TDB Trends Research (Research & Summary for July 2019)

Domestic economy has worsened for eight months in a row

 \sim Downturn in overseas economies, further worsened due to unstable weather \sim

(Companies researched: 23,650; Valid responses: 10,091; Response rate: 42.7%; Survey start date: May 2002)

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

The economic diffusion index (DI) in July 2019 was 44.6, down 0.5 points from the previous month, and worsened for the eighth consecutive month. Amid the continuing deterioration in the manufacturing industry and declining capital investment incentives, as well as the impact of unstable weather, the possibility of entering a recession phase has increased.

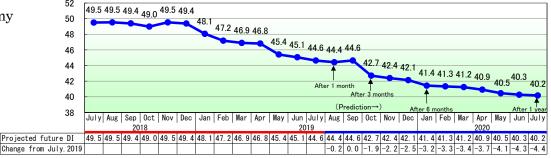
< Future outlook: Uncertainty has further intensified >

There are concerns over the impact of US-Japan trade talks and the interestrate cut by the Federal Reserve Board, besides the decrease in consumption due to the consumption tax hike, and uncertainty about the domestic economy has further intensified. e-mail: keiki@mail.tdb.co.jp

By industry: Six of the ten industries worsened. Adversely affected by unstable weather and export deceleration.

By size: All sizes worsened for the fourth consecutive month. Economic deceleration overseas and unstable weather exerted downward pressure.

By region: Seven of the ten regions worsened. Capital investment incentives declined in nine regions.



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

1

Economic Diffusion Index (Economic DI)1/2

	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Ratio to the PrFDious Month
Total	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	44.6	▲ 0.5
Large Firms	51.3	51.8	51.6	51.4	51.4	51.4	51.7	50.6	49.8	49.8	49.7	48.8	48.7	47.7	▲ 1.0
Small to Medium-sized Firms	48.5	48.9	49.0	48.9	48.4	49.0	48.8	47.4	46.5	46.2	46. 1	44.6	44.2	43.9	▲ 0.3
Micro Firms	47.6	48.1	48.4	48.4	47.9	48.2	48.2	47.0	46.5	46.3	46.2	44.5	44.1	43.8	▲ 0.3

		Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Ratio to the PrFDious Month
Agriculture,Forest	ry,Fisheries	43.3	43.4	45.7	43.8	41.5	40.7	40.7	41.8	41.7	42.3	41. 3	40.5	43.2	39. 1	▲ 4.1
Finance		47.2	49.5	47.5	48.5	46.2	47.1	46.5	46. 1	45. 2	45.9	45. 1	44.7	44.8	45. 1	0.3
Construction		51.9	52.8	53. 1	53.8	53.4	53.9	54. 1	53.9	53.6	53.6	52.8	51.7	51.6	51.7	0.1
Real Estate		51.1	50.5	51.1	50.7	49.3	49.3	49.7	49.1	47.5	47.4	48.7	47.6	48.3	47.4	▲ 0.9
	Food,BEWerages,Livestock Feed	43.2	43.1	43.3	42.9	42.0	42.4	43.0	41.6	40.6	40.6	42. 2	41.3	40.3	40.4	0. 1
	Textile, Textile Products, Clothing	42.8	42.1	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.
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	45. 9	46.6	45. 6	45. 2	46. 1	47.5	48. 3	47. 1	45. 5	44. 1	45. 7	45. 4	43.5	43.8	0. :
	Pulp, Paper and Paper Products	45.2	44.5	44.5	45.4	44.3	46.5	49.3	44.6	45. 2	44. 1	45.7	43.0	41.7	39.6	▲ 2. 3
	Publishing, Printing	33.7	35.0	33.8	34.6	33. 2	34.8	35.0	33.5	33. 2	34. 4	35. 6	34.3	33.9	32.5	▲ 1.4
Manufacturing	Chemical	51.6	52.2	51.3	51.4	50.4	51.4	50.2	48.1	46.3	45.4	46. 2	43.9	42.5	41.9	▲ 0.6
	Steel, Nonferrous Metals, Mining	53.3	54.1	54. 2	52.8	53.0	54.4	52.5	50.4	48.0	45.4	45.5	42.9	41.8	41.5	▲ 0.5
	General Machinery	60.3	60.7	59.9	59.1	58. 1	57.5	55.9	52.5	51.4	48.9	49.0	46.0	45.1	44.0	▲ 1.
	Electrical Machinery	53.4	52.8	52.0	53.3	52.9	52.5	50.5	49.2	47.6	46.0	44.7	43.1	43.0	42.8	▲ 0.2
	Transportation Machinery, Equipment	57.3	56.6	58.7	58.3	56.9	56.4	53.8	52.3	50.9	49.3	49.4	48. 1	47.5	46.4	▲ 1.1
	Precision Machinery, Medical Instruments and Equipment	57. 2	55. 1	54. 8	54. 3	53. 7	53. 4	54.0	51. 3	48.6	45. 5	47. 3	44. 4	42. 4	43. 9	1.5
	Other	42.5	41.5	40.7	42.6	42.8	41.8	42.8	42.7	42. 1	45.3	40.2	40.2	40.2	38.0	▲ 2.2
	Total	50.4	50.6	50.2	50.0	49.5	50.0	49.2	47.1	45.8	44.5	44.8	42.9	42.0	41.5	▲ 0.5
	Food,BEWerages	42.4	40.9	41.9	41.3	40.6	41.9	41.1	39.4	40.5	40.5	41.1	40.8	40.4	38.8	▲ 1.6
	Textile,Textile Products,Clothing	37. 3	35.9	37.3	35.1	35.3	33.5	34. 3	34.0	32.0	33.6	33. 2	33. 2	31.6	29.8	▲ 1.8
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	44. 4	44.8	44. 2	44.8	43. 9	46.9	47.8	47.4	46. 5	46. 4	45. 6	44.7	43.8	44. 7	0.9
Wholesale	Paper Products, Stationery, Books	36.2	35.4	36.6	36.9	36.5	38. 1	39.3	37.9	36.0	39.0	39. 2	39.0	36.4	37.0	0.6
	Chemical	46.8	48.9	48. 1	47.1	47.0	47.8	47.7	45.3	44. 3	44.3	44. 2	41.8	41.2	42.7	1. 5
	Recycled Resources	50.6	48.2	51.2	47.8	49.4	44.0	47.6	39.8	45.6	48.6	41.0	40.2	37.1	32.8	▲ 4. 5
	Steel,Nonferrous Metals, Mining Products	47.8	48.0	50.3	49. 2	49. 4	48.8	50. 2	46. 3	45. 0	43. 7	43. 4	40.8	40.4	39. 0	▲ 1.4
	Machinery, Equipment	50.0	50.9	51.0	50.2	49.6	49.9	50.0	48.4	46. 9	46.5	45. 9	44.2	44.4	43.8	▲ 0.0
	Other	43.3	43.2	42.4	42.4	43.4	44.0	43.9	41.9	41.2	42.5	42.7	40.6	40.6	40.2	▲ 0.4
	Total	45.7	45.9	46.3	45.6	45.4	46.0	46.3	44.4	43.6	43.7	43.3	41.9	41.4	41.0	▲ 0.4

©TEIKOKUDATABANK,LTD

TDB Trends Research July 2019

Economic	Diffusion	Indox	Faanamia	DI) 5/5
Economic	Dillusion	muex v	(ECOHOIIIC	D1/2/2

		Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Ratio to the PrFDious Month
	Food,BEWerages	45.2	44.5	45.3	45.7	44.4	45.5	42.8	43.4	41.5	42.5	42.5	44.8	42.9	41.5	▲ 1.4
	Textile, Textile Products, Clothing	32.1	34.6	32.7	30.6	32.7	31.3	34.0	30.9	32.7	38.9	39. 1	36.9	36.6	34.6	▲ 2.0
	Drugs,Sundries	42.9	41.0	41.3	40.2	38.4	42.4	44.4	44.8	39.7	39.7	40.9	41.0	38.5	40.0	1.
	Furniture	38.3	38.3	37.0	37.0	37.9	37.5	35.4	38.9	33.3	33.3	38. 9	39.6	48.5	40.9	▲ 7.
Retail	Electrical Household Appliances, Information Machinery and Equipment	41.9	45. 5	43. 7	42.8	40.6	39. 7	43. 1	39.0	40. 7	38. 9	41.7	39. 1	43.5	34.3	▲ 9.
	Motor Vehicles, Motor Vehicle Parts	42.9	45.0	43.5	46. 1	40.8	41.5	42.2	44.6	44.3	45.2	43.3	41.5	42.5	39.2	▲ 3.
	Special Merchandise	39.7	40.7	39. 1	39. 1	39.7	43.3	43.2	41.9	41.3	40.8	42.1	41.3	41.1	40.6	▲ 0.
	Various Merchandise	44.2	48.2	46.5	43.6	46.4	43.6	44.7	42.9	41.9	43.5	43.3	43.8	44.7	39.3	▲ 5.
	Other	33.3	36. 1	40.5	38. 9	41.7	38. 1	35.7	35.7	31.3	33.3	43.8	39.6	46.3	41.7	▲ 4.
	Total	41.3	42.7	41.7	41.6	40.9	42. 1	42.3	41.6	40.8	41.4	42.1	41.6	42.0	39.5	▲ 2.
Transportati	on,Warehousing	48.7	50.3	50.3	49.5	48.7	50.1	50.5	49.1	48.2	48. 1	48.2	46.7	45.6	44.5	▲ 1.
	Restaurants	42.5	42.7	42.5	39. 3	37.0	37.6	40.7	37.9	41.0	37.8	42.9	40.6	42.9	39.6	▲ 3.
	Postal, Telecommunications	54.5	55. 6	55. 0	56. 1	59.7	57. 1	54. 5	60.0	57. 6	62. 1	57. 6	56. 7	60.0	58.3	▲ 1.
	Electricity, Gas, Water, Heat	57.4	56. 3	57. 4	59.3	56.7	57. 1	61.9	57.4	57. 4	56. 3	58. 3	55. 6	54. 5	54.2	▲ 0.
	Leasing,Rentals	52. 9	54. 5	54. 2	55. 9	56.5	57. 1	55. 7	55.0	52.0	52.7	54. 1	50.9	52. 5	51.8	▲ 0.
	Lodging, Hotels	50.0	45. 2	46.6	43.6	41.0	45.5	45.7	44.9	44. 2	42.3	41.0	50.0	44. 9	40.3	▲ 4.
	Recreation	40.9	39. 8	40.0	39. 9	35. 5	40.6	39. 3	38. 9	37.8	41.0	38. 8	42.0	41.5	41.8	0.
	Broadcasting	40.3	42. 3	38. 5	41.7	40.5	40.0	36. 7	40.5	44. 4	43.3	41.7	44. 1	43.3	41.1	▲ 2. :
Service	Maintenance,Guarding,Testing		50. 5	52. 3	51.8	51.4	51.6	50.7	50.7	51.0	50.0	48. 1	48.2	48.8	49.3	0.
	Advertising		41.7	41.4	42.3	42.3	41.2	41.7	40.4	40.1	40.3	40.7	40.5	40.7	40.4	A 0.
	Information	58.8	58. 7	59. 1	59.7	59.8	60.7	59.3	60.1	59.0	60.3	59.6	58.0	57.8	58.5	0.
	Labor Dispatching	59.1	59.3	59. 2	58.0	59.4	58.8	59.0	57.2	54.6	53.8	53. 5	53.9	52.8	52.7	▲ 0.
	Special Services	54.6	54.8	55. 3	53. 9	55.0	54.6	53.6	53.5	52.8	52.5	51.5	49.5	50.1	49.9	A 0.
	Medical,Welfare,Public Health	46.8	46. 1	48. 2	48.3	48.8	48.3	47.4	47.5	46.5	47.1	46.9	47.8	47.0	48.7	1.
	Education	40.6	42.6	46.5	46.4	43.8	43.5	46.2	38.5	44.7	45.8	44. 2	43.6	44.0	41.1	▲ 2.
	Other	50.0	51.3	50.2	51.6	49.3	49.8	52.0	50.2	49.7	49.0	50.2	47.9	48.5	47.9	▲ 0.
	Total	52.0	52. 4	52.8	52.9	52. 9	53. 2	52.7	52.4	51.7	51.9	51.6	50.6	50.8	50.8	0.
Other		46.3	46. 1	45.0	46.3	46.2	45.3	46.6	44. 1	48.3	45. 2	44. 9	43.2	42.6	44. 1	1.
		Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Ratio to the PrFDious Month
	Hokkaido	46.5	46.6	47.5	44.3	43.9	45.2	45.2	43.9	44.4	44.6	45.5	45.3	45.1	45.7	0.
	Tohoku	44.2	46.8	46.6	46.4	45.9	46.5	45.4	44.4	43.1	42.8	43.1	42.2	41.9	41.7	▲ 0.
	kitakanto	49.4	50.6	50.0	50.0	49.0	48.5	48.5	45.8	44.8	44.7	44.3	43.1	42.5	42.5	0.
	minamikanto	50.2	50.3	50.0	50.4	49.8	50.4	50.1	49.0	48. 1	47.8	47.7	46.0	46.0	45.5	▲ 0.
	Hokuriku	48.7	49.4	49.8	49.3	49.4	49.3	48.6	47.7	46.3	45.3	45.3	44.6	44.2	43.5	▲ 0.
	Tokai	50.9	51.6	51.8	51.4	51.3	51.8	51.8	50.1	48.6	48.4	48.0	46.8	45.8	44.7	▲ 1.
	Kinki	48.4	48.6	49.4	48.9	48.8	49.7	49.7	48.4	47.6	47.3	46.9	45.0	44.6	44.0	▲ 0.
	Chugoku	47.9	47.0	47.1	48.0	48.6	48.5	48.7	47.7	47.2	46.7	47.2	45.6	45.5	45.0	▲ 0.

