TDB Trends Research (Research & Summary for November 2017)

Economic DI of 50.0, second highest level ever
- Manufacturing industry marked a record high for two
consecutive months -

(Companies researched: 23,212; Valid responses: 10,105; Response rate: 43.5%; Survey start date: May 2002)

< Overview of November 2017: Recovery continues >

The economic diffusion index (DI) in November 2017 was 50.0, up 0.9 points from the previous month, and the second highest since the survey started. The domestic economy continued to recover, such as in the manufacturing industry that marked a record high for two consecutive months, while exports are expanding.

< Future outlook: Recovery trend continues >

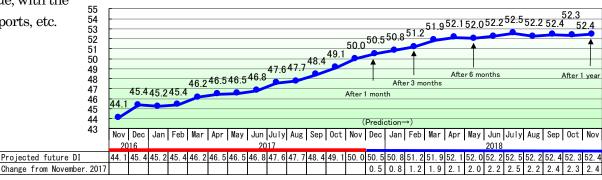
The recovery trend in the domestic economy is expected to continue, with the corporate sector leading the way as a result of continuing strong exports, etc.

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By industry: "Manufacturing" marked a record high for two consecutive months, and five industries scored a DI of over 50.

By size: SMEs have improved drastically, and the gap among sizes narrowed to the level for the first time in six years.

By region: Of the ten regions, five scored a DI of over 50, and an increase in automobile production spread over the regional economy.



^{*:} 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

	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Ratio to the PrFDious Month
Total	44.1	45. 4	45.2	45.4	46.2	46.5	46.5	46.8	47.6	47.7	48.4	49.1	50.0	0.9
Large Firms		48. 4	48.2	48.3	48.9	49.4	49.9	49.8	50.3	50.5	51.3	51.6	52. 1	0.5
Small to Medium-sized Firms		44. 5	44.4	44.6	45.4	45.7	45.6	46.0	46.8	47.0	47.7	48.5	49.4	0.9
Micro Firms	42. 9	43. 9	43.5	44. 1	44.4	44. 5	44. 4	44.4	45.6	45.7	46. 7	47.6	48.7	1.1

		Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Ratio to the PrFDious Month
Agriculture,Forest	ry,Fisheries	44.6	47.3	43.3	45. 1	45.5	47.0	45. 4	45.3	44. 9	44.5	45.6	47.5	46.7	▲ 0.8
Finance			45. 9	46.4	45. 5	45.6	46.0	46. 4	46.3	47. 2	46.8	48.0	47.9	49.0	1.1
Construction		49.2	49.7	49.2	49.5	49.3	49.0	49.5	49.5	50.4	50.7	51.7	52.7	53. 7	1.0
Real Estate	Estate		48. 7	49.3	49. 9	49.4	49.7	50.7	49.4	49.6	49.3	49. 9	50.9	50.3	▲ 0.6
	Food,BEWerages,Livestock Feed		43.4	41.9	42.1	42.7	43.0	42.6	43.5	43.5	42.9	43.0	42.8	42.9	0.1
	Textile, Textile Products, Clothing	36.7	38. 0	36.3	37. 7	38.6	38.8	39. 4	37.8	37. 9	38.4	37. 7	38.6	39. 6	1.0
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	42.5	43. 5	43.3	42.8	43. 2	42. 4	43. 4	43.4	45. 3	45.9	45. 6	47.0	46.8	▲ 0.2
	Pulp, Paper and Paper Products 4		43.0	43.3	42.0	42.0	42.9	42.5	43.4	43.8	41.9	44.4	46.6	45.6	▲ 1.0
	Publishing, Printing	35.0	35. 7	33.9	34.6	36.5	35.6	33. 4	35.1	34. 2	34.6	36. 4	35.7	35. 4	▲ 0.3
Manufacturing	Chemical	45.5	48.2	47.5	47.9	48.5	49.9	50.3	50.2	51.4	50.5	51.8	52.5	53.3	0.8
	Steel,Nonferrous Metals,Mining	44.3	45.7	45.9	46.2	47.0	47.5	47.3	49.6	51.1	51.6	53.0	54.3	56.6	2.3
	General Machinery	47.9	50.3	49.9	51.1	52.9	54.1	54.5	54.8	56.5	56.2	57. 2	59.3	59.3	0.0
	Electrical Machinery	44.4	45.5	46.3	47.1	47.8	48.6	49.3	49.7	50.3	51.5	52.2	53.7	54.5	0.8
	Transportation Machinery, Equipment	46.6	48.6	49.5	49.3	52.5	50.3	52.0	52.7	52.2	54.7	54.8	54.2	58.6	4.4
	Precision Machinery, Medical Instruments and Equipment	44.8	46. 3	46.7	49. 4	48. 1	50.0	51.7	51.5	50.4	51.8	51.5	53. 2	55. 1	1.9
	Other	39.4	39.6	39. 2	41.3	41.3	40.1	38. 2	38.5	40.3	39.7	41.6	39.6	40.9	1.3
	Total	43.5	45.2	44.8	45.4	46.3	46.7	46.9	47.5	48.5	48.6	49.4	50.3	51.2	0.9
	Food,BEWerages	40.1	41.5	40.6	40.4	41.0	41.7	42.7	41.8	42.2	41.3	41.6	41.1	42.4	1.3
	Textile, Textile Products, Clothing	33.1	34.0	33.7	33.4	32.6	34.7	34. 5	35.0	34. 3	34.2	35.3	35.4	36. 1	0.7
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	42.6	43. 2	42. 1	42. 6	42.8	41.8	43. 2	42.8	43. 0	43.8	44.0	44. 2	45. 1	0.9
Wholesale	Paper Products, Stationery, Books	37.5	37.7	38.6	38. 4	38.3	38.5	36. 1	38.4	37. 4	35.7	38.8	38.4	38. 9	0.5
	Chemical	40.4	43.1	44.4	42.8	44.5	46.0	45. 1	45.3	46.5	47.2	47.5	48.1	48.6	0.5
	Recycled Resources	44.0	49.5	49.1	50.0	54.9	49.5	49.0	51.8	49.5	55.4	52.4	51.6	57.8	6.2
	Steel,Nonferrous Metals, Mining Products	39.6	42.6	42.5	42.9	44.0	43. 5	41.3	43. 1	45. 1	45.6	46. 2	49. 5	50.5	1.0
	Machinery, Equipment	42.5	44.2	44.8	44. 3	45.8	46.3	46.1	46.6	48.0	48.2	48.5	49.3	50.9	1.6
	Other	37. 9	39. 9	40.1	39. 2	39.9	41.1	42.0	41. 4	42.1	41.3	42.0	42.0	42.7	0.7
	Total	40.4	42.1	42.2	41.8	42.8	43.2	43. 1	43.4	44.2	44.3	44.8	45.5	46.5	1.0

