

New Indicator of Japan's Unemployment Rate



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Unemployment Rate that Fits ILO Standard

As introduced in the article in this series in the March-April 2017 issue, the unemployment rate is an indicator of the relationship between demand and supply in the labor market. The unemployment rate has continued to fall, and the figure for June 2018, which was released on July 31, showed a drop to 2.4%. It will soon be lower than 2% for the first time since June 1980.

Under such circumstances, the Statistics Bureau of the Ministry of Internal Affairs and Communications has begun releasing a new indicator for the unemployment rate starting from the May 11, 2018 release of the “Labour Force Survey (Detailed Tabulation)” for the period average between January and March 2018. Four Labour Underutilization Indicators have been added to the conventional unemployment rate. It will be published periodically every quarter in the Labour Force Survey (Detailed Tabulation).

“Totally unemployed persons” in the Labour Force Survey refers to those that fit the following three conditions:

- (1) Not employed
- (2) Was looking for work or getting ready to start a business during the survey period
- (3) Can start working immediately if there is a job.

In comparison, a more moderate condition for (2), which is “have been doing job-seeking activity within the last month”, is the Unemployed Person (ILO2013) which has been released beginning with the latest Detailed Tabulation. It meets the International Labour Organization (ILO) standard. This Unemployed Person (ILO2013) is divided by the Labour Force to calculate the Labour Underutilization Indicator 1 (LU1). For the period average between January and March 2018, the unemployment rate was 2.5% but LU1 was 2.7%. As shown in [Table 1](#), there is a greater difference between the unemployment rate and LU1 for women than for men. There is a good possibility that they may not have been doing job-seeking activities during the survey period, and hence it is thought that LU1 captures the reality of the labor market better than the unemployment rate.

Capturing “I Want to Work More”

Amongst part-time workers and other employed persons with relatively short working hours, there are those that want to “work longer hours” or “become full-time”. The latest Detailed Tabulation began capturing these people as “Persons in time-related underemployment” if they fit the following four conditions:

- (1) Employed person
- (2) Whose weekly hours of work were less than 35 hours
- (3) Wishing to work additional hours
- (4) Able to work additional hours.

Persons in time-related underemployment for the period average between January and March 2018 totaled 1.77 million people. Of this figure, 1.33 million were women, and women are more underemployed, which indicates that more women are wishing for additional employment opportunities. Adding Persons in time-related underemployment to Unemployed Person (ILO2013), and dividing it by the Labour Force, gives the Labour Underutilization Indicator 2 (LU2). While the shortage of labor is often pointed out in Japan, LU2 will become an indicator that can measure the growth potential in the labor force.

TABLE 1

Findings from the period average for January-March 2018

Unit : %	Sum of Men and Women	Men	Women
Unemployment rate	2.5	2.6	2.3
LU1	2.7	2.8	2.7
LU2	5.3	3.9	7.1
LU3	3.3	3.2	3.4
LU4	5.9	4.3	7.8
Supplementary LU1	0.7	0.8	0.5
Supplementary LU2	2.7	2.8	2.7

Source: “Labour Force Survey (Detailed Tabulation)”, Statistics Bureau, Ministry of Internal Affairs and Communication

Capturing Those that “Really Want to Work”

Of those that meet the conditions of “totally unemployed persons” and “unemployed persons”, there are those who cannot meet the condition “can start working immediately if there is a job”, but who can work if they are given more time. The “Potential Labour Force” tries to capture these persons who are in a cluster of those who “really want to work”.

This “Potential Labour Force” is further classified into two categories:

1. “Unavailable jobseekers” are those that fit the following two conditions:
 - (i) Did any job-seeking activity within one month
 - (ii) Not ready to work currently but would be within two weeks.
2. “Available potential jobseekers” are those that fit the following three conditions:
 - (i) Did not do any job-seeking activity within one month
 - (ii) Wishing to work
 - (iii) Ready to work if work is available.

For the period average between January and March 2018, the Potential Labour Force was 370,000 people. Of the 370,000 Labour Force, 220,000 were women.

Labour Underutilization Indicator 3 (LU3) calculates those who are unemployed but “want to work but are unable to work” for various reasons, such as caring for children or the elderly. Further, Labour Underutilization Indicator (LU4) includes those in clusters who “want to work longer hours” and “want to work but are unable to work”.

In addition, there are two more indicators calculated as supplementary indicators. The calculations are as shown in [Table 2](#).

