (20)	20 (28)	0 (0)	60 (18)	16 (18)	3 (21)	3 (9)	2 (6)	16 (18)	40 (16)	100 (17)
8	6	IT engineer	2 (20)	7 (41)	4 (9)	10 (20)	2 (8)	15 (27)	13 (18)	0 (0)	60 (18)	4 (5)	2 (14)	2 (6)	2 (6)	21 (24)	31 (12)	91 (16)
6	7	Technician	3 (30)	6 (35)	6 (13)	11 (22)	7 (27)	11 (20)	15 (21)	0 (0)	67 (21)	6 (7)	1 (7)	2 (6)	2 (6)	5 (6)	16 (6)	83 (14)
7	8	Staff (accounting / general affairs)	2 (20)	2 (12)	4 (9)	6 (12)	3 (12)	8 (14)	10 (14)	0 (0)	40 (12)	9 (10)	1 (7)	2 (6)	9 (26)	18 (21)	39 (15)	79 (14)
10	8	Worker	2 (20)	5 (29)	4 (9)	3 (6)	1 (4)	6 (11)	6 (8)	0 (0)	32 (10)	0 (0)	2 (14)	2 (6)	3 (9)	5 (6)	12 (5)	44 (8)
8	10	Import/export and purchasing staff	1 (10)	1 (6)	4 (9)	3 (6)	1 (4)	5 (9)	7 (10)	0 (0)	26 (8)	8 (9)	3 (21)	0 (0)	2 (6)	2 (2)	15 (6)	41 (7)
11	10.6	Staff (other than accounting / general affairs)	0 (0)	0 (0)	4 (9)	3 (6)	0 (0)	1 (2)	6 (8)	0 (0)	17 (5)	2 (2)	1 (7)	2 (6)	5 (15)	8 (9)	18 (7)	35 (6)
12	11.6	Driver	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	6 (7)	0 (0)	1 (3)	5 (15)	8 (9)	20 (8)	22 (4)
-	-	Others	0 (0)	0 (0)	1 (2)	2 (4)	2 (8)	1 (2)	4 (6)	0 (0)	10 (3)	3 (3)	0 (0)	0 (0)	1 (3)	7 (8)	11 (4)	21 (4)
Total			21	42	87	117	53	129	184	0	734	136	26	57	62	144	425	1159
No. of firms			10	17	47	51	26	56	71	47	325	88	14	35	34	87	258	583 (100)

(2) The Thai government's human development policy

Regarding policies that the Thai government should expand to develop human resources to support more advanced industry (check all that apply), the predominant response was "Enhance the level of basic education (especially in Science and Mathematics)" (46%), followed by "Enhance higher level education in science and engineering (establish and strengthen the science and engineering faculties at the universities, expand the number of technical colleges, etc.)" (37%), and "Support developing more advanced levels of human resources in companies (subsidy payment, tax incentives, etc.)" (34%). (Table 12-2)

(Table 12-2) Policies that the Thai government should expand to develop high skilled human resources (check all that apply)

Unit: No. of firms and (%)

