#### TDB Trends Research (Research & Summary for January 2020)

# Stagnation of production activities, with an additional blow from the record warm winter

 $\sim$  Domestic economy worsens for the fourth month in a row, and concerns about a new type of pneumonia  $\sim$ 

(Companies researched: 23,665; Valid responses: 10,405; Response rate: 44.0%; Survey start date: May 2002)

#### < Overview of January 2020: Recession phase >

The economic diffusion index (DI) in January 2020 was 41.9, down 0.6 points from the previous month, and worsened for the fourth consecutive month. While inventory adjustment is ongoing, a recession phase continues in the domestic economy, together with the record warm winter.

#### < Future outlook: Moderate recession continues >

A moderate recession is expected in the domestic economy, with the biggest risk factor being overseas trends.

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By industry: Five of the ten industries deteriorated. The impact of the warm winter put downward pressure on a wide range of industries.

By size: All sizes deteriorated for the fourth month in a row, with an increased cost burden, such as for fuel, being a negative factor.

By region: Eight of the ten regions deteriorated, with a tendency for the warm winter, mainly in northern Japan, being a negative factor.



<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

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Ratio to tHI PrFDious Month
Total	48.1	47. 2	46.9	46.8	45.4	45. 1	44.6	44.7	45.0	43.9	43.6	42.5	41.9	▲ 0.6
Large Firms		49.8	49.8	49.7	48.8	48. 7	47.7	47.9	48.0	47.1	47.0	45.7	45.3	▲ 0.4
Small to Medium-sized Firms		46.5	46.2	46. 1	44.6	44. 2	43.9	43.9	44. 2	43.2	42.8	41.7	41.1	▲ 0.6
Micro Firms	47.0	46. 5	46.3	46. 2	44.5	44. 1	43.8	44. 2	45. 1	43.9	43. 5	42.1	41.4	▲ 0.7

