

Draft Summary

Survey on Business Sentiment of Japanese Corporations in Thailand

For the 2nd Half of 2022

<Introduction of the Survey>

JCCB, Japanese Chamber of Commerce Bangkok, has been conducting survey on business sentiment of Japanese corporations in Thailand twice a year for 52 years, since 1971. This survey is the only comprehensive data reflecting the business situation of Japanese corporations in Thailand.

- The survey period was from November 29 to December 23, 2022.
- The questionnaires were handed out to 1,627 JCCB members, of which 508 companies responded (31.2%).
- Press release date: January 31, 2023 (Tue.)

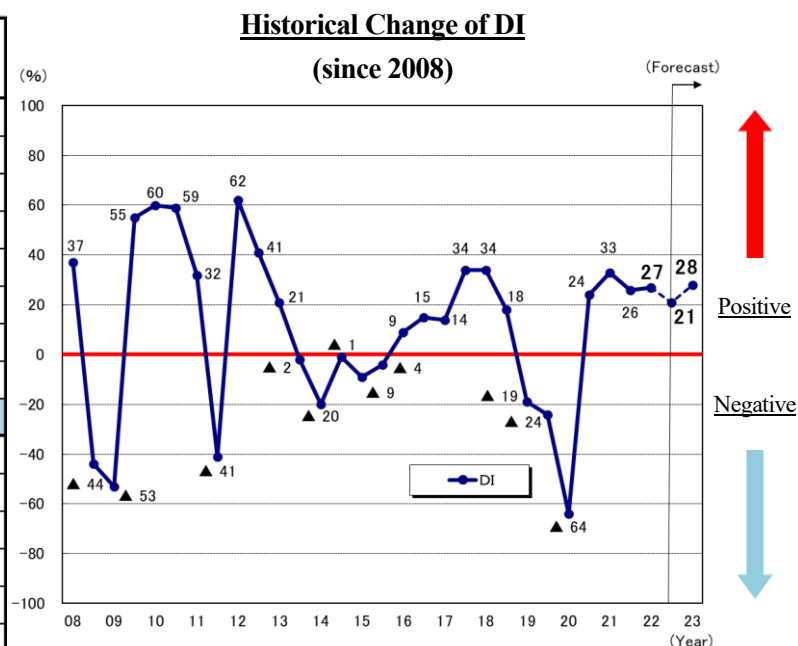
1. Business Sentiment Illustrated by DI (Diffusion Index)

- The business sentiment (DI) is 27 in the first half of 2022, 21 in the second half of 2022 (forecast), and 28 in the first half of 2023 (forecast). The DI forecast for the second half of 2022 (21) continues to be positive following the first half of 2022, even though the DI figure shrinks compared to the first half of 2022. The decrease of DI is influenced by several factors such as surging prices of raw materials and energy, the global inflation, and the declining demand for exports due to the tightening of monetary policies.
- The DI forecast for the first half of 2023 reflects a more optimistic sentiment (21→28), compared to the second half of 2022, as the responding Japanese firms expect favorable economic impact from the increasing number of inbound tourists and the resolution of raw material and parts shortage.

Industry	Current Survey			No. of firms	
	Result 22H1	Forecast 22H2	23H1		
Manufacturing	Food	0	-10	10	10
	Textile	55	18	27	11
	Chemical	23	-8	30	39
	Steel/Non-ferrous metal	21	-8	18	38
	General machinery	20	40	30	20
	Electrical/Electronic machinery	-7	-2	4	44
	Transportation machinery	29	32	31	68
	Others	44	5	18	39
	Manufacturing sector total	23	10	22	269
Non-manufacturing	Trading	45	34	31	82
	Retail	20	-10	20	10
	Finance/Insurance/Securities	36	48	40	25
	Construction/Civil engineering	23	35	50	26
	Transportation/Communication	30	3	4	27
	Others	22	49	42	69
	Non-manufacturing sector total	32	35	34	239
Total	27	21	28	508	

H1: The first half of the year, H2: The second half of the year

For the first half of 2023
“Improving” (44%), “No change” (41%), “Deteriorating” (16%)
44% - 16% = DI 28



	2022		2023
	H1	H2	H1
Improving (%)	49	48	44
No change (%)	30	25	41
Deteriorating (%)	22	27	16
(Ref.) DI (pt)	27	21	28

<What is DI?>

◆ DI (Diffusion Index):

A comparison of business performance in a six-month term with its previous term

DI = the percentage of those answered "improving" — (minus) the percentage of those answered "deteriorating"

2. Capital Investment (Manufacturing Sector)

- The percentage of the firms anticipating “Increase” in their capital investments in 2023 is 31%, whereas 46% of them anticipated “No change” and 16% anticipated “Decrease”.

