TDB Trends Research (Research & Summary for July 2018)

Domestic economy improved for the first time in four months, heat wave stimulated consumption

 \sim Business confidence of Chugoku region worsened due to disasters caused by heavy rain \sim

(Companies researched: 23,112; Valid responses: 9,979; Response rate: 43.2%; Survey start date: May 2002)

< Overview of July 2018: Economy was at a standstill >

The economic diffusion index (DI) in July 2018 was 49.5, up 0.5 points from the previous month, and improved for the first time in four months. A heat wave and bonuses stimulated consumption and the domestic economy improved for first time in four months, but it was at a standstill as torrential rain triggered stagnant corporate activities mainly around disaster-stricken areas.

<Future outlook: Possibility of situation change >

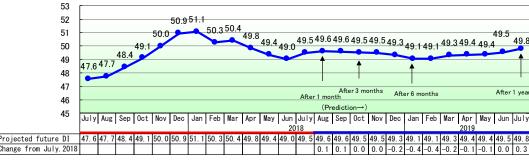
A steady increase in exports and capital investment will underpin the domestic economy, and reconstruction demand after disasters is expected to emerge; however, there are concerns about overseas risks such as trade friction, and the impact of high crude oil prices.

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By industry: A heat wave and bonuses stimulated consumption, and disasters caused by heavy rain had an adverse effect.

By size All of "large enterprises," "SMEs" and "small enterprises" improved for the first time in four months.

By region: While nine of the ten regions improved, the Chugoku region worsened partly due to heavy rains.



f beconomic bis are calculated based on the structural akima model, in which economic statistics are incorporated to the akima mod

Economic Diffusion Index (Economic DI)1/2

	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Ratio to the PrFDious Month
Total	47.6	47.7	48.4	49. 1	50.0	50.9	51.1	50.3	50.4	49.8	49.4	49.0	49.5	0.5
Large Firms		50.5	51.3	51.6	52.1	53.0	53.2	52. 2	52.5	52.2	51.6	51.3	51.8	0.5
Small to Medium-sized Firms		47.0	47.7	48.5	49.4	50.4	50.5	49.8	49.9	49.3	48.8	48.5	48.9	0.4
Micro Firms	45.6	45.7	46. 7	47.6	48.7	49.8	49.6	49. 0	49. 2	48. 1	48. 1	47.6	48.1	0.5

