Domestic Economy may have entered a recession phase

～ Negatively affected by the US-China trade conflict and the long holidays ～

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（Companies researched: 23,169; Valid responses: 9,555; Response rate: 41.2%; Survey start date: May 2002）

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

The economic diffusion index (DI) in May 2019 was 45.4, down 1.4 points from the previous month, and worsened for the sixth consecutive month. Intensified US-China trade conflict coincides with emerging negative effects associated with the long holidays, and domestic economy may have entered a recession phase.

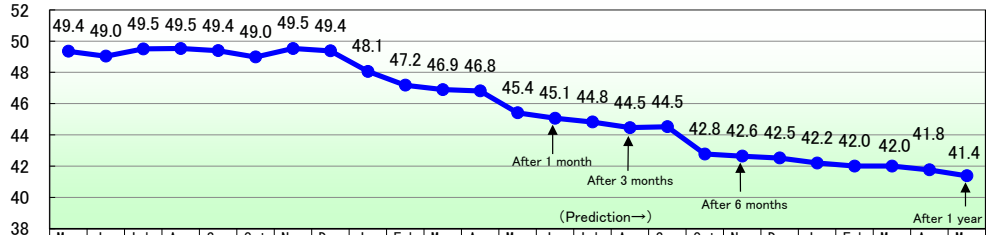
< Future outlook: Uncertainty has further intensified >

Uncertainty about the future domestic economy has further intensified, such as how the US-China trade conflict will turn out, in addition to concerns about declining consumption due to the consumption tax hike.

By industry : All ten industries worsened. The long holidays have had a negative effect.

By size : Business confidence of "SMEs" have significantly deteriorated, being largely impacted by the US-China trade conflict.

By region : All ten regions worsened. A downturn in urban areas exerted downward pressure on all regions.



	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
	2018								2019												2020				
Projected future DI	49.4	49.0	49.5	49.5	49.4	49.0	49.5	49.4	48.1	47.2	46.9	46.8	45.4	45.1	44.8	44.5	44.5	42.8	42.6	42.5	42.2	42.0	42.0	41.8	41.4
Change from May.2019														-0.3	-0.6	-0.9	-0.9	-2.6	-2.8	-2.9	-3.2	-3.4	-3.4	-3.6	-4.0

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

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Economic Diffusion Index (Economic DI)1/2

	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Ratio to the PrFDious Month
Total	49.4	49.0	49.5	49.5	49.4	49.0	49.5	49.4	48.1	47.2	46.9	46.8	45.4	▲ 1.4
Large Firms	51.6	51.3	51.8	51.6	51.4	51.4	51.4	51.7	50.6	49.8	49.8	49.7	48.8	▲ 0.9
Small to Medium-sized Firms	48.8	48.5	48.9	49.0	48.9	48.4	49.0	48.8	47.4	46.5	46.2	46.1	44.6	▲ 1.5
Micro Firms	48.1	47.6	48.1	48.4	48.4	47.9	48.2	48.2	47.0	46.5	46.3	46.2	44.5	▲ 1.7

