TDB Trends Research (Research & Summary for January 2016)

# Domestic economy worsening with additional damage from cold snap

All 10 regions deteriorate for the first time in 1 year and 5 months

(Companies Researched: 23,228; Valid Responses: 10,519; Response Rate: 45.3%; Survey Start Date: May 2002)

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#### < Overview of January 2016: Deterioration >

The Economic DI (Economic DI: 50 points is the threshold of assessment) in January 2016 stood at 43.5, down 1.2 points from the previous month, declining for two months in a row. This downturn was in line with a sharp decline in the Nikkei Stock Average since the beginning of this year as well as China's economic slowdown and sluggish growth in capital investment. The Japanese economy has deteriorated due to the stagnation of production activities as well as unseasonable weather.

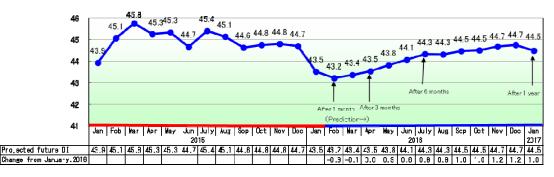
# < Future Outlook: A seesaw affair >

While the Japanese economy is expected to shift to a weak mode involving downside risk in production and consumption, a policy package will need to be introduced to help the second stage of Abenomics by taking actions, including monetary easing and economic stimulus measures as well as the postponement of a consumption tax hike.

By industry: 9 out of 10 industries deteriorate; bad effects come from China's economic slowdown coupled with unseasonable weather.

By size: All size categories deteriorate; the smaller the size is, the worse the impact, is

By region: All 10 regions deteriorate for the first time in 1 year and 5 months



🤃 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

	Jan-15	Feb-15	Mar·15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep·15	Oct-15	Nov-15	Dec-15	Jan-16	Ratio to the PrFDious Month
Total	43.9	45.1	45.8	45.3	45.3	44. 7	45.4	45.1	44.6	44.8	44.8	44.7	43.5	<b>▲</b> 1.2
Large Firms		48.0	48.6	48.9	49.2	48. 4	48.8	48.9	48.2	48.4	48. 4	47.9	47.1	▲ 0.8
Small to Medium-sized Firms		44.2	45.0	44. 3	44.3	43.6	44.5	44. 1	43.6	43.7	43.7	43.8	42.5	<b>▲</b> 1.3
Micro Firms	42.3	43.4	44. 3	43.1	43.2	43. 1	43.4	43.2	43.2	43.2	43. 1	43.3	41.8	<b>▲</b> 1.5

