

Deteriorating trend in manufacturing industry continues

~ Marginal improvement overall for the first time in nine months ~

e-mail : keiki@mail.tdb.co.jp

(Companies researched: 23,638; Valid responses: 10,007; Response rate: 42.3%; Survey start date: May 2002)

< Overview of August 2019: Possibility of entering a recession phase >

The economic diffusion index (DI) in August 2019 was 44.7, up 0.1 point from the previous month, and improved for the first time in nine months. While the possibility of entering a recession phase has increased in the domestic economy due to continuing export deceleration and a decline in motivation for investment, increased public works had an upward effect.

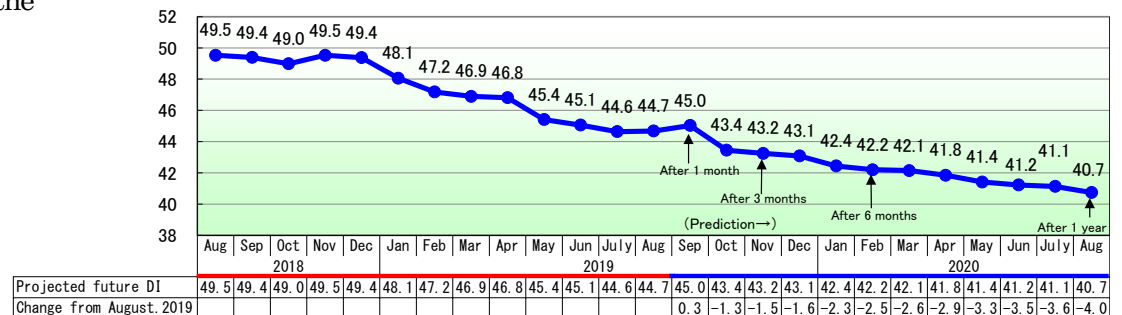
< Future outlook: Uncertainty has further intensified >

With overseas risks in addition to the decrease in consumption and increasing cost burden after the consumption tax hike, uncertainty about the domestic economy has further intensified.

By industry : While four of the ten industries improved, six industries, including manufacturing, worsened.

By size : Small-sized enterprises improved for the first time in nine months.

By region : Six of the ten regions improved. Advancement of schedules of public works was a positive factor.



*: Economic DIs are calculated based on the structural ARIMA model, in which economic statistics are incorporated to the ARIMA model.

Economic Diffusion Index (Economic DI)1/2

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Ratio to the PrFDious Month
Total	49.5	49.4	49.0	49.5	49.4	48.1	47.2	46.9	46.8	45.4	45.1	44.6	44.7	0.1
Large Firms	51.6	51.4	51.4	51.4	51.7	50.6	49.8	49.8	49.7	48.8	48.7	47.7	47.9	0.2
Small to Medium-sized Firms	49.0	48.9	48.4	49.0	48.8	47.4	46.5	46.2	46.1	44.6	44.2	43.9	43.9	0.0
Micro Firms	48.4	48.4	47.9	48.2	48.2	47.0	46.5	46.3	46.2	44.5	44.1	43.8	44.2	0.4

