TDB Trends Research (Research & Summary for September 2019)

Construction demand boosted the economy, with rush demand in some businesses

 \sim Marginal improvement in the domestic economy for the second consecutive month owing to continued deterioration in the manufacturing industry \sim

(Companies researched: 23,696; Valid responses: 9,901; Response rate: 41.8%; Survey start date: May 2002)

< Overview of September 2019: Possibility of entering a recession phase >

The economic diffusion index (DI) in September 2019 was 45.0, up 0.3 points from the previous month, and improved for the second consecutive month. While the possibility of entering a recession phase has increased in the domestic economy due to worsening business conditions in the manufacturing industry, strong construction demand contributed to boost the economy, and rush demand was also seen in some businesses.

< Future outlook: Uncertainty has further intensified,

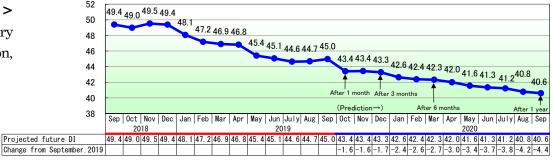
with many downside factors >

With many causes of concern, such as the slowdown in exports and wary stance on capital investment in addition to the decrease in consumption, uncertainty about the domestic economy has further intensified. e-mail: keiki@mail.tdb.co.jp

By industry: Rush demand occurred in some industries, mainly in the retail industry. The business climate in the manufacturing industry deteriorated for the fifth consecutive month.

By size: All sizes improved for the first time in one year and two months, with rush demand in some businesses.

By region: While eight of the ten regions improved, some regions were affected by Typhoon No. 15.



*: 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

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Ratio to the PrFDious Month
Total	49.5	49.4	49.0	49.5	49. 4	48. 1	47.2	46.9	46.8	45.4	45. 1	44.6	44.7	45.0	0.3
Large Firms	51.6	51.4	51.4	51.4	51.7	50.6	49.8	49.8	49.7	48.8	48.7	47.7	47.9	48.0	0.1
Small to Medium-sized Firms	49.0	48.9	48.4	49.0	48.8	47.4	46.5	46.2	46. 1	44.6	44. 2	43.9	43.9	44.2	0.3
Micro Firms	48.4	48.4	47.9	48.2	48.2	47.0	46.5	46.3	46. 2	44.5	44. 1	43.8	44. 2	45.1	0.9

		Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Ratio to the PrFDious Month
Agriculture,Forest	ry,Fisheries	45.7	43.8	41.5	40.7	40.7	41.8	41.7	42. 3	41.3	40.5	43.2	39. 1	41.5	41.8	0.3
Finance		47.5	48.5	46.2	47.1	46.5	46. 1	45. 2	45. 9	45. 1	44.7	44.8	45. 1	44. 7	45.8	1. 1
Construction		53.1	53.8	53.4	53.9	54. 1	53. 9	53. 6	53. 6	52.8	51.7	51.6	51.7	52. 1	53.1	1.0
Real Estate		51.1	50.7	49.3	49.3	49.7	49. 1	47. 5	47. 4	48. 7	47.6	48.3	47. 4	46.5	48.0	1.5
	Food,BEWerages,Livestock Feed	43.3	42.9	42.0	42.4	43.0	41.6	40.6	40.6	42.2	41.3	40.3	40.4	41.1	39.8	▲ 1.3
	Textile, Textile Products, Clothing	41.8	41.9	41.4	41.6	41.3	37. 7	38. 8	39. 2	39. 0	36.6	36. 5	36. 4	36. 9	36.3	▲ 0.6
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	45.6	45. 2	46.1	47.5	48. 3	47. 1	45. 5	44. 1	45. 7	45. 4	43.5	43.8	45. 2	44. 1	▲ 1.1
	Pulp, Paper and Paper Products	44.5	45.4	44.3	46.5	49.3	44.6	45.2	44. 1	45.7	43.0	41.7	39.6	42.3	42.8	0.5
	Publishing, Printing	33.8	34.6	33.2	34.8	35.0	33. 5	33. 2	34. 4	35. 6	34. 3	33. 9	32.5	33. 1	34. 1	1.0
Manufacturing	Chemical	51.3	51.4	50.4	51.4	50.2	48. 1	46.3	45.4	46.2	43.9	42.5	41.9	41.8	41.0	▲ 0.8
	Steel,Nonferrous Metals,Mining	54.2	52.8	53.0	54.4	52.5	50.4	48.0	45. 4	45. 5	42.9	41.8	41.5	41.2	40.4	▲ 0.8
	General Machinery	59.9	59.1	58.1	57.5	55.9	52. 5	51.4	48.9	49.0	46.0	45.1	44.0	41.5	41.1	▲ 0.4
	Electrical Machinery	52.0	53.3	52.9	52.5	50.5	49. 2	47.6	46.0	44.7	43.1	43.0	42.8	43.9	41.2	▲ 2.7
	Transportation Machinery, Equipment	58.7	58.3	56.9	56.4	53.8	52. 3	50.9	49.3	49.4	48.1	47.5	46.4	43.4	42.3	▲ 1.1
	Precision Machinery, Medical Instruments and Equipment	54.8	54.3	53.7	53.4	54. 0	51. 3	48.6	45. 5	47. 3	44. 4	42.4	43. 9	43.4	42.0	▲ 1.4
	Other	40.7	42.6	42.8	41.8	42.8	42.7	42.1	45.3	40.2	40.2	40.2	38.0	40.7	41.8	1.1
	Total	50.2	50.0	49.5	50.0	49.2	47. 1	45.8	44. 5	44.8	42.9	42.0	41.5	41.4	40.6	▲ 0.8
	Food,BEWerages	41.9	41.3	40.6	41.9	41.1	39. 4	40.5	40.5	41.1	40.8	40.4	38.8	39.0	38.8	▲ 0.2
	Textile,Textile Products,Clothing	37.3	35. 1	35.3	33.5	34. 3	34.0	32.0	33.6	33. 2	33. 2	31.6	29.8	30.8	31.6	0.8
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	44. 2	44.8	43.9	46.9	47. 8	47. 4	46. 5	46. 4	45. 6	44. 7	43.8	44. 7	44.6	46. 0	1. 4
Wholesale	Paper Products, Stationery, Books	36.6	36.9	36.5	38.1	39. 3	37. 9	36.0	39.0	39. 2	39.0	36. 4	37.0	37. 1	38.0	0.9
	Chemical	48.1	47.1	47.0	47.8	47.7	45.3	44. 3	44. 3	44. 2	41.8	41.2	42.7	42.0	42.7	0.7
	Recycled Resources	51.2	47.8	49.4	44.0	47.6	39.8	45.6	48.6	41.0	40.2	37. 1	32.8	32.8	30.6	▲ 2.2
	Steel, Nonferrous Metals, Mining Products	50.3	49. 2	49. 4	48.8	50. 2	46. 3	45. 0	43. 7	43. 4	40.8	40.4	39. 0	38.8	37. 6	▲ 1.2
	Machinery, Equipment	51.0	50.2	49.6	49.9	50.0	48. 4	46. 9	46.5	45. 9	44. 2	44.4	43.8	43.3	44.6	1.3
	Other	42.4	42.4	43.4	44.0	43.9	41. 9	41.2	42.5	42.7	40.6	40.6	40.2	40.2	40.7	0.5
	Total	46.3	45.6	45.4	46.0	46.3	44. 4	43.6	43.7	43.3	41.9	41.4	41.0	40.8	41.4	0.6

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Economic Diffusion Index (Economic DI)2/2

		Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Ratio to the PrFDious Month
	Food,BEWerages	45. 3	45.7	44.4	45.5	42.8	43.4	41.5	42.5	42.5	44.8	42.9	41.5	41.3	41.8	0.5
	Textile, Textile Products, Clothing	32. 7	30.6	32.7	31.3	34.0	30.9	32.7	38.9	39. 1	36.9	36.6	34.6	36.5	37.9	1.4
	Drugs,Sundries	41.3	40.2	38.4	42.4	44.4	44.8	39.7	39.7	40.9	41.0	38.5	40.0	37.7	40.6	2. 9
	Furniture	37.0	37.0	37.9	37.5	35.4	38.9	33.3	33.3	38. 9	39.6	48.5	40.9	45.0	53.0	8.0
Retail	Electrical Household Appliances, Information Machinery and Equipment	43. 7	42.8	40.6	39. 7	43. 1	39. 0	40.7	38. 9	41.7	39. 1	43.5	34. 3	38. 9	45.0	6. 1
	Motor Vehicles, Motor Vehicle Parts	43.5	46.1	40.8	41.5	42.2	44.6	44. 3	45. 2	43.3	41.5	42.5	39. 2	41.1	41.4	0.3
	Special Merchandise	39. 1	39. 1	39.7	43.3	43.2	41.9	41.3	40.8	42.1	41.3	41.1	40.6	40.7	43.5	2.8
	Various Merchandise	46.5	43.6	46.4	43.6	44.7	42.9	41.9	43.5	43.3	43.8	44.7	39. 3	38. 9	43.1	4.2
	Other	40.5	38. 9	41.7	38. 1	35.7	35.7	31.3	33.3	43.8	39.6	46.3	41.7	41.7	40.5	▲ 1.2
	Total	41.7	41.6	40.9	42. 1	42.3	41.6	40.8	41.4	42.1	41.6	42.0	39. 5	40.2	42.6	2.4
Transportati	on,Warehousing	50.3	49.5	48.7	50.1	50.5	49. 1	48. 2	48. 1	48. 2	46.7	45.6	44.5	45.5	46.0	0.5
	Restaurants	42.5	39. 3	37.0	37.6	40.7	37.9	41.0	37.8	42.9	40.6	42.9	39.6	38. 1	43.6	5. 5
	Postal, Telecommunications	55.0	56.1	59.7	57.1	54.5	60.0	57.6	62.1	57.6	56.7	60.0	58.3	60.6	56.9	▲ 3.7
	Electricity,Gas,Water,Heat	57. 4	59.3	56.7	57.1	61.9	57.4	57.4	56.3	58.3	55.6	54.5	54. 2	52.6	51.3	▲ 1.3
	Leasing,Rentals	54. 2	55. 9	56.5	57.1	55.7	55.0	52.0	52.7	54. 1	50.9	52.5	51.8	51.7	53.5	1.8
	Lodging, Hotels	46.6	43.6	41.0	45.5	45.7	44.9	44.2	42.3	41.0	50.0	44. 9	40.3	39.9	47.2	7.3
	Recreation	40.0	39. 9	35. 5	40.6	39. 3	38.9	37.8	41.0	38.8	42.0	41.5	41.8	40.9	38.7	▲ 2.2
	Broadcasting	38. 5	41.7	40.5	40.0	36. 7	40.5	44.4	43.3	41.7	44. 1	43.3	41.1	45.2	43.1	▲ 2.1
Service	Maintenance, Guarding, Testing	52.3	51.8	51.4	51.6	50.7	50.7	51.0	50.0	48. 1	48.2	48.8	49.3	49.8	48.6	▲ 1.2
	Advertising	41.4	42.3	42.3	41.2	41.7	40.4	40.1	40.3	40.7	40.5	40.7	40.4	38. 9	40.3	1.4
	Information	59. 1	59. 7	59.8	60.7	59.3	60.1	59.0	60.3	59.6	58.0	57.8	58. 5	58.7	57.7	▲ 1.0
	Labor Dispatching	59. 2	58.0	59.4	58.8	59.0	57.2	54.6	53.8	53.5	53.9	52.8	52.7	51.0	53.2	2. 2
	Special Services	55.3	53.9	55.0	54.6	53.6	53. 5	52.8	52.5	51.5	49.5	50.1	49.9	51.1	51.8	0.7
	Medical, Welfare, Public Health	48. 2	48.3	48.8	48.3	47.4	47.5	46.5	47.1	46.9	47.8	47.0	48.7	46.5	47.3	0.8
	Education	46.5	46.4	43.8	43.5	46.2	38.5	44.7	45.8	44.2	43.6	44.0	41.1	39.5	40.0	0.5
	Other	50.2	51.6	49.3	49.8	52.0	50.2	49.7	49.0	50.2	47.9	48.5	47.9	48.3	48.4	0.1
Total		52.8	52. 9	52. 9	53.2	52.7	52.4	51.7	51.9	51.6	50.6	50.8	50.8	50.7	51.0	0.3
Other		45.0	46.3	46. 2	45.3	46.6	44. 1	48.3	45. 2	44. 9	43. 2	42.6	44. 1	43.2	42.1	▲ 1.1

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Ratio to the PrFDious Month
Hokkaido	47.5	44.3	43.9	45.2	45.2	43.9	44. 4	44.6	45.5	45.3	45. 1	45.7	46.4	46.6	0.2
Tohoku	46.6	46. 4	45.9	46.5	45.4	44. 4	43. 1	42.8	43.1	42.2	41.9	41.7	41.7	43.2	1.5
kitakanto	50.0	50.0	49.0	48.5	48.5	45.8	44.8	44.7	44.3	43.1	42.5	42.5	42.6	42.2	▲ 0.4
minamikanto	50.0	50.4	49.8	50.4	50.1	49.0	48.1	47.8	47.7	46.0	46.0	45.5	45.7	46.1	0.4
Hokuriku	49.8	49.3	49.4	49.3	48.6	47.7	46.3	45.3	45.3	44.6	44. 2	43.5	44. 1	43.5	▲ 0.6
Tokai	51.8	51.4	51.3	51.8	51.8	50.1	48.6	48. 4	48.0	46.8	45.8	44.7	45.0	45.2	0.2
Kinki	49.4	48.9	48.8	49.7	49.7	48. 4	47.6	47. 3	46.9	45.0	44.6	44.0	43.8	43.9	0.1
Chugoku	47.1	48.0	48.6	48.5	48.7	47.7	47. 2	46.7	47.2	45.6	45.5	45.0	44.8	45.0	0.2
Shikoku	47.9	47.0	47.6	47. 2	48.4	46.8	47.6	46.8	46. 9	46. 7	44.8	43.1	43.8	43.9	0.1
Kyushu	50.6	50.8	49. 1	50.6	50.7	49.7	48.5	48.6	48.3	46. 9	47.0	47.6	46.3	47.1	0.8