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Ratio to the PrFDious Month
Agriculture,Forest	try,Fisheries	44. 9	44. 5	45.6	47.5	46.7	49.2	47.1	45. 5	44.4	43.5	44.2	43.3	43.4	0.1
Finance		47.2	46.8	48.0	47. 9	49.0	48.9	49.6	48.0	50.3	49.4	47.8	47.2	49.5	2.3
Construction		50.4	50.7	51.7	52. 7	53.7	54. 2	54.0	53. 4	52.9	51.4	51.8	51.9	52.8	0.9
Real Estate		49.6	49.3	49.9	50.9	50.3	51.3	52.3	52. 1	53.1	50.9	51.0	51.1	50.5	▲ 0.6
	Food,BEWerages,Livestock Feed	43.5	42.9	43.0	42.8	42.9	44.8	44.0	43. 2	41.9	42.9	43.4	43.2	43. 1	▲ 0.1
İ	Textile,Textile Products,Clothing	37. 9	38.4	37.7	38.6	39.6	42.0	39. 1	41.3	42.4	42.4	42.7	42.8	42. 1	▲ 0.7
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	45. 3	45. 9	45.6	47.0	46.8	48.0	46.8	46. 2	46.3	45.7	45.8	45.9	46.6	0.7
	Pulp, Paper and Paper Products	43.8	41.9	44.4	46.6	45.6	48.7	46.6	44. 1	45.8	46.3	43.1	45.2	44. 5	▲ 0.7
Manufacturing	Publishing, Printing	34. 2	34.6	36.4	35. 7	35.4	35.8	36.4	37. 4	37.1	36. 2	36. 3	33.7	35.0	1.3
	Chemical	51.4	50.5	51.8	52. 5	53.3	54. 1	53.9	53. 2	53.8	52.3	51.8	51.6	52. 2	0.6
	Steel, Nonferrous Metals, Mining	51.1	51.6	53.0	54.3	56.6	56.3	57.6	55. 6	55.6	53.7	53.5	53.3	54. 1	0.8
	General Machinery	56. 5	56.2	57.2	59.3	59.3	60.8	62.4	62.0	61.2	60.9	60.6	60.3	60.7	0.4
	Electrical Machinery	50.3	51.5	52. 2	53.7	54.5	55.7	56.9	56. 5	54.8	54. 9	53.4	53.4	52.8	▲ 0.6
	Transportation Machinery, Equipment	52. 2	54.7	54.8	54.2	58.6	56.9	57.9	56. 6	59.8	57.6	58.4	57.3	56.6	▲ 0.7
	Precision Machinery, Medical Instruments and Equipment	50. 4	51.8	51.5	53. 2	55. 1	54. 7	57.4	56. 2	54.8	57.5	56.6	57.2	55. 1	▲ 2.1
	Other	40.3	39.7	41.6	39.6	40.9	42.6	43.4	43. 1	43.8	43.2	44.3	42.5	41.5	▲ 1.0
	Total	48.5	48.6	49.4	50.3	51.2	52. 1	52.6	51. 9	51.6	51.0	50.8	50.4	50.6	0.2
	Food,BEWerages	42.2	41.3	41.6	41.1	42.4	43.5	42.9	42. 1	43.0	42. 9	42.8	42.4	40.9	▲ 1.5
	Textile, Textile Products, Clothing	34. 3	34. 2	35.3	35. 4	36.1	37. 4	37. 2	35. 5	37.2	37.2	36.8	37.3	35. 9	▲ 1.4
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	43. 0	43.8	44.0	44. 2	45. 1	46. 7	46.2	44. 9	44. 7	45.0	43. 3	44. 4	44. 8	0.4
Wholesale	Paper Products, Stationery, Books	37. 4	35.7	38.8	38. 4	38.9	38. 4	37.6	34. 9	36.8	38.0	37.5	36.2	35. 4	▲ 0.8
	Chemical	46.5	47.2	47.5	48. 1	48.6	50.7	49.7	49.0	49.1	49.1	49. 1	46.8	48.9	2.1
	Recycled Resources	49.5	55.4	52.4	51.6	57.8	58.3	56.2	51.0	51.9	49.5	46.6	50.6	48. 2	▲ 2.4
	Steel,Nonferrous Metals, Mining Products	45. 1	45. 6	46.2	49. 5	50.5	52. 3	53. 1	51. 9	50.8	49.7	48. 2	47.8	48. 0	0.2
	Machinery, Equipment	48.0	48.2	48.5	49.3	50.9	52. 1	52.3	51.4	51.8	51.1	50.6	50.0	50.9	0.9
	Other	42.1	41.3	42.0	42.0	42.7	43.7	43.9	42.8	43.8	45.4	43.4	43.3	43.2	▲ 0.1
	Total	44. 2	44.3	44.8	45.5	46.5	47.9	47.8	46.6	47.1	47.0	46. 1	45.7	45.9	0.2