Industry	No. of firms and (%)					Total
	Increase	No change	Decrease	Undecided		
Food	3 (33)	4 (44)	1 (11)	1 (11)		9
Textile	2 (20)	6 (60)	1 (10)	1 (10)		10
Chemical	12 (31)	18 (46)	8 (21)	1 (3)		39
Steel/Non-ferrous metal	14 (38)	13 (35)	7 (19)	3 (8)		37
General machinery	6 (35)	10 (59)	0 (0)	1 (6)		17
Electrical/Electronic machinery	12 (29)	14 (34)	10 (24)	5 (12)		41
Transportation machinery	18 (27)	34 (51)	11 (16)	4 (6)		67
Others	12 (32)	19 (50)	3 (8)	4 (11)		38
Manufacturing sector total	79 (31)	118 (46)	41 (16)	20 (8)		258
Results from the Previous Survey (First Half of 2022)	109 (40)	89 (33)	47 (17)	25 (9)		270

(Note) Year-to-year comparison

3. Export and Potential Export Markets in the Future

3.1 Export Trend in the First Half of 2023 (January-June)

- The percentage of the firms anticipating “Increase” in their exports in the first half of 2023 totaled 35%, while 51% anticipated “No change” and 14% anticipated “Decrease”.

Industry	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 (33)	0 (0)	2 (22)	1 (11)	4 (44)	2 (22)	0 (0)	0 (0)	2 (22)	9
Textile	4 (44)	1 (11)	1 (11)	2 (22)	2 (22)	3 (33)	1 (11)	1 (11)	1 (11)	9
Chemical	11 (31)	3 (9)	5 (14)	3 (9)	19 (54)	5 (14)	4 (11)	1 (3)	0 (0)	35
Steel/Non-ferrous metal	4 (13)	0 (0)	1 (3)	3 (10)	24 (80)	2 (7)	2 (7)	0 (0)	0 (0)	30
General machinery	6 (43)	0 (0)	2 (14)	4 (29)	7 (50)	1 (7)	0 (0)	1 (7)	0 (0)	14
Electrical/Electronic machinery	13 (38)	3 (9)	3 (9)	7 (21)	10 (29)	11 (32)	6 (18)	3 (9)	2 (6)	34
Transportation machinery	21 (34)	3 (5)	6 (10)	12 (20)	32 (52)	8 (13)	3 (5)	3 (5)	2 (3)	61
Others	18 (51)	1 (3)	7 (20)	10 (29)	12 (34)	5 (14)	5 (14)	0 (0)	0 (0)	35
Manufacturing sector total	80 (35)	11 (5)	27 (12)	42 (19)	110 (48)	37 (16)	21 (9)	9 (4)	7 (3)	227
Trading	26 (36)	5 (7)	9 (12)	12 (16)	41 (56)	6 (8)	2 (3)	2 (3)	2 (3)	73
Retail	1 (25)	0 (0)	0 (0)	1 (25)	2 (50)	1 (25)	1 (25)	0 (0)	0 (0)	4
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4
Others	6 (43)	0 (0)	3 (21)	3 (21)	8 (57)	0 (0)	0 (0)	0 (0)	0 (0)	14
Non-manufacturing sector total	33 (35)	5 (5)	12 (13)	16 (17)	55 (58)	7 (7)	3 (3)	2 (2)	2 (2)	95
Total	113 (35)	16 (5)	39 (12)	58 (18)	165 (51)	44 (14)	24 (7)	11 (3)	9 (3)	322
Results from the Previous Survey (First Half of 2022)	130 (38)	26 (8)	40 (12)	64 (19)	159 (47)	49 (14)	25 (7)	13 (4)	11 (3)	338

(Note) Year-to-year comparison

3.2 Potential Export Markets in the Future (multiple answers)

- “Vietnam” (47%) ranks first on the list of future potential export markets from Thailand, followed by “India” (38%), “Indonesia” (30%), and “Japan” (20%), respectively.

