

KIET Manufacturing Business Survey Index (BSI) for the 2nd Quarter 2020

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1. Overview

The overall composite Business Survey Index for the manufacturing sector in Q2 2020 remained under the baseline (100). Moreover, all feeder indices have worsened compared to the previous quarter. Specifically, business conditions (69), sales (68), domestic demand (69), exports (69), ordinary profit (70), and operation ratio of facilities (76) in the manufacturing sector have decreased in this quarter. The BSI

outlook for the 3rd quarter of 2020 indicates that the business environment for manufacturers will remain at a similar condition compared to the 2nd quarter. To wit, all BSI outlook indices excepting inventory (100) are projected to be under the baseline, and most importantly, all BSI outlook indices are projected to slightly decrease quarter on quarter. These means that the overall outlook for business conditions and domestic demand does not look very promising in the next quarter.

Table 1. Business Survey Indices for the Manufacturing Sector

	2019			2020		
	2/4	3/4	4/4	1/4	2/4	3/4
Business conditions	88 (98)	78 (90)	84 (87)	71 (86)	69 (84)	(84)
Sales	95 (102)	78 (96)	85 (88)	70 (86)	68 (88)	(85)
Domestic demand	92 (100)	80 (95)	86 (88)	71 (86)	69 (88)	(84)
Exports	96 (101)	92 (98)	90 (96)	75 (94)	69 (87)	(84)
Ordinary profit	88 (95)	78 (91)	85 (86)	74 (87)	70 (87)	(83)
Facilities investment	99 (101)	94 (98)	101 (94)	97 (100)	95 (97)	(96)
Operation ratio of facilities	94 (101)	85 (96)	90 (91)	80 (92)	76 (93)	(90)
Inventory	103 (101)	99 (101)	104 (98)	100 (100)	103 (100)	(100)
Employment	96 (100)	93 (98)	99 (94)	96 (98)	91 (97)	(96)
Financial condition	85 (91)	84 (87)	83 (86)	74 (85)	74 (83)	(83)

Note : 1) Figures in () represent outlooks.

2. Sales BSI and Outlook by Industry

In Q2 2020, sales indices in most industries

have worsened compared to the previous quarter. Despite some improvements in several industries, sales indices in most indus-

Table 2. Sales BSI by Industry

	2019			2020		
	2/4	3/4	4/4	1/4	2/4	3/4
Overall	95 (102)	78 (96)	85 (88)	70 (86)	68 (88)	(85)
Electronics*	95 (112)	- (107)	- -	- -	- -	-
Semiconductors	95 (95)	73 (94)	85 (82)	74 (89)	82 (93)	(97)
Automobiles	92 (95)	74 (92)	87 (90)	58 (90)	37 (79)	(68)
Shipbuilding	110 (99)	84 (99)	86 (87)	76 (89)	76 (81)	(75)
General machinery	95 (104)	75 (89)	87 (83)	70 (88)	67 (85)	(86)
Steel	92 (101)	84 (89)	83 (93)	66 (83)	58 (85)	(57)
Chemicals	98 (103)	85 (102)	89 (88)	81 (93)	70 (96)	(75)
Electricity*	90 (106)	- (94)	- -	- -	- -	-
Precision machines*	103 (122)	- (107)	- -	- -	- -	-
Textiles	83 (100)	63 (87)	76 (86)	50 (80)	55 (65)	(83)
Nonmetallic minerals*	97 (107)	- (98)	- -	- -	- -	-
Displays**	- -	78 -	73 (82)	78 (75)	72 (99)	(97)
Electronic products**	- -	69 -	81 (78)	58 (83)	68 (87)	(84)
Wireless communication products**	- -	92 -	89 (102)	68 (80)	95 (93)	(111)
Refined petroleum products**	- -	80 -	90 (96)	67 (82)	68 (86)	(100)
Bio/Health care**	- -	99 -	105 (105)	68 (107)	91 (82)	(94)
Secondary batteries**	- -	81 -	89 (96)	78 (96)	60 (89)	(100)
ICT	95 (103)	77 (100)	83 (89)	67 (83)	80 (92)	(97)
Heavy-chemical industry	96 (102)	- (95)	- -	- -	- -	-
Light industry	90 (99)	- (94)	- -	- -	- -	-
Material industry	- -	77 -	83 (89)	65 (85)	65 (81)	(78)
Machinery industry	- -	76 -	87 (86)	67 (89)	54 (82)	(76)
New industries	- -	95 -	101 (104)	70 (105)	83 (84)	(95)
Large companies	104 (110)	94 (101)	96 (100)	74 (97)	74 (90)	(92)
Small and medium-sized enterprises (SMEs)	92 (103)	77 (94)	85 (87)	66 (87)	64 (83)	(81)

Note : 1) Figures in () represent projections.

2) Due to reforms made to the survey panel and the reorganization of industries, direct quarterly comparisons of indices may not be statistically significant.