		Jan-15	Feb- 15	Mar- 15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Ratio to the PrFDious Month
Agriculture,Forest	try,Fisheries	41.3	40.0	44.0	43.7	45.0	41. 9	42.9	44. 7	44.7	44.6	45. 2	46.4	43.6	<b>▲</b> 2.8
Finance		45. 1	44.7	48.0	48. 1	47.4	49. 2	48.1	46.5	46.3	47.3	46.6	46.3	45.3	<b>▲</b> 1.0
Construction		50.4	50.4	50.8	49.3	48.6	47.7	48.6	48.8	49.1	49.5	49.6	49.3	47.9	▲ 1.4
Real Estate		45.1	47.2	48.8	48.8	49.6	49. 1	49.8	48.4	48.7	48.7	48. 9	48.4	47.1	<b>▲</b> 1.3
	Food,BEWerages,Livestock Feed	37. 2	39.8	43. 1	42.1	44.3	43. 1	43.4	43.0	43.6	44.3	44. 5	44.1	44.2	0.1
	Textile,Textile Products,Clothing	36.8	39.7	37. 6	40.2	41.7	39. 4	39.4	40.2	38.8	39.8	39. 4	39.3	36. 4	▲ 2.9
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	43. 2	41.9	42. 1	40. 3	40.9	40. 3	41.2	41. 2	40.9	40.2	38. 9	40.7	38. 5	▲ 2.2
	Pulp, Paper and Paper Products	34.8	37.3	39. 3	39.8	40.0	39. 0	39.7	42.0	40.8	41.1	42.4	41.7	40.3	<b>▲</b> 1.4
	Publishing, Printing	31.8	33.5	34. 1	34.6	34. 1	33. 5	33.7	34. 9	34.8	34.8	34. 6	34.7	34.0	▲ 0.7
Manufacturing	Chemical	43.2	44.5	44.6	44. 1	44. 4	43. 9	44.7	45.3	44.4	44.4	44. 9	45.4	44.3	<b>▲</b> 1.1
	Steel,Nonferrous Metals,Mining	44.8	46.8	45. 2	43.9	43.0	42. 9	43.6	42.8	41.7	41.4	41.8	41.5	41.1	▲ 0.4
	General Machinery	49.6	51.5	52.6	52.5	51.6	51. 3	51.9	50.3	47.3	47.9	47.3	48.6	46.0	▲ 2.6
	Electrical Machinery	47.3	48.4	49.7	47.7	47.3	47.4	47.4	44.8	45.2	45.2	45. 2	44.9	43.0	▲ 1.9
	Transportation Machinery, Equipment	47.4	50.3	50.4	51.1	47.8	49.7	50.9	50.8	48.3	46.3	47.0	46.2	45.7	▲ 0.5
	Precision Machinery, Medical Instruments and Equipment	47. 9	48.9	49. 2	47.8	49.8	49. 4	50.4	51.2	47.9	48.6	47. 9	46. 1	46. 2	0.1
	Other	35.4	38.7	38. 7	37. 1	40.7	37.8	39.2	37.7	40.0	39.8	40.0	39.6	39.4	▲ 0.2
	Total	43.0	44.6	45. 1	44. 4	44.5	44.0	44.6	44. 2	43.2	43.3	43.3	43.5	42.2	<b>▲</b> 1.3
	Food,BEWerages	38. 3	39.7	40.6	42.6	42.9	43.0	44.1	42.7	43.6	43.0	43. 1	42.6	41.9	▲ 0.7
	Textile, Textile Products, Clothing	31.1	32.2	33. 3	35.5	37.0	34. 8	34.4	34.7	36.5	37.8	34. 4	34.4	33.5	▲ 0.9
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	39. 0	40.5	40. 2	38. 2	38. 7	38. 1	39.8	39. 7	39. 5	41.3	41.5	41.8	40.5	<b>▲</b> 1.3
Wholesale	Paper Products, Stationery, Books	33. 2	35.1	37.7	37.3	38. 1	34. 5	37.1	36.5	36.8	36.8	37.4	37.2	38. 1	0.9
	Chemical	38. 9	41.2	41.8	42.5	43.0	43. 1	43.9	42.6	42.3	42.5	42.8	43.2	40.8	▲ 2.4
	Recycled Resources	39.0	38.5	39. 3	39.7	42.3	40.1	35.8	36.0	25.8	29.9	26.7	32.1	25.6	<b>▲</b> 6.5
	Steel,Nonferrous Metals, Mining Products	43. 9	43.5	43. 2	41. 2	40. 3	39. 3	40.4	40.3	38. 5	38.8	39. 4	37. 7	36. 4	▲ 1.3
	Machinery, Equipment	44.8	46.0	47.3	46.7	46.3	45. 1	45.6	45.3	43.6	43.6	43.4	43.6	42.6	<b>▲</b> 1.0
	Other		38.5	40.7	40.9	41.8	42.0	42.4	41.4	40.8	41.0	41.1	41.1	39.9	<b>▲</b> 1.2
	Total	40.4	41.5	42.5	42.3	42.5	41. 7	42.5	41. 9	41.2	41.5	41. 4	41.4	40.1	<b>▲</b> 1.3

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r <sub>i</sub> conom <sub>1</sub>	c Diffusioi	n index trc	onomic Di <i>iziz</i>

