TDB Trends Research (Research & Summary for July 2017)

Economy boosted by active construction investment and intense heatwave

- Large companies exceeding 50 points for the first time in 3 years and 4 months -

(Companies researched: 23,767; Valid responses: 10,093; Response rate: 42.5%; Survey start date: May 2002)

< Overview of July 2017: Recovery continues >

The economic diffusion index (DI) in July 2017 was 47.6, up 0.8 points from the previous month. This reflects an improvement for two consecutive months.

Recovery of the domestic economy continued, with large companies and the construction industry exceeding 50 points boosted by active construction investment and intense heatwave.

< Future outlook: Recovery trend continues >

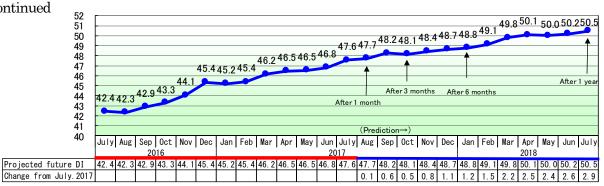
The recovery trend in the domestic economy is expected to continue, buoyed by construction-related work and capital investment, in addition to continued strong exports.

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By industry: Seven of the 10 industries have improved. Improvement in 'construction' rippled across relevant sectors, such as building materials.

By size: 'Large companies' recovered to above the 50 point level for the first time in 3 years and 4 months.

By region: Nine of the 10 regions have improved on the back of a pickup in disaster recovery and restoration work.



^{*:} 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

	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Ratio to the PrFDious Month
Total	42.4	42.3	42.9	43.3	44. 1	45.4	45.2	45.4	46.2	46.5	46.5	46.8	47.6	0.8
Large Firms		45.7	46.5	46.5	47.0	48.4	48.2	48.3	48.9	49.4	49.9	49.8	50.3	0.5
Small to Medium-sized Firms		41.4	41.9	42.4	43.3	44.5	44.4	44.6	45.4	45.7	45.6	46.0	46.8	0.8
Micro Firms	40.3	40.6	41.3	41.9	42.9	43.9	43.5	44.1	44.4	44.5	44. 4	44.4	45.6	1.2

		Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Ratio to the PrFDious Month
Agriculture,Forest	ry,Fisheries	42.5	40.1	41.8	41. 2	44.6	47.3	43.3	45.1	45.5	47.0	45.4	45.3	44. 9	▲ 0.4
Finance			43.7	44.5	44. 1	45. 2	45.9	46.4	45.5	45.6	46.0	46.4	46.3	47.2	0.9
Construction			46.9	48.1	48.6	49. 2	49.7	49.2	49.5	49.3	49.0	49.5	49.5	50.4	0.9
Real Estate			47.3	47.0	46. 2	47.7	48.7	49.3	49.9	49.4	49.7	50.7	49.4	49.6	0.2
	Food,BEWerages,Livestock Feed		42.1	41.8	42. 2	42.2	43.4	41.9	42.1	42.7	43.0	42.6	43.5	43.5	0.0
	Textile, Textile Products, Clothing		37.8	37. 3	36. 6	36. 7	38.0	36.3	37.7	38.6	38.8	39.4	37.8	37. 9	0.1
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	40.5	40.7	40.5	41.7	42. 5	43.5	43.3	42.8	43. 2	42.4	43. 4	43. 4	45.3	1.9
Manufacturing	Pulp, Paper and Paper Products	40.4	39.4	39. 1	40.1	40.3	43.0	43.3	42.0	42.0	42.9	42.5	43.4	43.8	0.4
	Publishing, Printing	33.5	32.8	33.7	34. 4	35.0	35.7	33.9	34.6	36.5	35.6	33.4	35. 1	34. 2	▲ 0.9
	Chemical	43.3	41.8	44.0	43.8	45.5	48.2	47.5	47.9	48.5	49.9	50.3	50.2	51.4	1.2
	Steel, Nonferrous Metals, Mining	38.7	39.8	41.4	42.5	44. 3	45.7	45.9	46.2	47.0	47.5	47.3	49.6	51.1	1.5
	General Machinery	44. 9	44.3	45.3	46.7	47. 9	50.3	49.9	51.1	52.9	54.1	54.5	54.8	56.5	1.7
	Electrical Machinery	41.9	41.5	42.6	44. 5	44. 4	45.5	46.3	47.1	47.8	48.6	49.3	49.7	50.3	0.6
	Transportation Machinery, Equipment	44.0	44.9	44. 2	46.9	46.6	48.6	49.5	49.3	52.5	50.3	52.0	52.7	52.2	▲ 0.5
	Precision Machinery, Medical Instruments and Equipment	42.6	43. 2	44.8	44. 0	44. 8	46.3	46. 7	49. 4	48. 1	50.0	51.7	51.5	50. 4	▲ 1.1
	Other	39. 1	35.7	37.7	37. 3	39. 4	39.6	39. 2	41.3	41.3	40.1	38. 2	38. 5	40.3	1.8
	Total	41.2	40.9	41.8	42.7	43.5	45.2	44.8	45.4	46.3	46.7	46.9	47.5	48.5	1.0
	Food,BEWerages	41.1	40.4	39. 9	39. 9	40.1	41.5	40.6	40.4	41.0	41.7	42.7	41.8	42.2	0.4
	Textile, Textile Products, Clothing	33.5	34. 5	32.9	31. 9	33. 1	34.0	33.7	33.4	32.6	34.7	34.5	35.0	34. 3	▲ 0.7
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	39.0	38. 9	39. 9	40. 3	42. 6	43.2	42. 1	42.6	42.8	41.8	43.2	42.8	43.0	0.2
Wholesale	Paper Products, Stationery, Books	35.9	36.3	37.4	36. 1	37. 5	37.7	38.6	38. 4	38.3	38.5	36. 1	38.4	37.4	▲ 1.0
	Chemical	39.5	39. 4	39.6	40.9	40.4	43.1	44.4	42.8	44.5	46.0	45. 1	45.3	46.5	1.2
	Recycled Resources	29.4	35.0	33.8	36. 9	44.0	49.5	49.1	50.0	54.9	49.5	49.0	51.8	49.5	▲ 2.3
	Steel, Nonferrous Metals, Mining Products	35. 7	36.0	35. 5	36. 8	39. 6	42.6	42.5	42.9	44.0	43.5	41.3	43. 1	45. 1	2. 0
	Machinery, Equipment	40.9	40.5	41.2	41.6	42.5	44. 2	44.8	44.3	45.8	46.3	46.1	46.6	48.0	1.4
	Other		38. 7	38. 2	37.6	37.9	39. 9	40.1	39. 2	39. 9	41.1	42.0	41.4	42.1	0.7
	Total	38.8	38. 9	39.0	39. 3	40.4	42.1	42.2	41.8	42.8	43.2	43. 1	43.4	44. 2	0.8