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Ratio to tHI PrFDious Month
Agriculture,Forest	try,Fisheries	41.8	41.7	42.3	41.3	40.5	43. 2	39. 1	41.5	41.8	42.3	42.5	41.7	38.4	▲ 3.3
Finance		46.1	45. 2	45.9	45. 1	44.7	44.8	45. 1	44.7	45.8	45.4	46.8	44.5	44.8	0.3
Construction		53.9	53.6	53.6	52.8	51.7	51.6	51.7	52.1	53. 1	52. 1	52. 2	51.6	50.0	▲ 1.6
Real Estate		49.1	47.5	47.4	48.7	47.6	48. 3	47. 4	46.5	48.0	45.9	46.0	44. 2	45.9	1.7
	Food,BEWerages,Livestock Feed	41.6	40.6	40.6	42.2	41.3	40.3	40.4	41.1	39.8	39.1	39. 7	39.9	38.0	<b>▲</b> 1.9
	Textile,Textile Products,Clothing	37.7	38.8	39. 2	39. 0	36.6	36. 5	36. 4	36.9	36. 3	36. 1	34. 6	32.6	30.5	<b>▲</b> 2.1
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	47.1	45. 5	44. 1	45. 7	45.4	43. 5	43.8	45. 2	44. 1	44.8	43.8	40.2	39.9	▲ 0.3
	Pulp, Paper and Paper Products	44.6	45.2	44.1	45.7	43.0	41.7	39.6	42.3	42.8	40.2	41.7	40.6	37.3	▲ 3.3
Manufacturing	Publishing, Printing	33.5	33. 2	34.4	35. 6	34.3	33. 9	32. 5	33.1	34. 1	33.0	32. 7	32.9	30.9	<b>▲</b> 2.0
	Chemical	48.1	46.3	45.4	46. 2	43.9	42.5	41.9	41.8	41.0	41.2	40.6	40.1	39.0	<b>▲</b> 1.1
	Steel, Nonferrous Metals, Mining	50.4	48.0	45.4	45.5	42.9	41.8	41.5	41.2	40.4	39.8	38. 1	37.6	36.3	<b>▲</b> 1.3
	General Machinery	52.5	51.4	48.9	49.0	46.0	45. 1	44.0	41.5	41.1	40.8	39. 9	38.4	37.3	<b>▲</b> 1.1
	Electrical Machinery	49.2	47.6	46.0	44. 7	43.1	43.0	42.8	43.9	41.2	42.2	40.5	40.4	41.0	0.6
	Transportation Machinery, Equipment	52.3	50.9	49.3	49.4	48.1	47.5	46.4	43.4	42.3	43.5	41.2	40.9	39.4	<b>▲</b> 1.5
	Precision Machinery, Medical Instruments and Equipment	51.3	48. 6	45. 5	47. 3	44. 4	42. 4	43.9	43.4	42.0	41.3	42.0	39. 9	40.4	0.5
	Other	42.7	42.1	45.3	40.2	40.2	40.2	38.0	40.7	41.8	37.4	38. 4	38.0	36.9	<b>▲</b> 1.1
	Total	47.1	45.8	44.5	44.8	42.9	42.0	41.5	41.4	40.6	40.3	39. 6	38.6	37.6	<b>▲</b> 1.0
	Food,BEWerages	39.4	40.5	40.5	41.1	40.8	40.4	38.8	39.0	38.8	38. 1	37. 9	37.4	37.3	▲ 0.1
	Textile, Textile Products, Clothing	34.0	32.0	33.6	33. 2	33.2	31.6	29.8	30.8	31.6	28.8	28.8	26.5	26.2	▲ 0.3
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	47.4	46. 5	46.4	45. 6	44. 7	43.8	44. 7	44.6	46.0	45. 1	43. 4	43. 1	42.8	▲ 0.3
Wholesale	Paper Products, Stationery, Books	37.9	36.0	39.0	39. 2	39.0	36. 4	37.0	37.1	38.0	37.7	36. 3	35.0	34.9	▲ 0.1
	Chemical	45.3	44. 3	44.3	44. 2	41.8	41.2	42.7	42.0	42.7	41.0	40.4	39.0	38.7	▲ 0.3
	Recycled Resources	39.8	45.6	48.6	41.0	40.2	37. 1	32.8	32.8	30.6	34.8	29. 0	33.3	30.8	<b>▲</b> 2.5
	Steel, Nonferrous Metals, Mining Products	46. 3	45. 0	43. 7	43. 4	40.8	40. 4	39. 0	38.8	37. 6	38.0	37. 0	34.8	33. 9	▲ 0.9
	Machinery, Equipment	48.4	46. 9	46.5	45. 9	44.2	44. 4	43.8	43.3	44.6	42.7	42.3	41.7	41.2	▲ 0.5
	Other	41.9	41.2	42.5	42.7	40.6	40.6	40.2	40.2	40.7	37.9	37. 6	37.1	36.7	▲ 0.4
	Total	44.4	43.6	43.7	43.3	41.9	41.4	41.0	40.8	41. 4	39.9	39. 3	38.4	37.9	▲ 0.5

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## Economic Diffusion Index (Economic DI)2/2

