

## Recovery tailwinded by automobile manufacture and labor shortage measures

- Increased capital investment demand intended for labor-saving -

(Companies Researched: 23,929; Valid responses: 10,305; Response rate: 43.1%;  
Survey Start Date: May 2002)

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

### < Overview of March 2017: Recovery trend continue >

The economic diffusion index (DI) in March was 46.2, up 0.8 points from the previous month, and an improvement for two consecutive months. The domestic economy continued to show recovery trends, tailwinded by favorable automobile-related performance and increased demand in labor shortage measures.

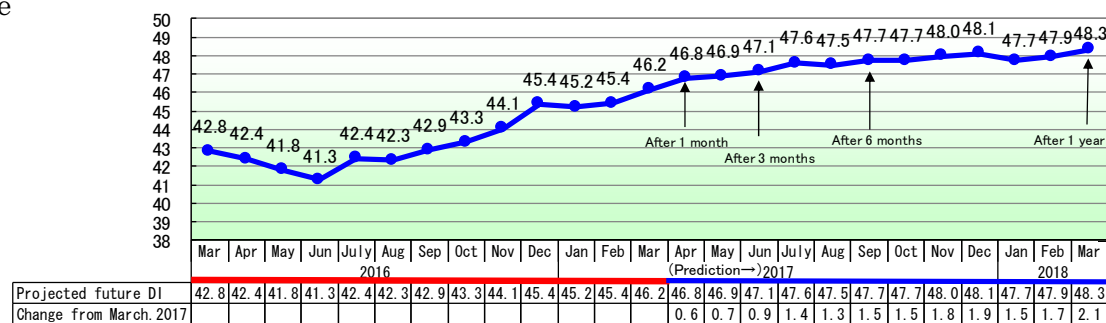
### < Future Outlook: Mild recovery continues >

Mild recovery in economic conditions is expected to continue against the background of strong export and full-scale construction investment for the Olympics.

By industry: The 'service' industry has improved for seven consecutive months. Favorable for both business operators and individuals.

By size: The economy improved nationwide for two consecutive months. Size disparities fell for three consecutive months.

By region: The economy improved in eight of the 10 regions. Good automobile sales spread into related regions.



\*: 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

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Ratio to the PrFDious Month
Total	42.8	42.4	41.8	41.3	42.4	42.3	42.9	43.3	44.1	45.4	45.2	45.4	46.2	0.8
Large Firms	46.5	46.2	45.7	45.1	46.6	45.7	46.5	46.5	47.0	48.4	48.2	48.3	48.9	0.6
Small to Medium-sized Firms	41.8	41.4	40.8	40.3	41.3	41.4	41.9	42.4	43.3	44.5	44.4	44.6	45.4	0.8
Micro Firms	40.8	40.3	39.7	39.6	40.3	40.6	41.3	41.9	42.9	43.9	43.5	44.1	44.4	0.3

		Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Ratio to the PrFDious Month
Agriculture,Forestry,Fisheries		42.3	42.4	42.1	43.7	42.5	40.1	41.8	41.2	44.6	47.3	43.3	45.1	45.5	0.4
Finance		44.8	45.5	44.3	45.0	45.1	43.7	44.5	44.1	45.2	45.9	46.4	45.5	45.6	0.1
Construction		46.3	45.2	44.9	44.7	46.5	46.9	48.1	48.6	49.2	49.7	49.2	49.5	49.3	▲ 0.2
Real Estate		48.2	48.1	48.3	48.4	47.8	47.3	47.0	46.2	47.7	48.7	49.3	49.9	49.4	▲ 0.5
Manufacturing	Food,BEWerages,Livestock Feed	44.2	44.6	43.4	43.0	43.0	42.1	41.8	42.2	42.2	43.4	41.9	42.1	42.7	0.6
	Textile,Textile Products,Clothing	39.8	38.2	38.4	38.2	37.0	37.8	37.3	36.6	36.7	38.0	36.3	37.7	38.6	0.9
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	38.6	37.9	38.3	37.8	40.5	40.7	40.5	41.7	42.5	43.5	43.3	42.8	43.2	0.4
	Pulp, Paper and Paper Products	37.6	40.2	38.6	38.5	40.4	39.4	39.1	40.1	40.3	43.0	43.3	42.0	42.0	0.0
	Publishing,Printing	35.3	34.1	34.0	32.9	33.5	32.8	33.7	34.4	35.0	35.7	33.9	34.6	36.5	1.9
	Chemical	42.7	43.0	42.7	42.2	43.3	41.8	44.0	43.8	45.5	48.2	47.5	47.9	48.5	0.6
	Steel,Nonferrous Metals,Mining	38.3	38.3	38.1	37.6	38.7	39.8	41.4	42.5	44.3	45.7	45.9	46.2	47.0	0.8
	General Machinery	45.7	45.3	44.0	43.6	44.9	44.3	45.3	46.7	47.9	50.3	49.9	51.1	52.9	1.8
	Electrical Machinery	42.8	42.3	40.4	40.4	41.9	41.5	42.6	44.5	44.4	45.5	46.3	47.1	47.8	0.7
	Transportation Machinery,Equipment	46.8	46.8	43.8	42.7	44.0	44.9	44.2	46.9	46.6	48.6	49.5	49.3	52.5	3.2
	Precision Machinery, Medical Instruments and Equipment	44.6	44.6	43.2	43.2	42.6	43.2	44.8	44.0	44.8	46.3	46.7	49.4	48.1	▲ 1.3
	Other	40.6	37.5	37.8	37.0	39.1	35.7	37.7	37.3	39.4	39.6	39.2	41.3	41.3	0.0
Total		41.6	41.3	40.6	40.1	41.2	40.9	41.8	42.7	43.5	45.2	44.8	45.4	46.3	0.9
Wholesale	Food,BEWerages	42.2	42.6	41.0	40.1	41.1	40.4	39.9	39.9	40.1	41.5	40.6	40.4	41.0	0.6
	Textile,Textile Products,Clothing	33.8	35.7	34.6	35.3	33.5	34.5	32.9	31.9	33.1	34.0	33.7	33.4	32.6	▲ 0.8
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	39.4	39.2	38.4	37.6	39.0	38.9	39.9	40.3	42.6	43.2	42.1	42.6	42.8	0.2
	Paper Products,Stationery,Books	38.0	36.6	36.7	34.2	35.9	36.3	37.4	36.1	37.5	37.7	38.6	38.4	38.3	▲ 0.1
	Chemical	40.2	39.5	39.4	38.8	39.5	39.4	39.6	40.9	40.4	43.1	44.4	42.8	44.5	1.7
	Recycled Resources	30.7	39.3	33.3	28.3	29.4	35.0	33.8	36.9	44.0	49.5	49.1	50.0	54.9	4.9
	Steel,Nonferrous Metals, Mining Products	36.1	35.2	34.6	33.2	35.7	36.0	35.5	36.8	39.6	42.6	42.5	42.9	44.0	1.1
	Machinery,Equipment	41.7	40.9	41.1	39.7	40.9	40.5	41.2	41.6	42.5	44.2	44.8	44.3	45.8	1.5
	Other	39.6	39.1	38.6	38.2	38.0	38.7	38.2	37.6	37.9	39.9	40.1	39.2	39.9	0.7
	Total		39.7	39.4	38.9	37.9	38.8	38.9	39.0	39.3	40.4	42.1	42.2	41.8	42.8