Economic Diffusion Index (Economic DI)2/2

		Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Ratio to the PrFDious Month
	Food,BEWerages	40.7	40.0	39. 5	37.6	37.7	40.6	37. 4	41.5	41.4	39.0	39. 9	42.9	41.1	▲ 1.8
	Textile, Textile Products, Clothing	33.8	32.8	28.0	27.6	32.4	31.3	32.7	29.0	30.9	31.8	33.9	34.4	34.6	0.2
	Drugs,Sundries	42.5	42.5	42.0	38.3	41.1	42.0	43.5	46.0	44.3	46.0	46.4	44.4	43.8	▲ 0.6
	Furniture	36.1	35.4	33. 3	37.5	37. 5	30.0	33. 3	38.1	33. 3	35.7	35. 7	40.7	39.6	▲ 1.1
Retail	Electrical Household Appliances, Information Machinery and Equipment	40.2	37.9	42. 7	41.2	37. 8	38.6	40.5	39. 9	43.0	41.7	38. 1	41.9	41.7	▲ 0.2
	Motor Vehicles, Motor Vehicle Parts	39.8	40.1	42.3	39.3	40.2	41.0	43.5	46.3	47.7	41.9	41.5	44.4	44. 4	0.0
	Special Merchandise	37.6	36.7	38. 1	36.5	36. 3	37.1	38. 3	39.1	38.8	38.3	39. 1	39.8	39. 7	▲ 0.1
	Various Merchandise	43.2	39.9	40.6	41.7	44. 4	44.6	42.0	45.3	44.6	44.3	45.0	48.7	46.5	▲ 2.2
	Other	46.7	47.2	50.0	46.7	46.7	46.7	45.8	45.8	40.0	40.0	41.7	41.7	38. 9	▲ 2.8
	Total		38.4	39.3	37.5	38. 3	39.1	39. 4	40.9	41.1	39.8	40.2	42.1	41.5	▲ 0.6
Transportati	on,Warehousing	41.5	42.0	42.7	44.0	44. 4	46.1	45.0	43.8	45.6	47.0	46.8	45.7	47.7	2.0
	Restaurants	45.3	42.2	39. 0	37.0	38. 0	37.5	42. 3	39.0	45. 1	45.0	41. 1	43.0	43. 9	0.9
	Postal, Telecommunications	52.6	51.1	52.0	53.7	57.7	46.2	55. 1	52.8	58.3	54.2	51.3	56.9	55. 6	▲ 1.3
	Electricity, Gas, Water, Heat	42.9	46.3	43.8	43.3	50.0	41.7	50.0	52.4	47. 2	52.4	52.4	57.1	52.4	▲ 4.7
	Leasing, Rentals	45.9	47.2	47. 4	49.0	49.3	48.9	47. 9	48.2	50.1	48.9	50.2	50.0	50.6	0.6
	Lodging, Hotels	47.8	50.0	49.0	49.4	44. 3	47.5	43.5	45.6	49.4	48.9	49.4	47.9	46.9	▲ 1.0
	Recreation	37.1	38.0	38. 1	37.8	37.0	36.9	37.7	37.1	39. 2	39.1	40.9	40.8	40.1	▲ 0.7
	Broadcasting	43.6	44.4	44.0	47.9	50.0	49.0	45.6	47.8	47.8	47.8	46.7	42.9	46. 2	3.3
Service	Maintenance, Guarding, Testing	46.3	46.4	47.0	47.0	48.2	47.1	47.4	47.8	48.6	49.4	48.9	49.7	50.2	0.5
	Advertising	38.9	39. 2	39.0	39.8	38. 9	40.9	38.6	39.8	41.0	42.3	41.8	40.6	41.0	0.4
	Information	53.0	52.2	52.6	52.3	52.7	53.2	54.3	54.8	55.3	56.1	55.6	55.7	56.6	0.9
	Labor Dispatching	52.4	52.7	51.8	52.5	51.4	54.4	54.4	50.8	54.6	55.8	52.3	54.8	54.8	0.0
	Special Services	50.5	48.8	50.3	50.8	50.3	52.8	51.9	51.8	52.6	53.2	52.3	52.3	52.6	0.3
	Medical, Welfare, Public Health	41.6	42.6	44. 1	43.5	43.6	44.0	43.6	44.7	46.4	47.7	47.9	48.3	45.2	▲ 3.1
	Education	48.2	43.1	45.0	45.6	43.1	43.7	46.7	44.4	43.7	41.1	43.5	42.1	42.5	0.4
	Other	46.6	48.2	47.5	47.4	47.9	47.9	47. 1	49.6	50.1	50.0	49.3	50.8	50.2	▲ 0.6
	Total	47.8	47.7	47.9	48.1	48.2	48.7	48.8	49.1	50.4	50.9	50.4	50.7	50.9	0.2
Other		38.8	40.1	39. 4	41.5	38.6	39.5	39. 9	40.8	40.2	42.1	41.7	42.2	41.7	▲ 0.5