		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Ratio to tHI PrFDious Month
	Food,BEWerages	43.4	41.5	42.5	42.5	44.8	42. 9	41.5	41.3	41.8	40.5	40.2	38. 4	39. 1	0.7
	Textile, Textile Products, Clothing	30.9	32.7	38. 9	39. 1	36. 9	36. 6	34.6	36.5	37.9	32.7	31.5	28.7	28.0	▲ 0.7
	Drugs,Sundries	44.8	39.7	39. 7	40.9	41.0	38. 5	40.0	37.7	40.6	35.8	37.3	40.2	37. 7	<b>▲</b> 2.5
	Furniture	38.9	33. 3	33. 3	38. 9	39. 6	48. 5	40.9	45.0	53.0	33.3	26. 9	31.8	31.9	0.1
Retail	Electrical Household Appliances, Information Machinery and Equipment	39.0	40.7	38. 9	41.7	39. 1	43. 5	34. 3	38.9	45.0	34. 3	32. 3	38. 1	38. 2	0. 1
	Motor Vehicles, Motor Vehicle Parts	44.6	44.3	45.2	43.3	41.5	42.5	39.2	41.1	41.4	34.5	31.4	31. 9	36. 7	4.8
	Special Merchandise	41.9	41.3	40.8	42.1	41.3	41.1	40.6	40.7	43.5	38. 2	39. 1	36.0	35. 2	▲ 0.8
	Various Merchandise	42.9	41.9	43.5	43.3	43.8	44.7	39.3	38.9	43.1	36.5	36.5	36. 2	37. 4	1.2
	Other	35.7	31.3	33.3	43.8	39.6	46.3	41.7	41.7	40.5	48.1	40.7	47.9	48. 1	0.2
	Total	41.6	40.8	41.4	42.1	41.6	42.0	39.5	40.2	42.6	37.0	36. 1	35. 8	36. 3	0.5
Transportati	on,Warehousing	49.1	48.2	48. 1	48.2	46.7	45.6	44.5	45.5	46.0	44. 9	45.1	42.6	39. 5	▲ 3.1
	Restaurants	37.9	41.0	37.8	42.9	40.6	42.9	39.6	38. 1	43.6	37. 3	39. 4	40.7	41.0	0.3
	Postal, Telecommunications	60.0	57.6	62.1	57. 6	56. 7	60.0	58.3	60.6	56.9	56. 1	59.5	52.8	64.6	11.8
	Electricity,Gas,Water,Heat	57.4	57.4	56. 3	58.3	55.6	54. 5	54.2	52.6	51.3	51.2	52.2	47.4	52.4	5. 0
	Leasing, Rentals	55.0	52.0	52.7	54.1	50.9	52.5	51.8	51.7	53.5	54.5	53. 1	50.4	50.8	0.4
	Lodging, Hotels	44.9	44.2	42.3	41.0	50.0	44. 9	40.3	39.9	47.2	41.3	42.0	39. 1	38. 5	▲ 0.6
	Recreation	38.9	37.8	41.0	38.8	42.0	41.5	41.8	40.9	38.7	38. 2	40.7	37. 5	39. 4	1.9
	Broadcasting	40.5	44.4	43.3	41.7	44. 1	43.3	41.1	45.2	43.1	42.9	41.7	38. 2	38. 1	▲ 0.1
Service	Maintenance, Guarding, Testing	50.7	51.0	50.0	48. 1	48. 2	48.8	49.3	49.8	48.6	49.1	47.3	46.6	46. 4	▲ 0.2
	Advertising	40.4	40.1	40.3	40.7	40.5	40.7	40.4	38.9	40.3	40.4	39.6	37.8	40.0	2. 2
	Information	60.1	59.0	60.3	59.6	58.0	57.8	58.5	58.7	57.7	57.4	57.8	56. 2	56. 5	0.3
	Labor Dispatching	57.2	54.6	53.8	53.5	53.9	52.8	52.7	51.0	53.2	53.3	50.9	46. 2	49.2	3. 0
	Special Services	53.5	52.8	52.5	51.5	49.5	50.1	49.9	51.1	51.8	51.5	50.8	49.9	50.3	0.4
	Medical, Welfare, Public Health	47.5	46.5	47.1	46.9	47.8	47.0	48.7	46.5	47.3	46.5	48.5	47.7	47.8	0.1
	Education	38.5	44.7	45.8	44.2	43.6	44.0	41.1	39.5	40.0	42.4	37.8	43.1	41.4	<b>▲</b> 1.7
	Other	50.2	49.7	49.0	50.2	47. 9	48.5	47.9	48.3	48.4	47. 9	47.9	45.6	46.2	0.6
	Total	52.4	51.7	51.9	51.6	50.6	50.8	50.8	50.7	51.0	50.6	50.4	48.8	49.5	0.7
Other		44.1	48. 3	45.2	44. 9	43. 2	42.6	44.1	43.2	42.1	43.1	40.4	41.7	42.7	1.0