		May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Ratio to the PrFDious Month
Agriculture,Forestry,Fisheries		44.2	43.3	43.4	45.7	43.8	41.5	40.7	40.7	41.8	41.7	42.3	41.3	40.5	▲ 0.8
Finance		47.8	47.2	49.5	47.5	48.5	46.2	47.1	46.5	46.1	45.2	45.9	45.1	44.7	▲ 0.4
Construction		51.8	51.9	52.8	53.1	53.8	53.4	53.9	54.1	53.9	53.6	53.6	52.8	51.7	▲ 1.1
Real Estate		51.0	51.1	50.5	51.1	50.7	49.3	49.3	49.7	49.1	47.5	47.4	48.7	47.6	▲ 1.1
Manufacturing	Food,BEWerages,Livestock Feed	43.4	43.2	43.1	43.3	42.9	42.0	42.4	43.0	41.6	40.6	40.6	42.2	41.3	▲ 0.9
	Textile,Textile Products,Clothing	42.7	42.8	42.1	41.8	41.9	41.4	41.6	41.3	37.7	38.8	39.2	39.0	36.6	▲ 2.4
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	45.8	45.9	46.6	45.6	45.2	46.1	47.5	48.3	47.1	45.5	44.1	45.7	45.4	▲ 0.3
	Pulp, Paper and Paper Products	43.1	45.2	44.5	44.5	45.4	44.3	46.5	49.3	44.6	45.2	44.1	45.7	43.0	▲ 2.7
	Publishing,Printing	36.3	33.7	35.0	33.8	34.6	33.2	34.8	35.0	33.5	33.2	34.4	35.6	34.3	▲ 1.3
	Chemical	51.8	51.6	52.2	51.3	51.4	50.4	51.4	50.2	48.1	46.3	45.4	46.2	43.9	▲ 2.3
	Steel,Nonferrous Metals,Mining	53.5	53.3	54.1	54.2	52.8	53.0	54.4	52.5	50.4	48.0	45.4	45.5	42.9	▲ 2.6
	General Machinery	60.6	60.3	60.7	59.9	59.1	58.1	57.5	55.9	52.5	51.4	48.9	49.0	46.0	▲ 3.0
	Electrical Machinery	53.4	53.4	52.8	52.0	53.3	52.9	52.5	50.5	49.2	47.6	46.0	44.7	43.1	▲ 1.6
	Transportation Machinery,Equipment	58.4	57.3	56.6	58.7	58.3	56.9	56.4	53.8	52.3	50.9	49.3	49.4	48.1	▲ 1.3
	Precision Machinery, Medical Instruments and Equipment	56.6	57.2	55.1	54.8	54.3	53.7	53.4	54.0	51.3	48.6	45.5	47.3	44.4	▲ 2.9
	Other	44.3	42.5	41.5	40.7	42.6	42.8	41.8	42.8	42.7	42.1	45.3	40.2	40.2	0.0
	Total	50.8	50.4	50.6	50.2	50.0	49.5	50.0	49.2	47.1	45.8	44.5	44.8	42.9	▲ 1.9
Wholesale	Food,BEWerages	42.8	42.4	40.9	41.9	41.3	40.6	41.9	41.1	39.4	40.5	40.5	41.1	40.8	▲ 0.3
	Textile,Textile Products,Clothing	36.8	37.3	35.9	37.3	35.1	35.3	33.5	34.3	34.0	32.0	33.6	33.2	33.2	0.0
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	43.3	44.4	44.8	44.2	44.8	43.9	46.9	47.8	47.4	46.5	46.4	45.6	44.7	▲ 0.9
	Paper Products,Stationery,Books	37.5	36.2	35.4	36.6	36.9	36.5	38.1	39.3	37.9	36.0	39.0	39.2	39.0	▲ 0.2
	Chemical	49.1	46.8	48.9	48.1	47.1	47.0	47.8	47.7	45.3	44.3	44.3	44.2	41.8	▲ 2.4
	Recycled Resources	46.6	50.6	48.2	51.2	47.8	49.4	44.0	47.6	39.8	45.6	48.6	41.0	40.2	▲ 0.8
	Steel,Nonferrous Metals, Mining Products	48.2	47.8	48.0	50.3	49.2	49.4	48.8	50.2	46.3	45.0	43.7	43.4	40.8	▲ 2.6
	Machinery,Equipment	50.6	50.0	50.9	51.0	50.2	49.6	49.9	50.0	48.4	46.9	46.5	45.9	44.2	▲ 1.7
	Other	43.4	43.3	43.2	42.4	42.4	43.4	44.0	43.9	41.9	41.2	42.5	42.7	40.6	▲ 2.1
	Total	46.1	45.7	45.9	46.3	45.6	45.4	46.0	46.3	44.4	43.6	43.7	43.3	41.9	▲ 1.4

