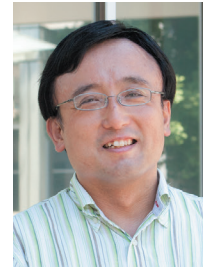


# Wage Growth: Where Is the Actual Rate?



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## Wage Data Scandal in Japan

With the start of 2019, a scandal which destroyed the credibility of Japan's wage statistics unfolded and caused much discussion in Japan. It was about inappropriate survey procedures for the Monthly Labour Survey. Since the trend in wages is one of the important indices for measuring the results of the economic policies of the current government ("Abenomics"), opposition parties are trying to determine whether the government of Prime Minister Shinzo Abe led a statistical fraud in order to make it look like Abenomics was succeeding. This month's article will examine what the key points are of this scandal around inappropriate survey procedures, and what needs to be done to monitor the actual trend in Japan's wages.

Two main issues have been broadly pointed out with regard to the Monthly Labour Survey.

The first inappropriate procedure is about surveying businesses with 500 or more employees. The survey was originally intended to be a complete census, in other words it was required to survey all businesses. But the Tokyo Metropolitan government only surveyed a portion of businesses from 2004 (the so-called sample survey). Although only a portion was surveyed, it was treated as though a complete census was conducted, and hence the average wage for the whole of Japan from 2004 to 2017 was underestimated. Moreover, because the average wage for the entire country was calculated on the basis that the Tokyo Metropolitan government had conducted sample surveys only after 2018, monthly wage growth after 2018 turned out to be higher. For this incident, the Ministry of Health, Labour and Welfare released revised values on Jan. 23, 2019 and has stated that the Tokyo Metropolitan government will now revert to conducting a complete census from June 2019. Compared to before the revision, wage growth has now decreased by a maximum of 0.7 points after the revision (*Chart 1*).

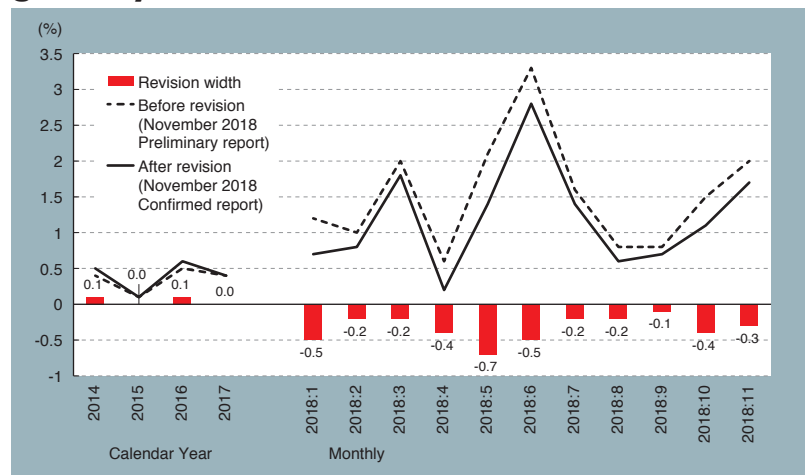
## Partial Switching of Survey Samples

The second issue is related to switching of survey samples. The Monthly Labour Survey conducts sample surveys of businesses with less than 500 employees. Until 2017, samples for the survey of businesses with 30 to 499 employees have been switched once every two to three years. But since 2018, the method has changed so that a portion of survey samples was switched every year. The opposition parties at one point accused the Abe government of making this switch with the intention of making wage growth look higher, but it is now slowly being understood that this was not necessarily the case.

On the other hand, with the change in the method for switching survey samples, the Ministry of Health, Labour and Welfare stopped correcting gaps that were created with the switch. Up until then, adjustments were being made by going back to historical surveys to fill the gap in survey results between old samples and new samples. But this led to revisions to wage growth by going back to historical data, and it was the subject of criticism from not only the government but also from economists in the private sector.

CHART 1

### Nominal wages (annual growth, year-on-year growth) before & after revision



Source: "Monthly Labour Survey", Ministry of Health, Labour and Welfare

In addition, the Ministry of Health, Labour and Welfare began to release a reference value (total value for common businesses) which is the average wage growth calculated by only using the same survey samples as the previous year. As *Chart 2* shows, since 2018, the actual value continues to be lower than the reference value and opposition parties have been attacking the government by claiming “the reference value is the truth, and the real value is overrated.”

### Focus on Per Capita Employee Compensation

In looking at the actual value and reference value of the Monthly Labour Survey, which value, then, shows the real wage growth in Japan? I believe that neither shows the real rate.

First, actual value has the shortcoming of being overvalued due to the benchmark factor. The benchmark is detailed data which shows Japan’s industrial structure and the size of businesses. The Monthly Labour Survey is a sample survey and not a survey of all offices and factories, and hence the survey alone cannot show the average wage for the whole of Japan. There is a need to estimate the figure for the whole of Japan by using the benchmark.

