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

## COVID-19 significantly holding down the domestic economy

 $\sim$  Nationwide worsening with the movement of people and goods stagnating  $\sim$ 

(Companies researched: 23,668; Valid responses: 10,704; Response rate: 45.2%; Survey start date: May 2002)

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

The economic diffusion index (DI) in February 2020 was 38.7, down 3.2 points from the previous month, worsening for the fifth consecutive month, and below 40 for the first time in seven years. Amid a continuing recession phase, the domestic economic situation deteriorated markedly, with the additional impact of COVID-19.

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

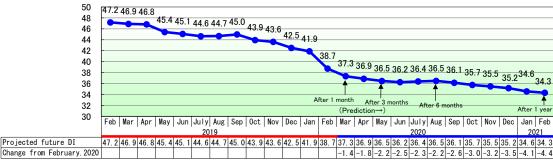
Due to a number of risk factors, including COVID-19, a moderate recession is expected to continue in the domestic economy.

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By industry: All ten industries deteriorated. The impact of COVID-19 rippled through various industries.

By size: All sizes deteriorated for the fifth month in a row, with a drop of over 2 points across the board due to COVID-19.

By region: Nationwide worsening with the movement of people and goods stagnating in 45 prefectures in all ten regions.



\*: Economic DIs are calculated based on the structural ARIMA model, in which economic statistics are incorporated to the ARIMA model

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TDB Trends Research February 2020

### Economic Diffusion Index (Economic DI)1/2

	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb·20	Ratio to tHJ PrFDious Month
Total	47. 2	46.9	46.8	45. 4	45.1	44.6	44.7	45.0	43.9	43.6	42.5	41.9	38. 7	<b>▲</b> 3.2
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	42.0	▲ 3.3
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	38.0	▲ 3.1
Micro Firms	46.5	46.3	46.2	44. 5	44. 1	43.8	44. 2	45.1	43.9	43.5	42. 1	41.4	38.8	<b>▲</b> 2.6

		Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Ratio to tHJ PrFDious Month
Agriculture,Forestry,Fisheries		41.7	42.3	41.3	40.5	43.2	39.1	41.5	41.8	42.3	42.5	41.7	38. 4	37. 9	▲ 0.5
Finance		45. 2	45.9	45.1	44. 7	44.8	45.1	44. 7	45.8	45.4	46.8	44. 5	44.8	42. 2	▲ 2.6
Construction		53.6	53.6	52.8	51.7	51.6	51.7	52.1	53.1	52.1	52. 2	51.6	50.0	47.8	▲ 2.2
Real Estate		47.5	47.4	48.7	47.6	48.3	47.4	46.5	48.0	45.9	46.0	44. 2	45.9	42.0	▲ 3.9
	Food,BEWerages,Livestock Feed	40.6	40.6	42.2	41.3	40.3	40.4	41.1	39.8	39.1	39. 7	39. 9	38.0	34. 5	▲ 3.5
	Textile, Textile Products, Clothing	38.8	39. 2	39.0	36.6	36. 5	36.4	36. 9	36.3	36. 1	34. 6	32.6	30.5	29. 3	<b>▲</b> 1.2
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	45. 5	44. 1	45. 7	45. 4	43. 5	43.8	45. 2	44. 1	44.8	43.8	40. 2	39. 9	37. 2	<b>▲</b> 2.7
	Pulp, Paper and Paper Products	45. 2	44.1	45.7	43.0	41.7	39.6	42.3	42.8	40.2	41.7	40.6	37.3	32.0	▲ 5.3
	Publishing, Printing	33. 2	34.4	35.6	34.3	33. 9	32.5	33. 1	34.1	33.0	32. 7	32. 9	30.9	29. 7	<b>▲</b> 1.2
Manufacturing	Chemical	46.3	45.4	46.2	43.9	42.5	41.9	41.8	41.0	41.2	40.6	40.1	39.0	35.8	▲ 3.2
	Steel, Nonferrous Metals, Mining	48.0	45.4	45.5	42.9	41.8	41.5	41.2	40.4	39.8	38. 1	37. 6	36.3	32. 9	▲ 3.4
	General Machinery	51.4	48.9	49.0	46.0	45. 1	44.0	41.5	41.1	40.8	39. 9	38. 4	37.3	35. 4	<b>▲</b> 1.9
	Electrical Machinery	47.6	46.0	44.7	43.1	43.0	42.8	43.9	41.2	42.2	40.5	40.4	41.0	38. 5	▲ 2.5
	Transportation Machinery, Equipment	50.9	49.3	49.4	48. 1	47.5	46.4	43.4	42.3	43.5	41.2	40.9	39.4	36. 5	▲ 2.9
	Precision Machinery, Medical Instruments and Equipment	48.6	45.5	47.3	44. 4	42. 4	43.9	43. 4	42.0	41.3	42.0	39. 9	40.4	39. 0	<b>▲</b> 1.4
	Other	42.1	45.3	40.2	40.2	40.2	38.0	40.7	41.8	37.4	38. 4	38.0	36.9	36.8	▲ 0.1
	Total	45.8	44.5	44.8	42.9	42.0	41.5	41.4	40.6	40.3	39. 6	38.6	37.6	34. 9	<b>▲</b> 2.7
	Food,BEWerages	40.5	40.5	41.1	40.8	40.4	38.8	39.0	38.8	38.1	37. 9	37. 4	37.3	33. 1	<b>▲</b> 4.2
	Textile, Textile Products, Clothing	32.0	33.6	33.2	33. 2	31.6	29.8	30.8	31.6	28.8	28.8	26.5	26.2	22.0	<b>▲</b> 4. 2
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	46. 5	46.4	45.6	44. 7	43.8	44.7	44. 6	46.0	45. 1	43. 4	43. 1	42.8	38. 5	<b>▲</b> 4.3
Wholesale	Paper Products,Stationery,Books	36. 0	39.0	39.2	39.0	36. 4	37.0	37. 1	38.0	37.7	36. 3	35.0	34.9	33. 5	▲ 1.4
	Chemical	44. 3	44.3	44.2	41.8	41.2	42.7	42.0	42.7	41.0	40.4	39.0	38.7	35. 5	▲ 3.2
	Recycled Resources	45.6	48.6	41.0	40.2	37. 1	32.8	32.8	30.6	34.8	29.0	33. 3	30.8	27. 1	▲ 3.7
	Steel, Nonferrous Metals, Mining Products	45. 0	43. 7	43. 4	40.8	40. 4	39. 0	38. 8	37. 6	38.0	37.0	34. 8	33. 9	31.9	▲ 2.0
	Machinery, Equipment	46. 9	46.5	45.9	44.2	44. 4	43.8	43.3	44.6	42.7	42.3	41.7	41.2	38.2	▲ 3.0
	Other	41. 2	42.5	42.7	40.6	40.6	40.2	40.2	40.7	37. 9	37.6	37. 1	36. 7	31.5	▲ 5.2
	Total	43.6	43.7	43.3	41.9	41.4	41.0	40.8	41.4	39. 9	39.3	38.4	37. 9	34. 4	▲ 3.5