Economic Diffusion Index (Economic DI)2/2

		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Ratio to the PrFDious Month
	Food,BEWerages	41.1	44.3	44.4	42.1	45.2	45.3	44. 1	45.6	46.1	47.4	45.7	45.2	44.5	▲ 0.7
	Textile, Textile Products, Clothing	34.6	35. 1	34.4	37.5	32.7	35.6	41.0	38. 2	37.3	38.9	36.7	32. 1	34.6	2. 5
	Drugs,Sundries	43.8	46.8	44.2	44. 9	46.2	44.4	46.4	45.7	47.2	44. 9	47.1	42.9	41.0	▲ 1.9
	Furniture	39.6	37.5	41.7	40.9	45.0	40.7	43.9	35.2	35.0	36.7	35.2	38.3	38.3	0.0
Retail	Electrical Household Appliances, Information Machinery and Equipment	41. 7	44. 6	40. 2	43.9	43. 9	47. 7	41. 9	40.4	45. 7	46.5	40. 2	41. 9	45. 5	3. 6
	Motor Vehicles, Motor Vehicle Parts	44. 4	45.5	46.2	45.3	45.6	44. 2	49.2	47.8	48.3	48.2	43.5	42.9	45.0	2. 1
	Special Merchandise	39. 7	39.8	39.7	39.6	38.8	41.5	41.9	42.5	42.9	41.0	39.7	39.7	40.7	1. (
	Various Merchandise	46.5	45.8	45.7	46.3	45.7	46.4	46.9	46.0	47.5	49.6	44. 1	44. 2	48.2	4. (
	Other	38. 9	44.4	46.7	46.7	43.3	50.0	50.0	43.3	41.7	36. 1	41.7	33.3	36.1	2.8
Total		41.5	42.7	42.2	42.4	42.4	43.4	44.3	43.8	44.8	44.6	42.0	41.3	42.7	1. 4
Transportati	Transportation,Warehousing		48.4	49.0	49.9	50.7	52.5	50.7	49.6	50.5	50.0	49.3	48.7	50.3	1. 6
	Restaurants	43.9	41.9	45.2	45. 1	42.9	44.9	45.2	43.6	44.2	44.7	45.0	42.5	42.7	0. 2
	Postal, Telecommunications	55.6	54. 2	59. 1	54.5	57.7	56.4	56.1	59.1	57.7	56.9	50.0	54.5	55.6	1. 1
	Electricity,Gas,Water,Heat	52.4	52.8	57.1	58.3	59.5	54.2	60.4	58.3	61.1	54. 2	56.3	57.4	56.3	▲ 1.
	Leasing, Rentals	50.6	49.7	52.0	54. 2	54.9	55.9	56.9	56.0	56.0	55. 2	51.5	52.9	54. 5	1. (
	Lodging, Hotels	46.9	47.4	41.7	43.6	51.9	48.0	46.9	48.7	52.0	51.7	50.6	50.0	45.2	▲ 4.8
	Recreation	40.1	38. 3	40.0	39. 1	39.0	42.2	41.7	42.2	42.5	41.5	39.5	40.9	39.8	▲ 1.
	Broadcasting	46.2	47.2	47.2	46.2	44.4	47.6	47.6	47.4	47.0	39.7	37.2	40.3	42.3	2. (
Service	Maintenance, Guarding, Testing	50.2	51.4	51.3	50.3	51.6	50.3	51.5	50.7	51.1	49.9	50.2	48.5	50.5	2. 0
	Advertising	41.0	41.9	40.5	43.6	41.8	41.5	46.1	42.3	43.4	44.2	43.0	40.2	41.7	1. 5
	Information	56.6	56.1	57.2	57.9	57.6	58.4	59.4	58.8	58.6	59.4	58.4	58.8	58.7	▲ 0.1
	Labor Dispatching	54.8	58.6	57.5	58.2	59.0	57.9	58.6	56.5	57.9	57.8	59.0	59.1	59.3	0. 2
	Special Services	52.6	53.4	53.2	53.3	53.2	55.5	53.4	53.1	54.3	53.6	53.7	54.6	54.8	0. 2
	Medical,Welfare,Public Health	45.2	46.1	47.4	44. 1	47.9	48.3	47.6	48.6	48.1	48.8	48.0	46.8	46.1	▲ 0.7
	Education	42.5	42.5	41.7	41.0	40.5	42.4	45.1	41.7	44.2	42.4	42.8	40.6	42.6	2. 0
	Other	50.2	50.5	50.7	50.6	53.9	52.6	51.6	51.3	51.8	50.7	50.8	50.0	51.3	1. 3
	Total	50.9	51.1	51.5	51.8	52.5	53.0	53.4	52.7	53.1	52.8	52.1	52.0	52.4	0.4
Other		41.7	42.4	43.6	43.3	47.9	48.2	47.8	47.9	50.8	49.2	50.0	46.3	46.1	▲ 0.2

