

## Economic DI worsened for three months in a row

~ A decline in consumption after the consumption tax hike and growing overseas risks are grounds for concern ~

e-mail : [keiki@mail.tdb.co.jp](mailto:keiki@mail.tdb.co.jp)

(Companies researched: 23,031; Valid responses: 9,701; Response rate: 42.1%;  
Survey start date: May 2002)

### < Overview of January 2019: Signs of entering a recession phase >

The economic diffusion index (DI) in February 2019 was 47.2, down 0.9 points from the previous month, and worsened for the third consecutive month. In addition to a slowdown in exports to China and a downturn in automobile-related businesses, a manpower shortage and an increased cost burden also had adverse effects, and the domestic economy has begun to show signs of entering a recession phase.

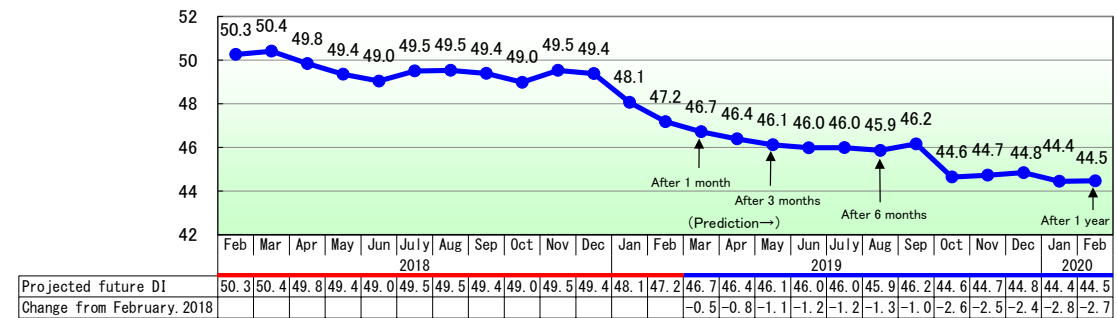
### < Future outlook: Uncertainty has intensified >

While capital investment and consumer spending underpin the domestic economy, there are concerns about a decline in consumption after the consumption tax hike and growing overseas risks, and uncertainty has further intensified.

**By industry :** Nine of the ten industries worsened. In the “manufacturing” industry, a decline in machinery-related performance continues.

**By size :** “Large enterprises,” ”SMEs,” and “small enterprises” all worsened for the second consecutive month.

**By region :** Eight of the ten regions worsened. Overseas trends also impact on the local economy.



\*: 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

	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Ratio to the PrFDious Month
Total	50.3	50.4	49.8	49.4	49.0	49.5	49.5	49.4	49.0	49.5	49.4	48.1	47.2	▲ 0.9
Large Firms	52.2	52.5	52.2	51.6	51.3	51.8	51.6	51.4	51.4	51.4	51.7	50.6	49.8	▲ 0.8
Small to Medium-sized Firms	49.8	49.9	49.3	48.8	48.5	48.9	49.0	48.9	48.4	49.0	48.8	47.4	46.5	▲ 0.9
Micro Firms	49.0	49.2	48.1	48.1	47.6	48.1	48.4	48.4	47.9	48.2	48.2	47.0	46.5	▲ 0.5

