

## Improvement for three consecutive months, supported by strong production and exports

- Expectation for a full-scale recovery of personal consumption -

e-mail : [keiki@mail.tdb.co.jp](mailto:keiki@mail.tdb.co.jp)

(Companies researched: 23,920; Valid responses: 10,029; Response rate: 41.9%;  
Survey start date: May 2002)

### < Overview of April 2017: Recovery continues >

The economic diffusion index (DI) in April was 46.5, up 0.3 points from the previous month, and improvement for three consecutive months. The domestic economy continued to show recovery, supported by improvement in “manufacturing” thanks to strong production and exports.

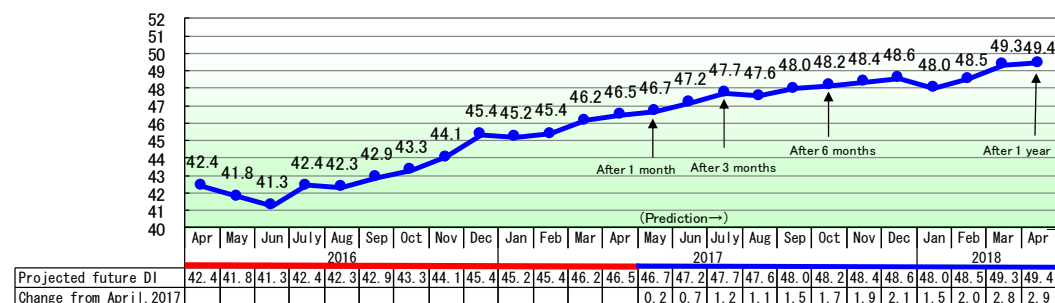
### < Future Outlook: Mild recovery continues >

Mild recovery in economic conditions is expected to continue, tailwinded by continuing strong production and exports, and an increase in public works, amid an expected full-scale recovery of personal consumption.

By industry: Eight of the ten industries have improved. Strong exports have boosted business confidence in related industries.

By size: The economy improved in all sizes for three consecutive months. The transport industry has seen an order expansion for SMEs.

By region: The economy improved in nine of the ten regions. Recovery from the Kumamoto Earthquake has progressed in “Kyushu.”



\*: 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

	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Ratio to the PrFDious Month
Total	42.4	41.8	41.3	42.4	42.3	42.9	43.3	44.1	45.4	45.2	45.4	46.2	46.5	0.3
Large Firms	46.2	45.7	45.1	46.6	45.7	46.5	46.5	47.0	48.4	48.2	48.3	48.9	49.4	0.5
Small to Medium-sized Firms	41.4	40.8	40.3	41.3	41.4	41.9	42.4	43.3	44.5	44.4	44.6	45.4	45.7	0.3
Micro Firms	40.3	39.7	39.6	40.3	40.6	41.3	41.9	42.9	43.9	43.5	44.1	44.4	44.5	0.1