Country/ Region	No. of firms and (%)															Total	No. of firms
	Vietnam	India	Indonesia	Japan	Malaysia	USA	China	Europe	Philippines	Cambodia	Middle East	Latin America	Singapore	Africa	Pakistan		
Manufacturing	90 (40)	87 (39)	69 (31)	42 (19)	44 (20)	40 (18)	39 (17)	25 (11)	19 (8)	13 (6)	20 (9)	12 (5)	11 (5)	11 (5)	9 (4)	570	224
Non-manufacturing	56 (64)	32 (36)	25 (28)	21 (24)	13 (15)	9 (10)	5 (6)	4 (5)	9 (10)	11 (13)	2 (2)	3 (3)	3 (3)	2 (2)	2 (2)	207	88
Total	146 (47)	119 (38)	94 (30)	63 (20)	57 (18)	49 (16)	44 (14)	29 (9)	28 (9)	24 (8)	22 (7)	15 (5)	14 (4)	13 (4)	11 (4)	777	312
Current survey	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Last survey	1	3	2	4	6	5	7	8	10	9	11	18	16	15	17		
The survey before last	1	2	3	4	9	6	5	7	8	10	13	18	19	12	13		

(Note) Ranks up to top 15

4. Exchange Rates Used in Business Planning

4.1 Thai Baht/US Dollar

- Regarding the exchange rates used in business planning (Thai Baht/US Dollar), the predominant rates used are in a range between “No less than 35.0 but less than 35.5” (16.5%), followed by “No less than 35.5 but less than 36.0” (15.6%), with the median rate at 35.0 baht/US dollar. In the previous survey, however, the predominant answers fell in a range between “No less than 33.0 but less than 33.5” (26.1%), followed by “No less than 32.5 but less than 33.0” (19.7%), which implies that some companies have adjusted their exchange rate settings.

Industry Baht/US Dollar		Thai Baht/US Dollar, No. of firms, and (%)										Total from the Previous Survey (First Half of 2022)			
		Manufacturing								Non-manufacturing					
		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	Total
No less than 29.0 but less than 29.5		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 30.0 but less than 30.5		0	0	1	0	0	0	0	1	2	0	0	0	2	0.9 (0.4)
No less than 30.5 but less than 31.0		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 31.0 but less than 31.5		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 31.5 but less than 32.0		1	0	0	0	0	0	2	1	4	1	0	0	1	5 (2.3)
No less than 32.0 but less than 32.5		1	0	0	1	2	2	2	0	8	1	0	1	2	10 (4.6)
No less than 32.5 but less than 33.0		1	1	1	0	0	1	3	4	11	3	0	1	4	15 (6.9)
No less than 33.0 but less than 33.5		0	0	2	2	5	2	7	2	20	6	0	1	7	27 (12.4)
No less than 33.5 but less than 34.0		0	0	0	0	0	0	3	0	3	3	0	0	3	6 (2.8)
No less than 34.0 but less than 34.5		0	1	1	3	0	3	4	4	16	3	0	0	3	19 (8.7)
No less than 34.5 but less than 35.0		2	1	1	1	0	1	2	1	9	2	0	2	4	13 (6.0)
No less than 35.0 but less than 35.5		0	3	3	1	1	3	10	1	22	10	1	3	14	36 (16.5)
No less than 35.5 but less than 36.0		0	2	6	6	1	4	5	3	27	6	0	1	7	34 (15.6)
No less than 36.0 but less than 36.5		0	0	3	2	1	2	1	2	11	4	0	1	5	16 (7.3)
No less than 36.5 but less than 37.0		0	0	3	4	0	3	1	3	14	1	0	0	1	15 (6.9)
No less than 37.0 but less than 37.5		0	0	2	1	0	2	1	1	7	0	1	0	1	8 (3.7)
No less than 37.5 but less than 38.0		0	0	0	1	0	1	2	1	5	1	0	0	1	6 (2.8)
No less than 38.0 but less than 38.5		0	0	0	1	0	0	1	1	3	3	0	0	3	6 (2.8)
No. of firms		5	8	23	23	10	27	41	25	162	44	2	10	56	218
Average		33.08	34.66	35.11	35.40	34.03	35.01	34.54	34.53	34.73	33.14	36.05	30.86	32.83	33.78
Median		32.50	35.00	35.50	35.70	33.20	35.00	34.75	34.30	35.00	35.00	36.05	34.70	35.00	35.00
Mode		#N/A	35.00	36.20	36.50	33.00	34.00	35.00	32.50	35.00	35.00	#N/A	35.00	35.00	35.00

(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 that all respondents' values differ.

4.2 Japanese Yen/Thai Baht

- Regarding the exchange rates used in business planning (Japanese Yen/Thai Baht), the predominant rates used are in a range between “No less than 3.8 but less than 3.9” (21.8%), followed by “No less than 3.7 but less than 3.8” (19.1%), with the median rate at 3.70 yen/baht. In the previous survey, however, the predominant answers fell in a range between “No less than 3.5 but less than 3.6” (34.0%), followed by “No less than 3.4 but less than 3.5” (27.0%), which implies that some companies have adjusted their exchange rate settings.