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

		Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Ratio to the PrFDious Month
Retail	Food,BEWerages	43.4	42.1	38.9	38.6	40.7	40.0	39.5	37.6	37.7	40.6	37.4	41.5	41.4	▲ 0.1
	Textile,Textile Products,Clothing	33.3	35.1	32.9	32.5	33.8	32.8	28.0	27.6	32.4	31.3	32.7	29.0	30.9	1.9
	Drugs,Sundries	46.1	42.0	41.1	37.9	42.5	42.5	42.0	38.3	41.1	42.0	43.5	46.0	44.3	▲ 1.7
	Furniture	40.5	38.1	42.9	41.7	36.1	35.4	33.3	37.5	37.5	30.0	33.3	38.1	33.3	▲ 4.8
	Electrical Household Appliances, Information Machinery and Equipment	40.4	40.7	35.8	36.6	40.2	37.9	42.7	41.2	37.8	38.6	40.5	39.9	43.0	3.1
	Motor Vehicles,Motor Vehicle Parts	38.6	40.4	37.2	37.0	39.8	40.1	42.3	39.3	40.2	41.0	43.5	46.3	47.7	1.4
	Special Merchandise	37.4	38.9	37.0	37.4	37.6	36.7	38.1	36.5	36.3	37.1	38.3	39.1	38.8	▲ 0.3
	Various Merchandise	44.8	43.3	43.7	42.6	43.2	39.9	40.6	41.7	44.4	44.6	42.0	45.3	44.6	▲ 0.7
	Other	44.4	41.7	42.9	41.7	46.7	47.2	50.0	46.7	46.7	46.7	45.8	45.8	40.0	▲ 5.8
	Total	40.1	40.2	38.0	37.7	39.3	38.4	39.3	37.5	38.3	39.1	39.4	40.9	41.1	0.2
Transportation,Warehousing		41.9	41.5	41.5	40.0	41.5	42.0	42.7	44.0	44.4	46.1	45.0	43.8	45.6	1.8
Service	Restaurants	43.6	43.1	42.3	40.2	45.3	42.2	39.0	37.0	38.0	37.5	42.3	39.0	45.1	6.1
	Postal,Telecommunications	50.0	59.1	52.4	46.2	52.6	51.1	52.0	53.7	57.7	46.2	55.1	52.8	58.3	5.5
	Electricity,Gas,Water,Heat	50.0	51.9	47.6	44.4	42.9	46.3	43.8	43.3	50.0	41.7	50.0	52.4	47.2	▲ 5.2
	Leasing,Rentals	47.1	45.9	46.7	45.5	45.9	47.2	47.4	49.0	49.3	48.9	47.9	48.2	50.1	1.9
	Lodging, Hotels	56.1	50.5	44.4	46.8	47.8	50.0	49.0	49.4	44.3	47.5	43.5	45.6	49.4	3.8
	Recreation	36.9	38.0	36.8	38.4	37.1	38.0	38.1	37.8	37.0	36.9	37.7	37.1	39.2	2.1
	Broadcasting	45.6	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	43.9	44.4	44.3	44.3	46.3	46.4	47.0	47.0	48.2	47.1	47.4	47.8	48.6	0.8
	Advertising	40.9	37.5	36.8	37.9	38.9	39.2	39.0	39.8	38.9	40.9	38.6	39.8	41.0	1.2
	Information	53.4	53.4	52.5	52.2	53.0	52.2	52.6	52.3	52.7	53.2	54.3	54.8	55.3	0.5
	Labor Dispatching	54.7	53.1	52.5	49.4	52.4	52.7	51.8	52.5	51.4	54.4	54.4	50.8	54.6	3.8
	Special Services	49.6	48.3	48.6	49.2	50.5	48.8	50.3	50.8	50.3	52.8	51.9	51.8	52.6	0.8
	Medical,Welfare,Public Health	42.5	41.5	41.4	41.5	41.6	42.6	44.1	43.5	43.6	44.0	43.6	44.7	46.4	1.7
	Education	47.4	43.0	42.2	43.9	48.2	43.1	45.0	45.6	43.1	43.7	46.7	44.4	43.7	▲ 0.7
	Other	47.1	46.7	45.7	46.8	46.6	48.2	47.5	47.4	47.9	47.9	47.1	49.6	50.1	0.5
	Total	48.2	47.5	46.8	46.7	47.8	47.7	47.9	48.1	48.2	48.7	48.8	49.1	50.4	1.3
Other		38.8	37.4	37.5	37.5	38.8	40.1	39.4	41.5	38.6	39.5	39.9	40.8	40.2	▲ 0.6

		Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Ratio to the PrFDious Month
Hokkaido		38.6	39.2	39.6	39.4	40.5	40.6	41.0	42.1	42.5	42.6	42.2	43.2	43.9	0.7
Tohoku		43.1	43.3	41.7	42.9	43.4	42.9	43.6	44.7	44.8	44.6	44.2	43.6	44.7	1.1
kitakanto		41.5	40.8	41.2	40.0	41.5	41.1	42.3	42.3	43.3	45.0	44.9	44.2	45.4	1.2
minamikanto		43.9	43.6	43.0	42.3	43.4	43.2	43.5	44.0	45.0	46.1	46.3	46.5	47.1	0.6
Hokuriku		40.4	39.2	39.3	38.4	39.4	39.6	40.2	40.1	41.8	43.0	43.4	42.8	44.1	1.3
Tokai		43.6	43.3	42.7	41.5	43.1	43.1	43.7	43.6	44.2	46.4	45.7	45.9	46.6	0.7
Kinki		41.1	40.8	40.3	39.4	40.5	40.4	41.1	41.6	42.4	43.7	43.7	44.1	45.1	1.0
Chugoku		44.3	43.1	41.5	41.5	42.4	42.2	43.0	43.6	43.9	45.8	44.6	45.1	46.3	1.2
Shikoku		45.7	45.2	45.0	43.4	44.6	44.5	45.6	45.1	45.8	47.2	46.2	46.5	46.1	▲ 0.4
Kyushu		44.3	43.4	41.7	42.5	44.2	44.7	45.1	45.6	46.7	48.0	48.1	49.0	48.7	▲ 0.3

## Appendix

### 1. Research Subjects (Companies Researched 23,929; Valid responses: 10,305; Response rate: 43.1%)

Appendix

#### 1. Region

Hokkaido	549	Tokai	1,153
Tohoku	641	Kinki	1,713
kitaKanto	719	Chugoku	570
minamikanto	3,324	Shikoku	315
Hokuriku	570	Kyushu	751
		Total	10,305

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

Agriculture, Forestry, Fisheries		55	Retail 480	Food, Beverages	68
Finance		126		Textile, Textile Products, Clothing	34
Construction		1,480		Drugs, Sundries	29
Real Estate		295		Furniture	9
Manufacturing 3,223	Food, Beverages, Livestock Feed	337		Electrical Household Appliances, Information Machinery and Equipment	38
	Textile, Textile Products, Clothing	120		Motor Vehicles, Motor Vehicle Parts	58
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	237		Special Merchandise	136
	Pulp, Paper and Paper Products	111		Various Merchandise	49
	Publishing, Printing	195		Others	5
	Chemical	422	Transportation, Warehousing		441
	Steel, Nonferrous Metals, Mining	522	Service 1,384	Restaurants	41
	General Machinery	459		Telecommunications	12
	Electrical Machinery	347		Electricity, Gas, Water, Heat	6
	Transportation Machinery, Equipment	102		Leasing, Rentals	113
	Precision Machinery, Medical Instruments and Equipment	79		Lodging, Hotels	29
	Others	92		Recreation	57
Wholesale 3,959	Food, Beverages	348		Broadcasting	15
	Textile, Textile Products, Clothing	189		Maintenance, Guarding, Testing	153
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	358		Advertising	111
	Paper Products, Stationery, Books	115		Information	421
	Chemical	281		Labor Dispatching	62
	Recycled Resources	34		Special Services	228
	Steel, Nonferrous Metals, Mining Products	319		Medical, Welfare, Public Health	101
	Machinery, Equipment	910		Education	21
	Others	355		Others	139
			Others		41
			Total		10,305

#### 3. Size

Large Firms	2,140	20.8%
Small to Medium-sized Firms	8,165	79.2%
micro Firms	2,593	25.2%
Total	10,305	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 March 17 – 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’.

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

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.