Business Survey Index (BSI) and Economic Sentiment Index (ESI) for December 2020

☐ The Business Survey Index (BSI) on business conditions in the manufacturing sector for December 2020 was 82, down 3 points from the previous month, and that for the outlook for the following month also fell by 4 points to 77.

※ After seasonal adjustment, the BSI for December 2020 was 83, down 2 points from November 2020, and that for the outlook for the following month also fell by 6 points to 78.

☐ In the non-manufacturing sector, the BSI on business conditions for December 2020 was 68, down 5 points from the previous month, and that for the outlook for the following month also fell by 8 points to 64.

※ After seasonal adjustment, the BSI for December 2020 was 67, down 6 points from December 2020, and that for the outlook for the following month fell by 8 points to 65.

☐ The Economic Sentiment Index (ESI)－a composite of the BSI and the CSI (Consumer Survey Index)－ for December 2020 was 82.5, down 6.6 points from November 2020.

Major Index Components

			avg.[1]	2020						2021		Month-on-month changes
				Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
BSI[3]	Manu-facturing	Business conditions	79 (82)	51 (49)	59 (51)	66 (61)	68 (68)	79 (68)	85 (76)	82 (81)	(77)	−3 (−4)
		S.A.	79 (82)	51 (45)	59 (51)	68 (63)	68 (68)	79 (70)	85 (78)	83 (84)	(78)	−2 (−6)
		Export-oriented	83 (85)	59 (53)	64 (60)	72 (68)	74 (74)	82 (75)	93 (80)	89 (86)	(88)	−4 (+2)
		Domestic demand-oriented	77 (80)	47 (46)	55 (46)	62 (56)	63 (64)	77 (64)	79 (74)	78 (78)	(70)	−1 (−8)
		Sales	91 (94)	53 (48)	63 (53)	66 (64)	66 (69)	78 (68)	83 (79)	81 (83)	(81)	−2 (−2)
		Profitability	84 (86)	78 (74)	82 (78)	80 (82)	82 (82)	87 (82)	89 (86)	86 (87)	(85)	−3 (−2)
		Raw material purchase prices	118 (116)	108 (103)	108 (108)	111 (109)	112 (109)	114 (111)	112 (112)	117 (111)	(117)	+5 (+6)
		Sales prices	95 (96)	90 (87)	91 (89)	90 (93)	93 (92)	94 (92)	96 (94)	96 (95)	(95)	0 (0)
	Non-manu-facturing	Business conditions	75 (77)	60 (56)	65 (59)	66 (63)	62 (69)	69 (62)	73 (69)	68 (72)	(64)	−5 (−8)
		S.A.	75 (77)	60 (52)	66 (59)	68 (66)	62 (71)	70 (62)	73 (69)	67 (73)	(65)	−6 (−8)
ESI			-	63.1	72.8	79.7	73.2	85.9	89.1	82.5	-	−6.6
	Cyclical component of ESI[4]		-	69.6	71.1	73.5	76.5	79.7	83.0	86.3	-	+3.3

Notes: 1) Long-term average from January 2003 to December 2019, updated annually.
2) The BSI after July 2020 are surveyed by new samples due to sample reorganization.
3) 3,255 companies were surveyed during December 14 to 21, among which 2,808 responded.
4) Obtained by removing seasonal and irregular components from the ESI.
5) Figures in ( ) represent the outlooks.

Overview of Business Survey Index

☐ What it means

– The Business Survey Index (BSI) is compiled to grasp the business conditions for the current month and their outlook for the month following, by conducting surveys on entrepreneurs' perceptions of them.

☐ What is surveyed

– A total of 15 items, including business conditions, sales and profitability, are surveyed at 3,255 corporations, which are selected using stratified systematic sampling and fall into the following classifications per the 10th revision of the KSIC (Korean Standard Industrial Classification):

o Manufacturing industry: 23 sub-sectors* classified by sections

* Manufacture of tobacco products has been included in the 'other manufacturing' sub-sector from July 2012.

o Non-manufacturing industry: 13 sub-sectors* classified by divisions

* The 'sewerage, waste management and materials recovery activities' sub-sector has been added and compiled from July 2012.

		Items Surveyed	Periods Surveyed
Level		business conditions (overall conditions), inventories[1)], facilities investment, production facilities[1)], labor force situation[1)]	conditions for current month and outlooks for following month
Change	Year-on-year	new orders, production, sales (domestic and exports), capacity utilization	
	Month-on-month	sales prices, raw material purchase prices, profitability, financial situation	
Other		operational difficulties	

Note: 1) These items are countercyclical series, in that their values fall during cyclical upturns and rise during downturns.

☐ How it is compiled

– The survey responses are translated into indices in accordance with the following formulas:

o Sub-sector BSI*

$$= \frac{\text{number of companies responding 「up/above normal」} - \text{number of companies responding 「down/below normal」}}{\text{total number of companies responding}} \times 100 + 100$$

* A BSI reading of 100, equivalent to the benchmark, implies that the number of firms whose responses were positive was equal to that of the negative ones; a reading above (below) 100 indicates the number of firms responding positively to have exceeded (has been less than) that of the negatively responding ones.

o Industry (manufacturing/non-manufacturing) BSI = $\sum_{i=1}^{n} w_i \cdot BSI_i$,

where w_i: each sub-sector's GDP weight

BSI_i: each sub-sector's BSI

Overview of Economic Sentiment Index

□ What it is

– The Economic Sentiment Index (ESI), a composite of the BSI (business survey index) and the CSI (consumer survey index), is compiled to comprehensively grasp the private sector perception of economic conditions, including the sentiments of both businesses and consumers.

□ What it means

– An ESI reading above 100 is interpreted as meaning that economic sentiment in the private sector, including that of both businesses and consumers, is on a level better than past averages (and vice versa when the reading is below 100), since the ESI is constructed so that it is distributed around a long-term mean of 100 and a standard deviation of 10.

* BSI and CSI readings of 100 imply, as defined by their formulas, that the shares of positive and negative responses are equal.

o A long-term mean of 100 implies that the mean of ESI values is 100 over the standardization interval, from January 2003 to December 2019 – the period for which BSI and CSI time series data are obtainable.

o The cyclical component of the ESI is compiled to track the cyclical patterns of economic sentiment, and is calculated by removing seasonal and irregular components from its original series.

□ How it is compiled

– The ESI is calculated by first choosing seven component indices that are highly responsive to the economy, from among the 32 BSI and 17 CSI component indices, weighted averaging each of their standardized indices, and then scaling the index so that it will have a long-term mean of 100 and a standard deviation of 10.

o The component indices and their weights are selected so that the ESI will be highly correlated with and responsive to GDP, a representative indicator of the real economy.

ESI Component Indices and their Weights

		Component Indices[1)]	Weights	
BSI	Manufacturing	Exports	0.150	0.45
		Capacity utilization	0.150	
		Financial situation	0.150	
	Non-manufacturing	Business conditions	0.150	0.30
		Financial situation	0.150	
CSI		Household income	0.125	0.25
		Spending decisions	0.125	

Note: 1) Each index is based on the outlooks for each of the components — those of the BSI component indices are for the following month and those of the CSI for six months ahead.

※ More detailed statistics can be found at the Bank of Korea's Economic Statistics System, http://ecos.bok.or.kr.