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

		Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Ratio to tHJ PrFDious Month
	Food,BEWerages	41.5	42.5	42.5	44.8	42.9	41.5	41.3	41.8	40.5	40.2	38. 4	39. 1	36. 7	▲ 2.4
	Textile, Textile Products, Clothing	32.7	38. 9	39.1	36.9	36.6	34.6	36.5	37. 9	32.7	31.5	28.7	28.0	24. 2	▲ 3.8
	Drugs,Sundries	39. 7	39. 7	40.9	41.0	38. 5	40.0	37.7	40.6	35.8	37.3	40.2	37.7	34. 7	▲ 3.0
	Furniture	33. 3	33. 3	38.9	39.6	48.5	40.9	45.0	53.0	33. 3	26.9	31.8	31.9	29. 2	<b>▲</b> 2.7
Retail	Electrical Household Appliances, Information Machinery and Equipment	40. 7	38. 9	41.7	39. 1	43. 5	34.3	38.9	45.0	34. 3	32.3	38. 1	38. 2	36. 0	<b>▲</b> 2.2
	Motor Vehicles, Motor Vehicle Parts	44. 3	45.2	43.3	41.5	42.5	39.2	41.1	41.4	34. 5	31.4	31.9	36.7	32. 9	▲ 3.8
	Special Merchandise	41.3	40.8	42.1	41.3	41.1	40.6	40.7	43.5	38. 2	39.1	36.0	35. 2	34. 7	▲ 0.5
	Various Merchandise	41.9	43.5	43.3	43.8	44.7	39.3	38. 9	43.1	36. 5	36.5	36. 2	37.4	34. 4	▲ 3.0
	Other	31. 3	33. 3	43.8	39.6	46. 3	41.7	41.7	40.5	48. 1	40.7	47.9	48. 1	43. 9	<b>▲</b> 4.2
	Total	40.8	41. 4	42.1	41.6	42.0	39.5	40.2	42.6	37.0	36.1	35.8	36.3	34. 1	<b>▲</b> 2.2
Transportation, Warehousing		48. 2	48.1	48.2	46.7	45.6	44.5	45.5	46.0	44. 9	45.1	42.6	39. 5	34.0	▲ 5.5
	Restaurants	41.0	37.8	42.9	40.6	42.9	39.6	38.1	43.6	37. 3	39.4	40.7	41.0	32. 3	▲ 8.7
	Postal, Telecommunications	57. 6	62.1	57.6	56.7	60.0	58.3	60.6	56.9	56. 1	59.5	52.8	64.6	57. 1	<b>▲</b> 7.5
	Electricity, Gas, Water, Heat	57. 4	56. 3	58.3	55.6	54. 5	54.2	52.6	51.3	51.2	52.2	47.4	52.4	46.7	▲ 5.7
	Leasing,Rentals	52.0	52.7	54.1	50.9	52. 5	51.8	51.7	53.5	54. 5	53.1	50.4	50.8	46. 9	▲ 3.9
	Lodging, Hotels	44. 2	42.3	41.0	50.0	44. 9	40.3	39.9	47.2	41.3	42.0	39. 1	38. 5	23. 2	<b>▲</b> 15.3
	Recreation	37.8	41.0	38.8	42.0	41.5	41.8	40.9	38.7	38. 2	40.7	37.5	39.4	35. 7	▲ 3.7
	Broadcasting	44.4	43.3	41.7	44.1	43.3	41.1	45.2	43.1	42.9	41.7	38. 2	38. 1	38. 9	0.8
Service	Maintenance,Guarding,Testing	51.0	50.0	48.1	48.2	48.8	49.3	49.8	48.6	49.1	47.3	46.6	46.4	42.6	▲ 3.8
	Advertising	40.1	40.3	40.7	40.5	40.7	40.4	38.9	40.3	40.4	39.6	37.8	40.0	34. 1	▲ 5.9
	Information	59.0	60.3	59.6	58.0	57.8	58.5	58.7	57.7	57.4	57.8	56.2	56.5	54. 2	▲ 2.3
	Labor Dispatching	54.6	53.8	53.5	53.9	52.8	52.7	51.0	53.2	53.3	50.9	46.2	49.2	42.5	▲ 6.7
	Special Services	52.8	52.5	51.5	49.5	50.1	49.9	51.1	51.8	51.5	50.8	49.9	50.3	45.8	<b>▲</b> 4.5
	Medical,Welfare,Public Health	46.5	47.1	46.9	47.8	47.0	48.7	46.5	47.3	46.5	48.5	47.7	47.8	43.2	<b>▲</b> 4.6
	Education	44.7	45.8	44.2	43.6	44.0	41.1	39.5	40.0	42.4	37.8	43.1	41.4	40.0	<b>▲</b> 1.4
	Other	49.7	49.0	50.2	47.9	48.5	47.9	48.3	48.4	47.9	47.9	45.6	46.2	39.8	▲ 6.4
Total		51.7	51.9	51.6	50.6	50.8	50.8	50.7	51.0	50.6	50.4	48.8	49.5	45. 1	<b>▲</b> 4.4
Other		48.3	45. 2	44.9	43.2	42.6	44.1	43.2	42.1	43. 1	40.4	41.7	42.7	39. 2	▲ 3.5

