

TDB Trends Research (Research & Summary for May 2016)

Stagnation in consumption, coupled with the falsification of MPGdata and Kumamoto Earthquake, had an adverse impact on economic conditions

- The delay in implementation of a consumption tax increase is expected to help mitigate these negative factors -

(Companies Researched 23, 586; Valid Responses 10, 588; Response Rate 44.9%; Survey Start Date: May 2002)

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< Overview of May 2016: Shifted to declining >

Economic diffusion index (DI) in May was 41.8, down 0.6 points from the previous month. This reflects a declining trend for two consecutive months. Manufacturers' component procurement was affected by operational shutdowns of parts suppliers due to the Kumamoto Earthquake. Businesses continued to adopt a cautious stance toward capital investment, and consumer spending was in the doldrums. As a result, Japan's economy worsened during this period.

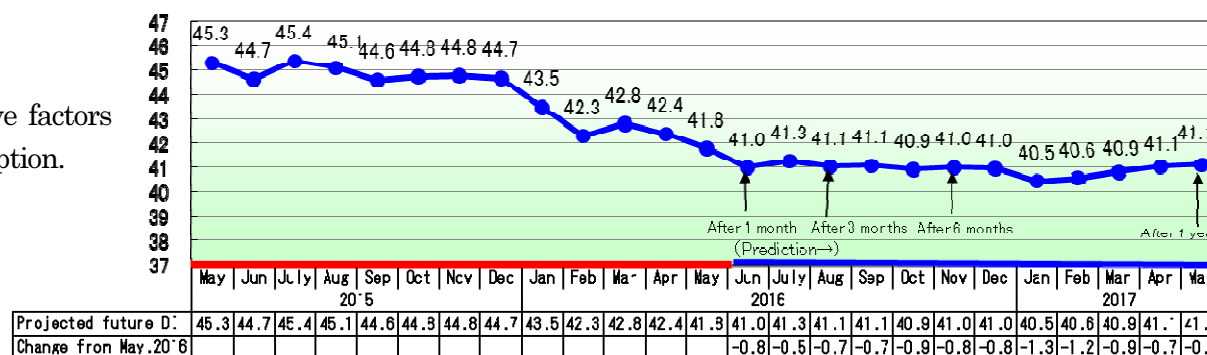
< Future Outlook: Stagnation will continue >

Economic conditions will remain weak due to a lack of positive factors needed to bring about a turnaround in manufacturing and consumption.

By industry: "Retail" industry has worsened for the first time in three months. Sluggishness in personal consumption was noticeable.

By size: As with the previous month, the economy worsened "nationwide."

By region: Miles per gallon (MPG) falsification affected the "Chugoku" region and the Kumamoto Earthquake impacted the "Kyushu" region. These adverse conditions continue.



*: 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

	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Ratio to the PrFDious Month
Total	45.3	44.7	45.4	45.1	44.6	44.8	44.8	44.7	43.5	42.3	42.8	42.4	41.8	▲ 0.6
Large Firms	49.2	48.4	48.8	48.9	48.2	48.4	48.4	47.9	47.1	46.0	46.5	46.2	45.7	▲ 0.5
Small to Medium-sized Firms	44.3	43.6	44.5	44.1	43.6	43.7	43.7	43.8	42.5	41.3	41.8	41.4	40.8	▲ 0.6
Micro Firms	43.2	43.1	43.4	43.2	43.2	43.2	43.1	43.3	41.8	40.3	40.8	40.3	39.7	▲ 0.6