Appendix

1.Research Subjects(Companies researched: 23,696; Valid responses: 9,901; Response rate: 41.8%)

Appendix

1.Region

Hokkaido	483	Tokai	1,124
Tohoku	646	Kinki	1,663
kitaKanto	748	Chugoku	536
minamikanto	3,189	Shikoku	292
Hokuriku	543	Kyushu	677
		Total	9,901

2.Industry (10 Industries 51 Lines of business)

Agriculture,For	estry, Fisheries	55
Finance		116
Construction		1,506
Real Estate		296
	Food, Beverages, Livestock Feed	304
	Textile, Textile Products, Clothing	101
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	225
	Pulp, Paper and Paper Products	95
	Publishing, Printing	167
Manufacturing	Chemical	406
3,223	Steel, Nonferrous Metals, Mining	486
	General Machinery	438
	Electrical Machinery	318
	Transportation Machinery, Equipment	102
	Precision Machinery, Medical Instruments and Equipment	77
	Others	81
	Food, Beverages	347
	Textile, Textile Products, Clothing	169
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	307
Wholesale	Paper Products, Stationery, Books	90
3,959	Chemical	264
	Recycled Resources	37
	Steel, Nonferrous Metals, Mining Products	292
	Machinery, Equipment	881
	Others	319

3.Size

Large Firms	1,962	19.8%
Small to Medium-sized Firms	7,939	80.2%
micro Firms	2,646	26.7%
Total	9,901	100.0%

	Food, Beverages	57
	Textile, Textile Products, Clothing	29
	Drugs,Sundries	23
Retail	Furniture	11
480	Electrical Household Appliances, Information Machinery and Equipment	30
	Motor Vehicles, Motor Vehicle Parts	68
	Special Merchandise	125
	Various Merchandise	48
	Others	7
'ransportation	n,Warehousing	427
	Restaurants	44
	Telecommunications	12
	Electricity, Gas, Water, Heat	13
	Leasing, Rentals	113
	Lodging, Hotels	24
	Recreation	53
Service	Broadcasting	12
1,384	Maintenance, Guarding, Testing	157
	Advertising	93
	Information	442
	Labor Dispatching	52
	Special Services	247
	Medical,Welfare,Public Health	106
	Education	25
	Others	166
Others		38
	Total	9,901

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 13 – 30 2019

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 Calculation

The DI (Diffusion Index) is calculated by multiplying the number of responses for each assessment category by the number given in parentheses in the table below, to a seven-level assessment rated by companies.

Selection category	Extremely good	good	fairly good	neither good nor bad	fairly bad	bad	very bad
points	6	5	4	3	2	1	0
number of responses for each category	N_6	N_5	N ₄	N ₃	N ₂	N_1	N_0

Economic DI

$$= \frac{\text{Total of (Points for each category} \times \text{Number of responses for each category)}}{\text{Number of valid responses} N} \times \frac{1}{6} \times 100$$

$$\equiv \frac{\sum_{i=0}^{6} i \times N_i}{N} \times \frac{1}{6} \times 100$$

An economic DI of 50 is <u>the point separating good and bad</u>, so a DI over 50 means "good," and below 50 means "bad." (The numbers are rounded off to one decimal place.) No weight is given according to a company's size, and calculations are made on the basis of "one company, one vote."

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	No. of Ferritories Balance
Other Industries*	and No. of Employee: Over 300	or No. of Employee: Below 300	No. of Employee: Below 20
Wholesale Trade	Capital: More than 100 million yen and	Capital: Below 100 million yen or	No. of Employee: Below 5
Retail Trade	No. of Employee: Over 100 Capital: More than 50 million yen	No. of Employee: Below 100 Capital: Below 50 million yen	
inetali Trade	and No. of Employee: Over 50	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 Enterorises Basic Act.