This time		Manufacturing: Food	Manufacturing: Textile	Manufacturing: Chemical	Manufacturing: Steel/ Non-ferrous metal	Manufacturing: General machinery	Manufacturing: Electric/ Electronic machinery	Manufacturing: Transportation machinery	Manufacturing: Others	Manufacturing setor total	Non-manufacturing: Trading	Non-manufacturing: Retails	Non-manufacturing: Construction/ Civil engineering	Non-manufacturing: Transportation/ Communication	Non-manufacturing: Others	Non-manufacturing sector total	Grand total
1	Enhance the level of basic education (especially in Science and Mathematics)	7 (70)	12 (71)	21 (45)	22 (43)	12 (46)	33 (59)	36 (51)	0 (0)	163 (50)	42 (48)	8 (57)	11 (31)	13 (38)	33 (38)	107 (41)	270 (46)
2	Enhance higher level education in science and engineering (establish and strengthen the science and engineering faculties at the universities, expand the number of technical colleges, etc.)	1 (10)	8 (47)	19 (40)	23 (45)	8 (31)	32 (57)	37 (52)	0 (0)	142 (44)	24 (27)	3 (21)	14 (40)	6 (18)	27 (31)	74 (29)	216 (37)
3	Support developing more advanced levels of human resources in companies (subsidy payment, tax incentives, etc.).	4 (40)	5 (29)	13 (28)	19 (37)	10 (38)	20 (36)	21 (30)	0 (0)	112 (34)	31 (35)	8 (57)	11 (31)	12 (35)	23 (26)	85 (33)	197 (34)
4	Support for technically related students to study abroad (or the technical trainee s ' dispatch system to Japan by the Thai Government)	0 (0)	7 (41)	16 (34)	19 (37)	7 (27)	23 (41)	21 (30)	0 (0)	111 (34)	17 (19)	2 (14)	14 (40)	6 (18)	21 (24)	60 (23)	171 (29)
5	Improve and advance the indicators to develop individual capabilities by means of a suitable technology/skill certificate system	4 (40)	3 (18)	4 (9)	6 (12)	5 (19)	21 (38)	24 (34)	0 (0)	80 (25)	10 (11)	2 (14)	7 (20)	8 (24)	18 (21)	45 (17)	125 (21)
6	Develop advanced administrative human resources that know how to plan and implement the law, tax system, budget, plans, etc.	1 (10)	6 (35)	4 (9)	10 (20)	4 (15)	11 (20)	11 (15)	0 (0)	56 (17)	16 (18)	3 (21)	11 (31)	9 (26)	26 (30)	65 (25)	121 (21)
7	Improve the internship system	0 (0)	3 (18)	5 (11)	4 (8)	3 (12)	9 (16)	11 (15)	0 (0)	40 (12)	5 (6)	3 (21)	4 (11)	9 (26)	11 (13)	32 (12)	72 (12)
8	Expand the Thai Government's R&D budget	1 (10)	5 (29)	1 (2)	3 (6)	3 (12)	6 (11)	7 (10)	0 (0)	28 (9)	11 (13)	1 (7)	6 (17)	6 (18)	6 (7)	30 (12)	58 (10)
9	Others	0 (0)	0 (0)	0 (0)	1 (2)	1 (4)	2 (4)	2 (3)	0 (0)	7 (2)	3 (3)	0 (0)	1 (3)	1 (3)	3 (3)	8 (3)	15 (3)
Total		18	49	83	107	53	157	170	0	739	159	30	79	70	168	506	1245
No. of firms		10	17	47	51	26	56	71	47	325	88	14	35	34	87	258	583 (100)

13. EXPECTATIONS FOR the EAST ASIA REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP (RCEP)

(1) Expectations for Thailand concerning RCEP

Regarding expectations for Thailand concerning RCEP (check all that apply), the predominant response was “Improvement of various procedures, such as transparency of the Customs procedure” (48%), followed by “Higher liberation (tariff elimination) rate for both item quantity and trade volume” (46%), and “Standardization of certificates of origin by 16 countries” (36%). (Table 13-1)

Regarding expectations for neighbouring countries concerning RCEP, the predominant response was “Higher liberation (tariff elimination) rate in both item quantity and trade volume” (45%), followed by “Improvement of various procedures, such as transparency of the Customs procedure” (41%), and “Standardization of the certificates of origin by 16 countries” (34%). (Table 13-2)

(Table 13-1) Expectations for Thailand concerning RCEP

Unit: No. of firms and (%)