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Ratio to the PrFDious Month	
Agriculture,Forestry,Fisheries	45.7	43.8	41.5	40.7	40.7	41.8	41.7	42.3	41.3	40.5	43.2	39.1	41.5	2.4	
Finance	47.5	48.5	46.2	47.1	46.5	46.1	45.2	45.9	45.1	44.7	44.8	45.1	44.7	▲ 0.4	
Construction	53.1	53.8	53.4	53.9	54.1	53.9	53.6	53.6	52.8	51.7	51.6	51.7	52.1	0.4	
Real Estate	51.1	50.7	49.3	49.3	49.7	49.1	47.5	47.4	48.7	47.6	48.3	47.4	46.5	▲ 0.9	
Manufacturing	Food,BEWerages,Livestock Feed	43.3	42.9	42.0	42.4	43.0	41.6	40.6	42.2	41.3	40.3	40.4	41.1	0.7	
	Textile,Textile Products,Clothing	41.8	41.9	41.4	41.6	41.3	37.7	38.8	39.2	39.0	36.6	36.5	36.4	0.5	
	Construction Materials,Furniture,Ceramics,Stone and Clay Products	45.6	45.2	46.1	47.5	48.3	47.1	45.5	44.1	45.7	45.4	43.5	43.8	45.2	1.4
	Pulp, Paper and Paper Products	44.5	45.4	44.3	46.5	49.3	44.6	45.2	44.1	45.7	43.0	41.7	39.6	42.3	2.7
	Publishing,Printing	33.8	34.6	33.2	34.8	35.0	33.5	33.2	34.4	35.6	34.3	33.9	32.5	33.1	0.6
	Chemical	51.3	51.4	50.4	51.4	50.2	48.1	46.3	45.4	46.2	43.9	42.5	41.9	41.8	▲ 0.1
	Steel,Nonferrous Metals,Mining	54.2	52.8	53.0	54.4	52.5	50.4	48.0	45.4	45.5	42.9	41.8	41.5	41.2	▲ 0.3
	General Machinery	59.9	59.1	58.1	57.5	55.9	52.5	51.4	48.9	49.0	46.0	45.1	44.0	41.5	▲ 2.5
	Electrical Machinery	52.0	53.3	52.9	52.5	50.5	49.2	47.6	46.0	44.7	43.1	43.0	42.8	43.9	1.1
	Transportation Machinery,Equipment	58.7	58.3	56.9	56.4	53.8	52.3	50.9	49.3	49.4	48.1	47.5	46.4	43.4	▲ 3.0
	Precision Machinery,Medical Instruments and Equipment	54.8	54.3	53.7	53.4	54.0	51.3	48.6	45.5	47.3	44.4	42.4	43.9	43.4	▲ 0.5
	Other	40.7	42.6	42.8	41.8	42.8	42.7	42.1	45.3	40.2	40.2	40.2	38.0	40.7	2.7
Total	50.2	50.0	49.5	50.0	49.2	47.1	45.8	44.5	44.8	42.9	42.0	41.5	41.4	▲ 0.1	
Wholesale	Food,BEWerages	41.9	41.3	40.6	41.9	41.1	39.4	40.5	41.1	40.8	40.4	38.8	39.0	0.2	
	Textile,Textile Products,Clothing	37.3	35.1	35.3	33.5	34.3	34.0	32.0	33.6	33.2	33.2	31.6	29.8	30.8	1.0
	Construction Materials,Furniture,Ceramics,Stone and Clay Products	44.2	44.8	43.9	46.9	47.8	47.4	46.5	46.4	45.6	44.7	43.8	44.7	44.6	▲ 0.1
	Paper Products,Stationery,Books	36.6	36.9	36.5	38.1	39.3	37.9	36.0	39.0	39.2	39.0	36.4	37.0	37.1	0.1
	Chemical	48.1	47.1	47.0	47.8	47.7	45.3	44.3	44.2	44.2	41.8	41.2	42.7	42.0	▲ 0.7
	Recycled Resources	51.2	47.8	49.4	44.0	47.6	39.8	45.6	48.6	41.0	40.2	37.1	32.8	32.8	0.0
	Steel,Nonferrous Metals,Mining Products	50.3	49.2	49.4	48.8	50.2	46.3	45.0	43.7	43.4	40.8	40.4	39.0	38.8	▲ 0.2
	Machinery,Equipment	51.0	50.2	49.6	49.9	50.0	48.4	46.9	46.5	45.9	44.2	44.4	43.8	43.3	▲ 0.5
	Other	42.4	42.4	43.4	44.0	43.9	41.9	41.2	42.5	42.7	40.6	40.6	40.2	40.2	0.0
Total	46.3	45.6	45.4	46.0	46.3	44.4	43.6	43.7	43.3	41.9	41.4	41.0	40.8	▲ 0.2	