3) *represent industries surveyed prior to reforms, while ** represent industries surveyed following reforms to the survey methodology.

tries stayed under the baseline. Above all, the decline in the automobiles (37), textiles (55) and steel (58) industries is noticeable. The sales outlook for the next quarter predicts all groups will post lower-than-baseline figures save only for wireless communication products (111), refined petroleum products (100) and secondary batteries (100). In particular, the most of machinery and material industries such as automobiles, shipbuilding, steel, chemicals and others are all expected to record decreases from the previous quarter.

3. Exports BSI and Outlook by Industry

The overall export indices of manufacturing industries for the 2nd quarter indicate gloomy conditions, much as they were in the quarter previous. Most feeder indices have slightly worsened compared to the previous quarter. Particularly, automobiles (34), textiles (40) and steel (52) showed dramatic decreases among all industries. The outlook for the 3rd quarter expect to get even worse this quarter, as many industries are forecasted to post below-baseline performances. In particular the automobiles, steel, and chemicals industries and SMEs are set to deliver conspicuously poor export performances. Only the semiconductors, wireless communication products, refined petroleum products, and ICT industries are expected to stay above the baseline.

4. Industrial Weather Chart for the 2nd Quarter 2020

Overall, it is clear that indices gauging sales, domestic demand and ordinary profits in the manufacturing sector in Q2 2020 have been stagnant. And it is clear that conditions have worsened since last quarter. Specifically, the BSI for most manufacturing activities remained lower than the baseline figure of 100. Only the facilities investment of displays, wireless communication products, bio/health care, and new industries improved compared to the previous quarter. On the other hand, sales, domestic demand, exports and ordinary profit in most industries showed continued weak economic performance given the business climate. In particular, the major indices of the automobiles, steel, and textile industries have been unfavorable, especially compared to other industries.

5. Industrial Weather Forecast for the 3rd Quarter 2020

Overall BSI figures for Q3 2020 do not suggest an optimistic business climate. In particular, major indices of most industries are expected to post figures under the baseline, except for the wireless communication products, refined petroleum products, secondary batteries and ICT industries. Most major indices are expected to stay below the baseline;

Table 3. Exports BSI by Industry

	2019			2020		
	2/4	3/4	4/4	1/4	2/4	3/4
Overall	96 (103)	92 (98)	90 (96)	75 (94)	69 (87)	(84)
Electronics*	96 (116)	- (104)	- -	- -	- -	-
Semiconductors	88 (112)	93 (92)	96 (93)	83 (104)	91 (91)	(100)
Automobiles	98 (100)	90 (96)	92 (96)	65 (94)	34 (77)	(63)
Shipbuilding	106 (98)	101 (100)	81 (99)	84 (99)	83 (89)	(85)
General machinery	93 (106)	88 (91)	84 (91)	73 (93)	62 (84)	(80)
Steel	94 (102)	94 (91)	86 (99)	74 (88)	52 (80)	(48)
Chemicals	101 (102)	93 (104)	90 (95)	85 (100)	70 (95)	(71)
Electricity*	92 (100)	- (95)	- -	- -	- -	-
Precision machines*	96 (107)	- (103)	- -	- -	- -	-
Textiles	95 (106)	92 (93)	85 (97)	55 (86)	40 (65)	(81)
Nonmetallic minerals*	99 (100)	- (101)	- -	- -	- -	-
Displays**	- -	84 -	67 (92)	71 (69)	81 (96)	(98)
Electronic products**	- -	91 -	82 (91)	59 (95)	60 (84)	(95)
Wireless communication products**	- -	97 -	93 (103)	75 (89)	77 (86)	(119)
Refined petroleum products**	- -	89 -	103 (96)	76 (92)	78 (91)	(100)
Bio/Health care**	- -	100 -	111 (103)	77 (109)	82 (93)	(89)
Secondary batteries**	- -	86 -	100 (98)	75 (102)	70 (86)	(93)
ICT	91 (114)	92 (98)	85 (95)	70 (92)	86 (88)	(100)
Heavy-chemical industry	97 (102)	- (97)	- -	- -	- -	-
Light industry	96 (95)	- (98)	- -	- -	- -	-
Material industry**	- -	93 -	88 (97)	71 (92)	64 (80)	(72)
Machinery industry**	- -	91 -	86 (94)	72 (94)	51 (82)	(74)
New industry**	- -	97 -	109 (102)	76 (108)	79 (91)	(90)
Large companies	102 (102)	99 (102)	93 (102)	77 (97)	67 (90)	(88)
Small and medium-sized enterprises (SMEs)	95 (103)	92 (96)	89 (95)	71 (94)	61 (83)	(78)

Note : 1) Figures in () represent projections.

2) Due to the reform of the survey panel and the reorganization of industries, direct quarterly comparisons of indices not be statistically significant.