The newly introduced Labour Underutilization Indicator allows for international comparisons ([Table 3](#)). For LU1, the low level of Japan’s unemployment rate stands out, but not so much for LU2. There are probably many barriers such as taxes and social insurance costs, but one can identify that there is still room for labor input to expand by creating a conducive environment. On the other hand, in terms of LU3, the figure for Japan is low compared to other countries. One can interpret that those in the “want to work but are unable to work” cluster in Japan, for reasons such as shortage of daycare facilities, are not many, but it can also be interpreted that they are only able to work short hours because of these limitations.

TABLE 2

Indicators for “Labour Underutilization”

Labour Underutilization Indicator 1 (LU1)	=	$\frac{\text{Unemployed person (ILO 2013)}}{\text{Labour Force}} \times 100$
Labour Underutilization Indicator 2 (LU2)	=	$\frac{\text{Unemployed person (ILO 2013) + Persons in time-related underemployment}}{\text{Labour Force}} \times 100$
Labour Underutilization Indicator 3 (LU3)	=	$\frac{\text{Unemployed person (ILO 2013) + Potential Labour Force}}{\text{Labour Force + Potential Labour Force}} \times 100$
Labour Underutilization Indicator 4 (LU4)	=	$\frac{\text{Unemployed person (ILO 2013) + Potential Labour Force + Persons in time-related underemployment}}{\text{Labour Force + Potential Labour Force}} \times 100$
Supplementary Labour Underutilization Indicator 1	=	$\frac{\text{Unemployed person (ILO 2013) who quit a job involuntarily}}{\text{Labour Force}} \times 100$
Supplementary Labour Underutilization Indicator 2	=	$\frac{\text{Unemployed person (ILO 2013) + Unavailable jobseekers}}{\text{Labour Force + Unavailable jobseekers}} \times 100$

Note: “Unemployed person (ILO 2013) who quit a job involuntarily” is a person who quit a job due to mandatory retirement, termination of employment contract or “circumstances of employer or business.”

Source: “Revisions of the Labour Force Survey from January 2018”, Statistics Bureau, Ministry of Internal Affairs and Communication

TABLE 3

Labour Underutilization Indicator in several countries

%	Japan	South Korea	UK	Germany	France	Italy	US
LU1	2.7	4.3	4.2	3.5	9.2	11.2	4.3
LU2	5.3	6.5	8.6	6.5	14.2	14	7.6
LU3	3.3	10.1	6.7	5.6	12.3	20.5	5.3
LU4	5.9	12.2	11	8.5	17.2	22.9	8.5

Note: Figures for South Korea and US are for the first quarter of 2018. Figures for the UK, Germany, France and Italy are for the fourth quarter of 2017.

Source: “Labour Force Survey (Detailed Tabulation), 2018 January-March Average”, Statistics Bureau, Ministry of Internal Affairs and Communication

Last but not least, this Detailed Tabulation only surveys a quarter of the households surveyed in the “Basic Tabulation”, and thus the survey samples differ. It should be noted that a simple comparison with the unemployment rate of the Basic Tabulation is not possible.

Note: This article has been written with information available as of July 31, 2018. **JS**

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ECONOMIC INDICATORS FOR JAPAN

Calendar year, Quarter and Month	Real GDP		Nominal GDP		IIP rate of increase over previous year/term (month) (%)	CPI (All terms, less fresh food) rate of increase over previous year/the same term (month) of the previous year (%)
	Amount (trillion yen)	Rate of increase over previous year/term (%)	Amount (trillion yen)	Rate of increase over previous year/term (%)		
2009	472.2	-5.4	489.5	-6.0	-21.9	-1.3
2010	492.0	4.2	500.4	2.2	15.6	-1.0
2011	491.5	-0.1	491.4	-1.8	-2.8	-0.3
2012	498.8	1.5	495.0	0.7	0.6	-0.1
2013	508.8	2.0	503.2	1.7	-0.8	0.4
2014	510.7	0.4	513.9	2.1	2.1	2.6
2015	517.6	1.4	532.0	3.5	-1.2	0.5
2016	522.6	1.0	538.5	1.2	-0.1	-0.3
2017	531.6	1.7	546.6	1.5	4.4	0.5
2017/3rd Qtr.	533.7	0.6	549.5	0.8	0.5	0.6
4th Qtr.	534.8	0.2	551.0	0.3	1.6	0.9
2018/1st Qtr.	533.5	-0.2	548.9	-0.4	-1.3	0.9
2nd Qtr.	536.0	0.5	551.3	0.4	1.3	0.8
2017/Nov.	—	—	—	—	0.7	0.9
Dec.	—	—	—	—	1.8	0.9
2018/Jan.	—	—	—	—	-4.5	0.9
Feb.	—	—	—	—	2.0	1.0
March	—	—	—	—	1.4	0.9
April	—	—	—	—	0.5	0.7
May	—	—	—	—	-0.2	0.7
June	—	—	—	—	-1.8	0.8
Sources	"SNA (National Accounts of Japan)", Cabinet Office				"Indices of Industrial Production", Ministry of Economy, Trade and Industry	"Consumer Price Index", Statistics Bureau, Ministry of Internal Affairs and Communications