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Ratio to tHI PrFDious Month
Hokkaido	43.9	44.4	44.6	45.5	45. 3	45. 1	45.7	46.4	46.6	45.7	45.0	43.8	42.4	<b>▲</b> 1.4
Tohoku	44.4	43.1	42.8	43.1	42. 2	41.9	41.7	41.7	43.2	41.9	42.2	40.9	38.8	<b>▲</b> 2.1
kitakanto	45.8	44.8	44.7	44.3	43. 1	42.5	42.5	42.6	42.2	40.9	40.0	40.0	39. 4	▲ 0.6
minamikanto	49.0	48.1	47.8	47.7	46.0	46.0	45.5	45.7	46.1	45.5	45.5	44. 3	44.5	0. 2
Hokuriku	47.7	46.3	45.3	45.3	44.6	44. 2	43.5	44. 1	43.5	42.1	40.4	39. 5	37.6	<b>▲</b> 1.9
Tokai	50.1	48.6	48.4	48.0	46.8	45.8	44.7	45.0	45.2	43.6	42.7	41.8	40.6	<b>▲</b> 1.2
Kinki	48.4	47.6	47.3	46.9	45.0	44.6	44.0	43.8	43.9	42.2	41.9	40.5	39.8	▲ 0.7
Chugoku	47.7	47.2	46.7	47.2	45.6	45.5	45.0	44.8	45.0	44.0	43.6	42.6	41.2	<b>▲</b> 1.4
Shikoku	46.8	47.6	46.8	46. 9	46. 7	44.8	43.1	43.8	43.9	44. 4	44.0	43.8	42.7	▲ 1.1
Kyushu	49.7	48.5	48.6	48.3	46. 9	47.0	47.6	46.3	47.1	46.5	46.8	45. 1	45.2	0. 1

#### Survey of Corporate Attitudes Towards Wage Trends for 2020

# "Stability of and securing the workforce" as reason for wage improvement reaches record high 80.6%

- Wage improvement reaching a high level at 53.3%, but appears to pause -

While companies that considered the economy for 2019 was in a "recovery phase" remained in the single digits for the second consecutive year, those that considered it was in a "downturn phase" reached the 30% range for the first time in seven years. Continuing from 2018, it was a year of increased severity. (Teikoku Databank, "Survey of Corporate Attitudes Towards Economic Outlook for 2020") As the household burden increased due to the consumption tax hike in October 2019, wage trends attracted a lot of attention, such as the government asking the Japan Business Federation (Keidanren) to continue increasing wages for the seventh consecutive year.

Under such circumstances, Teikoku Databank conducted a survey on corporate attitudes towards wage trends for 2020. This survey was conducted in conjunction with the January 2020 TDB Trends Research.

- \* Survey period: January 20 January 31, 2020; Companies Surveyed: 23,665; Valid Responses: 10,405 (Response Rate: 44.0%) The survey on wages has been conducted in January every year since January 2006, and this is the 15th survey.
- \* Details of this survey can be found on the dedicated Economic Trends Survey HP. (http://www.tdb-di.com/)
- \* Wage improvement means improvement (increase) in wages by pay-scale raises and bonus pay (lump-sum pay) increases, and does not include annual regular pay raises.