		Jan-15	Feb-15	Mar·15	Apr·15	May-15	Jun-15	Jul·15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Ratio to the PrFDious Month
	Food,BEWerages	36.8	38. 2	39. 4	39.3	41.6	42.7	45.0	44.0	44. 5	44.6	41.4	43. 2	39.9	▲ 3.3
	Textile, Textile Products, Clothing	30.7	32. 3	34.8	38.0	40.2	37.0	38.6	38.7	36. 9	40.1	36.8	32. 1	34.8	2.7
	Drugs,Sundries	44.6	45.3	46.0	48.1	48.0	48.6	49.3	48.7	46.7	48.6	50.0	49.4	45.3	<b>▲</b> 4.1
	Furniture	28.8	33. 3	27.8	35.0	40.0	43.3	41.7	41.7	42.9	42.9	42.9	47.2	42.9	<b>▲</b> 4.3
Retail	Electrical Household Appliances, Information Machinery and Equipment	39. 3	39. 0	43. 2	38. 4	41.5	40.6	38. 9	38. 3	44. 6	39. 6	38. 7	40. 7	43.8	3. 1
	Motor Vehicles, Motor Vehicle Parts	37.8	40.7	38.8	36.5	39. 9	37.2	38. 3	38.7	38. 6	39. 9	38. 2	37. 9	40.0	2. 1
	Special Merchandise	41.4	43.7	42.3	39.4	40.5	38.0	39. 9	41.6	40.7	39. 2	39.8	38. 4	40.4	2.0
	Various Merchandise	42.6	41.0	40.6	47.1	49.7	48.1	48.8	49.0	47.3	46.5	47.3	43.8	45.0	1.2
	Other	33.3	36. 7	38. 9	41.7	36.1	43.3	35.7	44. 4	44. 4	36. 1	38.9	43.3	44.4	1.1
	Total	39. 1	40.5	40.5	40.2	42.1	40.7	41.9	42.4	42. 2	41.6	40.9	40.2	41.0	0.8
Transportati	on,Warehousing	43.7	44. 8	44. 9	44.8	44.8	42.6	44. 4	44. 9	45. 1	44.7	45.4	45.3	43.2	<b>▲</b> 2.1
	Restaurants	44.6	45. 2	49. 2	50.0	49.6	48.3	47.4	51.3	45. 3	49.2	46.2	44. 4	47.1	2.7
	Postal, Telecommunications	56.3	53. 7	48.3	54.2	53. 7	50.0	47.0	53.0	59. 3	57.6	53.0	51.5	58.3	6.8
	Electricity,Gas,Water,Heat	50.0	50.0	48.3	55.0	53.7	53.0	50.0	51.9	56.7	55.0	55.0	55.0	52.4	▲ 2.6
	Leasing,Rentals	50.9	50.0	49.3	49.6	47.9	47.9	48.7	49.9	48.0	48.0	49.2	49.7	48.1	<b>▲</b> 1.6
	Lodging, Hotels	47.7	49.5	48.6	51.4	53.1	54.2	59. 2	59.0	58. 3	61.4	59.1	55. 4	56.9	1.5
	Recreation	34.4	40.0	45.6	38.7	40.2	37.9	37.3	38.0	37. 9	38.0	38.0	38.6	39.1	0.5
	Broadcasting	44.4	40.0	45.6	47.9	45.6	46.1	49. 1	46. 1	41.7	45.1	46.9	47.8	43.8	<b>▲</b> 4.0
Service	Maintenance, Guarding, Testing	44.6	46. 9	47. 2	47.8	48.1	47.4	47.6	47. 4	46.0	46.1	47.1	46.4	44.8	▲ 1.6
	Advertising	38.8	39. 3	42.1	42.2	41.1	41.0	39.8	40.7	40.8	40.7	40.3	40.3	39. 2	<b>▲</b> 1.1
	Information	53.5	54.6	56.3	56.3	55. 3	55.4	56. 4	55.8	55. 5	56.0	54.9	54.9	55.2	0.3
	Labor Dispatching	55.7	57. 5	56.7	55.5	56. 2	56.3	54. 4	55.0	54. 2	54.7	52.5	53. 1	50.9	▲ 2.2
	Special Services	50.8	51.4	53.0	51.0	51.7	50.9	52.0	51.4	51.5	49.0	50.3	52.1	49.1	▲ 3.0
	Medical, Welfare, Public Health	44.7	45.7	45.3	46.1	46.3	43.3	45.3	43.6	42.8	42.3	44. 1	42.2	39.9	▲ 2.3
	Education	40.5	40.2	39.5	41.2	41.1	44.4	40.6	44. 1	42.1	45.0	50.8	46.7	46.3	▲ 0.4
	Other	47.4	48. 1	47. 2	46.1	46.8	49.5	50.9	48.5	49.3	49.2	50.1	49.0	45.9	▲ 3.1
	Total	48.3	49. 2	50.3	50.1	49.9	49.7	50.4	50.1	49.6	49.6	49.6	49.6	48.4	<b>▲</b> 1.2
Other		37.3	41.7	42.0	43. 2	40.2	41.9	42.6	40.7	41.4	42.3	41.9	43.8	40.9	▲ 2.9