	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Ratio to the PrFDious Month
Agriculture,Forestry,Fisheries	45.0	41.9	42.9	44.7	44.4	44.6	45.2	46.4	43.6	44.5	42.3	42.4	42.1	▲ 0.3
Finance	47.4	49.2	48.1	46.5	46.3	47.3	46.6	46.3	45.3	44.3	44.8	45.5	44.3	▲ 1.2
Construction	48.6	47.7	48.6	48.8	49.1	49.5	49.6	49.3	47.9	45.9	46.3	45.2	44.9	▲ 0.3
Real Estate	49.6	49.1	49.8	48.4	48.7	48.7	48.9	48.4	47.1	48.0	48.2	48.1	48.3	0.2
Manufacturing	Food,BEWerages,Livestock Feed	44.3	43.1	43.4	43.0	43.6	44.3	44.5	44.1	44.2	43.2	44.2	44.6	▲ 1.2
	Textile,Textile Products,Clothing	41.7	39.4	39.4	40.2	38.8	39.8	39.4	39.3	36.4	37.6	39.8	38.2	0.2
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	40.9	40.3	41.2	41.2	40.9	40.2	38.9	40.7	38.5	38.0	38.6	37.9	0.4
	Pulp, Paper and Paper Products	40.0	39.0	39.7	42.0	40.8	41.1	42.4	41.7	40.3	36.8	37.6	40.2	▲ 1.6
	Publishing,Printing	34.1	33.5	33.7	34.9	34.8	34.8	34.6	34.7	34.0	34.6	35.3	34.1	▲ 0.1
	Chemical	44.4	43.9	44.7	45.3	44.4	44.4	44.9	45.4	44.3	42.8	42.7	43.0	▲ 0.3
	Steel,Nonferrous Metals,Mining	43.0	42.9	43.6	42.8	41.7	41.4	41.8	41.5	41.1	38.8	38.3	38.3	▲ 0.2
	General Machinery	51.6	51.3	51.9	50.3	47.3	47.9	47.3	48.6	46.0	45.5	45.7	45.3	▲ 1.3
	Electrical Machinery	47.3	47.4	47.4	44.8	45.2	45.2	44.9	43.0	42.8	42.8	42.3	40.4	▲ 1.9
	Transportation Machinery,Equipment	47.8	49.7	50.9	50.8	48.3	46.3	47.0	46.2	45.7	44.6	46.8	46.8	▲ 3.0
	Precision Machinery, Medical Instruments and Equipment	49.8	49.4	50.4	51.2	47.9	48.6	47.9	46.1	46.2	43.1	44.6	44.6	▲ 1.4
	Other	40.7	37.8	39.2	37.7	40.0	39.8	40.0	39.6	39.4	39.1	40.6	37.5	0.3
	Total	44.5	44.0	44.6	44.2	43.2	43.3	43.3	43.5	42.2	41.2	41.6	41.3	▲ 0.7
Wholesale	Food,BEWerages	42.9	43.0	44.1	42.7	43.6	43.0	43.1	42.6	41.9	40.9	42.2	42.6	▲ 1.6
	Textile,Textile Products,Clothing	37.0	34.8	34.4	34.7	36.5	37.8	34.4	34.4	33.5	32.7	33.8	35.7	▲ 1.1
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	38.7	38.1	39.8	39.7	39.5	41.3	41.5	41.8	40.5	39.1	39.4	39.2	▲ 0.8
	Paper Products,Stationery,Books	38.1	34.5	37.1	36.5	36.8	36.8	37.4	37.2	38.1	37.4	38.0	36.6	0.1
	Chemical	43.0	43.1	43.9	42.6	42.3	42.5	42.8	43.2	40.8	39.2	40.2	39.5	▲ 0.1
	Recycled Resources	42.3	40.1	35.8	36.0	25.8	29.9	26.7	32.1	25.6	28.4	30.7	39.3	▲ 6.0
	Steel,Nonferrous Metals, Mining Products	40.3	39.3	40.4	40.3	38.5	38.8	39.4	37.7	36.4	35.8	36.1	35.2	▲ 0.6
	Machinery,Equipment	46.3	45.1	45.6	45.3	43.6	43.6	43.4	43.6	42.6	41.2	41.7	40.9	0.2
	Other	41.8	42.0	42.4	41.4	40.8	41.0	41.1	41.1	39.9	39.0	39.6	39.1	▲ 0.5
	Total	42.5	41.7	42.5	41.9	41.2	41.5	41.4	41.4	40.1	39.0	39.7	39.4	▲ 0.5