©TEIKOKUDATABANK,LTD

TDB Trends Research July 2019

Shikoku Kyushu

Appendix

1.Research Subjects(Companies researched: 23,650; Valid responses: 10,091; Response rate: 42.7%)

Appendix

1.Region

Hokkaido	497	Tokai	1,123
Tohoku	648	Kinki	1,668
kitaKanto	774	Chugoku	542
minamikanto	3,238	Shikoku	294
Hokuriku	578	Kyushu	729
		Total	10,091

2.Industry (10 Industries 51 Lines of business)

Agriculture, For	estry, Fisheries	58
Finance		118
Construction		1,531
Real Estate		309
	Food,Beverages,Livestock Feed	319
	Textile, Textile Products, Clothing	99
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	224
	Pulp, Paper and Paper Products	106
	Publishing, Printing	172
Manufacturing 3,223	Chemical	407
	Steel, Nonferrous Metals, Mining	484
	General Machinery	450
	Electrical Machinery	311
	Transportation Machinery, Equipment	96
	Precision Machinery, Medical Instruments and Equipment	76
	Others	88
	Food,Beverages	349
	Textile, Textile Products, Clothing	176
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	318
Wholesale	Paper Products, Stationery, Books	91
3,959	Chemical	269
	Recycled Resources	38
	Steel, Nonferrous Metals, Mining Products	303
	Machinery, Equipment	901
	Others	334

	Food,Beverages	69
	Textile, Textile Products, Clothing	20
	Drugs,Sundries	2
Retail	Furniture	1
480	Electrical Household Appliances,Information Machinery and Equipment	3
	Motor Vehicles, Motor Vehicle Parts	7
	Special Merchandise	12
	Various Merchandise	4
	Others	(
ansportation	n,Warehousing	42
	Restaurants	4
	Telecommunications	1:
	Electricity,Gas,Water,Heat	1:
	Leasing,Rentals	11
	Lodging, Hotels	2
	Recreation	5
Service	Broadcasting	1
1,384	Maintenance,Guarding,Testing	16
	Advertising	9
	Information	45
	Labor Dispatching	5
	Special Services	26
	Medical,Welfare,Public Health	10
	Education	3
	Others	16
thers		3
	Total	10.09

3.Size

	Large Firms	1,981	19.6%
Sr	nall to Medium-sized Firms	8,110	80.4%
	micro Firms	2,696	26.7%
	Total	10,091	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 July 18 – 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

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

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

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	Capital: More than 300 million yen	Capital: Below 300 million yen	
Other Industries*	and	or	No. of Employee: Below 20
	No. of Employee: Over 300	No. of Employee: Below 300	
Wholesale Trade	Capital: More than 100 million yen	Capital: Below 100 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	
Retail Trade	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 50	No. of Employee: Below 50	
Service**	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	

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.