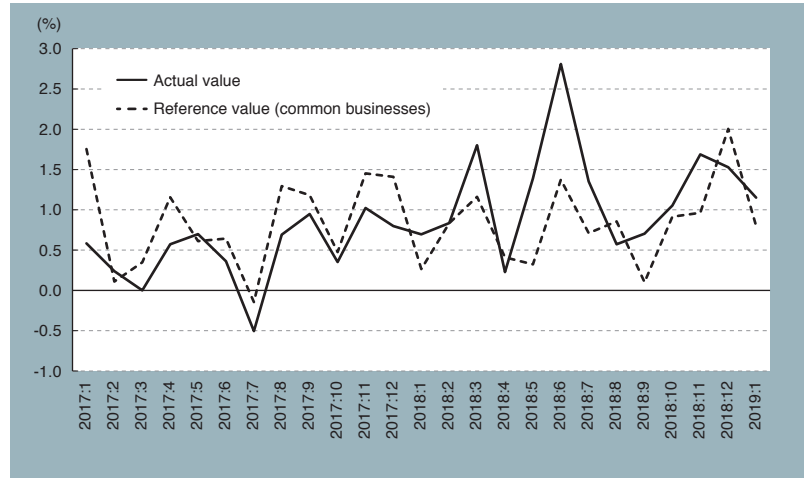
The benchmark used to estimate the actual value of average wages since 2018 is different from that for 2017. The ratio of businesses with large numbers of employees became higher, and the Ministry of Health, Labour and Welfare itself has admitted that wage growth for January 2018 is higher by 0.4 points. On the other hand, the reference value is calculated so that it is not affected by the change in the benchmark factor, but has the shortcoming of having a fewer number of samples.

It will be good if the Ministry of Health, Labour and Welfare were to eliminate the benchmark factor from the actual value, but because the Statistics Committee itself which oversees Japan’s statistics gave it assurances, the ministry has clearly stated that it will not undertake benchmark factor adjustments.

I would therefore like to propose to focus on the rate of change in the per capita compensation of employees which is derived by dividing the compensation of employees in the System of National Accounts by the number of employees in the Labour Force Survey – the reasoning being that compensation of employees is estimated using the Monthly Labour Survey and others, and the impact from switching survey samples or changing the benchmark has been eliminated. As *Chart 3* shows, results of the rate of growth in per capita compensation of employees have been lower than the actual value, but higher than the

CHART 2

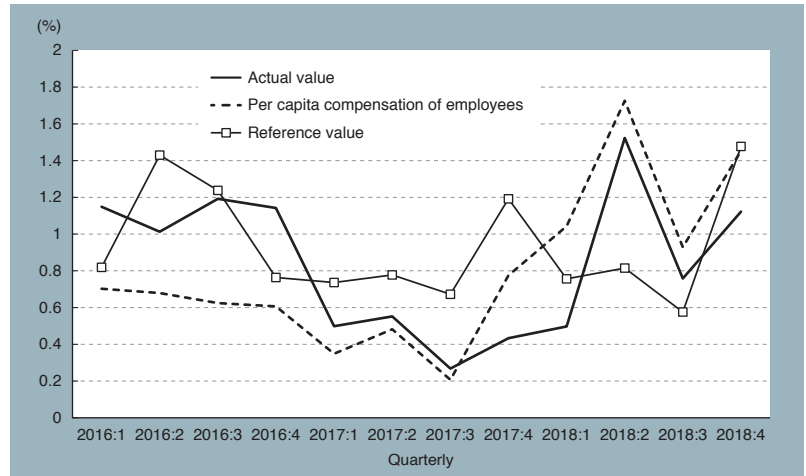
### Actual value & reference value of nominal wages (year-on-year growth)



Source: “Monthly Labour Survey”, Ministry of Health, Labour and Welfare

CHART 3

### Comparison of per capita compensation of employees & Monthly Labour Survey



Source: “Monthly Labour Survey” Ministry of Health, Labour and Welfare, “Quarterly Estimates of GDP”, Cabinet Office, and “Labour Force Survey”, Statistics Bureau, Ministry of International Affairs and Communication

reference value. The growth rate in 2018 was 1.4% for the actual value, but per capita compensation of employees was 1.0% and 0.9% for the reference value.