Industry Yen/Baht		Japanese Yen/Thai Baht, No. of firms, and (%)										Total from the Previous Survey (First Half of 2022)			
		Manufacturing								Non-manufacturing					
		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	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)
No less than 2.7 but less than 2.8		0	0	0	0	0	1	0	0	1	0	0	0	0	1 (0.3)
No less than 2.8 but less than 2.9		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 2.9 but less than 3.0		0	1	0	0	0	0	0	0	1	0	0	0	1	0.3 (0.3)
No less than 3.0 but less than 3.1		0	0	0	1	0	0	1	0	2	0	0	0	0	2 (0.7)
No less than 3.1 but less than 3.2		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 3.2 but less than 3.3		0	0	0	0	0	1	1	0	2	0	0	0	0	2 (0.7)
No less than 3.3 but less than 3.4		1	0	0	0	0	1	4	3	9	3	0	3	6	15 (5.0)
No less than 3.4 but less than 3.5		1	0	2	3	3	5	8	2	24	5	0	3	8	32 (10.7)
No less than 3.5 but less than 3.6		1	0	3	5	2	6	9	5	31	11	2	2	15	46 (15.4)
No less than 3.6 but less than 3.7		0	0	4	2	2	5	10	2	25	10	0	1	11	36 (12.1)
No less than 3.7 but less than 3.8		2	3	7	5	2	4	9	4	36	19	0	2	21	57 (19.1)
No less than 3.8 but less than 3.9		3	3	8	7	1	7	10	9	48	10	3	4	17	65 (21.8)
No less than 3.9 but less than 4.0		0	3	2	5	3	5	2	3	23	8	0	4	12	35 (11.7)
No less than 4.0 but less than 4.1		0	0	1	1	0	0	0	0	2	2	0	0	2	4 (1.3)
No. of firms		8	10	27	29	13	35	54	30	206	68	5	19	92	298
Average		3.63	3.71	3.56	3.67	3.64	3.60	3.52	4.78	3.77	3.66	3.68	3.63	3.65	3.71
Median		3.70	3.80	3.70	3.70	3.60	3.60	3.60	3.70	3.70	3.70	3.80	3.70	3.70	3.70
Mode		3.80	3.90	3.80	3.80	3.90	3.80	3.60	3.80	3.80	3.70	3.80	3.90	3.70	3.80

(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 that all respondents' values differ.

5. Challenges for Corporate Management (multiple answers)

- The top challenge for Japanese companies' corporate management, is "Severe competition with other companies" (64%), followed by "Surging prices of raw materials and parts" (63%), "Increase in total labor cost" (39%), and "Increase in logistics cost" (36%).
- Another popular choice for firms in the manufacturing sector is "Rising energy cost" (45%), while many companies in the non-manufacturing sector also cited "Employee's job hopping" (26%) as one of the challenges.

		No. of firms and (%)			
Previous survey	Current survey	Challenges for Corporate Management	Manufacturing	Non-manufacturing	Total
2	1	Severe competition with other companies	156 (59)	157 (69)	313 (64)
1	2	Surging prices of raw materials and parts	214 (81)	95 (41)	309 (63)
4	3	Increase in total labor cost	116 (44)	74 (32)	190 (39)
3	4	Increase in logistics cost	130 (49)	48 (21)	178 (36)
5	4	Foreign exchange rate fluctuation	119 (45)	59 (26)	178 (36)
11	6	Rising energy cost	119 (45)	22 (10)	141 (29)
9	7	Shortage of engineers	77 (29)	43 (19)	120 (24)
7	8	Changes in products/users' needs	59 (22)	53 (23)	112 (23)
8	9	Enhancement of business efficiency through digitalization	44 (17)	57 (25)	101 (21)
9	10	Employee's job hopping	36 (14)	60 (26)	96 (20)
Total			1,365	890	2,255
No. of firms			263	229	492

(Note) Ranks up to top 10

6. Requests to the Thai Government

6.1 Requests to the Thai Government (multiple answers)

- "Improvement of customs duty and clearance regulations and its implementation" (35%) is most requested by the responding companies, followed by "Stabilization of foreign exchange rates" (34%) and "Development of transportation infrastructure" (34%).
- "Implementation of flood prevention measures" (31%) is also popular among the manufacturing sector, while "Relaxation of the Foreign Business Act" (25%) is another predominant request among the non-manufacturing sector.