This time		Manufacturing									Non-manufacturing						
		Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Trading	Retails	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	Improvement of various procedures, such as transparency of the Customs procedure	4 (40)	5 (29)	16 (35)	29 (57)	15 (58)	32 (57)	29 (41)	20 (43)	150 (46)	53 (60)	7 (50)	9 (26)	22 (65)	25 (40)	116 (50)	266 (48)
2	Higher liberation (tariff elimination) rate in both item quantity and trade volume	7 (70)	9 (53)	20 (43)	28 (55)	12 (46)	30 (54)	40 (56)	16 (34)	162 (50)	49 (56)	4 (29)	8 (23)	11 (32)	25 (40)	97 (41)	259 (46)
3	Standardization of certificates of origin by 16 counties	1 (10)	7 (41)	22 (48)	13 (25)	7 (27)	26 (46)	33 (46)	17 (36)	126 (39)	38 (43)	6 (43)	4 (11)	14 (41)	11 (17)	73 (31)	199 (36)
4	Adoption of easy-to-use rules of origin (e.g. introduction of regulations concerning the selection system of the tariff number change criteria and added value criteria, which are not adopted in part, such as the FTA with India), and the cumulative effect under the rules of origin (e.g. added value can be calculated by accumulating between multiple counties)	3 (30)	8 (47)	15 (33)	8 (16)	5 (19)	30 (54)	25 (35)	8 (17)	102 (31)	28 (32)	4 (29)	0 (0)	6 (18)	5 (8)	43 (18)	145 (26)
5	Mitigation / abolition of non-tariff barriers (e.g. import quantity restrictions, local procurement obligations, etc.)	1 (10)	8 (47)	9 (20)	8 (16)	4 (15)	18 (32)	14 (20)	8 (17)	70 (22)	25 (28)	2 (14)	9 (26)	6 (18)	14 (22)	56 (24)	126 (23)
6	Liberalization of investment (e.g. protection of investment property, elimination of discrimination before and after investment, inside and outside of the capital, etc.)	2 (20)	2 (12)	2 (4)	6 (12)	2 (8)	2 (4)	7 (10)	4 (9)	27 (8)	11 (13)	2 (14)	13 (37)	6 (18)	17 (27)	49 (21)	76 (14)
7	Liberalization of the services' trade (e.g. elimination of restricting the foreign capital equity ratio in the services industry field, etc.)	1 (10)	4 (24)	1 (2)	2 (4)	2 (8)	5 (9)	5 (7)	2 (4)	22 (7)	23 (26)	3 (21)	6 (17)	12 (35)	28 (44)	72 (31)	94 (17)
8	Improvement of intellectual property rights' protection (countermeasures against pirated versions / counterfeit items).	0 (0)	1 (6)	3 (7)	3 (6)	2 (8)	9 (16)	5 (7)	6 (13)	29 (9)	7 (8)	3 (21)	2 (6)	3 (9)	7 (11)	22 (9)	51 (9)
9	Establishment of e-commerce rules that do not impede free trade. (Data free flow (e.g. freedom to send personal information, such as salary information from the local factory to the head office in Japan) / Elimination of the source code disclosure obligations, etc.)	1 (10)	0 (0)	0 (0)	2 (4)	1 (4)	5 (9)	3 (4)	4 (9)	16 (5)	5 (6)	0 (0)	2 (6)	3 (9)	8 (13)	18 (8)	34 (6)
10	Economic and technical cooperation to rectify development disparities among the participating countries.	0 (0)	1 (6)	0 (0)	2 (4)	2 (8)	2 (4)	4 (6)	0 (0)	11 (3)	4 (5)	0 (0)	4 (11)	0 (0)	7 (11)	15 (6)	26 (5)
Total		19	43	85	94	47	143	153	75	659	227	28	49	77	125	506	1165
No. of firms		10	17	46	51	26	56	71	47	324	88	14	35	34	63	234	558 (100)

(Table 13-2) Expectations for neighbouring countries concerning RCEP

Unit: No. of firms and (%)

This time		Manufacturing									Non-manufacturing				
		Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Trading	Construction/ Civil engineering	Others	Non-manufacturing sector total	Grand total
1	Higher liberation (tariff elimination) rate in both item quantity and trade volume	6 (60)	10 (59)	19 (41)	19 (37)	11 (42)	30 (54)	37 (52)	13 (28)	145 (45)	45 (51)	7 (20)	19 (86)	87 (45)	232 (45)
2	Improvement of various procedures, such as transparency of the Customs procedure	4 (40)	5 (29)	17 (37)	25 (49)	10 (38)	31 (55)	27 (38)	16 (34)	135 (42)	32 (36)	6 (17)	20 (91)	78 (40)	213 (41)
3	Standardization of the certificates of origin by 16 counties.	1 (10)	5 (29)	19 (41)	10 (20)	7 (27)	21 (38)	28 (39)	15 (32)	106 (33)	39 (44)	3 (9)	11 (50)	69 (36)	175 (34)
4	Adoption of easy-to-use rules of origin (e.g. introduction of regulations on the selection system of the tariff number change criteria and added value criteria, which are not adopted in part, such as the FTA with India), and the cumulative effect under the rules of origin (e.g. added value can be calculated by accumulating	2 (20)	6 (35)	14 (30)	10 (20)	5 (19)	28 (50)	18 (25)	7 (15)	90 (28)	30 (34)	3 (9)	6 (27)	48 (25)	138 (27)
5	Mitigation / abolition of non-tariff barriers (e.g. import quantity restrictions, local procurement obligations, etc.)	2 (20)	6 (35)	10 (22)	7 (14)	5 (19)	20 (36)	18 (25)	7 (15)	75 (23)	18 (20)	5 (14)	12 (55)	42 (22)	117 (23)
6	Liberalization of the services' trade (e.g. elimination of restricting the foreign capital equity ratio in the services industry field, etc.)	2 (20)	3 (18)	2 (4)	2 (4)	2 (8)	5 (9)	4 (6)	2 (4)	22 (7)	16 (18)	9 (26)	28 (127)	63 (33)	85 (16)
7	Liberalization of investment (e.g. protection of investment property, elimination of discrimination before and after investment, inside and outside of the capital, etc.)	1 (10)	3 (18)	2 (4)	3 (6)	1 (4)	4 (7)	11 (15)	5 (11)	30 (9)	11 (13)	10 (29)	13 (59)	41 (21)	71 (14)
8	Improvement of intellectual property rights' protection (countermeasures against pirated versions / counterfeit items)	0 (0)	0 (0)	2 (4)	3 (6)	1 (4)	10 (18)	5 (7)	6 (13)	27 (8)	5 (6)	3 (9)	8 (36)	22 (11)	49 (9)
9	Establishment of e-commerce rules that do not impede free trade(Data free flow (e.g. freedom to send personal information, such as salary information from the local factory to the head office in Japan) / Elimination of the source code disclosure	1 (10)	0 (0)	0 (0)	3 (6)	0 (0)	4 (7)	4 (6)	3 (6)	15 (5)	5 (6)	2 (6)	7 (32)	15 (8)	30 (6)
10	Economic and technical cooperation to rectify development disparities among the participating countries	1 (10)	0 (0)	1 (2)	2 (4)	0 (0)	4 (7)	4 (6)	1 (2)	13 (4)	4 (5)	2 (6)	6 (27)	12 (6)	25 (5)
Total		20	38	86	84	42	157	156	75	658	205	50	130	477	1135
No. of firms		10	17	46	51	26	56	71	47	324	88	35	22	193	517 (100)

