

Economic DI worsened for the third month in a row, with sluggish year-end demand

~ Domestic economy has entered a recession phase, with manufacturing industry's continuing downturn ~

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(Companies researched: 23,652; Valid responses: 10,292; Response rate: 43.5%; Survey start date: May 2002)

< Overview of December 2019: Recession phase >

The economic diffusion index (DI) in December 2019 was 42.5, down 1.1 points from the previous month, and worsened for the third consecutive month in a row. Domestic economy seems to have entered a recession phase, although there are some positive factors.

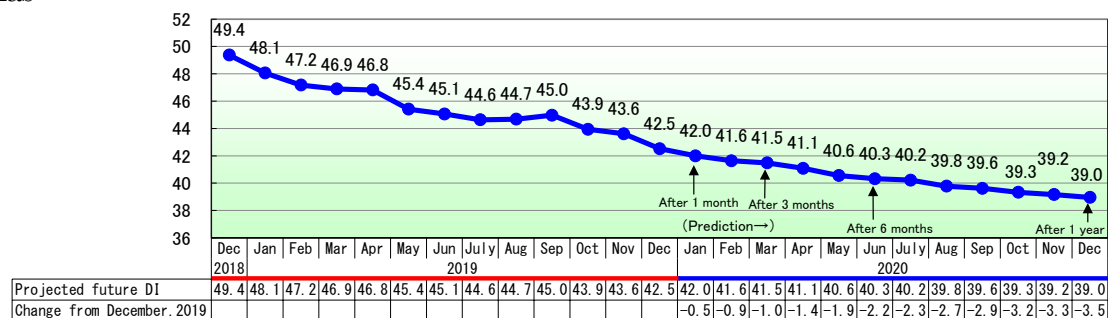
< Future outlook: Moderate recession continues >

With many causes of concern, such as the consumer spending trend and a global economic slowdown, uncertainty about the domestic economy has further intensified.

By industry : Nine of the ten industries deteriorated. Manufacturing industry deteriorated for the eighth month in a row.

By size : All sizes deteriorated for the third month in a row. "Large enterprises" significantly deteriorated for the first time in five years and eight months.

By region : There was deterioration in 36 prefectures in nine of the ten regions. Urban depression was noticeable.



*: 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

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Ratio to tHH PrFDious Month
Total	49.4	48.1	47.2	46.9	46.8	45.4	45.1	44.6	44.7	45.0	43.9	43.6	42.5	▲ 1.1
Large Firms	51.7	50.6	49.8	49.8	49.7	48.8	48.7	47.7	47.9	48.0	47.1	47.0	45.7	▲ 1.3
Small to Medium-sized Firms	48.8	47.4	46.5	46.2	46.1	44.6	44.2	43.9	43.9	44.2	43.2	42.8	41.7	▲ 1.1
Micro Firms	48.2	47.0	46.5	46.3	46.2	44.5	44.1	43.8	44.2	45.1	43.9	43.5	42.1	▲ 1.4