		No. of firms and (%)			
Previous survey	Current survey	Requests to the Thai Government	Manufacturing	Non-manufacturing	Total
2	1	Improvement of customs duty and clearance regulations and its implementation	90 (37)	69 (33)	159 (35)
4	2	Stabilization of foreign exchange rates	106 (44)	48 (23)	154 (34)
5	2	Development of transportation infrastructure	78 (32)	76 (36)	154 (34)
3	4	Improvement of tax system implementation e.g. Corporate Income Tax	78 (32)	61 (29)	139 (31)
10	5	Implementation of flood prevention measures	75 (31)	45 (21)	120 (26)
1	6	Promotion of economic stimulus measures (consumption stimulus measures)	56 (23)	41 (19)	97 (21)
7	7	Relaxation of the Foreign Business Act	29 (12)	52 (25)	81 (18)
9	8	Promotion of economic ties e.g. FTA and EPA	52 (21)	21 (10)	73 (16)
10	9	Resolution of problems concerning work permit and visa issuance	20 (8)	48 (23)	68 (15)
1	10	Promotion of economic stimulus measures (tax measures)	38 (16)	26 (12)	64 (14)
Total			926	710	1,578
No. of firms			242	211	453

(Note 1) Ranks up to top 10

(Note 2) "Promotion of economic stimulus measures (e.g. public infrastructure development)," which appeared up until the previous survey, was broken down into five choices namely "Promotion of economic stimulus measures (public investment)," "Promotion of economic stimulus measures (financial assistance)," "Promotion of economic stimulus measures (tax measures)," "Promotion of economic stimulus measures (consumption stimulus measures)," and "Promotion of economic stimulus measures (others)" from this survey.

6.2 Recent Improvement in Investment Environment

(Policy Evaluation, multiple answers)

- The policy area that most of the Japanese firms recognized some improvement recently is the “Measures to address the impacts of the Covid-19” (33%), followed by “Development of transportation infrastructure” (27%), “Development of communication infrastructure” (16%), “Flood prevention measures” (13%), and “Economic ties e.g. FTA and EPA” (12%).

		No. of firms and (%)			
Previous survey	Current survey	Recent Policy Improvement	Manufacturing	Non-manufacturing	Total
1	1	Measures to address the impacts of the Covid-19	69 (31)	58 (36)	127 (33)
2	2	Development of transportation infrastructure	61 (27)	44 (28)	105 (27)
5	3	Development of communication infrastructure	29 (13)	34 (21)	63 (16)
8	4	Flood prevention measures	29 (13)	21 (13)	50 (13)
6	5	Economic ties e.g. FTA and EPA	25 (11)	22 (14)	47 (12)
4	6	Problems concerning work permit and visa issuance	36 (16)	10 (6)	46 (12)
-	7	Regulations related to green energy and its implementation	21 (9)	12 (8)	33 (9)
7	7	Maintenance of public security and safety	18 (8)	15 (9)	33 (9)
3	9	Promotion of economic stimulus measures (consumption stimulus measures)	18 (8)	13 (8)	31 (8)
9	10	Customs duty and clearance regulations and its implementation	19 (9)	10 (6)	29 (8)
Total			437	321	758
No. of firms			223	160	383

(Note 1) Ranks up to top 10

(Note 2) “Promotion of economic stimulus measures (e.g. public infrastructure development),” which appeared up until the previous survey, was broken down into five choices namely “Promotion of economic stimulus measures (public investment),” “Promotion of economic stimulus measures (financial assistance),” “Promotion of economic stimulus measures (tax measures),” “Promotion of economic stimulus measures (consumption stimulus measures),” and “Promotion of economic stimulus measures (others)” from this survey.

(Note 3) “Regulations related to green energy and its implementation” was added to the choices from this survey.

7. The Current Economic Situation

7.1 The Impact of the Soaring Prices and Shortages of Energy, Resources, and Raw Materials

- In response to a question regarding the impact of the soaring prices and shortages of energy (e.g., crude oil), resources, raw materials, etc., most firms indicated that they experience “Some negative impact” (59%) and 24% admitted that they face “Significant negative impact”. Meanwhile, 14% pointed out that there is “No impact”.

		No. of firms and (%)			
Ranking	Impact of the Soaring Prices and Shortages of Energy, Resources, and Raw Materials	Manufacturing	Non-manufacturing	Total	
1	Some negative impact	149 (58)	138 (60)	287 (59)	
2	Significant negative impact	91 (35)	26 (11)	117 (24)	
3	No impact	12 (5)	57 (25)	69 (14)	
4	Some positive impact	6 (2)	9 (4)	15 (3)	
5	Positive impact	1 (0)	0 (0)	1 (0)	
No. of firms		259	230	489	

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the First Half of 2022 (released on August 30, 2022)

- ① Some negative impact 55%
- ② Significant negative impact 29%
- ③ No impact 12%

7.2 Specific Causes (multiple answers)

- When the companies were asked to specifically identify causes of the impact that they experience in item 7.1, “Rising prices of raw materials and parts” (83%) is the respondents’ top choice, followed by “Rising energy prices” (64%) and “Increasing logistics prices” (56%).