	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Ratio to tHJ PrFDious Month
Hokkaido	44. 4	44.6	45.5	45.3	45. 1	45.7	46.4	46.6	45.7	45.0	43.8	42.4	39.0	<b>▲</b> 3.4
Tohoku	43. 1	42.8	43.1	42.2	41.9	41.7	41.7	43.2	41.9	42.2	40.9	38.8	36.7	<b>▲</b> 2.1
kitakanto	44.8	44.7	44.3	43. 1	42.5	42.5	42.6	42.2	40.9	40.0	40.0	39.4	36.9	<b>▲</b> 2.5
minamikanto	48.1	47.8	47.7	46.0	46.0	45.5	45.7	46.1	45.5	45.5	44. 3	44.5	41.1	▲ 3.4
Hokuriku	46.3	45.3	45.3	44.6	44. 2	43.5	44. 1	43.5	42.1	40.4	39.5	37.6	35. 6	<b>▲</b> 2.0
Tokai	48.6	48.4	48.0	46.8	45.8	44.7	45.0	45.2	43.6	42.7	41.8	40.6	37. 3	▲ 3.3
Kinki	47.6	47.3	46.9	45.0	44.6	44.0	43.8	43.9	42.2	41.9	40.5	39.8	36. 3	<b>▲</b> 3.5
Chugoku	47. 2	46.7	47.2	45.6	45.5	45.0	44.8	45.0	44.0	43.6	42.6	41. 2	39. 0	<b>▲</b> 2.2
Shikoku	47.6	46.8	46.9	46.7	44.8	43.1	43.8	43.9	44.4	44.0	43.8	42.7	39.5	▲ 3.2
Kyushu	48.5	48.6	48. 3	46. 9	47.0	47.6	46.3	47. 1	46.5	46.8	45. 1	45.2	41.5	▲ 3.7

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

# Companies planning to hire full-time employees fall below 60% for the first time in six years

- Companies refrain from hiring due to CODIV-19 -

Amid a worsening labor shortage, the effective ratio of job openings to applicants for 2019 stood at 1.60, and continues at the high level, the similar level that was seen during the period of rapid economic growth (Ministry of Health, Labour and Welfare). Job offer tentative acceptance rate for new graduates was 87.1% (university graduates) as of December 2019, marking the second highest rate recorded since the survey began in 1996. (Ministry of Health, Labour and Welfare, Ministry of Education, Culture, Sports, Science and Technology). Furthermore, attention has been paid to supporting employment, such as the government starting success support for the employment ice age generation, through work and career enhancement, etc.

Therefore, Teikoku Databank has conducted a survey on corporate attitudes towards hiring trends for 2020. This survey was conducted in conjunction with the February 2020 TDB Trends Research.

\*Survey period: February 14-29, 2020; Companies Surveyed: 23,668; Valid Responses: 10,704 (Response Rate: 45.2%). The survey on hiring has been conducted every year since February 2005, and this is the 16th survey.

