#### TDB Trends Research (Research & Summary for September 2016)

# Improvement in all ten regions for the first time in two months

- Domestic economy propped up by "Construction"

(Companies Researched23,710; Valid responses: 10,292; Response rate: 43.4%; Survey Start Date: May 2002)

#### < Overview of September 2016: Recovery >

The economic diffusion index (DI) in September was 42.9, up 0.6 point from the previous month, and the first improvement in two months. In addition to having recovered from the previous month's drop due to unsettled weather, the overall economy was pushed up by the Construction-related industry because of increasing public works. The domestic economy has been back on track, supported by public demand and housing investment.

#### < Future Outlook: Remains unchanged >

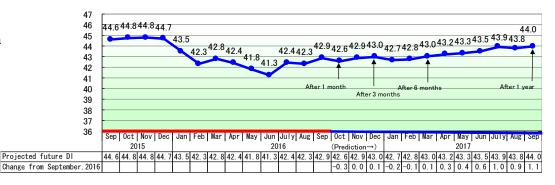
Economic conditions will remain unchanged for the time being, although signs of a gradual uptick in the economy have emerged.

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By industry: <u>Eight industries</u>, including "Construction," have improved, with positive impact from strong construction demand.

By size: "SMEs" and "small-scale enterprises" have improved for three consecutive months.

By region: All ten regions have improved for the first time in two months.



<sup>\*:</sup> 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

	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb·16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Aug-16	Ratio to the PrFDious Month
Total	44.6	44.8	44.8	44.7	43.5	42. 3	42.8	42.4	41.8	41.3	42.4	42.3	42.9	0.6
Large Firms	48.2	48.4	48.4	47.9	47.1	46.0	46. 5	46. 2	45.7	45. 1	46.6	45.7	46.5	0.8
Small to Medium-sized Firms	43.6	43.7	43.7	43.8	42.5	41.3	41.8	41.4	40.8	40.3	41.3	41.4	41.9	0.5
Micro Firms	43.2	43.2	43.1	43.3	41.8	40.3	40.8	40.3	39.7	39.6	40.3	40.6	41.3	0.7

