

# MHRT Brief

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# Looking back at the Japanese economy's "2% interest rate era"

The biggest difference between then and now is the BOJ's JGB holdings

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## Long-term interest rate ceiling before monetary easing was 2%

The Japanese economy has not experienced a "phase of rising interest rates" for quite some time, and has now come to a turning point. Long-term interest rates (yield on newly issued 10-year JGBs) rose to the 0.8% level in October 2023, the highest in about a decade. Meanwhile, the inflation rate (consumer price inflation) is hovering at well above the current long-term interest rate and the 2% price target set by the national government and the Bank of Japan. With inflation still showing no signs of abating, market participants are certainly aware of the possible end of monetary easing in place over the past 15 years and the 2% long-term interest rate ceiling that was formed before monetary easing began.

The phase in which 2% was first recognized as the upper limit for long-term interest rates was the so-called IT bubble economy from mid-1999 to the fall of 2000. After the recessionary phase that followed in around 2001, the longest postwar expansionary phase began and lasted until early 2008, during which time the long-term interest rate ceiling was 2% as well. The inflation rate at that time remained in the zero percent range or negative territory in both phases, when the long-term interest rate was approaching 2% (Chart 1).

In general, long-term interest rates tend to rise as the economy expands and inflation swings upward. On the other hand, a rise in real interest rates, which are long-term interest rates minus inflation rate, will exert recessionary pressure on the economy by cooling domestic investment and other factors. In fact, in both the 1999-2000 and 2006-2007 periods when long-term interest rates hit 2%, real interest rates rose above 2% and led to the subsequent recession.

Currently, real interest rates are significantly negative. However, the Bank of Japan anticipates a slowdown in inflation in the future, in other words, a reduction in the negative range of real interest rates. Going forward, the Bank of Japan is expected to keep an eye on where the inflation rate will settle and make a prudent decision on such policy revisions as changing or eliminating the long-term interest rate target, while paying attention to the level and range of change in real interest rates.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For more information on the Bank of Japan's monetary policy outlook, see Mizuho Research & Technologies (2023).

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[ Chart 1: Long-term interest rates and inflation in Japan ]

Notes: 1. Shaded part represents recession.

2. The inflation rate is the year-on-year change rate in the consumer price index (all items excluding fresh food and energy, adjusted for consumption tax). The long-term interest rate is the yield on newly issued 10-year JGBs (monthly average, most recently the average for October 2-16, 2023).

Source: Made by MHRT based on the Ministry of Internal Affairs and Communications, Consumer Price Index, and Refinitiv.

# Real wage growth to support normalization of monetary policy

In the process of moving to a "2% interest rate," higher real interest rates will weigh down the economy. On the other hand, if wage growth exceeds the inflation rate, the economy will be boosted by an increase in consumer spending. Real wages (spring wage increase rate - inflation rate) are currently at an extremely low level in 2023, but the degree of real wage hikes is expected to expand in the future, partly due to the slowdown in inflation. Real wages during the past two "2% interest rate" phases have ranged from around 2% to just under 3%. The Bank of Japan's decision on future policy revisions will also largely depend on the level and range of change in real wages.

The wage increase demands of labor unions, which form the basis for wage increases, are strongly affected by the inflation rate of the previous year. The theoretical rate of the spring wage increase demands is estimated to be around 2.5 percentage points above the inflation rate (of the previous year), taking into account the characteristic that the wage increase rate in the "spring wage offensive" is structurally unlikely to fall below 2%.<sup>2</sup> Based on the forecasted inflation rate for FY2023 (3.2%, Bank of Japan "Outlook Report," July 2023), the estimated wage increase demand for the spring labor negotiations in 2024 will be around 5.7%. Based on past spring labor agreements, we can envisage real wages comparable to the "2% interest rate" era (Charts 2 and 3).3

The demand for spring wage hikes in 2024 will be largely fixed by the end of 2023.<sup>4</sup> If the demand for wage increases in the spring labor negotiations exceeds 5% and the domestic economy recovers steadily in 2024, it will raise the probability that the Bank of Japan will normalize its monetary policy during the same year. The view that 2% will be the upper limit for long-term interest rates is expected to become more realistic.

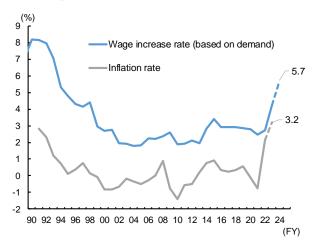
<sup>&</sup>lt;sup>2</sup> We estimated the Tobit model (2% cutoff) that explains RENGO's (Japanese Trade Union Confederation) wage increase demands (%) with the previous year's consumer price inflation rate, with the constant term being the range of additions to the inflation rate.

Management responds to wage negotiations with a sharp eye on the future earnings environment. A positive correlation has actually been confirmed between the rate of wage increases concluded in the spring wage negotiations and the indexes of business conditions (leading CI). For details, see Miyazaki (2016b).