	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Ratio to tHH PrFDious Month	
Agriculture,Forestry,Fisheries	40.7	41.8	41.7	42.3	41.3	40.5	43.2	39.1	41.5	41.8	42.3	42.5	41.7	▲ 0.8	
Finance	46.5	46.1	45.2	45.9	45.1	44.7	44.8	45.1	44.7	45.8	45.4	46.8	44.5	▲ 2.3	
Construction	54.1	53.9	53.6	53.6	52.8	51.7	51.6	51.7	52.1	53.1	52.1	52.2	51.6	▲ 0.6	
Real Estate	49.7	49.1	47.5	47.4	48.7	47.6	48.3	47.4	46.5	48.0	45.9	46.0	44.2	▲ 1.8	
Manufacturing	Food,BEWerages,Livestock Feed	43.0	41.6	40.6	40.6	42.2	41.3	40.3	40.4	41.1	39.8	39.1	39.9	0.2	
	Textile,Textile Products,Clothing	41.3	37.7	38.8	39.2	39.0	36.6	36.5	36.4	36.9	36.3	36.1	34.6	▲ 2.0	
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	48.3	47.1	45.5	44.1	45.7	45.4	43.5	43.8	45.2	44.1	44.8	43.8	40.2	▲ 3.6
	Pulp, Paper and Paper Products	49.3	44.6	45.2	44.1	45.7	43.0	41.7	39.6	42.3	42.8	40.2	41.7	40.6	▲ 1.1
	Publishing,Printing	35.0	33.5	33.2	34.4	35.6	34.3	33.9	32.5	33.1	34.1	33.0	32.7	32.9	0.2
	Chemical	50.2	48.1	46.3	45.4	46.2	43.9	42.5	41.9	41.8	41.0	41.2	40.6	40.1	▲ 0.5
	Steel,Nonferrous Metals,Mining	52.5	50.4	48.0	45.4	45.5	42.9	41.8	41.5	41.2	40.4	39.8	38.1	37.6	▲ 0.5
	General Machinery	55.9	52.5	51.4	48.9	49.0	46.0	45.1	44.0	41.5	41.1	40.8	39.9	38.4	▲ 1.5
	Electrical Machinery	50.5	49.2	47.6	46.0	44.7	43.1	43.0	42.8	43.9	41.2	42.2	40.5	40.4	▲ 0.1
	Transportation Machinery,Equipment	53.8	52.3	50.9	49.3	49.4	48.1	47.5	46.4	43.4	42.3	43.5	41.2	40.9	▲ 0.3
	Precision Machinery, Medical Instruments and Equipment	54.0	51.3	48.6	45.5	47.3	44.4	42.4	43.9	43.4	42.0	41.3	42.0	39.9	▲ 2.1
	Other	42.8	42.7	42.1	45.3	40.2	40.2	40.2	38.0	40.7	41.8	37.4	38.4	38.0	▲ 0.4
Total	49.2	47.1	45.8	44.5	44.8	42.9	42.0	41.5	41.4	40.6	40.3	39.6	38.6	▲ 1.0	
Wholesale	Food,BEWerages	41.1	39.4	40.5	40.5	41.1	40.8	40.4	38.8	39.0	38.8	38.1	37.9	37.4	▲ 0.5
	Textile,Textile Products,Clothing	34.3	34.0	32.0	33.6	33.2	33.2	31.6	29.8	30.8	31.6	28.8	28.8	26.5	▲ 2.3
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	47.8	47.4	46.5	46.4	45.6	44.7	43.8	44.7	44.6	46.0	45.1	43.4	43.1	▲ 0.3
	Paper Products,Stationery,Books	39.3	37.9	36.0	39.0	39.2	39.0	36.4	37.0	37.1	38.0	37.7	36.3	35.0	▲ 1.3
	Chemical	47.7	45.3	44.3	44.3	44.2	41.8	41.2	42.7	42.0	42.7	41.0	40.4	39.0	▲ 1.4
	Recycled Resources	47.6	39.8	45.6	48.6	41.0	40.2	37.1	32.8	32.8	30.6	34.8	29.0	33.3	4.3
	Steel,Nonferrous Metals, Mining Products	50.2	46.3	45.0	43.7	43.4	40.8	40.4	39.0	38.8	37.6	38.0	37.0	34.8	▲ 2.2
	Machinery,Equipment	50.0	48.4	46.9	46.5	45.9	44.2	44.4	43.8	43.3	44.6	42.7	42.3	41.7	▲ 0.6
	Other	43.9	41.9	41.2	42.5	42.7	40.6	40.6	40.2	40.2	40.7	37.9	37.6	37.1	▲ 0.5
	Total	46.3	44.4	43.6	43.7	43.3	41.9	41.4	41.0	40.8	41.4	39.9	39.3	38.4	▲ 0.9