Economic Diffusion Index (Economic DI)2/2

		Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Ratio to the PrFDious Month
Retail	Food,BEWerages	45.3	45.7	44.4	45.5	42.8	43.4	41.5	42.5	42.5	44.8	42.9	41.5	41.3	▲ 0.2
	Textile,Textile Products,Clothing	32.7	30.6	32.7	31.3	34.0	30.9	32.7	38.9	39.1	36.9	36.6	34.6	36.5	1.9
	Drugs,Sundries	41.3	40.2	38.4	42.4	44.4	44.8	39.7	39.7	40.9	41.0	38.5	40.0	37.7	▲ 2.3
	Furniture	37.0	37.0	37.9	37.5	35.4	38.9	33.3	33.3	38.9	39.6	48.5	40.9	45.0	4.1
	Electrical Household Appliances, Information Machinery and Equipment	43.7	42.8	40.6	39.7	43.1	39.0	40.7	38.9	41.7	39.1	43.5	34.3	38.9	4.6
	Motor Vehicles,Motor Vehicle Parts	43.5	46.1	40.8	41.5	42.2	44.6	44.3	45.2	43.3	41.5	42.5	39.2	41.1	1.9
	Special Merchandise	39.1	39.1	39.7	43.3	43.2	41.9	41.3	40.8	42.1	41.3	41.1	40.6	40.7	0.1
	Various Merchandise	46.5	43.6	46.4	43.6	44.7	42.9	41.9	43.5	43.3	43.8	44.7	39.3	38.9	▲ 0.4
	Other	40.5	38.9	41.7	38.1	35.7	35.7	31.3	33.3	43.8	39.6	46.3	41.7	41.7	0.0
	Total	41.7	41.6	40.9	42.1	42.3	41.6	40.8	41.4	42.1	41.6	42.0	39.5	40.2	0.7
Transportation,Warehousing		50.3	49.5	48.7	50.1	50.5	49.1	48.2	48.1	48.2	46.7	45.6	44.5	45.5	1.0
Service	Restaurants	42.5	39.3	37.0	37.6	40.7	37.9	41.0	37.8	42.9	40.6	42.9	39.6	38.1	▲ 1.5
	Postal,Telecommunications	55.0	56.1	59.7	57.1	54.5	60.0	57.6	62.1	57.6	56.7	60.0	58.3	60.6	2.3
	Electricity,Gas,Water,Heat	57.4	59.3	56.7	57.1	61.9	57.4	57.4	56.3	58.3	55.6	54.5	54.2	52.6	▲ 1.6
	Leasing,Rentals	54.2	55.9	56.5	57.1	55.7	55.0	52.0	52.7	54.1	50.9	52.5	51.8	51.7	▲ 0.1
	Lodging, Hotels	46.6	43.6	41.0	45.5	45.7	44.9	44.2	42.3	41.0	50.0	44.9	40.3	39.9	▲ 0.4
	Recreation	40.0	39.9	35.5	40.6	39.3	38.9	37.8	41.0	38.8	42.0	41.5	41.8	40.9	▲ 0.9
	Broadcasting	38.5	41.7	40.5	40.0	36.7	40.5	44.4	43.3	41.7	44.1	43.3	41.1	45.2	4.1
	Maintenance,Guarding,Testing	52.3	51.8	51.4	51.6	50.7	50.7	51.0	50.0	48.1	48.2	48.8	49.3	49.8	0.5
	Advertising	41.4	42.3	42.3	41.2	41.7	40.4	40.1	40.3	40.7	40.5	40.7	40.4	38.9	▲ 1.5
	Information	59.1	59.7	59.8	60.7	59.3	60.1	59.0	60.3	59.6	58.0	57.8	58.5	58.7	0.2
	Labor Dispatching	59.2	58.0	59.4	58.8	59.0	57.2	54.6	53.8	53.5	53.9	52.8	52.7	51.0	▲ 1.7
	Special Services	55.3	53.9	55.0	54.6	53.6	53.5	52.8	52.5	51.5	49.5	50.1	49.9	51.1	1.2
	Medical,Welfare,Public Health	48.2	48.3	48.8	48.3	47.4	47.5	46.5	47.1	46.9	47.8	47.0	48.7	46.5	▲ 2.2
	Education	46.5	46.4	43.8	43.5	46.2	38.5	44.7	45.8	44.2	43.6	44.0	41.1	39.5	▲ 1.6
Other	50.2	51.6	49.3	49.8	52.0	50.2	49.7	49.0	50.2	47.9	48.5	47.9	48.3	0.4	
Total	52.8	52.9	52.9	53.2	52.7	52.4	51.7	51.9	51.6	50.6	50.8	50.8	50.7	▲ 0.1	
Other		45.0	46.3	46.2	45.3	46.6	44.1	48.3	45.2	44.9	43.2	42.6	44.1	43.2	▲ 0.9

		Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Ratio to the PrFDious Month
Hokkaido		47.5	44.3	43.9	45.2	45.2	43.9	44.4	44.6	45.5	45.3	45.1	45.7	46.4	0.7
Tohoku		46.6	46.4	45.9	46.5	45.4	44.4	43.1	42.8	43.1	42.2	41.9	41.7	41.7	0.0
kitakanto		50.0	50.0	49.0	48.5	48.5	45.8	44.8	44.7	44.3	43.1	42.5	42.6	42.6	0.1
minamikanto		50.0	50.4	49.8	50.4	50.1	49.0	48.1	47.8	47.7	46.0	46.0	45.5	45.7	0.2
Hokuriku		49.8	49.3	49.4	49.3	48.6	47.7	46.3	45.3	45.3	44.6	44.2	43.5	44.1	0.6
Tokai		51.8	51.4	51.3	51.8	51.8	50.1	48.6	48.4	48.0	46.8	45.8	44.7	45.0	0.3
Kinki		49.4	48.9	48.8	49.7	49.7	48.4	47.6	47.3	46.9	45.0	44.6	44.0	43.8	▲ 0.2
Chugoku		47.1	48.0	48.6	48.5	48.7	47.7	47.2	46.7	47.2	45.6	45.5	45.0	44.8	▲ 0.2
Shikoku		47.9	47.0	47.6	47.2	48.4	46.8	47.6	46.8	46.9	46.7	44.8	43.1	43.8	0.7
Kyushu		50.6	50.8	49.1	50.6	50.7	49.7	48.5	48.6	48.3	46.9	47.0	47.6	46.3	▲ 1.3

Appendix

1. Research Subjects (Companies researched: 23,638; Valid responses: 10,007; Response rate: 42.3%)

Appendix

1. Region

Hokkaido	494	Tokai	1,112
Tohoku	666	Kinki	1,689
kitaKanto	739	Chugoku	540
minamikanto	3,211	Shikoku	293
Hokuriku	549	Kyushu	714
		Total	10,007

2. Industry (10 Industries 51 Lines of business)

Agriculture, Forestry, Fisheries		55
Finance		111
Construction		1,534
Real Estate		306
Manufacturing 3,223	Food, Beverages, Livestock Feed	314
	Textile, Textile Products, Clothing	106
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	222
	Pulp, Paper and Paper Products	102
	Publishing, Printing	170
	Chemical	394
	Steel, Nonferrous Metals, Mining	487
	General Machinery	446
	Electrical Machinery	304
	Transportation Machinery, Equipment	96
Wholesale 3,959	Precision Machinery, Medical Instruments and Equipment	78
	Others	82
	Food, Beverages	358
	Textile, Textile Products, Clothing	180
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	322
	Paper Products, Stationery, Books	92
	Chemical	268
	Recycled Resources	32
	Steel, Nonferrous Metals, Mining Products	300
	Machinery, Equipment	879
Others	324	