Economic Diffusion Index (Economic DI)2/2

		May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Ratio to the PrFDious Month
Retail	Food,BEVerages	41.6	42.7	45.0	44.0	44.5	44.6	41.4	43.2	39.9	40.4	43.4	42.1	38.9	▲ 3.2
	Textile,Textile Products,Clothing	40.2	37.0	38.6	38.7	36.9	40.1	36.8	32.1	34.8	31.6	33.3	35.1	32.9	▲ 2.2
	Drugs,Sundries	48.0	48.6	49.3	48.7	46.7	48.6	50.0	49.4	45.3	45.4	46.1	42.0	41.1	▲ 0.9
	Furniture	40.0	43.3	41.7	41.7	42.9	42.9	42.9	47.2	42.9	40.5	40.5	38.1	42.9	4.8
	Electrical Household Appliances, Information Machinery and Equipment	41.5	40.6	38.9	38.3	44.6	39.6	38.7	40.7	43.8	39.2	40.4	40.7	35.8	▲ 4.9
	Motor Vehicles,Motor Vehicle Parts	39.9	37.2	38.3	38.7	38.6	39.9	38.2	37.9	40.0	37.9	38.6	40.4	37.2	▲ 3.2
	Special Merchandise	40.5	38.0	39.9	41.6	40.7	39.2	39.8	38.4	40.4	39.2	37.4	38.9	37.0	▲ 1.9
	Various Merchandise	49.7	48.1	48.8	49.0	47.3	46.5	47.3	43.8	45.0	43.7	44.8	43.3	43.7	0.4
	Other	36.1	43.3	35.7	44.4	44.4	36.1	38.9	43.3	44.4	41.7	44.4	41.7	42.9	1.2
	Total	42.1	40.7	41.9	42.4	42.2	41.6	40.9	40.2	41.0	39.5	40.1	40.2	38.0	▲ 2.2
Transportation,Warehousing		44.8	42.6	44.4	44.9	45.1	44.7	45.4	45.3	43.2	41.9	41.9	41.5	41.5	0.0
Service	Restaurants	49.6	48.3	47.4	51.3	45.3	49.2	46.2	44.4	47.1	42.1	43.6	43.1	42.3	▲ 0.8
	Postal,Telecommunications	53.7	50.0	47.0	53.0	59.3	57.6	53.0	51.5	58.3	54.2	50.0	59.1	52.4	▲ 6.7
	Electricity,Gas,Water,Heat	53.7	53.0	50.0	51.9	56.7	55.0	55.0	55.0	52.4	53.7	50.0	51.9	47.6	▲ 4.3
	Leasing,Rentals	47.9	47.9	48.7	49.9	48.0	48.0	49.2	49.7	48.1	46.2	47.1	45.9	46.7	0.8
	Lodging, Hotels	53.1	54.2	59.2	59.0	58.3	61.4	59.1	55.4	56.9	54.7	56.1	50.5	44.4	▲ 6.1
	Recreation	40.2	37.9	37.3	38.0	37.9	38.0	38.0	38.6	39.1	37.3	36.9	38.0	36.8	▲ 1.2
	Broadcasting	45.6	46.1	49.1	46.1	41.7	45.1	46.9	47.8	43.8	46.9	45.6	46.7	44.4	▲ 2.3
	Maintenance,Guarding,Testing	48.1	47.4	47.6	47.4	46.0	46.1	47.1	46.4	44.8	43.8	43.9	44.4	44.3	▲ 0.1
	Advertising	41.1	41.0	39.8	40.7	40.8	40.7	40.3	40.3	39.2	37.2	40.9	37.5	36.8	▲ 0.7
	Information	55.3	55.4	56.4	55.8	55.5	56.0	54.9	54.9	55.2	53.3	53.4	53.4	52.5	▲ 0.9
	Labor Dispatching	56.2	56.3	54.4	55.0	54.2	54.7	52.5	53.1	50.9	52.7	54.7	53.1	52.5	▲ 0.6
	Special Services	51.7	50.9	52.0	51.4	51.5	49.0	50.3	52.1	49.1	48.9	49.6	48.3	48.6	0.3
	Medical,Welfare,Public Health	46.3	43.3	45.3	43.6	42.8	42.3	44.1	42.2	39.9	39.2	42.5	41.5	41.4	▲ 0.1
	Education	41.1	44.4	40.6	44.1	42.1	45.0	50.8	46.7	46.3	46.8	47.4	43.0	42.2	▲ 0.8
	Other	46.8	49.5	50.9	48.5	49.3	49.2	50.1	49.0	45.9	47.5	47.1	46.7	45.7	▲ 1.0
	Total	49.9	49.7	50.4	50.1	49.6	49.6	49.6	49.6	48.4	47.4	48.2	47.5	46.8	▲ 0.7
Other		40.2	41.9	42.6	40.7	41.4	42.3	41.9	43.8	40.9	39.4	38.8	37.4	37.5	0.1