Calendar year, Quarter and Month	Foreign Trade Statistics									
	Exports amount (trillion yen)	Exports rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount (trillion yen)	Imports rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to US (trillion yen)	Exports to US rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from US (trillion yen)	Imports from US rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to EU (trillion yen)	Exports to EU rate of increase over previous year/ the same term (month) of the previous year (%)
2009	54.2	-33.1	51.5	-34.8	8.7	-38.6	5.5	-31.4	6.7	-41.0
2010	67.4	24.4	60.8	18.0	10.4	18.8	5.9	7.2	7.6	12.8
2011	65.5	-2.7	68.1	12.1	10.0	-3.4	5.9	0.3	7.6	0.0
2012	63.7	-2.7	70.7	3.8	11.2	11.7	6.1	2.5	6.5	-14.7
2013	69.8	9.5	81.2	14.9	12.9	15.6	6.8	12.0	7.0	7.7
2014	73.1	4.8	85.9	5.7	13.6	5.6	7.5	10.7	7.6	8.4
2015	75.6	3.4	78.4	-8.7	15.2	11.5	8.1	6.9	8.0	5.3
2016	70.0	-7.4	66.0	-15.8	14.1	-7.1	7.3	-9.2	8.0	-0.0
2017	78.3	11.8	75.4	14.1	15.1	6.9	8.1	10.5	8.7	8.5
2017/3rd Qtr.	19.6	15.1	18.4	14.8	3.8	14.4	2.0	12.4	2.2	11.1
4th Qtr.	20.9	13.0	20.2	17.0	4.1	7.5	2.0	7.8	2.3	13.4
2018/1st Qtr.	19.9	4.9	20.1	7.5	3.7	1.9	2.1	4.6	2.3	9.7
2nd Qtr.	20.2	7.5	19.4	7.5	3.7	2.9	2.2	7.2	2.3	8.1
2017/Nov.	6.9	16.2	6.8	17.3	1.4	13.0	0.7	12.5	0.7	13.3
Dec.	7.3	9.4	6.9	15.0	1.4	3.1	0.7	7.6	0.8	11.4
2018/Jan.	6.1	12.3	7.0	7.8	1.1	1.2	0.7	8.5	0.7	20.3
Feb.	6.5	1.8	6.5	16.6	1.3	4.3	0.6	5.3	0.8	11.5
March	7.4	2.1	6.6	-0.5	1.4	0.2	0.7	0.6	0.8	0.3
April	6.8	7.8	6.2	6.0	1.3	4.3	0.7	4.0	0.8	14.1
May	6.3	8.1	6.9	14.1	1.1	5.8	0.8	20.0	0.7	0.7
June	7.1	6.7	6.3	2.6	1.3	-0.9	0.7	-2.1	0.8	9.3
Sources	"Trade Statistics of Japan", Ministry of Finance									