Ranking	Specific Causes	No. of firms and (%)		
		Manufacturing	Non-manufacturing	Total
1	Rising prices of raw materials and parts	224 (90)	128 (74)	352 (83)
2	Rising energy prices	186 (75)	84 (48)	270 (64)
3	Increasing logistics prices	156 (63)	80 (46)	236 (56)
4	Shortage of raw materials and parts	76 (31)	61 (35)	137 (32)
5	Declining prices of raw materials and parts	6 (2)	5 (3)	11 (3)
6	Resolution of the raw material and parts shortage	4 (2)	2 (1)	6 (1)
7	Decreasing logistics prices	3 (1)	1 (1)	4 (1)
8	Declining energy prices	1 (0)	0 (0)	1 (0)
Total		656	361	1,017
No. of firms		248	174	422

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the First Half of 2022 (released on August 30, 2022)

- ① Rising costs of raw materials and parts 72%
- ② Increasing logistics costs 62%
- ③ Surging costs of purchase 50%
- ④ Rising energy costs 43%

7.3 The Impact of the Current Logistics Situation

- In response to a question whether the company is being affected by logistics disruption and surging transportation costs, 268 companies (56%) indicated that “The company is being affected”, whereas 207 companies (43%) said that “The company is not being affected”.

Industry	No. of firms and (%)			No. of firms
	The company is being affected	The company is not being affected	Others	
Manufacturing	165 (64)	90 (35)	2 (1)	257
Non-manufacturing	103 (47)	117 (53)	1 (0)	221
Total	268 (56)	207 (43)	3 (1)	478

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the First Half of 2022 (released on August 30, 2022)

- ① The company is being affected 73%
- ② The company is not being affected 26%

7.4 Specific Impacts of the Current Logistics Situation (multiple answers)

- Regarding the specific impacts of logistics disruption and surging transportation costs, “Rising container ship freight rates” (66%) is the most popular choice among the survey respondents, followed by “Shipment schedule delays and disruptions due to port congestion and cargo pileup” (48%) and “Increasing land freight rates” (37%).

Ranking	Specific Impacts	No. of firms and (%)		
		Manufacturing	Non-manufacturing	Total
1	Rising container ship freight rates	125 (74)	54 (53)	179 (66)
2	Shipment schedule delays and disruptions due to port congestion and cargo pileup	87 (51)	44 (43)	131 (48)
3	Increasing land freight rates	64 (38)	35 (34)	99 (37)
4	Increasing air cargo rates	57 (34)	34 (33)	91 (34)
5	Difficulty in securing spaces on container ships	39 (23)	18 (18)	57 (21)
6	Difficulty in securing spaces on cargo flights	9 (5)	5 (5)	14 (5)
7	Difficulty in securing spaces on land freight vehicles	3 (2)	0 (0)	3 (1)
-	Others	2 (1)	3 (3)	5 (2)
Total		386	193	579
No. of firms		169	102	271

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the First Half of 2022 (released on August 30, 2022)

- ① Shipment schedule delays and disruptions due to port congestion and cargo pileup 79%
- ② Rising container ship freight rates 78%
- ③ Difficulty in securing spaces on container ships 52%

8. Supply Chain Review

8.1 Important Considerations When Reviewing the Supply Chain (multiple answers)

- When reviewing the company’s supply chain, the greatest number of responding firms indicated that they place importance on “Measure to address shortage of raw materials and parts” (52%), followed by “Measure to address international logistics disruption/increasing transportation costs” (41%) and “Increase and decrease in demand” (27%).

Ranking	Important Considerations When Reviewing the Supply Chain	No. of firms and (%)		
		Manufacturing	Non-manufacturing	Total
1	Measure to address shortage of raw materials and parts	165 (64)	76 (37)	241 (52)
2	Measure to address international logistics disruption/increasing transportation costs	116 (45)	72 (35)	188 (41)
3	Increase and decrease in demand	75 (29)	49 (24)	124 (27)
4	Measure to address rising labor wage	56 (22)	40 (19)	96 (21)
5	Geopolitical risks	57 (22)	32 (15)	89 (19)
6	The company has not considered a review in particular	27 (11)	49 (24)	76 (16)
7	Request from trading partners	32 (13)	35 (17)	67 (14)
8	Decarbonization movement towards carbon neutrality	41 (16)	23 (11)	64 (14)
9	Request from the parent company	42 (16)	20 (10)	62 (13)
10	Risks of natural disaster	32 (13)	13 (6)	45 (10)
Total		674	443	1,117
No. of firms		256	208	464

(Note) Ranks up to top 10

8.2 Issues Surrounding Supply Chain Review (multiple answers)

- As for the issues the companies are facing when conducting supply chain review, the most common issue is “Difficulty in finding new trading partners” (53%), followed by “Unable to change trading partners easily even if a problem occurs” (35%) and “Unable to foresee results that could offset the costs” (24%).