	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Ratio to the PrFDious Month
Hokkaido	40.5	40.6	41.0	42.1	42.5	42.6	42.2	43.2	43.9	44.3	46.1	45.7	48.4	2. 7
Tohoku	43.4	42.9	43.6	44.7	44.8	44.6	44.2	43.6	44.7	45. 2	45.4	45.4	45.7	0.3
kitakanto	41.5	41.1	42.3	42.3	43.3	45.0	44.9	44. 2	45.4	46.6	46.4	47.0	48.3	1.3
minamikanto	43.4	43.2	43.5	44.0	45.0	46.1	46.3	46.5	47.1	47.4	47.3	47.7	48.2	0.5
Hokuriku	39. 4	39.6	40.2	40.1	41.8	43.0	43.4	42.8	44. 1	44.3	45.3	45.9	47.5	1.6
Tokai	43. 1	43.1	43.7	43.6	44. 2	46.4	45.7	45.9	46.6	46.8	46.4	47.3	48. 1	0.8
Kinki	40.5	40.4	41.1	41.6	42.4	43.7	43.7	44. 1	45.1	45. 2	44.7	44. 9	45.6	0. 7
Chugoku	42.4	42.2	43.0	43.6	43.9	45.8	44.6	45.1	46.3	46. 1	46.0	46.5	47.0	0. 5
Shikoku	44.6	44. 5	45.6	45.1	45.8	47. 2	46.2	46.5	46.1	46.9	46.8	47.0	47.0	0.0
Kyushu	44. 2	44.7	45. 1	45.6	46.7	48.0	48. 1	49.0	48. 7	49.1	49.5	48.9	49. 4	0.5

Appendix

1.Research Subjects(Companies Researched 23,767; Valid responses: 10,093; Response rate: 42.5%)

Appendix

1.Region

Hokkaido	529	Tokai	1,137
Tohoku	606	Kinki	1,707
kitaKanto	701	Chugoku	580
minamikanto	3,265	Shikoku	310
Hokuriku	544	Kyushu	714
		Total	10,093

2.Industry (10 Industries 51 Lines of business)

Agriculture, For	estry, Fisheries	56
Finance		123
Construction		1,462
Real Estate		306
	Food,Beverages,Livestock Feed	311
	Textile, Textile Products, Clothing	110
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	226
	Pulp, Paper and Paper Products	107
Manufacturing	Publishing, Printing	183
	Chemical	421
3,223	Steel,Nonferrous Metals,Mining	507
	General Machinery	452
	Electrical Machinery	329
	Transportation Machinery, Equipment	97
	Precision Machinery, Medical Instruments and Equipment	77
	Others	86
	Food,Beverages	348
	Textile, Textile Products, Clothing	186
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	346
Wholesale	Paper Products, Stationery, Books	107
3,959	Chemical	279
	Recycled Resources	31
	Steel, Nonferrous Metals, Mining Products	298
	Machinery, Equipment	905
	Others	357

	Food, Beverages	62
	Textile,Textile Products,Clothing	27
	Drugs,Sundries	24
Retail	Furniture	8
480	Electrical Household Appliances, Information Machinery and Equipment	40
	Motor Vehicles,Motor Vehicle Parts	62
	Special Merchandise	126
	Various Merchandise	48
	Others	3
Transportation	n,Warehousing	449
	Restaurants	41
	Telecommunications	15
	Electricity,Gas,Water,Heat	7
	Leasing, Rentals	105
	Lodging, Hotels	27
	Recreation	57
Service	Broadcasting	13
1,384	Maintenance,Guarding,Testing	153
	Advertising	106
	Information	422
	Labor Dispatching	49
	Special Services	237
	Medical,Welfare,Public Health	94
	Education	20
	Others	144
Others	·	44
	Total	10,093

3.Size

	Large Firms	2,092	20.7%
٤	Small to Medium-sized Firms	8,001	79.3%
	micro Firms	2,586	25.6%
	Total	10,093	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 2017

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 Formula

The DI (Diffusion Index) is calculated by attaching a number (in parenthesis in the diagram below) to each of seven possible responses. Then multiplying the percentage of each response by the appropriate number, and adding the results.

Very Bad	Bad	Moderately Bad	Neither Good or Bad	Moderately Good	Good	Very Good
(0)	(1/6)	(2/6)	(3/6)	(4/6)	(5/6)	(6/6)
0	16.7	33.3	DI=50 Dividing point	66.7	83.3	100

A DI over 50 is in the range of "Good." A score under 50 is "Bad." The number 50 is the dividing point ("Neither Good or Bad"). All numbers are rounded off to the hundredth. It should be noted that no weight is given to a company's responses based on its size. Calculations are made according to a "one company, one vote" rule.

For example, all corporations rated 'Very Good'.

DI=6/6x100(%)=100

All corporations rated 'Neither Good nor Bad'.

DI=3/6x100(%)=50

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
ĺ	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.