Economic Diffusion Index (Economic DI)2/2

		Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Ratio to tHH PrFDious Month
Retail	Food,BEWerages	42.8	43.4	41.5	42.5	42.5	44.8	42.9	41.5	41.3	41.8	40.5	40.2	38.4	▲ 1.8
	Textile,Textile Products,Clothing	34.0	30.9	32.7	38.9	39.1	36.9	36.6	34.6	36.5	37.9	32.7	31.5	28.7	▲ 2.8
	Drugs,Sundries	44.4	44.8	39.7	39.7	40.9	41.0	38.5	40.0	37.7	40.6	35.8	37.3	40.2	2.9
	Furniture	35.4	38.9	33.3	33.3	38.9	39.6	48.5	40.9	45.0	53.0	33.3	26.9	31.8	4.9
	Electrical Household Appliances, Information Machinery and Equipment	43.1	39.0	40.7	38.9	41.7	39.1	43.5	34.3	38.9	45.0	34.3	32.3	38.1	5.8
	Motor Vehicles,Motor Vehicle Parts	42.2	44.6	44.3	45.2	43.3	41.5	42.5	39.2	41.1	41.4	34.5	31.4	31.9	0.5
	Special Merchandise	43.2	41.9	41.3	40.8	42.1	41.3	41.1	40.6	40.7	43.5	38.2	39.1	36.0	▲ 3.1
	Various Merchandise	44.7	42.9	41.9	43.5	43.3	43.8	44.7	39.3	38.9	43.1	36.5	36.5	36.2	▲ 0.3
	Other	35.7	35.7	31.3	33.3	43.8	39.6	46.3	41.7	41.7	40.5	48.1	40.7	47.9	7.2
	Total	42.3	41.6	40.8	41.4	42.1	41.6	42.0	39.5	40.2	42.6	37.0	36.1	35.8	▲ 0.3
Transportation,Warehousing		50.5	49.1	48.2	48.1	48.2	46.7	45.6	44.5	45.5	46.0	44.9	45.1	42.6	▲ 2.5
Service	Restaurants	40.7	37.9	41.0	37.8	42.9	40.6	42.9	39.6	38.1	43.6	37.3	39.4	40.7	1.3
	Postal,Telecommunications	54.5	60.0	57.6	62.1	57.6	56.7	60.0	58.3	60.6	56.9	56.1	59.5	52.8	▲ 6.7
	Electricity,Gas,Water,Heat	61.9	57.4	57.4	56.3	58.3	55.6	54.5	54.2	52.6	51.3	51.2	52.2	47.4	▲ 4.8
	Leasing,Rentals	55.7	55.0	52.0	52.7	54.1	50.9	52.5	51.8	51.7	53.5	54.5	53.1	50.4	▲ 2.7
	Lodging, Hotels	45.7	44.9	44.2	42.3	41.0	50.0	44.9	40.3	39.9	47.2	41.3	42.0	39.1	▲ 2.9
	Recreation	39.3	38.9	37.8	41.0	38.8	42.0	41.5	41.8	40.9	38.7	38.2	40.7	37.5	▲ 3.2
	Broadcasting	36.7	40.5	44.4	43.3	41.7	44.1	43.3	41.1	45.2	43.1	42.9	41.7	38.2	▲ 3.5
	Maintenance,Guarding,Testing	50.7	50.7	51.0	50.0	48.1	48.2	48.8	49.3	49.8	48.6	49.1	47.3	46.6	▲ 0.7
	Advertising	41.7	40.4	40.1	40.3	40.7	40.5	40.7	40.4	38.9	40.3	40.4	39.6	37.8	▲ 1.8
	Information	59.3	60.1	59.0	60.3	59.6	58.0	57.8	58.5	58.7	57.7	57.4	57.8	56.2	▲ 1.6
	Labor Dispatching	59.0	57.2	54.6	53.8	53.5	53.9	52.8	52.7	51.0	53.2	53.3	50.9	46.2	▲ 4.7
	Special Services	53.6	53.5	52.8	52.5	51.5	49.5	50.1	49.9	51.1	51.8	51.5	50.8	49.9	▲ 0.9
	Medical,Welfare,Public Health	47.4	47.5	46.5	47.1	46.9	47.8	47.0	48.7	46.5	47.3	46.5	48.5	47.7	▲ 0.8
	Education	46.2	38.5	44.7	45.8	44.2	43.6	44.0	41.1	39.5	40.0	42.4	37.8	43.1	5.3
	Other	52.0	50.2	49.7	49.0	50.2	47.9	48.5	47.9	48.3	48.4	47.9	47.9	45.6	▲ 2.3
Total	52.7	52.4	51.7	51.9	51.6	50.6	50.8	50.8	50.7	51.0	50.6	50.4	48.8	▲ 1.6	
Other		46.6	44.1	48.3	45.2	44.9	43.2	42.6	44.1	43.2	42.1	43.1	40.4	41.7	1.3

		Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Ratio to tHH PrFDious Month
Hokkaido		45.2	43.9	44.4	44.6	45.5	45.3	45.1	45.7	46.4	46.6	45.7	45.0	43.8	▲ 1.2
Tohoku		45.4	44.4	43.1	42.8	43.1	42.2	41.9	41.7	41.7	43.2	41.9	42.2	40.9	▲ 1.3
kitakanto		48.5	45.8	44.8	44.7	44.3	43.1	42.5	42.5	42.6	42.2	40.9	40.0	40.0	0.0
minamikanto		50.1	49.0	48.1	47.8	47.7	46.0	46.0	45.5	45.7	46.1	45.5	44.3	44.3	▲ 1.2
Hokuriku		48.6	47.7	46.3	45.3	45.3	44.6	44.2	43.5	44.1	43.5	42.1	40.4	39.5	▲ 0.9
Tokai		51.8	50.1	48.6	48.4	48.0	46.8	45.8	44.7	45.0	45.2	43.6	42.7	41.8	▲ 0.9
Kinki		49.7	48.4	47.6	47.3	46.9	45.0	44.6	44.0	43.8	43.9	42.2	41.9	40.5	▲ 1.4
Chugoku		48.7	47.7	47.2	46.7	47.2	45.6	45.5	45.0	44.8	45.0	44.0	43.6	42.6	▲ 1.0
Shikoku		48.4	46.8	47.6	46.8	46.9	46.7	44.8	43.1	43.8	43.9	44.4	44.0	43.8	▲ 0.2
Kyushu		50.7	49.7	48.5	48.6	48.3	46.9	47.0	47.6	46.3	47.1	46.5	46.8	45.1	▲ 1.7

Survey of Corporate Attitudes Toward Work Style Reform

(December 2019)

60.4% of companies are working on work style reform

- **“Introduction of satellite office and work from home,” and
“Approval for second jobs” rank high for future initiatives -**

A “work style reform law” was enacted on April 1, 2019. This law will be applied to SMEs in some fields from April 2020, and the scope of its application will be expanded gradually. Companies are required to realize diverse and flexible work styles, ensure fair treatment, and also address elimination of labor shortage and productivity improvement. Therefore, it is believed that the importance of work style reform will increase in future corporate activities.

Teikoku Databank has conducted a survey of the status of corporate initiatives and views about work style reform. This survey was conducted in conjunction with the December 2019 TDB Trends Research.

**Survey period: December 16, 2019 – January 6, 2020, Companies Surveyed: 23,652, Valid Responses: 10,292 (Response Rate: 43.5%).