No. of firms and (%)				
Ranking	Issues Surrounding Supply Chain Review	Manufacturing	Non-manufacturing	Total
1	Difficulty in finding new trading partners	133 (55)	81 (50)	214 (53)
2	Unable to change trading partners easily even if a problem occurs	96 (40)	44 (27)	140 (35)
3	Unable to foresee results that could offset the costs	62 (26)	34 (21)	96 (24)
4	Difficulty in grasping the overall supply chain	54 (22)	33 (20)	87 (21)
5	Unable to secure necessary personnel/budget	21 (9)	10 (6)	31 (8)
6	Not knowing ways to concretely carry out a review	5 (2)	18 (11)	23 (6)
-	Others	5 (2)	3 (2)	8 (2)
Total		376	223	599
No. of firms		242	163	405

8.3 Outlook on Future Business Activities

- Having considered supply chain adjustment, most of the responding companies indicated that they will “Maintain current business size” (66%) while 25% think they might “Expand the business”. Moreover, 8% hinted that they may “Expand the business (relocation from other countries to Thailand)”.

No. of firms and (%)				
Ranking	Outlook on Future Business Activities	Manufacturing	Non-manufacturing	Total
1	Maintain current business size	163 (66)	125 (66)	288 (66)
2	Expand the business	55 (22)	53 (28)	108 (25)
3	Expand the business (relocation from other countries to Thailand)	25 (10)	9 (5)	34 (8)
4	Downsize the business	4 (2)	2 (1)	6 (1)
5	Downsize the business (relocation from Thailand to other countries)	1 (0)	0 (0)	1 (0)
No. of firms		248	189	437

9. Activities Related to Carbon Neutrality

9.1 The Company's Policy Concerning Carbon Neutrality

- In response to a question regarding whether the local branch of the company has a policy concerning carbon neutrality, most firms indicated that “A policy is expected to be considered based on the headquarters' instruction or trading partner's request” (40%). Meanwhile, 32% admitted that “Nothing has been decided at the moment” and 19% stated that “A concrete policy has been decided”.

					No. of firms and (%)	
Ranking	Policy Concerning Carbon Neutrality	Manufacturing	Non-manufacturing	Total		
1	A policy is expected to be considered based on the headquarters' instruction or trading partner's request	105 (41)	90 (39)	195	(40)	
2	Nothing has been decided at the moment	55 (21)	99 (43)	154	(32)	
3	A concrete policy has been decided	69 (27)	22 (10)	91	(19)	
4	A concrete policy has not been set but it will be decided soon	27 (11)	19 (8)	46	(9)	
No. of firms		256	230	486		

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the Second Half of 2021 (released on February 1, 2022)

- ① A policy is expected to be considered based on the headquarters' instruction or trading partner's request 42%
- ② Nothing has been decided at the moment 36%
- ③ A concrete policy has not been set but it will be decided soon 11%
- ④ A concrete policy has been decided 11%

9.2 Opinion towards Efforts to Achieve Carbon Neutrality (multiple answers)

- Regarding the company's opinion towards efforts to achieve carbon neutrality, “Reducing greenhouse gas emissions according to standards specified by environmental laws/regulations at that time” (36%) is the most popular choice among the respondents, followed by “Reducing greenhouse gas emissions at an extent that is possible within the scope of daily business activities” (33%) and “Reducing greenhouse gas emissions according to standards required by trading partners” (24%).

					No. of firms and (%)	
Ranking	Opinion towards Efforts to Achieve Carbon Neutrality	Manufacturing	Non-manufacturing	Total		
1	Reducing greenhouse gas emissions according to standards specified by environmental laws/regulations at that time	105 (41)	67 (30)	172	(36)	
2	Reducing greenhouse gas emissions at an extent that is possible within the scope of daily business activities	68 (25)	98 (42)	156	(33)	
3	Reducing greenhouse gas emissions according to standards required by trading partners	67 (26)	49 (22)	116	(24)	
4	Reducing greenhouse gas emissions in an amount that exceeds standards specified by environmental laws/regulations at that time or standards required by trading partners	69 (27)	23 (10)	92	(19)	
5	The company does not feel the necessity of taking any initiative in particular	14 (6)	26 (12)	40	(8)	
6	Entering a business that contributes to greenhouse gas reduction and positioning it as a new core business	13 (5)	17 (8)	30	(6)	
7	The company does not feel the necessity of taking additional initiatives since the current efforts are adequate	4 (2)	5 (2)	9	(2)	
-	Others	8 (1)	1 (0)	4	(1)	
Total		338	281	619		
No. of firms		254	223	477		