Economic Diffusion Index (Economic DI)2/2

		May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Ratio to the PrFDious Month
Retail	Food,BEWerages	45.7	45.2	44.5	45.3	45.7	44.4	45.5	42.8	43.4	41.5	42.5	42.5	44.8	2.3
	Textile,Textile Products,Clothing	36.7	32.1	34.6	32.7	30.6	32.7	31.3	34.0	30.9	32.7	38.9	39.1	36.9	▲ 2.2
	Drugs,Sundries	47.1	42.9	41.0	41.3	40.2	38.4	42.4	44.4	44.8	39.7	39.7	40.9	41.0	0.1
	Furniture	35.2	38.3	38.3	37.0	37.0	37.9	37.5	35.4	38.9	33.3	33.3	38.9	39.6	0.7
	Electrical Household Appliances, Information Machinery and Equipment	40.2	41.9	45.5	43.7	42.8	40.6	39.7	43.1	39.0	40.7	38.9	41.7	39.1	▲ 2.6
	Motor Vehicles,Motor Vehicle Parts	43.5	42.9	45.0	43.5	46.1	40.8	41.5	42.2	44.6	44.3	45.2	43.3	41.5	▲ 1.8
	Special Merchandise	39.7	39.7	40.7	39.1	39.1	39.7	43.3	43.2	41.9	41.3	40.8	42.1	41.3	▲ 0.8
	Various Merchandise	44.1	44.2	48.2	46.5	43.6	46.4	43.6	44.7	42.9	41.9	43.5	43.3	43.8	0.5
	Other	41.7	33.3	36.1	40.5	38.9	41.7	38.1	35.7	35.7	31.3	33.3	43.8	39.6	▲ 4.2
	Total	42.0	41.3	42.7	41.7	41.6	40.9	42.1	42.3	41.6	40.8	41.4	42.1	41.6	▲ 0.5
Transportation,Warehousing		49.3	48.7	50.3	50.3	49.5	48.7	50.1	50.5	49.1	48.2	48.1	48.2	46.7	▲ 1.5
Service	Restaurants	45.0	42.5	42.7	42.5	39.3	37.0	37.6	40.7	37.9	41.0	37.8	42.9	40.6	▲ 2.3
	Postal,Telecommunications	50.0	54.5	55.6	55.0	56.1	59.7	57.1	54.5	60.0	57.6	62.1	57.6	56.7	▲ 0.9
	Electricity,Gas,Water,Heat	56.3	57.4	56.3	57.4	59.3	56.7	57.1	61.9	57.4	57.4	56.3	58.3	55.6	▲ 2.7
	Leasing,Rentals	51.5	52.9	54.5	54.2	55.9	56.5	57.1	55.7	55.0	52.0	52.7	54.1	50.9	▲ 3.2
	Lodging, Hotels	50.6	50.0	45.2	46.6	43.6	41.0	45.5	45.7	44.9	44.2	42.3	41.0	50.0	9.0
	Recreation	39.5	40.9	39.8	40.0	39.9	35.5	40.6	39.3	38.9	37.8	41.0	38.8	42.0	3.2
	Broadcasting	37.2	40.3	42.3	38.5	41.7	40.5	40.0	36.7	40.5	44.4	43.3	41.7	44.1	2.4
	Maintenance,Guarding,Testing	50.2	48.5	50.5	52.3	51.8	51.4	51.6	50.7	50.7	51.0	50.0	48.1	48.2	0.1
	Advertising	43.0	40.2	41.7	41.4	42.3	42.3	41.2	41.7	40.4	40.1	40.3	40.7	40.5	▲ 0.2
	Information	58.4	58.8	58.7	59.1	59.7	59.8	60.7	59.3	60.1	59.0	60.3	59.6	58.0	▲ 1.6
	Labor Dispatching	59.0	59.1	59.3	59.2	58.0	59.4	58.8	59.0	57.2	54.6	53.8	53.5	53.9	0.4
	Special Services	53.7	54.6	54.8	55.3	53.9	55.0	54.6	53.6	53.5	52.8	52.5	51.5	49.5	▲ 2.0
	Medical,Welfare,Public Health	48.0	46.8	46.1	48.2	48.3	48.8	48.3	47.4	47.5	46.5	47.1	46.9	47.8	0.9
	Education	42.8	40.6	42.6	46.5	46.4	43.8	43.5	46.2	38.5	44.7	45.8	44.2	43.6	▲ 0.6
	Other	50.8	50.0	51.3	50.2	51.6	49.3	49.8	52.0	50.2	49.7	49.0	50.2	47.9	▲ 2.3
	Total	52.1	52.0	52.4	52.8	52.9	52.9	53.2	52.7	52.4	51.7	51.9	51.6	50.6	▲ 1.0
Other		50.0	46.3	46.1	45.0	46.3	46.2	45.3	46.6	44.1	48.3	45.2	44.9	43.2	▲ 1.7