		Sep-15	Oct-15	Nov- 15	Dec-15	Jan-16	Feb-16	Mar·16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Aug-16	Ratio to the PrFDious Month
Agriculture,Forest	Agriculture,Forestry,Fisheries			45.2	46.4	43.6	44. 5	42.3	42. 4	42.1	43.7	42.5	40.1	41.8	1.7
Finance		46.3	47.3	46.6	46.3	45.3	44. 3	44.8	45. 5	44. 3	45.0	45. 1	43.7	44.5	0.8
Construction		49.1	49.5	49.6	49.3	47.9	45. 9	46. 3	45. 2	44. 9	44.7	46.5	46.9	48.1	1.2
Real Estate		48.7	48.7	48.9	48.4	47.1	48. 0	48. 2	48. 1	48.3	48.4	47.8	47.3	47.0	▲ 0.3
	Food,BEWerages,Livestock Feed	43.6	44.3	44.5	44.1	44.2	43. 2	44. 2	44. 6	43.4	43.0	43.0	42.1	41.8	▲ 0.3
	Textile, Textile Products, Clothing	38.8	39.8	39.4	39.3	36.4	37. 6	39.8	38. 2	38.4	38. 2	37.0	37.8	37.3	▲ 0.5
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	40.9	40.2	38. 9	40.7	38. 5	38. 0	38. 6	37. 9	38. 3	37. 8	40.5	40.7	40.5	▲ 0.2
	Pulp, Paper and Paper Products	40.8	41.1	42.4	41.7	40.3	36.8	37. 6	40.2	38.6	38. 5	40.4	39.4	39. 1	▲ 0.3
	Publishing, Printing	34.8	34.8	34.6	34.7	34.0	34.6	35. 3	34. 1	34.0	32.9	33.5	32.8	33.7	0.9
Manufacturing	Chemical	44.4	44.4	44.9	45.4	44.3	42.8	42.7	43.0	42.7	42.2	43.3	41.8	44.0	2. 2
	Steel, Nonferrous Metals, Mining	41.7	41.4	41.8	41.5	41.1	38.8	38. 3	38. 3	38. 1	37.6	38.7	39.8	41.4	1.6
	General Machinery	47.3	47.9	47.3	48.6	46.0	45.5	45.7	45.3	44.0	43.6	44. 9	44.3	45.3	1.0
	Electrical Machinery	45.2	45.2	45.2	44.9	43.0	42.8	42.8	42.3	40.4	40.4	41.9	41.5	42.6	1. 1
	Transportation Machinery, Equipment	48.3	46.3	47.0	46.2	45.7	44.6	46.8	46.8	43.8	42.7	44.0	44.9	44.2	▲ 0.7
	Precision Machinery, Medical Instruments and Equipment	47. 9	48.6	47.9	46. 1	46. 2	43. 1	44. 6	44.6	43. 2	43. 2	42.6	43.2	44.8	1.6
	Other	40.0	39.8	40.0	39.6	39.4	39. 1	40.6	37. 5	37.8	37.0	39.1	35.7	37.7	2.0
	Total	43.2	43.3	43.3	43.5	42.2	41.2	41.6	41.3	40.6	40.1	41.2	40.9	41.8	0.9
	Food,BEWerages	43.6	43.0	43.1	42.6	41.9	40.9	42.2	42.6	41.0	40.1	41.1	40.4	39.9	▲ 0.5
	Textile, Textile Products, Clothing	36.5	37.8	34.4	34.4	33.5	32. 7	33.8	35. 7	34.6	35.3	33.5	34.5	32.9	<b>▲</b> 1.6
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	39. 5	41.3	41.5	41.8	40.5	39. 1	39. 4	39. 2	38. 4	37. 6	39. 0	38.9	39. 9	1.0
Wholesale	Paper Products, Stationery, Books	36.8	36.8	37.4	37.2	38. 1	37. 4	38.0	36.6	36.7	34. 2	35. 9	36.3	37.4	1. 1
	Chemical	42.3	42.5	42.8	43.2	40.8	39. 2	40.2	39. 5	39.4	38.8	39.5	39.4	39.6	0.2
	Recycled Resources	25.8	29.9	26.7	32.1	25.6	28. 4	30.7	39. 3	33.3	28.3	29.4	35.0	33.8	<b>▲</b> 1.2
	Steel,Nonferrous Metals, Mining Products	38. 5	38.8	39. 4	37. 7	36. 4	35. 8	36. 1	35. 2	34. 6	33. 2	35. 7	36.0	35. 5	▲ 0.5
	Machinery, Equipment	43.6	43.6	43.4	43.6	42.6	41.2	41.7	40.9	41.1	39.7	40.9	40.5	41.2	0.7
	Other	40.8	41.0	41.1	41.1	39.9	39. 0	39. 6	39. 1	38.6	38. 2	38.0	38.7	38. 2	▲ 0.5
	Total	41.2	41.5	41.4	41.4	40.1	39. 0	39. 7	39. 4	38.9	37. 9	38.8	38.9	39.0	0.1

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Economic	Diffusion	index (	(Economic	D1)2/2

		Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Aug-16	Ratio to the PrFDious Month
	Food,BEWerages	44.5	44.6	41.4	43.2	39. 9	40.4	43.4	42. 1	38. 9	38.6	40.7	40.0	39.5	▲ 0.5
	Textile, Textile Products, Clothing	36.9	40.1	36.8	32.1	34. 8	31.6	33. 3	35. 1	32. 9	32.5	33.8	32.8	28.0	<b>▲</b> 4.8
	Drugs,Sundries	46.7	48.6	50.0	49.4	45. 3	45.4	46. 1	42.0	41. 1	37.9	42.5	42.5	42.0	▲ 0.5
	Furniture	42.9	42.9	42. 9	47.2	42. 9	40.5	40.5	38. 1	42. 9	41.7	36.1	35. 4	33.3	<b>▲</b> 2.1
Retail	Electrical Household Appliances, Information Machinery and Equipment	44.6	39. 6	38. 7	40.7	43. 8	39. 2	40. 4	40. 7	35. 8	36.6	40. 2	37. 9	42.7	4.8
	Motor Vehicles, Motor Vehicle Parts	38.6	39.9	38. 2	37.9	40.0	37. 9	38. 6	40.4	37. 2	37.0	39.8	40.1	42.3	2. 2
	Special Merchandise	40.7	39. 2	39.8	38.4	40.4	39. 2	37. 4	38. 9	37.0	37.4	37.6	36. 7	38.1	1.4
	Various Merchandise	47.3	46.5	47. 3	43.8	45.0	43.7	44.8	43.3	43.7	42.6	43.2	39. 9	40.6	0. 7
	Other	44.4	36. 1	38. 9	43.3	44. 4	41.7	44. 4	41.7	42. 9	41.7	46.7	47. 2	50.0	2.8
	Total	42.2	41.6	40.9	40.2	41.0	39.5	40.1	40.2	38.0	37.7	39.3	38. 4	39.3	0.9
Transportati	on,Warehousing	45.1	44.7	45. 4	45.3	43. 2	41.9	41.9	41.5	41.5	40.0	41.5	42.0	42.7	0.7
	Restaurants	45.3	49.2	46. 2	44.4	47. 1	42.1	43.6	43. 1	42.3	40.2	45.3	42. 2	39.0	▲ 3.2
	Postal, Telecommunications	59.3	57.6	53.0	51.5	58. 3	54.2	50.0	59. 1	52. 4	46.2	52.6	51.1	52.0	0.9
	Electricity,Gas,Water,Heat	56.7	55.0	55.0	55.0	52. 4	53.7	50.0	51.9	47.6	44.4	42.9	46. 3	43.8	<b>▲</b> 2.5
	Leasing, Rentals	48.0	48.0	49. 2	49.7	48. 1	46.2	47. 1	45. 9	46.7	45.5	45.9	47. 2	47.4	0. 2
	Lodging, Hotels	58.3	61.4	59. 1	55.4	56. 9	54.7	56. 1	50.5	44. 4	46.8	47.8	50.0	49.0	<b>▲</b> 1.0
	Recreation	37.9	38.0	38. 0	38.6	39. 1	37.3	36. 9	38. 0	36.8	38.4	37.1	38. 0	38.1	0. 1
	Broadcasting	41.7	45.1	46. 9	47.8	43.8	46.9	45.6	46.7	44. 4	42.7	43.6	44. 4	44.0	▲ 0.4
Service	Maintenance, Guarding, Testing	46.0	46.1	47.1	46.4	44.8	43.8	43.9	44. 4	44. 3	44.3	46.3	46. 4	47.0	0.6
	Advertising	40.8	40.7	40.3	40.3	39. 2	37.2	40.9	37. 5	36.8	37.9	38.9	39. 2	39.0	▲ 0.2
	Information	55.5	56.0	54. 9	54.9	55. 2	53.3	53.4	53.4	52. 5	52.2	53.0	52. 2	52.6	0.4
	Labor Dispatching	54.2	54.7	52. 5	53.1	50.9	52.7	54.7	53. 1	52. 5	49.4	52.4	52.7	51.8	▲ 0.9
	Special Services	51.5	49.0	50.3	52.1	49. 1	48.9	49.6	48.3	48.6	49.2	50.5	48.8	50.3	1. 5
	Medical, Welfare, Public Health	42.8	42.3	44. 1	42.2	39. 9	39. 2	42.5	41.5	41.4	41.5	41.6	42.6	44.1	1. 5
	Education	42.1	45.0	50.8	46.7	46.3	46.8	47.4	43.0	42. 2	43.9	48.2	43. 1	45.0	1.9
	Other	49.3	49.2	50.1	49.0	45. 9	47.5	47. 1	46.7	45.7	46.8	46.6	48. 2	47.5	▲ 0.7
	Total	49.6	49.6	49.6	49.6	48. 4	47.4	48.2	47. 5	46.8	46.7	47.8	47.7	47.9	0. 2
Other		41.4	42.3	41.9	43.8	40. 9	39.4	38.8	37. 4	37. 5	37.5	38.8	40.1	39.4	▲ 0.7