	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Ratio to the PrFDious Month
Agriculture,Forestry,Fisheries	42.4	42.1	43.7	42.5	40.1	41.8	41.2	44.6	47.3	43.3	45.1	45.5	47.0	1.5
Finance	45.5	44.3	45.0	45.1	43.7	44.5	44.1	45.2	45.9	46.4	45.5	45.6	46.0	0.4
Construction	45.2	44.9	44.7	46.5	46.9	48.1	48.6	49.2	49.7	49.2	49.5	49.3	49.0	▲ 0.3
Real Estate	48.1	48.3	48.4	47.8	47.3	47.0	46.2	47.7	48.7	49.3	49.9	49.4	49.7	0.3
Manufacturing	Food,BEWerages,Livestock Feed	44.6	43.4	43.0	43.0	42.1	41.8	42.2	42.2	43.4	41.9	42.1	42.7	0.3
	Textile,Textile Products,Clothing	38.2	38.4	38.2	37.0	37.8	37.3	36.6	36.7	38.0	36.3	37.7	38.6	0.2
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	37.9	38.3	37.8	40.5	40.7	40.5	41.7	42.5	43.5	43.3	42.8	43.2	▲ 0.8
	Pulp, Paper and Paper Products	40.2	38.6	38.5	40.4	39.4	39.1	40.1	40.3	43.0	43.3	42.0	42.9	0.9
	Publishing,Printing	34.1	34.0	32.9	33.5	32.8	33.7	34.4	35.0	35.7	33.9	34.6	36.5	▲ 0.9
	Chemical	43.0	42.7	42.2	43.3	41.8	44.0	43.8	45.5	48.2	47.5	47.9	48.5	1.4
	Steel,Nonferrous Metals,Mining	38.3	38.1	37.6	38.7	39.8	41.4	42.5	44.3	45.7	45.9	46.2	47.0	0.5
	General Machinery	45.3	44.0	43.6	44.9	44.3	45.3	46.7	47.9	50.3	49.9	51.1	52.9	1.2
	Electrical Machinery	42.3	40.4	40.4	41.9	41.5	42.6	44.5	44.4	45.5	46.3	47.1	47.8	0.8
	Transportation Machinery,Equipment	46.8	43.8	42.7	44.0	44.9	44.2	46.9	46.6	48.6	49.5	49.3	52.5	▲ 2.2
	Precision Machinery, Medical Instruments and Equipment	44.6	43.2	43.2	42.6	43.2	44.8	44.0	44.8	46.3	46.7	49.4	48.1	1.9
	Other	37.5	37.8	37.0	39.1	35.7	37.7	37.3	39.4	39.6	39.2	41.3	41.3	▲ 1.2
	Total	41.3	40.6	40.1	41.2	40.9	41.8	42.7	43.5	45.2	44.8	45.4	46.3	0.4
Wholesale	Food,BEWerages	42.6	41.0	40.1	41.1	40.4	39.9	39.9	40.1	41.5	40.6	40.4	41.0	0.7
	Textile,Textile Products,Clothing	35.7	34.6	35.3	33.5	34.5	32.9	31.9	33.1	34.0	33.7	33.4	32.6	2.1
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	39.2	38.4	37.6	39.0	38.9	39.9	40.3	42.6	43.2	42.1	42.6	42.8	▲ 1.0
	Paper Products,Stationery,Books	36.6	36.7	34.2	35.9	36.3	37.4	36.1	37.5	37.7	38.6	38.4	38.3	0.2
	Chemical	39.5	39.4	38.8	39.5	39.4	39.6	40.9	40.4	43.1	44.4	42.8	44.5	1.5
	Recycled Resources	39.3	33.3	28.3	29.4	35.0	33.8	36.9	44.0	49.5	49.1	50.0	54.9	▲ 5.4
	Steel,Nonferrous Metals, Mining Products	35.2	34.6	33.2	35.7	36.0	35.5	36.8	39.6	42.6	42.5	42.9	44.0	▲ 0.5
	Machinery,Equipment	40.9	41.1	39.7	40.9	40.5	41.2	41.6	42.5	44.2	44.8	44.3	45.8	0.5
	Other	39.1	38.6	38.2	38.0	38.7	38.2	37.6	37.9	39.9	40.1	39.2	39.9	1.2
	Total	39.4	38.9	37.9	38.8	38.9	39.0	39.3	40.4	42.1	42.2	41.8	42.8	0.4