	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Ratio to the PrFDious Month
Hokkaido	48.4	48.8	48.6	48.6	48.6	48.4	47.8	45.7	46.6	46.2	45.8	46.5	46.6	0.1
Tohoku	45.7	45.4	45.9	45.9	47.2	47.9	46.9	46.1	46.4	45.7	45.0	44. 2	46.8	2.6
kitakanto	48.3	47.8	49.1	50.2	51.2	52.9	52.3	51.7	51.4	50.7	49.8	49.4	50.6	1.2
minamikanto	48.2	48.2	49.1	49.7	50.5	51.3	51.8	51.0	51.5	50.7	50.3	50.2	50.3	0.1
Hokuriku	47.5	48.0	48.8	49.3	49.0	49.9	49.7	47.7	48.5	48.7	48.5	48.7	49.4	0.7
Tokai	48.1	48.8	49.2	50.0	51.2	52.5	52.6	52.5	52.3	51.9	51.9	50.9	51.6	0.7
Kinki	45.6	46.1	46.7	48.0	49.0	50.8	51.1	50.3	50.0	49.7	48.8	48.4	48.6	0.2
Chugoku	47.0	47.7	47.8	48.6	50.1	50.6	50.8	50.1	49.6	48.7	48.7	47.9	47.0	▲ 0.9
Shikoku	47.0	46.8	48.5	48.2	48.5	49.0	49.4	48.5	48.4	48.2	47.8	47.2	47.5	0.3
Kyushu	49.4	49.4	49.9	50.5	51.3	51.7	51.7	51.8	51.7	51.4	50.4	49.8	50.9	1.1

Appendix

1.Research Subjects(Companies Researched 23,112; Valid responses: 9,979; Response rate: 43.2%)

Appendix

1.Region

Hokkaido	514	Tokai	1,112
Tohoku	643	Kinki	1,633
kitaKanto	732	Chugoku	566
minamikanto	3,221	Shikoku	292
Hokuriku	563	Kyushu	703
		Total	9,979

2.Industry (10 Industries 51 Lines of business)

Agriculture, For	estry,Fisheries	53
Finance		131
Construction		1,434
Real Estate		302
	Food, Beverages, Livestock Feed	321
	Textile, Textile Products, Clothing	107
Manufacturing 3,223	Construction Materials, Furniture, Ceramics, Stone and Clay Products	218
	Pulp, Paper and Paper Products	107
	Publishing, Printing	174
	Chemical	409
	Steel, Nonferrous Metals, Mining	496
	General Machinery	433
	Electrical Machinery	325
	Transportation Machinery, Equipment	99
	Precision Machinery, Medical Instruments and Equipment	75
	Others	82
	Food, Beverages	340
	Textile, Textile Products, Clothing	187
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	323
Wholesale	Paper Products,Stationery,Books	105
3,959	Chemical	267
	Recycled Resources	28
	Steel, Nonferrous Metals, Mining Products	313
	Machinery, Equipment	897
	Others	322

thers	1	
	Others	1
	Education	
	Medical,Welfare,Public Health	1
	Special Services	2
	Labor Dispatching	
	Information	4
	Advertising	
1,384	Maintenance,Guarding,Testing	-
Service	Broadcasting	
	Recreation	
	Lodging, Hotels	
	Leasing, Rentals	
	Electricity,Gas,Water,Heat	
	Telecommunications	
	Restaurants	
ransportation	n,Warehousing	4
	Others	
	Various Merchandise	
	Special Merchandise	
	Motor Vehicles.Motor Vehicle Parts	
480	Electrical Household Appliances, Information Machinery and Equipment	
Retail	Furniture	
	Drugs,Sundries	
	Food,Beverages Textile,Textile Products,Clothing	

3.Size

Large Firms	2,039	20.4%
Small to Medium-sized Firms	7,940	79.6%
micro Firms	2,607	26.1%
Total	9,979	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 2018

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 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.