	Sep-15	Oct-15	Nov-15	Dec-15	Jan·16	Feb-16	Mar-16	Apr-16	May-16	Jun·16	Jul-16	Aug-16	Aug-16	Ratio to the PrFDious Month
Hokkaido	41.8	39.3	39.8	39.4	39. 0	37.9	38. 6	39. 2	39. 6	39.4	40.5	40.6	41.0	0.4
Tohoku	45.9	45.8	45.9	45.6	43. 9	43.2	43.1	43.3	41.7	42.9	43.4	42. 9	43.6	0. 7
kitakanto	42.6	43.3	43.8	43.0	41. 1	40.3	41.5	40.8	41. 2	40.0	41.5	41.1	42.3	1. 2
minamikanto	45.4	45.8	45.8	45.8	44. 6	43.2	43.9	43.6	43.0	42.3	43.4	43. 2	43.5	0. 3
Hokuriku	44.2	43.9	43.9	43.8	41. 1	40.3	40.4	39. 2	39. 3	38.4	39.4	39. 6	40.2	0.6
Tokai	46.0	46.0	45. 9	46.4	45. 4	43.6	43.6	43.3	42.7	41.5	43.1	43. 1	43.7	0.6
Kinki	42.7	42.6	42.3	42.5	41.7	40.7	41.1	40.8	40.3	39.4	40.5	40.4	41.1	0. 7
Chugoku	45.0	45.6	45.8	45.8	44.8	43.7	44. 3	43. 1	41.5	41.5	42.4	42. 2	43.0	0.8
Shikoku	46.5	47.3	48. 3	47.5	46. 7	45.1	45. 7	45. 2	45.0	43.4	44.6	44. 5	45.6	1. 1
Kyushu	45.7	46.6	46. 0	45.6	44. 8	44.0	44. 3	43. 4	41.7	42.5	44. 2	44. 7	45.1	0.4

### **Appendix**

## 1.Research Subjects(Companies Researched 23,710: ; Valid Responses 10,292 ; Response Rate 43.4%)

Appendix

#### 1.Region

Hokkaido	542	Tokai	1,179
Tohoku	627	Kinki	1,700
kitaKanto	706	Chugoku	584
minamikanto	3,307	Shikoku	321
Hokuriku	579	Kyushu	747
		Total	10,292

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

Agriculture, For	estry,Fisheries	59
Finance		127
Construction		1,468
Real Estate		291
	Food,Beverages,Livestock Feed	336
	Textile, Textile Products, Clothing	114
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	251
	Pulp, Paper and Paper Products	101
	Publishing, Printing	190
Manufacturing	Chemical	425
3,223	Steel, Nonferrous Metals, Mining	524
	General Machinery	447
	Electrical Machinery	343
	Transportation Machinery, Equipment	101
	Precision Machinery, Medical Instruments and Equipment	83
	Others	96
	Food,Beverages	346
	Textile, Textile Products, Clothing	185
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	351
Wholesale	Paper Products, Stationery, Books	111
3,959	Chemical	280
	Recycled Resources	36
	Steel, Nonferrous Metals, Mining Products	316
	Machinery, Equipment	936
	Others	339

	Food, Beverages	70
	Textile, Textile Products, Clothing	31
	Drugs,Sundries	27
Retail	Furniture	Į.
480	Electrical Household Appliances, Information Machinery and Equipment	4:
	Motor Vehicles, Motor Vehicle Parts	68
	Special Merchandise	145
	Various Merchandise	48
	Others	(
ransportatio	n,Warehousing	465
	Restaurants	4
	Telecommunications	1'
	Electricity, Gas, Water, Heat	8
	Leasing, Rentals	11'
	Lodging, Hotels	34
	Recreation	56
Service	Broadcasting	14
1,384	Maintenance, Guarding, Testing	159
	Advertising	11'
	Information	408
	Labor Dispatching	5'
	Special Services	218
	Medical,Welfare,Public Health	102
	Education	20
	Others	128
thers		44
	Total	10.299

#### 3.Size

Large Firms	2,194	21.3%
Small to Medium-sized Firms	8,098	78.7%
micro Firms	2,526	24.5%
Total	10,292	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 September 15 – 30 2016

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
	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.