## Economic Diffusion Index (Economic DI)2/2

		Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Ratio to the PrFDious Month
Retail	Food,BEWerages	42.1	38.9	38.6	40.7	40.0	39.5	37.6	37.7	40.6	37.4	41.5	41.4	39.0	▲ 2.4
	Textile,Textile Products,Clothing	35.1	32.9	32.5	33.8	32.8	28.0	27.6	32.4	31.3	32.7	29.0	30.9	31.8	0.9
	Drugs,Sundries	42.0	41.1	37.9	42.5	42.5	42.0	38.3	41.1	42.0	43.5	46.0	44.3	46.0	1.7
	Furniture	38.1	42.9	41.7	36.1	35.4	33.3	37.5	37.5	30.0	33.3	38.1	33.3	35.7	2.4
	Electrical Household Appliances, Information Machinery and Equipment	40.7	35.8	36.6	40.2	37.9	42.7	41.2	37.8	38.6	40.5	39.9	43.0	41.7	▲ 1.3
	Motor Vehicles,Motor Vehicle Parts	40.4	37.2	37.0	39.8	40.1	42.3	39.3	40.2	41.0	43.5	46.3	47.7	41.9	▲ 5.8
	Special Merchandise	38.9	37.0	37.4	37.6	36.7	38.1	36.5	36.3	37.1	38.3	39.1	38.8	38.3	▲ 0.5
	Various Merchandise	43.3	43.7	42.6	43.2	39.9	40.6	41.7	44.4	44.6	42.0	45.3	44.6	44.3	▲ 0.3
	Other	41.7	42.9	41.7	46.7	47.2	50.0	46.7	46.7	45.8	45.8	40.0	40.0		0.0
	Total	40.2	38.0	37.7	39.3	38.4	39.3	37.5	38.3	39.1	39.4	40.9	41.1	39.8	▲ 1.3
Transportation,Warehousing		41.5	41.5	40.0	41.5	42.0	42.7	44.0	44.4	46.1	45.0	43.8	45.6	47.0	1.4
Service	Restaurants	43.1	42.3	40.2	45.3	42.2	39.0	37.0	38.0	37.5	42.3	39.0	45.1	45.0	▲ 0.1
	Postal,Telecommunications	59.1	52.4	46.2	52.6	51.1	52.0	53.7	57.7	46.2	55.1	52.8	58.3	54.2	▲ 4.1
	Electricity,Gas,Water,Heat	51.9	47.6	44.4	42.9	46.3	43.8	43.3	50.0	41.7	50.0	52.4	47.2	52.4	5.2
	Leasing,Rentals	45.9	46.7	45.5	45.9	47.2	47.4	49.0	49.3	48.9	47.9	48.2	50.1	48.9	▲ 1.2
	Lodging, Hotels	50.5	44.4	46.8	47.8	50.0	49.0	49.4	44.3	47.5	43.5	45.6	49.4	48.9	▲ 0.5
	Recreation	38.0	36.8	38.4	37.1	38.0	38.1	37.8	37.0	36.9	37.7	37.1	39.2	39.1	▲ 0.1
	Broadcasting	46.7	44.4	42.7	43.6	44.4	44.0	47.9	50.0	49.0	45.6	47.8	47.8		0.0
	Maintenance,Guarding,Testing	44.4	44.3	44.3	46.3	46.4	47.0	47.0	48.2	47.1	47.4	47.8	48.6	49.4	0.8
	Advertising	37.5	36.8	37.9	38.9	39.2	39.0	39.8	38.9	40.9	38.6	39.8	41.0	42.3	1.3
	Information	53.4	52.5	52.2	53.0	52.2	52.6	52.3	52.7	53.2	54.3	54.8	55.3	56.1	0.8
	Labor Dispatching	53.1	52.5	49.4	52.4	52.7	51.8	52.5	51.4	54.4	54.4	50.8	54.6	55.8	1.2
	Special Services	48.3	48.6	49.2	50.5	48.8	50.3	50.8	50.3	52.8	51.9	51.8	52.6	53.2	0.6
	Medical,Welfare,Public Health	41.5	41.4	41.5	41.6	42.6	44.1	43.5	43.6	44.0	43.6	44.7	46.4	47.7	1.3
	Education	43.0	42.2	43.9	48.2	43.1	45.0	45.6	43.1	43.7	46.7	44.4	43.7	41.1	▲ 2.6
	Other	46.7	45.7	46.8	46.6	48.2	47.5	47.4	47.9	47.9	47.1	49.6	50.1	50.0	▲ 0.1
	Total	47.5	46.8	46.7	47.8	47.7	47.9	48.1	48.2	48.7	48.8	49.1	50.4	50.9	0.5
Other		37.4	37.5	37.5	38.8	40.1	39.4	41.5	38.6	39.5	39.9	40.8	40.2	42.1	1.9

		Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	Ratio to the PrFDious Month
Hokkaido		39.2	39.6	39.4	40.5	40.6	41.0	42.1	42.5	42.6	42.2	43.2	43.9	44.3	0.4
Tohoku		43.3	41.7	42.9	43.4	42.9	43.6	44.7	44.8	44.6	44.2	43.6	44.7	45.2	0.5
kitakanto		40.8	41.2	40.0	41.5	41.1	42.3	42.3	43.3	45.0	44.9	44.2	45.4	46.6	1.2
minamikanto		43.6	43.0	42.3	43.4	43.2	43.5	44.0	45.0	46.1	46.3	46.5	47.1	47.4	0.3
Hokuriku		39.2	39.3	38.4	39.4	39.6	40.2	40.1	41.8	43.0	43.4	42.8	44.1	44.3	0.2
Tokai		43.3	42.7	41.5	43.1	43.1	43.7	43.6	44.2	46.4	45.7	45.9	46.6	46.8	0.2
Kinki		40.8	40.3	39.4	40.5	40.4	41.1	41.6	42.4	43.7	43.7	44.1	45.1	45.2	0.1
Chugoku		43.1	41.5	41.5	42.4	42.2	43.0	43.6	43.9	45.8	44.6	45.1	46.3	46.1	▲ 0.2
Shikoku		45.2	45.0	43.4	44.6	44.5	45.6	45.1	45.8	47.2	46.2	46.5	46.1	46.9	0.8
Kyushu		43.4	41.7	42.5	44.2	44.7	45.1	45.6	46.7	48.0	48.1	49.0	48.7	49.1	0.4

## Appendix

### 1. Research Subjects (Companies Researched 23,920; Valid responses: 10,029; Response rate: 41.9%)

Appendix

#### 1. Region

Hokkaido	522	Tokai	1,136
Tohoku	617	Kinki	1,663
kitaKanto	701	Chugoku	550
minamikanto	3,257	Shikoku	303
Hokuriku	559	Kyushu	721
		Total	10,029

#### 2. Industry (10 Industries 51 Lines of business)

Agriculture, Forestry, Fisheries		50
Finance		120
Construction		1,453
Real Estate		294
Manufacturing 3,223	Food, Beverages, Livestock Feed	316
	Textile, Textile Products, Clothing	118
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	240
	Pulp, Paper and Paper Products	105
	Publishing, Printing	186
	Chemical	424
	Steel, Nonferrous Metals, Mining	493
	General Machinery	438
	Electrical Machinery	331
	Transportation Machinery, Equipment	99
Wholesale 3,959	Precision Machinery, Medical Instruments and Equipment	77
	Others	86
	Food, Beverages	347
	Textile, Textile Products, Clothing	179
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	341
	Paper Products, Stationery, Books	114
	Chemical	271
	Recycled Resources	35
	Steel, Nonferrous Metals, Mining Products	309
	Machinery, Equipment	877
	Others	350

Retail 480	Food, Beverages	68
	Textile, Textile Products, Clothing	32
	Drugs, Sundries	25
	Furniture	7
	Electrical Household Appliances, Information Machinery and Equipment	36
	Motor Vehicles, Motor Vehicle Parts	62
	Special Merchandise	141
	Various Merchandise	44
Service 1,384	Others	5
	Transportation, Warehousing	450
	Restaurants	40
	Telecommunications	12
	Electricity, Gas, Water, Heat	7
	Leasing, Rentals	107
	Lodging, Hotels	29
	Recreation	55
	Broadcasting	15
	Maintenance, Guarding, Testing	150
	Advertising	111
	Information	410
	Labor Dispatching	63
	Special Services	221
	Medical, Welfare, Public Health	96
	Education	15
	Others	137
	Others	38
Total		10,029

#### 3. Size

Large Firms	2,070	20.6%
Small to Medium-sized Firms	7,959	79.4%
micro Firms	2,557	25.5%
Total	10,029	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 April 17 – 30 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’.

$$DI=6/6 \times 100(\%)=100$$

All corporations rated ‘Neither Good nor Bad’.

$$DI=3/6 \times 100(\%)=50$$

#### 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.