3) * represent industries surveyed prior to reforms, while ** represent industries surveyed following reforms to the survey methodology.

moreover they should post figures measurably worse than those recorded in the previous

quarters. However, some of the major indices in several industries in ICT and new industry

Table 4. Major Index Components of Current Manufacturing Activity

	Sales	Domestic Demand	Exports	Ordinary Profit	Facilities Investment	Employment
Overall	68	69	69	70	95	91
Semiconductors	82	81	91	75	98	90
Displays**	72	71	81	88	101	94
Wireless communication products**	95	99	77	83	100	95
Electronic products**	68	77	60	68	98	93
Automobiles	37	41	34	45	82	75
Shipbuilding	76	83	83	82	95	98
General machinery	67	69	62	65	93	95
Refined petroleum products**	68	72	78	82	99	99
Chemicals	70	71	70	74	93	94
Steel	58	56	52	59	98	93
Textiles	55	57	40	55	93	85
Bio/Health care**	91	89	82	94	102	98
Secondary batteries**	60	60	70	62	97	95
ICT	80	80	86	78	99	91
Machinery industry**	54	57	51	58	88	86
Material industry**	65	66	64	70	95	94
New industries**	83	81	79	86	101	98
Large companies	74	78	67	79	87	91
Small and medium-sized enterprises (SMEs)	64	66	61	66	95	91
Domestic-oriented	66	68	64	68	95	91
Export-oriented	60	64	58	62	90	89

Note : 1) 115 above, 100~115, 85~100, 85 below.
 2) ** represent industries surveyed following reforms to the survey methodology.

sectors improved modestly compared to the previous quarter. It was a weak, though clearly positive signal for a return to a favorable economic environment.

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Table 5. Major Index Components of the Manufacturing Outlook

	Sales	Domestic Demand	Exports	Ordinary Profit	Facilities Investment	Employment
Overall	85 ☁️	84 ☁️	84 ☁️	83 ☁️	96 ☁️	96 ☁️
Semiconductors	97 ☁️	93 ☁️	100 🌤️	96 ☁️	101 🌤️	102 🌤️
Displays**	97 ☁️	95 ☁️	98 ☁️	98 ☁️	104 🌤️	102 🌤️
Wireless communication products**	111 🌤️	109 🌤️	119 🌞	100 🌤️	102 🌤️	103 🌤️
Electronic products**	84 ☁️	88 ☁️	95 ☁️	81 ☁️	94 ☁️	95 ☁️
Automobiles	68 ☁️	68 ☁️	63 ☁️	64 ☁️	84 ☁️	81 ☁️
Shipbuilding	75 ☁️	80 ☁️	85 ☁️	78 ☁️	97 ☁️	93 ☁️
General machinery	86 ☁️	85 ☁️	80 ☁️	82 ☁️	96 ☁️	97 ☁️
Refined petroleum products**	100 🌤️	99 ☁️	100 🌤️	96 ☁️	97 ☁️	96 ☁️
Chemicals	75 ☁️	77 ☁️	71 ☁️	75 ☁️	93 ☁️	97 ☁️
Steel	57 ☁️	56 ☁️	48 ☁️	55 ☁️	95 ☁️	90 ☁️
Textiles	83 ☁️	84 ☁️	81 ☁️	83 ☁️	94 ☁️	91 ☁️
Bio/Health care**	94 ☁️	91 ☁️	89 ☁️	93 ☁️	101 🌤️	98 ☁️
Secondary batteries**	100 🌤️	96 ☁️	93 ☁️	97 ☁️	102 🌤️	100 🌤️
ICT	97 ☁️	94 ☁️	100 🌤️	95 ☁️	101 🌤️	102 🌤️
Machinery industry**	76 ☁️	76 ☁️	72 ☁️	73 ☁️	90 ☁️	89 ☁️
Material industry**	78 ☁️	79 ☁️	74 ☁️	77 ☁️	95 ☁️	94 ☁️
New industries**	95 ☁️	93 ☁️	90 ☁️	94 ☁️	101 🌤️	98 ☁️
Large companies	92 ☁️	90 ☁️	88 ☁️	86 ☁️	94 ☁️	93 ☁️
Small and medium-sized enterprises (SMEs)	81 ☁️	81 ☁️	78 ☁️	79 ☁️	95 ☁️	94 ☁️
Domestic-oriented	82 ☁️	82 ☁️	80 ☁️	80 ☁️	96 ☁️	94 ☁️
Export-oriented	82 ☁️	80 ☁️	80 ☁️	79 ☁️	92 ☁️	91 ☁️

Note : 1) 🌞 115 above, 🌤️ 100~115, ☁️ 85~100, ☁️ 85 below.
 2) ** represent industries surveyed following reforms to the survey methodology.

< Appendix >

Outline of KIET Quarterly Manufacturing Business Survey Index

- BSI figures were compiled through surveys completed by representatives at 1007 domestic manufacturing firms, with 90.4 percent of the respondents who complied with the survey identifying as a small or medium-sized enterprise. The survey was conducted from June 8 to 19, 2020.
- The questionnaire issued comprises 10 sections on business conditions, sales, domestic demand, exports, ordinary profit, facilities investment, operation ratio of facilities, inventory, employment, and financial conditions. This survey is intended to assess quarterly performance and grasp the economic climate of the upcoming quarter.