Retail 480	Food, Beverages	65
	Textile, Textile Products, Clothing	26
	Drugs, Sundries	23
	Furniture	10
	Electrical Household Appliances, Information Machinery and Equipment	30
	Motor Vehicles, Motor Vehicle Parts	69
	Special Merchandise	124
	Various Merchandise	48
Others	8	
Transportation, Warehousing		426
Service 1,384	Restaurants	45
	Telecommunications	11
	Electricity, Gas, Water, Heat	13
	Leasing, Rentals	111
	Lodging, Hotels	23
	Recreation	55
	Broadcasting	14
	Maintenance, Guarding, Testing	158
	Advertising	99
	Information	450
	Labor Dispatching	52
	Special Services	248
	Medical, Welfare, Public Health	111
Education	27	
Others	162	
Others	37	
Total		10,007

3. Size

Large Firms	1,978	19.8%
Small to Medium-sized Firms	8,029	80.2%
micro Firms	2,656	26.5%
Total	10,007	100.0%

2. Research Items

- *Business Confidence (current, in 3 months, in 6 months, in 1 year)
- *Business Conditions (sales, purchasing and selling unit price, inventory, capacity utilization ratio, number of employees, overtime work hours)

3. Research Period and Methodology

Internet-based survey conducted August 19 – 31 2019

The explanation of the Economic Diffusion Index

Research Purpose/Researched Terms

TDB Economic Trend Research (started from May 2002) is a monthly statistical survey conducted for over 20,000 nationwide corporations on their general business activities including the current condition and future outlook of the industry business performance and operating climate. The primary purpose of such a survey is to assess the current state of Japan's economy.

Selection of the Subject Corporations

Companies of all sizes in all domestic industries are eligible to participate in the survey.

DI Calculation

The DI (Diffusion Index) is calculated by multiplying the number of responses for each assessment category by the number given in parentheses in the table below, to a seven-level assessment rated by companies.

Selection category	Extremely good	good	fairly good	neither good nor bad	fairly bad	bad	very bad
points	6	5	4	3	2	1	0
number of responses for each category	N ₆	N ₅	N ₄	N ₃	N ₂	N ₁	N ₀

Economic DI

$$= \frac{\text{Total of (Points for each category} \times \text{Number of responses for each category)}}{\text{Number of valid responses } N} \times \frac{1}{6} \times 100$$

$$= \frac{\sum_{i=0}^6 i \times N_i}{N} \times \frac{1}{6} \times 100$$

An economic DI of 50 is **the point separating good and bad**, so a DI over 50 means “good,” and below 50 means “bad.” (The numbers are rounded off to one decimal place.) No weight is given according to a company's size, and calculations are made on the basis of “one company, one vote.”

Size Classification

Industry	Large Firms	Small to Medium-Sized Firms (Micro Firms included)	Micro Firms
Manufacturing and Other Industries*	Capital: More than 300 million yen and No. of Employee: Over 300	Capital: Below 300 million yen or No. of Employee: Below 300	No. of Employee: Below 20
Wholesale Trade	Capital: More than 100 million yen and No. of Employee: Over 100	Capital: Below 100 million yen or No. of Employee: Below 100	No. of Employee: Below 5
Retail Trade	Capital: More than 50 million yen and No. of Employee: Over 50	Capital: Below 50 million yen or No. of Employee: Below 50	No. of Employee: Below 5
Service**	Capital: More than 50 million yen and No. of Employee: Over 100	Capital: Below 50 million yen or No. of Employee: Below 100	No. of Employee: Below 5

Note1: Large Firms refer to companies that rank in the top 3% in terms of sales volume according to the type of business, among small to medium-sized corporations excluding micro firms, which are defined in Small and Medium Enterprises Basic Act.

Note2: Small to Medium-Sized Firms refer to companies that rank in the bottom 50% in terms of sales volume according to the type of business, among those not categorized as small to medium-sized corporations in Small to Medium-Sized Enterprises Basic Act.