#### Survey results (Summary)

- 1. Companies anticipating "wage improvement" in 2020 surpassed 50% for the fourth consecutive year, at 53.3%, 2.2 points down from the previous survey (in January 2019). Companies anticipating "wage improvement" exceeded those anticipating "no wage improvement" for the tenth consecutive year, and the difference remains substantial, at 33.1 points.
- 2. With respect to the details of wage improvement, pay-scale raises and bonus pay (lump-sum pay) stood at 45.2% (a decrease of 0.4 points y-o-y), and 26.3% (a decrease of 4.0 points y-o-y), respectively. While pay-scale raises remained at a high level, in the 40% range for the fourth consecutive year, bonus pay (lump-sum pay) decreased to the 20% range.
- 3. With respect to the reasons for wage improvement, most cited "stability of and securing the workforce," which was a record high at 80.6%. The trend to increase wages for stability and to secure the workforce has strengthened. On the other hand, "business expansion of one's own company" (36.0%) dropped by 4.9 points from the previous year. With respect to the reasons for no wage improvement, "poor business performance of one's own company" increased by 5.5 points y-o-y, to 58.1%, the first increase in five years.
- 4. Companies responding total personnel expenses would "increase" in 2020 stood at 68.9%, a decrease of 1.6 points from the previous survey. By industry, percentages are high in "service," "transportation and warehousing," and "construction." Total personnel expenses are expected to increase by 2.85% on average, but the rate of increase is projected to drop slightly from the previous year. Among these, the total of employees' salaries and bonuses is estimated to increase by approximately 3.7 trillion yen (an average of 2.50%).

### **Appendix**

## 1.Research Subjects(Companies researched: 23,665; Valid responses: 10,405; Response rate: 44.0%)

#### Appendix

#### 1.Region

Hokkaido	516	Tokai	1,161
Tohoku	685	Kinki	1,742
kitaKanto	751	Chugoku	582
minamikanto	3,347	Shikoku	311
Hokuriku	561	Kyushu	749
		Total	10,405

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

Agriculture,For	estry, Fisheries	56
Finance		119
Construction		1,637
Real Estate		312
	Food, Beverages, Livestock Feed	328
	Textile,Textile Products,Clothing	110
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	223
	Pulp, Paper and Paper Products	9'
	Publishing, Printing	170
Manufacturing	Chemical	394
(2,880)	Steel, Nonferrous Metals, Mining	504
	General Machinery	459
	Electrical Machinery	32'
	Transportation Machinery, Equipment	10
	Precision Machinery, Medical Instruments and Equipment	78
	Others	88
	Food,Beverages	355
	Textile,Textile Products,Clothing	189
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	320
Wholesale	Paper Products, Stationery, Books	9'
(2,843)	Chemical	27'
	Recycled Resources	33
	Steel, Nonferrous Metals, Mining Products	318
	Machinery, Equipment	911
	Others	349

	Food, Beverages	66
	Textile Textile Products, Clothing	31
	Drugs,Sundries	19
Retail	Furniture	15
(432)	Electrical Household Appliances, Information Machinery and Equipment	34
	Motor Vehicles, Motor Vehicle Parts	79
	Special Merchandise	13'
	Various Merchandise	45
	Others	46
	t, Warehousing	449
ansportation	Restaurants	
	Restaurants Telecommunications	39
		3
	Electricity,Gas,Water,Heat	14
	Leasing,Rentals	110
	Lodging, Hotels	20
	Recreation	58
Service	Broadcasting	14
(1,638)	Maintenance,Guarding,Testing	158
	Advertising	102
	Information	471
	Labor Dispatching	60
	Special Services	258
	Medical,Welfare,Public Health	114
	Education	27
	Others	182
thers		39
	Total	10.40

#### 3.Size

Large Firms	2,012	19.3%
Small to Medium-sized Firms	8,393	80.7%
micro Firms	2,858	27.5%
Total	10,405	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 20 – 31 2020

#### 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 <sub>6</sub>	N <sub>5</sub>	N <sub>4</sub>	N <sub>3</sub>	N <sub>2</sub>	N <sub>1</sub>	N <sub>0</sub>

#### 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 **the point separating good and bad**, 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	
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	Capital: Below 100 million yen	
	and No. of Employee: Over 100	or No. of Employee: Below 100	No. of Employee: Below 5
Retail Trade	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and No. of Employee: Over 50	or No. of Employee: Below 50	No. of Employee: Below 5
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.