**Note:** This article has been written based on information obtained as of March 9, 2019. **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 (%)		
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	-0.3	0.4
2014	510.7	0.4	513.9	2.1	2.0	2.6
2015	516.9	1.2	531.3	3.4	-1.2	0.5
2016	520.1	0.6	536.0	0.9	0.0	-0.3
2017	530.1	1.9	545.1	1.7	3.1	0.5
2018	534.3	0.8	548.9	0.7	1.1	0.9
2018/1st Qtr.	533.5	-0.1	548.3	-0.3	-0.9	0.9
2nd Qtr.	536.0	0.5	550.5	0.4	0.8	0.8
3rd Qtr.	532.8	-0.6	547.5	-0.5	-0.7	0.9
4th Qtr.	535.3	0.5	549.7	0.4	1.4	0.9
2018/July	—	—	—	—	0.1	0.8
Aug.	—	—	—	—	-0.2	0.9
Sept.	—	—	—	—	-0.1	1.0
Oct.	—	—	—	—	2.0	1.0
Nov.	—	—	—	—	-0.9	0.9
Dec.	—	—	—	—	0.1	0.7
2019/Jan.	—	—	—	—	-2.5	0.8
Feb.	—	—	—	—	0.7	0.7
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 (%)
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
2018	81.5	4.1	82.7	9.7	15.5	2.4	9.0	11.4	9.2	6.4
2018/1st Qtr.	19.9	4.9	20.1	7.7	3.7	1.9	2.1	4.8	2.3	9.7
2nd Qtr.	20.2	7.5	19.4	7.5	3.7	3.0	2.2	7.2	2.3	8.1
3rd Qtr.	20.2	2.9	20.7	12.4	3.8	-0.4	2.2	11.9	2.2	2.7
4th Qtr.	21.2	1.3	22.4	11.2	4.3	4.8	2.5	21.7	2.4	5.1
2018/July	6.7	3.9	7.0	14.6	1.3	-5.2	0.7	11.3	0.8	6.4
Aug.	6.7	6.5	7.1	15.4	1.2	5.2	0.8	21.7	0.7	7.0
Sept.	6.7	-1.4	6.6	7.1	1.3	-0.6	0.7	3.2	0.7	-4.5
Oct.	7.2	8.2	7.7	20.0	1.4	11.6	0.9	34.4	0.8	7.7
Nov.	6.9	0.1	7.7	12.5	1.4	1.6	0.8	8.1	0.7	3.8
Dec.	7.0	-3.9	7.1	1.9	1.4	1.6	0.9	23.9	0.8	3.9
2019/Jan.	5.6	-8.4	7.0	-0.8	1.1	6.9	0.8	7.5	0.7	-2.5
Feb.	6.4	-1.2	6.1	-6.6	1.3	2.0	0.7	5.5	0.8	2.5
Sources	"Trade Statistics of Japan", Ministry of Finance									

## ECONOMIC INDICATORS FOR JAPAN

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)	
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	-0.2	0.93	4.0	3.6	-8.8	4.5	97.6
2014	0.5	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	0.6	1.36	3.1	3.4	5.5	21.4	108.8
2017	0.4	1.50	2.8	4.0	4.9	22.6	112.2
2018	1.4	1.61	2.4	2.9	1.2	19.2	110.4
2018/1st Qtr.	1.0	1.59	2.5	3.2	0.7	5.9	108.2
2nd Qtr.	1.7	1.61	2.4	3.1	1.1	5.0	109.1
3rd Qtr.	0.9	1.62	2.4	2.9	0.1	5.7	111.5
4th Qtr.	1.5	1.62	2.4	2.5	-0.6	2.6	112.9
2018/July	1.4	1.62	2.5	2.9	-0.0	2.0	111.4
Aug.	0.6	1.63	2.4	2.9	-0.3	1.8	111.1
Sept.	0.7	1.63	2.4	2.8	0.3	1.8	111.9
Oct.	1.1	1.62	2.4	2.7	-0.3	1.3	112.8
Nov.	1.7	1.63	2.5	2.3	-0.5	0.8	113.4
Dec.	1.5	1.63	2.4	2.4	0.2	0.5	112.4
2019/Jan.	-0.6	1.63	2.5	2.3	-1.0	0.6	109.0
Feb.	-0.8	1.63	2.3	2.4	0.5	2.7	110.4
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 (%)
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
2018	9.7	11.0	28.8	2.9	20.0	7.8	15.9	6.8	19.2	4.0
2018/1st Qtr.	2.4	14.3	7.1	3.4	5.1	10.6	3.7	8.8	4.6	2.2
2nd Qtr.	2.3	9.1	7.1	6.1	4.7	6.4	4.0	11.9	4.5	3.5
3rd Qtr.	2.5	11.7	7.3	4.0	4.9	5.6	4.0	7.2	4.8	5.7
4th Qtr.	2.6	9.1	7.4	-1.5	5.3	8.7	4.3	0.5	5.4	4.5
2018/July	0.9	29.2	2.4	6.0	1.7	7.1	1.4	11.9	1.6	6.8
Aug.	0.8	6.6	2.4	4.0	1.7	8.3	1.4	12.0	1.5	6.1
Sept.	0.8	0.8	2.5	2.3	1.5	1.2	1.3	-1.7	1.6	4.3
Oct.	0.9	10.2	2.5	6.3	1.9	18.6	1.5	9.0	1.9	16.2
Nov.	0.9	15.1	2.4	-3.2	1.8	7.2	1.4	0.3	1.9	4.2
Dec.	0.8	2.0	2.4	-6.9	1.7	0.8	1.4	-7.0	1.6	-6.3
2019/Jan.	0.8	-3.2	2.0	-10.9	1.6	-4.9	1.0	-17.4	1.8	5.7
Feb.	0.7	0.5	2.2	-5.2	1.5	-5.9	1.1	5.6	1.3	-15.8
Sources	"Trade Statistics of Japan", Ministry of Finance									