Economic Diffusion Index (Economic DI)2/2

		Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Ratio to the PrFDious Month
	Food,BEWerages	37.7	40.6	37. 4	41.5	41.4	39.0	39.9	42.9	41.1	44.3	44. 4	42.1	45.2	3. 1
	Textile, Textile Products, Clothing	32.4	31.3	32.7	29.0	30.9	31.8	33.9	34. 4	34.6	35. 1	34. 4	37.5	32.7	▲ 4.8
	Drugs,Sundries	41.1	42.0	43.5	46.0	44.3	46.0	46.4	44. 4	43.8	46.8	44. 2	44. 9	46.2	1. 3
	Furniture	37.5	30.0	33.3	38. 1	33.3	35.7	35.7	40.7	39.6	37.5	41.7	40.9	45.0	4. 1
Retail	Electrical Household Appliances, Information Machinery and Equipment	37.8	38. 6	40.5	39. 9	43.0	41.7	38. 1	41. 9	41. 7	44.6	40. 2	43. 9	43.9	0.0
	Motor Vehicles, Motor Vehicle Parts	40.2	41.0	43.5	46.3	47.7	41.9	41.5	44. 4	44. 4	45.5	46. 2	45.3	45.6	0.3
	Special Merchandise	36.3	37.1	38.3	39. 1	38.8	38. 3	39.1	39.8	39.7	39.8	39.7	39.6	38.8	▲ 0.8
	Various Merchandise	44. 4	44.6	42.0	45.3	44.6	44.3	45.0	48.7	46.5	45.8	45.7	46.3	45.7	▲ 0.6
	Other	46.7	46.7	45.8	45.8	40.0	40.0	41.7	41.7	38.9	44. 4	46.7	46.7	43.3	▲ 3.4
	Total		39. 1	39. 4	40.9	41.1	39.8	40.2	42.1	41.5	42.7	42.2	42.4	42.4	0.0
Transportati	on,Warehousing	44.4	46.1	45.0	43.8	45.6	47.0	46.8	45.7	47.7	48.4	49.0	49.9	50.7	0.8
	Restaurants	38.0	37.5	42.3	39.0	45.1	45.0	41.1	43.0	43.9	41.9	45.2	45.1	42.9	▲ 2.2
	Postal, Telecommunications	57.7	46.2	55. 1	52.8	58.3	54.2	51.3	56.9	55.6	54.2	59. 1	54.5	57.7	3. 2
	Electricity,Gas,Water,Heat	50.0	41.7	50.0	52.4	47.2	52.4	52.4	57.1	52.4	52.8	57.1	58.3	59.5	1. 2
	Leasing,Rentals	49.3	48.9	47.9	48.2	50.1	48.9	50.2	50.0	50.6	49.7	52.0	54. 2	54.9	0.7
	Lodging, Hotels	44. 3	47.5	43.5	45.6	49.4	48.9	49.4	47. 9	46.9	47.4	41.7	43.6	51.9	8. 3
	Recreation	37.0	36. 9	37.7	37.1	39. 2	39. 1	40.9	40.8	40.1	38.3	40.0	39. 1	39.0	▲ 0.1
	Broadcasting	50.0	49.0	45.6	47.8	47.8	47.8	46.7	42.9	46.2	47.2	47.2	46.2	44.4	▲ 1.8
Service	Maintenance, Guarding, Testing	48.2	47.1	47.4	47.8	48.6	49.4	48.9	49.7	50.2	51.4	51.3	50.3	51.6	1. 3
	Advertising	38.9	40.9	38.6	39.8	41.0	42.3	41.8	40.6	41.0	41.9	40.5	43.6	41.8	▲ 1.8
	Information	52.7	53.2	54.3	54.8	55.3	56. 1	55.6	55.7	56.6	56.1	57.2	57.9	57.6	▲ 0.3
	Labor Dispatching	51.4	54.4	54.4	50.8	54.6	55.8	52.3	54.8	54.8	58.6	57.5	58. 2	59.0	0.8
	Special Services	50.3	52.8	51.9	51.8	52.6	53.2	52.3	52.3	52.6	53.4	53. 2	53.3	53.2	▲ 0.1
	Medical, Welfare, Public Health	43.6	44.0	43.6	44.7	46.4	47.7	47.9	48.3	45.2	46.1	47.4	44. 1	47.9	3.8
	Education	43.1	43.7	46.7	44.4	43.7	41.1	43.5	42.1	42.5	42.5	41.7	41.0	40.5	▲ 0.5
	Other	47.9	47.9	47.1	49.6	50.1	50.0	49.3	50.8	50.2	50.5	50.7	50.6	53.9	3. 3
	Total	48.2	48.7	48.8	49.1	50.4	50.9	50.4	50.7	50.9	51.1	51.5	51.8	52.5	0.7
Other		38.6	39.5	39. 9	40.8	40.2	42. 1	41.7	42.2	41.7	42.4	43.6	43.3	47.9	4. 6