	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Ratio to the PrFDious Month
Hokkaido	39.1	39. 9	40.0	40.8	41.6	40.9	41.8	41.8	41.8	39.3	39.8	39. 4	39.0	▲ 0.4
Tohoku	45.4	46.0	46.5	46.0	44. 9	45.0	46.3	46.1	45. 9	45.8	45.9	45.6	43.9	<b>▲</b> 1.7
kitakanto	44. 1	45.3	46.2	45.4	45.2	44.8	45.0	45.2	42.6	43.3	43.8	43.0	41.1	<b>▲</b> 1.9
minamikanto	44.7	46.0	46.8	46.2	46.5	46.1	46.8	46.1	45. 4	45.8	45.8	45.8	44.6	<b>▲</b> 1.2
Hokuriku	43.6	44.6	44. 4	44. 4	44.8	43.8	44. 3	44.6	44. 2	43.9	43.9	43.8	41.1	<b>▲</b> 2.7
Tokai	45.0	46.3	46.4	45.6	46.5	45.3	46.9	46.5	46.0	46.0	45.9	46.4	45.4	<b>▲</b> 1.0
Kinki	42.2	43. 2	44. 5	43.7	43.4	42.6	43.2	43.1	42.7	42.6	42.3	42.5	41.7	▲ 0.8
Chugoku	43.6	44. 4	45.5	45.4	45.6	44.8	45.5	44.9	45.0	45.6	45.8	45.8	44.8	<b>▲</b> 1.0
Shikoku	43.8	45.5	46.6	47.7	46.9	46.3	45.6	47.7	46.5	47.3	48.3	47.5	46.7	▲ 0.8
Kyushu	45.3	46.6	47.2	46.2	45.6	44.3	44. 9	44.5	45.7	46.6	46.0	45.6	44.8	▲ 0.8

# **Appendix**

# 1.Research Subjects(Companies Researched: 23,228; Valid Responses: 10,519; Response Rate: 45.3%)

#### Appendix

#### 1.Region

Hokkaido	565	Tokai	1,176
Tohoku	681	Kinki	1,768
kitaKanto	720	Chugoku	598
minamikanto	3,342	Shikoku	326
Hokuriku	568	Kyushu	775
		Total	10,519

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

Agriculture, For	estry, Fisheries	6
Finance		12
Construction		1,53
Real Estate		27
	Food,Beverages,Livestock Feed	34
	Textile,Textile Products,Clothing	10
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	24
	Pulp, Paper and Paper Products	10
	Publishing, Printing	19
Manufacturing	Chemical	42
3,223	Steel, Nonferrous Metals, Mining	52
	General Machinery	45
	Electrical Machinery	35
	Transportation Machinery, Equipment	10
	Precision Machinery, Medical Instruments and Equipment	7
	Others	9
	Food,Beverages	370
	Textile, Textile Products, Clothing	18
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	36
Wholesale	Paper Products,Stationery,Books	10
3,959	Chemical	30
	Recycled Resources	4
	Steel, Nonferrous Metals, Mining Products	32
	Machinery, Equipment	95
	Others	35

	Food,Beverages	76
	Textile,Textile Products,Clothing	35
	Drugs,Sundries	25
Retail	Furniture	7
480	${\bf ElectricalHouseholdAppliances,} Information {\bf Machinery} {\bf and} {\bf Equipment}$	35
	Motor Vehicles, Motor Vehicle Parts	60
	Special Merchandise	142
	Various Merchandise	50
	Others	6
'ransportation	n, Warehousing	447
	Restaurants	35
	Telecommunications	10
	Electricity, Gas, Water, Heat	7
	Leasing,Rentals	120
	Lodging, Hotels	34
	Recreation	55
Service	Broadcasting	16
1,384	Maintenance, Guarding, Testing	170
	Advertising	124
	Information	437
	Labor Dispatching	54
	Special Services	222
	Medical,Welfare,Public Health	104
	Education	18
	Others	127
Others		42
	Total	10,519

#### 3.Size

Large Firms	2,275	21.6%
Small to Medium-sized Firms	8,244	78.4%
micro Firms	2,592	24.6%
Total	10,519	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 January 18 – 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=6/6x100(%)=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.