		May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Ratio to the PrFDious Month
Hokkaido		41.6	40.9	41.8	41.8	41.8	39.3	39.8	39.4	39.0	37.9	38.6	39.2	39.6	0.4
Tohoku		44.9	45.0	46.3	46.1	45.9	45.8	45.9	45.6	43.9	43.2	43.1	43.3	41.7	▲ 1.6
kitakanto		45.2	44.8	45.0	45.2	42.6	43.3	43.8	43.0	41.1	40.3	41.5	40.8	41.2	0.4
minamikanto		46.5	46.1	46.8	46.1	45.4	45.8	45.8	45.8	44.6	43.2	43.9	43.6	43.0	▲ 0.6
Hokuriku		44.8	43.8	44.3	44.6	44.2	43.9	43.9	43.8	41.1	40.3	40.4	39.2	39.3	0.1
Tokai		46.5	45.3	46.9	46.5	46.0	46.0	45.9	46.4	45.4	43.6	43.6	43.3	42.7	▲ 0.6
Kinki		43.4	42.6	43.2	43.1	42.7	42.6	42.3	42.5	41.7	40.7	41.1	40.8	40.3	▲ 0.5
Chugoku		45.6	44.8	45.5	44.9	45.0	45.6	45.8	45.8	44.8	43.7	44.3	43.1	41.5	▲ 1.6
Shikoku		46.9	46.3	45.6	47.7	46.5	47.3	48.3	47.5	46.7	45.1	45.7	45.2	45.0	▲ 0.2
Kyushu		45.6	44.3	44.9	44.5	45.7	46.6	46.0	45.6	44.8	44.0	44.3	43.4	41.7	▲ 1.7

Appendix

1. Research Subjects (Companies Researched: 23,586; Valid Responses 10,588; Response Rate 44.9%)

Appendix

1. Region

Hokkaido	557	Tokai	1,179
Tohoku	682	Kinki	1,754
kitaKanto	724	Chugoku	593
minamikanto	3,430	Shikoku	323
Hokuriku	572	Kyushu	774
		Total	10,588

2. Industry (10 Industries 51 Lines of business)

Agriculture, Forestry, Fisheries		59
Finance		134
Construction		1,553
Real Estate		279
Manufacturing 3,223	Food, Beverages, Livestock Feed	341
	Textile, Textile Products, Clothing	119
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	235
	Pulp, Paper and Paper Products	105
	Publishing, Printing	211
	Chemical	436
	Steel, Nonferrous Metals, Mining	540
	General Machinery	453
	Electrical Machinery	345
	Transportation Machinery, Equipment	107
Wholesale 3,959	Precision Machinery, Medical Instruments and Equipment	83
	Others	97
	Food, Beverages	360
	Textile, Textile Products, Clothing	182
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	372
	Paper Products, Stationery, Books	110
	Chemical	297
	Recycled Resources	43
	Steel, Nonferrous Metals, Mining Products	334
	Machinery, Equipment	957
	Others	355

Retail 480	Food, Beverages	75
	Textile, Textile Products, Clothing	35
	Drugs, Sundries	30
	Furniture	7
	Electrical Household Appliances, Information Machinery and Equipment	41
	Motor Vehicles, Motor Vehicle Parts	61
	Special Merchandise	146
	Various Merchandise	45
	Others	7
Transportation, Warehousing		461
Service 1,384	Restaurants	41
	Telecommunications	14
	Electricity, Gas, Water, Heat	7
	Leasing, Rentals	121
	Lodging, Hotels	33
	Recreation	63
	Broadcasting	15
	Maintenance, Guarding, Testing	161
	Advertising	124
	Information	440
	Labor Dispatching	54
	Special Services	217
	Medical, Welfare, Public Health	103
	Education	15
	Others	125
Others		40
Total		10,588

3. Size

Large Firms	2,235	21.1%
Small to Medium-sized Firms	8,353	78.9%
micro Firms	2,646	25.0%
Total	10,588	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 May 19 – 31 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’.

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

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.