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the Second Half of 2021 (released on February 1, 2022)

- ① Reducing greenhouse gas emissions according to standards specified by environmental laws/regulations at that time 35%
- ② Reducing greenhouse gas emissions at an extent that is possible within the scope of daily business activities 31%
- ③ Reducing greenhouse gas emissions according to standards required by trading partners 28%

9.3 Activities Related to Carbon Neutrality (multiple answers)

➤ The Japanese companies' top choice of carbon neutrality-related activities is “Replacing or upgrading to energy-saving equipment” (46%), followed by “Introducing renewable energy such as generating electricity with solar energy” (37%) and “Promoting proper disposal and reduction of industrial waste/recycling of recyclable waste” (31%).

Ranking	Activities Related to Carbon Neutrality	No. of firms and (%)					
		Manufacturing		Non-manufacturing		Total	
1	Replacing or upgrading to energy-saving equipment	150	(62)	42	(24)	192	(46)
2	Introducing renewable energy such as generating electricity with solar energy	132	(55)	23	(13)	155	(37)
3	Promoting proper disposal and reduction of industrial waste/recycling of recyclable waste	86	(36)	44	(25)	130	(31)
4	Grasping the amount of the company's greenhouse gas emissions	100	(41)	27	(15)	127	(31)
5	Organizing/participating in seminars or webinars concerning approaches towards carbon neutrality	68	(28)	49	(28)	117	(28)
6	Optimizing the operation of equipment	89	(37)	27	(15)	116	(28)
7	Appointing a person in charge or establishing a department responsible for environmental activities	82	(34)	29	(17)	111	(27)
8	Setting behavioral targets related to greenhouse gas	86	(36)	20	(11)	106	(25)
9	Using raw materials and parts with low environmental impact	39	(16)	28	(16)	67	(16)
10	Introducing electric cars/fuel cell electric cars/hybrid cars	39	(16)	24	(14)	63	(15)
Total		899		339		1,238	
No. of firms		241		175		416	

(Note) Ranks up to top 10

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the Second Half of 2021 (released on February 1, 2022)

- ① Replacing or upgrading to energy-saving equipment 40%
- ② Introducing renewable energy such as generating electricity with solar energy 34%
- ③ Promoting proper disposal and reduction of industrial waste/recycling of recyclable waste 32%

9.4 Issues Surrounding Efforts to Achieve Carbon Neutrality (multiple answers)

- On the other hand, the top issue affecting the firm's efforts to achieve carbon neutrality is that they are “Unable to pass through costs to prices of products/services” (44%). Moreover, they have “Insufficient specialized knowledge and personnel, including know how for the implementation” (41%) and they also indicated that they are “Unable to foresee results that could offset the costs” (36%).

Ranking	Issues Surrounding Efforts to Achieve Carbon Neutrality	No. of firms and (%)					
		Manufacturing		Non-manufacturing		Total	
1	Unable to pass through costs to prices of products/services	131	(55)	60	(31)	191	(44)
2	Insufficient specialized knowledge and personnel, including know how for the implementation	108	(45)	70	(36)	178	(41)
3	Unable to foresee results that could offset the costs	99	(41)	56	(29)	155	(36)
3	Not knowing the level to which the company needs to take actions	78	(39)	77	(40)	155	(36)
5	The priority is low	19	(8)	37	(19)	56	(13)
6	The necessity to develop technology that is difficult to carry out by one company alone	22	(9)	17	(9)	39	(9)
7	Unable to bear the costs due to inadequate funding	19	(8)	12	(6)	31	(7)
8	Building consensus within the company	9	(4)	12	(6)	21	(5)
9	Unable to allocate time	9	(4)	11	(6)	20	(5)
10	Not knowing which organization to consult	7	(3)	6	(3)	13	(3)
Total		505		359		864	
No. of firms		239		193		432	

(Note) Ranks up to top 10

(Reference) The result of the Survey on Business Sentiment of Japanese Corporations in Thailand for the Second Half of 2021 (released on February 1, 2022)

- ① Unable to pass through costs to prices of products/services 40%
- ② Unable to foresee results that could offset the costs 39%
- ③ Insufficient specialized knowledge and personnel, including know how for the implementation 37%