	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Ratio to the PrFDious Month	
Agriculture,Forestry,Fisheries	45.5	44.4	43.5	44.2	43.3	43.4	45.7	43.8	41.5	40.7	40.7	41.8	41.7	▲ 0.1	
Finance	48.0	50.3	49.4	47.8	47.2	49.5	47.5	48.5	46.2	47.1	46.5	46.1	45.2	▲ 0.9	
Construction	53.4	52.9	51.4	51.8	51.9	52.8	53.1	53.8	53.4	53.9	54.1	53.9	53.6	▲ 0.3	
Real Estate	52.1	53.1	50.9	51.0	51.1	50.5	51.1	50.7	49.3	49.3	49.7	49.1	47.5	▲ 1.6	
Manufacturing	Food,BEWerages,Livestock Feed	43.2	41.9	42.9	43.4	43.2	43.1	43.3	42.9	42.0	42.4	43.0	41.6	40.6	▲ 1.0
	Textile,Textile Products,Clothing	41.3	42.4	42.4	42.7	42.8	42.1	41.8	41.9	41.4	41.6	41.3	37.7	38.8	1.1
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	46.2	46.3	45.7	45.8	45.9	46.6	45.6	45.2	46.1	47.5	48.3	47.1	45.5	▲ 1.6
	Pulp, Paper and Paper Products	44.1	45.8	46.3	43.1	45.2	44.5	44.5	45.4	44.3	46.5	49.3	44.6	45.2	0.6
	Publishing,Printing	37.4	37.1	36.2	36.3	33.7	35.0	33.8	34.6	33.2	34.8	35.0	33.5	33.2	▲ 0.3
	Chemical	53.2	53.8	52.3	51.8	51.6	52.2	51.3	51.4	50.4	51.4	50.2	48.1	46.3	▲ 1.8
	Steel,Nonferrous Metals,Mining	55.6	55.6	53.7	53.5	53.3	54.1	54.2	52.8	53.0	54.4	52.5	50.4	48.0	▲ 2.4
	General Machinery	62.0	61.2	60.9	60.6	60.3	60.7	59.9	59.1	58.1	57.5	55.9	52.5	51.4	▲ 1.1
	Electrical Machinery	56.5	54.8	54.9	53.4	53.4	52.8	52.0	53.3	52.9	52.5	50.5	49.2	47.6	▲ 1.6
	Transportation Machinery,Equipment	56.6	59.8	57.6	58.4	57.3	56.6	58.7	58.3	56.9	56.4	53.8	52.3	50.9	▲ 1.4
	Precision Machinery, Medical Instruments and Equipment	56.2	54.8	57.5	56.6	57.2	55.1	54.8	54.3	53.7	53.4	54.0	51.3	48.6	▲ 2.7
Other	43.1	43.8	43.2	44.3	42.5	41.5	40.7	42.6	42.8	41.8	42.8	42.7	42.1	▲ 0.6	
Total	51.9	51.6	51.0	50.8	50.4	50.6	50.2	50.0	49.5	50.0	49.2	47.1	45.8	▲ 1.3	
Wholesale	Food,BEWerages	42.1	43.0	42.9	42.8	42.4	40.9	41.9	41.3	40.6	41.9	41.1	39.4	40.5	1.1
	Textile,Textile Products,Clothing	35.5	37.2	37.2	36.8	37.3	35.9	37.3	35.1	35.3	33.5	34.3	34.0	32.0	▲ 2.0
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	44.9	44.7	45.0	43.3	44.4	44.8	44.2	44.8	43.9	46.9	47.8	47.4	46.5	▲ 0.9
	Paper Products,Stationery,Books	34.9	36.8	38.0	37.5	36.2	35.4	36.6	36.9	36.5	38.1	39.3	37.9	36.0	▲ 1.9
	Chemical	49.0	49.1	49.1	49.1	46.8	48.9	48.1	47.1	47.0	47.8	47.7	45.3	44.3	▲ 1.0
	Recycled Resources	51.0	51.9	49.5	46.6	50.6	48.2	51.2	47.8	49.4	44.0	47.6	39.8	45.6	5.8
	Steel,Nonferrous Metals, Mining Products	51.9	50.8	49.7	48.2	47.8	48.0	50.3	49.2	49.4	48.8	50.2	46.3	45.0	▲ 1.3
	Machinery,Equipment	51.4	51.8	51.1	50.6	50.0	50.9	51.0	50.2	49.6	49.9	50.0	48.4	46.9	▲ 1.5
	Other	42.8	43.8	45.4	43.4	43.3	43.2	42.4	42.4	43.4	44.0	43.9	41.9	41.2	▲ 0.7
	Total	46.6	47.1	47.0	46.1	45.7	45.9	46.3	45.6	45.4	46.0	46.3	44.4	43.6	▲ 0.8