	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Ratio to the PrFDious Month
Hokkaido	45.8	46.5	46.6	47.5	44.3	43.9	45.2	45.2	43.9	44.4	44.6	45.5	45.3	▲ 0.2
Tohoku	45.0	44.2	46.8	46.6	46.4	45.9	46.5	45.4	44.4	43.1	42.8	43.1	42.2	▲ 0.9
kitakanto	49.8	49.4	50.6	50.0	50.0	49.0	48.5	48.5	45.8	44.8	44.7	44.3	43.1	▲ 1.2
minamikanto	50.3	50.2	50.3	50.0	50.4	49.8	50.4	50.1	49.0	48.1	47.8	47.7	46.0	▲ 1.7
Hokuriku	48.5	48.7	49.4	49.8	49.3	49.4	49.3	48.6	47.7	46.3	45.3	45.3	44.6	▲ 0.7
Tokai	51.9	50.9	51.6	51.8	51.4	51.3	51.8	51.8	50.1	48.6	48.4	48.0	46.8	▲ 1.2
Kinki	48.8	48.4	48.6	49.4	48.9	48.8	49.7	49.7	48.4	47.6	47.3	46.9	45.0	▲ 1.9
Chugoku	48.7	47.9	47.0	47.1	48.0	48.6	48.5	48.7	47.7	47.2	46.7	47.2	45.6	▲ 1.6
Shikoku	47.8	47.2	47.5	47.9	47.0	47.6	47.2	48.4	46.8	47.6	46.8	46.9	46.7	▲ 0.2
Kyushu	50.4	49.8	50.9	50.6	50.8	49.1	50.6	50.7	49.7	48.5	48.6	48.3	46.9	▲ 1.4

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Appendix

1.Research Subjects(Companies researched: 23,169; Valid responses: 9,555; Response rate: 41.2%)

Appendix

1.Region

Hokkaido	485	Tokai	1,048
Tohoku	610	Kinki	1,571
kitaKanto	727	Chugoku	525
minamikanto	3,071	Shikoku	292
Hokuriku	526	Kyushu	700
		Total	9,555

2.Industry (10 Industries 51 Lines of business)

Agriculture,Forestry,Fisheries		49
Finance		113
Construction		1,445
Real Estate		295
Manufacturing 3,223	Food,Beverages,Livestock Feed	302
	Textile,Textile Products,Clothing	106
	Construction Materials,Furniture,Ceramics,Stone and Clay Products	209
	Pulp, Paper and Paper Products	98
	Publishing,Printing	165
	Chemical	372
	Steel,Nonferrous Metals,Mining	474
	General Machinery	417
	Electrical Machinery	305
	Transportation Machinery,Equipment	88
	Precision Machinery,Medical Instruments and Equipment	74
	Others	82
Wholesale 3,959	Food,Beverages	319
	Textile,Textile Products,Clothing	164
	Construction Materials,Furniture,Ceramics,Stone and Clay Products	320
	Paper Products,Stationery,Books	91
	Chemical	260
	Recycled Resources	34
	Steel,Nonferrous Metals,Mining Products	277
	Machinery,Equipment	840
	Others	316
Retail 480	Food,Beverages	64
	Textile,Textile Products,Clothing	28
	Drugs,Sundries	26
	Furniture	8
	Electrical Household Appliances,Information Machinery and Equipment	32
	Motor Vehicles,Motor Vehicle Parts	67
	Special Merchandise	120
	Various Merchandise	43
	Others	8
Transportation,Warehousing		414
Service 1,384	Restaurants	39
	Telecommunications	10
	Electricity,Gas,Water,Heat	9
	Leasing,Rentals	112
	Lodging, Hotels	24
	Recreation	54
	Broadcasting	17
	Maintenance,Guarding,Testing	146
	Advertising	97
	Information	412
	Labor Dispatching	55
	Special Services	249
	Medical,Welfare,Public Health	97
	Education	26
	Others	146
Others		37
Total		9,555

3.Size

Large Firms		1,883	19.7%
Small to Medium-sized Firms		7,672	80.3%
	micro Firms	2,559	26.8%
Total		9,555	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 May 20 – 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

$$\text{Economic DI}$$

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

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

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 midium-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 midium-sized corporations in Small to Medium-Sized Enterprises Basic Act.