14. EFFORTS TO IMPROVE CORPORATE SOCIAL RESPONSIBILITY (CSR)

Regarding companies' efforts to improve CSR, the predominant response was "Improvement of the work environment for employees" (62%), followed by "Information disclosure, compliance, prevention of corruption, respect for human rights, and others such as effective corporate governance" (60%), "Employment promotion of Thais" (28%), and "Promotion of environmental measures, adoption of environmentally friendly technology" (27%). (Table 14)

(Table 14)

Unit: No. of firms and (%)

This time		Manufacturing									Non-manufacturing						
		Food	Textile	Chemical	Steel/ Non-ferrous metal	General machinery	Electric/ Electronic machinery	Transportation machinery	Others	Manufacturing setor total	Trading	Retails	Construction/ Civil engineering	Transportation/ Communication	Others	Non-manufacturing sector total	Grand total
1	Improvement of work environment for the employees	6 (60)	12 (71)	33 (70)	32 (63)	15 (58)	44 (79)	52 (73)	28 (60)	222 (68)	53 (60)	5 (36)	14 (40)	21 (62)	45 (52)	138 (53)	360 (62)
2	Information disclosure, compliance, prevention of corruption, respect for human rights, and others such as effective corporate governance	5 (50)	14 (82)	29 (62)	33 (65)	12 (46)	46 (82)	53 (75)	27 (57)	219 (67)	48 (55)	8 (57)	14 (40)	19 (56)	40 (46)	129 (50)	348 (60)
3	Employment promotion of Thais	5 (50)	5 (29)	11 (23)	9 (18)	8 (31)	15 (27)	19 (27)	18 (38)	90 (28)	29 (33)	1 (7)	8 (23)	9 (26)	27 (31)	74 (29)	164 (28)
4	Promotion of environmental measures, adoption of environmentally friendly technologies	2 (20)	8 (47)	18 (38)	12 (24)	6 (23)	26 (46)	28 (39)	15 (32)	115 (35)	14 (16)	2 (14)	5 (14)	7 (21)	13 (15)	41 (16)	156 (27)
5	Other contributions to Thai society (such as eradication of poverty, etc.)	2 (20)	2 (12)	7 (15)	7 (14)	2 (8)	12 (21)	16 (23)	11 (23)	59 (18)	6 (7)	5 (36)	5 (14)	3 (9)	18 (21)	37 (14)	96 (16)
6	Contributing education to Thais by providing scholarships	2 (20)	1 (6)	14 (30)	4 (8)	2 (8)	16 (29)	12 (17)	12 (26)	63 (19)	9 (10)	0 (0)	5 (14)	1 (3)	13 (15)	28 (11)	91 (16)
7	Contributing traffic safety, disaster prevention, and other support to victims in Thailand	2 (20)	1 (6)	9 (19)	5 (10)	1 (4)	11 (20)	13 (18)	7 (15)	49 (15)	12 (14)	0 (0)	2 (6)	2 (6)	8 (9)	24 (9)	73 (13)
8	Donations and cooperation through the JCC	0 (0)	1 (6)	0 (0)	4 (8)	2 (8)	1 (2)	3 (4)	1 (2)	12 (4)	8 (9)	0 (0)	1 (3)	3 (9)	5 (6)	17 (7)	29 (5)
Total		24	44	121	106	48	171	196	119	829	179	21	54	65	169	488	1317
No. of firms		10	17	47	51	26	56	71	47	325	88	14	35	34	87	258	583 (100)