## Economic Diffusion Index (Economic DI)2/2

		Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Ratio to the PrFDious Month
Retail	Food,BEWerages	45.6	46.1	47.4	45.7	45.2	44.5	45.3	45.7	44.4	45.5	42.8	43.4	41.5	▲ 1.9
	Textile,Textile Products,Clothing	38.2	37.3	38.9	36.7	32.1	34.6	32.7	30.6	32.7	31.3	34.0	30.9	32.7	1.8
	Drugs,Sundries	45.7	47.2	44.9	47.1	42.9	41.0	41.3	40.2	38.4	42.4	44.4	44.8	39.7	▲ 5.1
	Furniture	35.2	35.0	36.7	35.2	38.3	38.3	37.0	37.0	37.9	37.5	35.4	38.9	33.3	▲ 5.6
	Electrical Household Appliances, Information Machinery and Equipment	40.4	45.7	46.5	40.2	41.9	45.5	43.7	42.8	40.6	39.7	43.1	39.0	40.7	1.7
	Motor Vehicles,Motor Vehicle Parts	47.8	48.3	48.2	43.5	42.9	45.0	43.5	46.1	40.8	41.5	42.2	44.6	44.3	▲ 0.3
	Special Merchandise	42.5	42.9	41.0	39.7	39.7	40.7	39.1	39.1	39.7	43.3	43.2	41.9	41.3	▲ 0.6
	Various Merchandise	46.0	47.5	49.6	44.1	44.2	48.2	46.5	43.6	46.4	43.6	44.7	42.9	41.9	▲ 1.0
	Other	43.3	41.7	36.1	41.7	33.3	36.1	40.5	38.9	41.7	38.1	35.7	35.7	31.3	▲ 4.4
	Total	43.8	44.8	44.6	42.0	41.3	42.7	41.7	41.6	40.9	42.1	42.3	41.6	40.8	▲ 0.8
Transportation,Warehousing		49.6	50.5	50.0	49.3	48.7	50.3	50.3	49.5	48.7	50.1	50.5	49.1	48.2	▲ 0.9
Service	Restaurants	43.6	44.2	44.7	45.0	42.5	42.7	42.5	39.3	37.0	37.6	40.7	37.9	41.0	3.1
	Postal,Telecommunications	59.1	57.7	56.9	50.0	54.5	55.6	55.0	56.1	59.7	57.1	54.5	60.0	57.6	▲ 2.4
	Electricity,Gas,Water,Heat	58.3	61.1	54.2	56.3	57.4	56.3	57.4	59.3	56.7	57.1	61.9	57.4	57.4	0.0
	Leasing,Rentals	56.0	56.0	55.2	51.5	52.9	54.5	54.2	55.9	56.5	57.1	55.7	55.0	52.0	▲ 3.0
	Lodging, Hotels	48.7	52.0	51.7	50.6	50.0	45.2	46.6	43.6	41.0	45.5	45.7	44.9	44.2	▲ 0.7
	Recreation	42.2	42.5	41.5	39.5	40.9	39.8	40.0	39.9	35.5	40.6	39.3	38.9	37.8	▲ 1.1
	Broadcasting	47.4	47.0	39.7	37.2	40.3	42.3	38.5	41.7	40.5	40.0	36.7	40.5	44.4	3.9
	Maintenance,Guarding,Testing	50.7	51.1	49.9	50.2	48.5	50.5	52.3	51.8	51.4	51.6	50.7	50.7	51.0	0.3
	Advertising	42.3	43.4	44.2	43.0	40.2	41.7	41.4	42.3	42.3	41.2	41.7	40.4	40.1	▲ 0.3
	Information	58.8	58.6	59.4	58.4	58.8	58.7	59.1	59.7	59.8	60.7	59.3	60.1	59.0	▲ 1.1
	Labor Dispatching	56.5	57.9	57.8	59.0	59.1	59.3	59.2	58.0	59.4	58.8	59.0	57.2	54.6	▲ 2.6
	Special Services	53.1	54.3	53.6	53.7	54.6	54.8	55.3	53.9	55.0	54.6	53.6	53.5	52.8	▲ 0.7
	Medical,Welfare,Public Health	48.6	48.1	48.8	48.0	46.8	46.1	48.2	48.3	48.8	48.3	47.4	47.5	46.5	▲ 1.0
	Education	41.7	44.2	42.4	42.8	40.6	42.6	46.5	46.4	43.8	43.5	46.2	38.5	44.7	6.2
	Other	51.3	51.8	50.7	50.8	50.0	51.3	50.2	51.6	49.3	49.8	52.0	50.2	49.7	▲ 0.5
Total	52.7	53.1	52.8	52.1	52.0	52.4	52.8	52.9	52.9	53.2	52.7	52.4	51.7	▲ 0.7	
Other		47.9	50.8	49.2	50.0	46.3	46.1	45.0	46.3	46.2	45.3	46.6	44.1	48.3	4.2

		Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Ratio to the PrFDious Month
Hokkaido		45.7	46.6	46.2	45.8	46.5	46.6	47.5	44.3	43.9	45.2	45.2	43.9	44.4	0.5
Tohoku		46.1	46.4	45.7	45.0	44.2	46.8	46.6	46.4	45.9	46.5	45.4	44.4	43.1	▲ 1.3
kitakanto		51.7	51.4	50.7	49.8	49.4	50.6	50.0	50.0	49.0	48.5	48.5	45.8	44.8	▲ 1.0
minamikanto		51.0	51.5	50.7	50.3	50.2	50.3	50.0	50.4	49.8	50.4	50.1	49.0	48.1	▲ 0.9
Hokuriku		47.7	48.5	48.7	48.5	48.7	49.4	49.8	49.3	49.4	49.3	48.6	47.7	46.3	▲ 1.4
Tokai		52.5	52.3	51.9	51.9	50.9	51.6	51.8	51.4	51.3	51.8	51.8	50.1	48.6	▲ 1.5
Kinki		50.3	50.0	49.7	48.8	48.4	48.6	49.4	48.9	48.8	49.7	49.7	48.4	47.6	▲ 0.8
Chugoku		50.1	49.6	48.7	48.7	47.9	47.0	47.1	48.0	48.6	48.5	48.7	47.7	47.2	▲ 0.5
Shikoku		48.5	48.4	48.2	47.8	47.2	47.5	47.9	47.0	47.6	47.2	48.4	46.8	47.6	0.8
Kyushu		51.8	51.7	51.4	50.4	49.8	50.9	50.6	50.8	49.1	50.6	50.7	49.7	48.5	▲ 1.2

## Appendix

### 1. Research Subjects (Companies Researched 23,031 ; Valid responses: 9,701 ; Response rate: 42.1%)

Appendix

#### 1. Region

Hokkaido	494	Tokai	1,071
Tohoku	619	Kinki	1,631
kitaKanto	712	Chugoku	537
minamikanto	3,127	Shikoku	281
Hokuriku	548	Kyushu	681
		Total	9,701

#### 2. Industry (10 Industries 51 Lines of business)

Agriculture, Forestry, Fisheries		50
Finance		121
Construction		1,450
Real Estate		293
Manufacturing 3,223	Food, Beverages, Livestock Feed	299
	Textile, Textile Products, Clothing	104
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	213
	Pulp, Paper and Paper Products	97
	Publishing, Printing	169
	Chemical	389
	Steel, Nonferrous Metals, Mining	474
	General Machinery	424
	Electrical Machinery	312
	Transportation Machinery, Equipment	97
Wholesale 3,959	Precision Machinery, Medical Instruments and Equipment	71
	Others	91
	Food, Beverages	333
	Textile, Textile Products, Clothing	179
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	321
	Paper Products, Stationery, Books	89
	Chemical	267
	Recycled Resources	34
	Steel, Nonferrous Metals, Mining Products	291
	Machinery, Equipment	873
Others	326	

#### 3. Size

Large Firms	1,930	19.9%
Small to Medium-sized Firms	7,771	80.1%
micro Firms	2,587	26.7%
Total	9,701	100.0%

Retail 480	Food, Beverages	65
	Textile, Textile Products, Clothing	27
	Drugs, Sundries	21
	Furniture	8
	Electrical Household Appliances, Information Machinery and Equipment	34
	Motor Vehicles, Motor Vehicle Parts	70
	Special Merchandise	121
	Various Merchandise	41
Others	8	
Transportation, Warehousing		415
Service 1,384	Restaurants	37
	Telecommunications	11
	Electricity, Gas, Water, Heat	9
	Leasing, Rentals	101
	Lodging, Hotels	23
	Recreation	52
	Broadcasting	15
	Maintenance, Guarding, Testing	149
	Advertising	96
	Information	417
	Labor Dispatching	54
	Special Services	244
	Medical, Welfare, Public Health	94
Education	25	
Others	158	
Others		39
Total		9,701

## 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 February 15 – 28 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 <sub>6</sub>	N <sub>5</sub>	N <sub>4</sub>	N <sub>3</sub>	N <sub>2</sub>	N <sub>1</sub>	N <sub>0</sub>

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.