\*Details of this survey can be found on the dedicated Economic Trend Survey HP. (http://www.tdb-di.com/)

#### Survey results (Summary)

- 1. Companies responding that they are planning to hire full-time employees in 2020 decreased by 5.0 points from that in the previous survey (implemented in February 2019), to 59.2%, a decline for the second consecutive year, and a substantial decrease to below 60% for the first time in six years. By size, "large companies" indicated high motivation to hire, at 82.9%, and in the 80% range for the seventh consecutive year. However, the percentage of "SMEs" responding this way was lower by 5.5 points from that in the previous survey, at 53.6%. While large companies continue to be positive about hiring full-time employees, the SMEs' stance for hiring full-time employees is at a high level, but a careful recruiting attitude is seen.
- 2. Companies responding that they are planning to hire non-fulltime employees substantially decreased by 6.1 points from the previous survey, to 44.2%, and below 50% for the first time in three years. On the other hand, those sectors experiencing labor shortage show high motivation to hire non-fulltime employees. 90% of companies in "restaurants," and more than 70% of five other sectors, such as "general retail trade" and "education service" are planning to hire non-fulltime employees.
- 3. According to comments from companies, many are refraining from hiring due to heightened uncertainty about the future because of COVID-19.
- 4. With respect to use of the status of "Employment Ice Age Generation Success Support Program," 6.3% of companies responded "positively" about their use of the program (those that replied any one of "already used," 'currently using," or "plan to use from now"). Also, 35.4% of companies responded, "do not use (cannot use)," while 23.9% of companies responded "do not know the program," and one of four companies did not know the program.

### **Appendix**

## 1.Research Subjects(Companies researched: 23,668; Valid responses: 10,704; Response rate: 45.2%)

#### Appendix

#### 1.Region

Hokkaido	531	Tokai	1,212
Tohoku	717	Kinki	1,800
kitaKanto	779	Chugoku	596
minamikanto	3,399	Shikoku	315
Hokuriku	594	Kyushu	761
		Total	10,704

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

Agriculture,For	estry, Fisheries	58
Finance		118
Construction		1,709
Real Estate		328
	Food,Beverages,Livestock Feed	338
	Textile,Textile Products,Clothing	115
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	230
	Pulp, Paper and Paper Products	103
	Publishing, Printing	166
Manufacturing	Chemical	408
(2,928)	Steel, Nonferrous Metals, Mining	514
	General Machinery	478
	Electrical Machinery	333
	Transportation Machinery, Equipment	108
	Precision Machinery, Medical Instruments and Equipment	70
	Others	83
	Food,Beverages	370
	Textile,Textile Products,Clothing	196
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	338
Wholesale	Paper Products, Stationery, Books	100
(2,903)	Chemical	285
	Recycled Resources	32
	Steel, Nonferrous Metals, Mining Products	316
	Machinery, Equipment	916
	Others	358

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Large Firms	2,056	19.2%
Small to Medium-sized Firms	8,648	80.8%
micro Firms	2,962	27.7%
Total	10,704	100.0%

	Food, Beverages	6-
	Textile, Textile Products, Clothing	3
	Drugs,Sundries	2
Retail	Furniture	1
(453)	Electrical Household Appliances, Information Machinery and Equipment	3
	Motor Vehicles,Motor Vehicle Parts	8
	Special Merchandise	14
	Various Merchandise	4
	Others	1
Γransportation	n, Warehousing	45
	Restaurants	4
	Telecommunications	
	Electricity, Gas, Water, Heat	1
	Leasing, Rentals	11
	Lodging, Hotels	2
	Recreation	5
Service	Broadcasting	1
(1,714)	Maintenance,Guarding,Testing	17
	Advertising	10
	Information	49
	Labor Dispatching	6
	Special Services	26
	Medical,Welfare,Public Health	12
	Education	3
	Others	18
Others	•	3
	Total	10.70

#### 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 February 14 – 29 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	$N_6$	$N_5$	N <sub>4</sub>	N <sub>3</sub>	$N_2$	N <sub>1</sub>	$N_0$

#### **Economic DI**

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

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

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 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.