Calendar year, Quarter and Month	Cash salary amount rate of increase over previous year/ the same term (month) of the previous year (%)	Active job openings-to-applicants ratio (time(s))	Unemployment rate (%)	M2 rate of increase over previous year/ the same term (month) of the previous year (%)	Balance of payments		Yen/\$ rate (averaged during the term)
					Trade balance (trillion yen)	Current balance (trillion yen)	
2009	-3.9	0.47	5.1	2.7	5.4	13.6	93.5
2010	0.5	0.52	5.1	2.8	9.5	19.4	87.8
2011	-0.2	0.65	4.6	2.7	-0.3	10.4	79.8
2012	-0.9	0.80	4.3	2.5	-4.3	4.8	79.8
2013	-0.4	0.93	4.0	3.6	-8.8	4.5	97.6
2014	0.4	1.09	3.6	3.4	-10.5	3.9	105.8
2015	0.1	1.20	3.4	3.6	-0.9	16.5	121.0
2016	0.5	1.36	3.1	3.4	5.5	21.1	108.8
2017	0.4	1.50	2.8	4.0	5.0	22.0	112.2
2017/3rd Qtr.	0.2	1.52	2.8	4.0	1.8	7.0	111.0
4th Qtr.	0.7	1.57	2.7	3.9	1.2	4.3	112.9
2018/1st Qtr.	1.4	1.59	2.5	3.2	0.7	5.9	108.2
2nd Qtr.	2.4	1.60	2.4	3.2	1.1	5.0	109.1
2017/Nov.	0.9	1.56	2.7	4.0	0.2	1.3	112.9
Dec.	0.9	1.59	2.7	3.6	0.5	0.8	113.0
2018/Jan.	1.2	1.59	2.4	3.4	-0.7	0.6	110.7
Feb.	1.0	1.58	2.5	3.2	0.2	2.1	107.9
March	2.0	1.59	2.5	3.1	1.2	3.2	106.0
April	0.6	1.59	2.5	3.2	0.6	1.8	107.5
May	2.1	1.60	2.2	3.2	-0.3	1.9	109.7
June	3.6	1.62	2.4	3.2	0.8	1.2	110.0
Sources	"Monthly Labour Survey", Ministry of Health, Labour and Welfare	"Employment Referrals for General Workers", Ministry of Health, Labour and Welfare	"Labour Force Survey", Statistics Bureau, Ministry of Internal Affairs and Communications	"Money Stock", Bank of Japan	"Balance of Payments", Ministry of Finance		Bank of Japan

Calendar year, Quarter and Month	Foreign Trade Statistics									
	Imports amount from EU (trillion yen)	Imports from EU rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to Asia (excluding China) (trillion yen)	Exports to Asia (excluding China) rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from Asia (excluding China) (trillion yen)	Imports from Asia (excluding China) rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to China (trillion yen)	Exports to China rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from China (trillion yen)	Imports from China rate of increase over previous year/ the same term (month) of the previous year (%)
2009	5.5	-24.3	19.1	-29.3	11.6	-32.8	10.2	-21.0	11.4	-22.9
2010	5.8	5.5	24.7	29.5	14.1	22.0	13.1	27.8	13.4	17.3
2011	6.4	10.1	23.8	-3.9	15.7	11.7	12.9	-1.4	14.6	9.2
2012	6.6	3.6	23.3	-1.8	16.3	3.3	11.5	-10.8	15.0	2.7
2013	7.6	15.2	25.2	8.1	18.3	12.6	12.6	9.7	17.7	17.4
2014	8.2	6.8	26.1	3.5	19.4	6.2	13.4	6.0	19.2	8.6
2015	8.6	5.6	27.1	3.7	18.9	-2.6	13.2	-1.2	19.4	1.3
2016	8.2	-5.5	24.7	-8.7	16.2	-14.5	12.4	-6.5	17.0	-12.4
2017	8.8	7.4	28.0	13.3	18.6	14.8	14.9	20.5	18.5	8.5
2017/3rd Qtr.	2.2	10.3	7.0	14.7	4.6	18.4	3.7	24.1	4.5	8.3
4th Qtr.	2.4	11.5	7.5	13.0	4.9	18.2	4.2	21.9	5.1	17.0
2018/1st Qtr.	2.4	13.8	7.1	3.4	5.1	10.4	3.7	8.8	4.6	2.1
2nd Qtr.	2.3	8.8	7.1	6.1	4.7	6.4	4.0	11.9	4.5	3.4
2017/Nov.	0.8	6.9	2.5	17.9	1.6	17.9	1.4	25.1	1.8	21.7
Dec.	0.8	9.9	2.6	6.8	1.7	16.7	1.5	15.9	1.7	14.9
2018/Jan.	0.8	18.3	2.2	9.6	1.7	10.2	1.2	30.8	1.7	-3.3
Feb.	0.7	11.2	2.3	0.3	1.6	16.8	1.1	-9.7	1.5	39.2
March	0.8	11.8	2.6	1.3	1.7	5.1	1.4	10.8	1.3	-16.8
April	0.7	9.0	2.3	3.4	1.5	5.4	1.3	10.9	1.5	2.3
May	0.8	12.0	2.3	7.6	1.7	10.3	1.3	13.9	1.6	8.7
June	0.8	5.2	2.5	7.2	1.6	3.6	1.4	11.1	1.5	-0.5
Sources	"Trade Statistics of Japan", Ministry of Finance									