*Details of this survey can be found on the dedicated Economic Trend Survey HP. (<http://www.tdb-di.com>)

Survey results (Summary)

1. With respect to the status of corporate initiatives to reform work style, 60.4% of companies are “working on this,” up 22.9 points from the last survey (in August 2018). By combining it with those saying “they are not working on it at present, but will do so in the future” (16.3%), 76.7% of companies are positive about such initiatives. Conversely, 2.0% of companies “used to work on this, but currently do not.” Those saying “no plan to work on this” stand at 8.9%.

2. Specific initiatives taken are “promotion to take holidays,” ranked top at 77.2%, followed by “reducing long working hours” at 71%, which are notably high. These are followed by “development of human resources” (49.6%), “enhanced health management” (45.9%), “creation of workplace culture, improvement of awareness, communication activation” (44.7%), “introduction of IT equipment, and a system to streamline and enhance efficiency of business affairs” (43.6%).

3. For future initiatives, “introduction of satellite office and work from home” (23.6%) showed the highest percentage, followed by “approval for second jobs” (22.5%). Both were below 10% in terms of current initiatives, but this indicates companies are considering their introduction in the future.

4. The most emphasized purposes of the initiatives are “improvement of employees’ motivation,” ranked top at 32.4%, followed by the highly ranked “retention of human resources” (20.2%), and “productivity enhancement” (13.5%). “Physical and mental health of employees” (11.4%) followed. A tendency was seen for companies to put importance on the impact on employees.

5. Reasons for not working on this are “do not feel the need,” with the highest percentage (34.2%), followed by “cannot expect an effect” (25.4%), and “cannot manage due to labor shortage and busy business” (22.4%), which continue to rank highly.

Appendix

1. Research Subjects (Companies researched: 23,652; Valid responses: 10,292; Response rate: 43.5%)

Appendix

1. Region

Hokkaido	517	Tokai	1,147
Tohoku	664	Kinki	1,732
kitaKanto	735	Chugoku	567
minamikanto	3,339	Shikoku	297
Hokuriku	568	Kyushu	726
		Total	10,292

2. Industry (10 Industries 51 Lines of business)

Agriculture, Forestry, Fisheries		56
Finance		119
Construction		1,568
Real Estate		318
Manufacturing (2,878)	Food, Beverages, Livestock Feed	316
	Textile, Textile Products, Clothing	116
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	221
	Pulp, Paper and Paper Products	96
	Publishing, Printing	182
	Chemical	400
	Steel, Nonferrous Metals, Mining	510
	General Machinery	453
	Electrical Machinery	331
	Transportation Machinery, Equipment	101
Wholesale (2,807)	Precision Machinery, Medical Instruments and Equipment	74
	Others	78
	Food, Beverages	339
	Textile, Textile Products, Clothing	176
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	332
	Paper Products, Stationery, Books	100
	Chemical	269
	Recycled Resources	32
	Steel, Nonferrous Metals, Mining Products	317
	Machinery, Equipment	907
Others	335	

Retail (423)	Food, Beverages	69
	Textile, Textile Products, Clothing	29
	Drugs, Sundries	22
	Furniture	11
	Electrical Household Appliances, Information Machinery and Equipment	35
	Motor Vehicles, Motor Vehicle Parts	68
	Special Merchandise	135
	Various Merchandise	46
Others	8	
Transportation, Warehousing		438
Service (1,647)	Restaurants	50
	Telecommunications	6
	Electricity, Gas, Water, Heat	13
	Leasing, Rentals	120
	Lodging, Hotels	26
	Recreation	52
	Broadcasting	17
	Maintenance, Guarding, Testing	161
	Advertising	97
	Information	463
	Labor Dispatching	57
	Special Services	260
	Medical, Welfare, Public Health	116
Education	29	
Others	180	
Others		38
Total		10,292

3. Size

Large Firms	2,007	19.5%
Small to Medium-sized Firms	8,285	80.5%
micro Firms	2,787	27.1%
Total	10,292	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 December 16 2019 – January 6 2020

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

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

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

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.