	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Ratio to the PrFDious Month
Hokkaido	42.5	42.6	42.2	43.2	43.9	44.3	46.1	45.7	48.4	48.8	48.6	48.6	48.6	0.0
Tohoku	44.8	44.6	44. 2	43.6	44.7	45.2	45.4	45.4	45.7	45.4	45.9	45.9	47.2	1. 3
kitakanto	43.3	45.0	44.9	44. 2	45.4	46.6	46.4	47.0	48.3	47.8	49. 1	50.2	51.2	1.0
minamikanto	45.0	46.1	46.3	46.5	47.1	47.4	47.3	47.7	48.2	48.2	49.1	49.7	50.5	0.8
Hokuriku	41.8	43.0	43.4	42.8	44.1	44.3	45.3	45.9	47.5	48.0	48.8	49.3	49.0	▲ 0.3
Tokai	44.2	46.4	45.7	45.9	46.6	46.8	46.4	47.3	48.1	48.8	49.2	50.0	51.2	1.2
Kinki	42.4	43.7	43.7	44. 1	45.1	45.2	44.7	44.9	45.6	46.1	46.7	48.0	49.0	1.0
Chugoku	43.9	45.8	44.6	45.1	46.3	46.1	46.0	46.5	47.0	47.7	47.8	48.6	50.1	1.5
Shikoku	45.8	47. 2	46. 2	46.5	46.1	46.9	46.8	47.0	47.0	46.8	48.5	48.2	48.5	0.3
Kyushu	46.7	48.0	48.1	49.0	48.7	49.1	49.5	48.9	49.4	49.4	49.9	50.5	51.3	0.8

Appendix

1.Research Subjects(Companies Researched 23,212; Valid responses: 10,105; Response rate: 43.5%)

Appendix

1.Region

Hokkaido	518	Tokai	1,124
Tohoku	609	Kinki	1,719
kitaKanto	708	Chugoku	562
minamikanto	3,258	Shikoku	312
Hokuriku	555	Kyushu	740
		Total	10,105

2.Industry (10 Industries 51 Lines of business)

Agriculture,For	estry, Fisheries	55
Finance		122
Construction		1,453
Real Estate		302
	Food, Beverages, Livestock Feed	319
	Textile, Textile Products, Clothing	114
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	233
	Pulp, Paper and Paper Products	106
	Publishing, Printing	180
Manufacturing	Chemical	415
3,223	Steel, Nonferrous Metals, Mining	505
	General Machinery	445
	Electrical Machinery	330
	Transportation Machinery, Equipment	101
	Precision Machinery, Medical Instruments and Equipment	75
	Others	81
	Food,Beverages	349
	Textile, Textile Products, Clothing	190
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	329
Wholesale	Paper Products, Stationery, Books	108
3,959	Chemical	276
	Recycled Resources	32
	Steel, Nonferrous Metals, Mining Products	306
	Machinery, Equipment	899
	Others	344

	Food,Beverages	66
	Textile, Textile Products, Clothing	28
	Drugs,Sundries	26
Retail	Furniture	10
480	Electrical Household Appliances, Information Machinery and Equipment	44
	Motor Vehicles,Motor Vehicle Parts	64
	Special Merchandise	128
	Various Merchandise	47
	Others	ē
ransportation	n,Warehousing	433
	Restaurants	40
	Telecommunications	13
	Electricity,Gas,Water,Heat	7
	Leasing, Rentals	112
	Lodging, Hotels	26
	Recreation	62
Service	Broadcasting	12
1,384	Maintenance,Guarding,Testing	168
	Advertising	104
	Information	435
	Labor Dispatching	52
	Special Services	242
	Medical,Welfare,Public Health	108
	Education	21
	Others	149
Others	•	47
	Total	10.10

3.Size

	Large Firms	2,075	20.5%
5	Small to Medium-sized Firms	8,030	79.5%
	micro Firms	2,617	25.9%
	Total	10,105	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 November 16 – 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=6/6x100(%)=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 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.