RENGO announced its demand for a 5% wage increase in the basic plan for the 2023 spring wage offensive on October 20, 2022. After that, major labor unions, including the Japan Council of Metalworkers' Unions and UA Zensen, established a policy of demanding wage increases by the end of 2022.

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[ Chart 2: Relationship between labor union wage demands and inflation rate ]

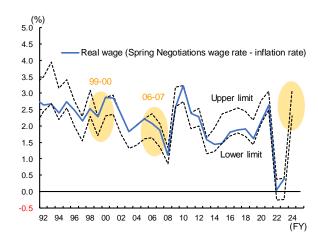


Notes: 1. The inflation rate is the year-on-year change rate in the consumer price index (all items excluding fresh food and energy, adjusted for consumption tax). The percentage of wage increase includes regular salary increases.

The most recent (dotted line) data are the Bank of Japan's forecast and estimates based on this forecast.

Source: Made by MHRT based on the Ministry of Internal Affairs and Communications and the Ministry of Health, Labour and Welfare.

### [ Chart 3: Assumed path of real wages ]



Notes: The upper and lower limits are calculated based on the rate of wage increases over the past 10 years (amount of wage increases achieved in the spring labor offensive divided by the amount of the same demand). The author's estimate for 2024 is based on the Bank of Japan's price forecasts.

Source: Made by MHRT based upon the Ministry of Internal
Affairs and Communication and the Ministry of Health,
Labour and Welfare.

#### The Bank of Japan's JGB holding policy impacts the level of long-term interest rates

Long-term interest rates are currently impacted by the Bank of Japan's monetary policy. Even if the Bank of Japan takes further steps toward normalization of monetary policy, there will continue to be a certain downward pressure on long-term interest rates as long as the BOJ continues to hold large amounts of JGBs. Even if long-term interest rates continue their upward trend, driven by rising real wages and other factors, whether they reach the 2% level recognized in the past will largely depend on the Bank of Japan's JGB holding policy.

The Bank of Japan in 1999-2000 and 2006-2007, when long-term interest rates reached around 2%, was in a different situation from today because (1) both periods were in the phase of interest rate hikes and (2) the Bank did not hold the large volume of JGBs that it does now (Chart 4). Currently, under the quantitative and qualitative monetary easing policy with yield curve control (YCC), the BOJ purchases the necessary amount of JGBs every month, sets the upper limit for long-term interest rates at around 0.5%, and conducts temporary operations to purchase JGBs if the interest rate exceeds this limit. The monthly JGB purchase operation is not directly linked to the BOJ's JGB holding policy, and the JGB operation policy after the removal of the YCC is now unclear. The policy for guiding short-term interest rates after lifting negative interest rates is similarly uncertain.

If the BOJ decides to reduce its JGB holdings, we cannot ignore the risk of downward pressure on the economy and prices through higher long-term interest rates. According to the BOJ (2016) and BOJ (2021), analysis shows that higher JGB holdings continue to push down long-term interest rates by about 1.0%.<sup>5</sup> Therefore, even if the

<sup>&</sup>lt;sup>5</sup> The Bank of Japan (2016) conducted linear regression analysis using the following formula: JGB interest rate (10-year) = 0.398 - 0.043 \* BOJ's share of JGB holdings + 0.235 \* US Treasury rate (10-year) + 0.341 \* Real GDP growth forecast + 0.039 \* (BOJ's share of JGB holdings - March 2014 (percentage held as of) \* Coefficient dummy - 0.232 \* Negative interest rate dummy (estimated period January 2005-June 2016. Linear model with coefficient dummies after April 2014. Assumes a decrease in the effect of bond purchases per unit after the beginning of FY2014.) The effect of pushing down interest rates per outstanding JGB holdings increase by +JPY10 trillion was -0.069% until March 2014 and -0.006% after April 2014. The Bank of Japan (2021) conducted linear regression analysis using the following formula: JGB interest rate (10-year) = 0.25 – 0.02 \* Percentage of JGBs held by the Bank of Japan + 0.16 \* US Treasury interest rate (10-year) + 0.45 \* real GDP growth forecast (estimated period is January 2005 to February 2021). The part of the

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Bank of Japan confirms wage hikes in 2024 and decides that monetary policy normalization is warranted, the Bank will be cautious in adjusting its JGB holdings to ensure that a sharp rise in real interest rates does not lead to deflation's return.

[ Chart 4: Comparison of BOJ monetary policy (2% long-term interest rate phase and now) ]

		1999-2000	2006-2007	Present (2023)
Sh	ort-term interest rate guidance target	Uncollateralized overnight call rate •0.15% -> 0% (1999/2-2000/8) •0% -> 0.25% (2000/8-)	Uncollateralized overnight call rate  •0% (2006/3-7)  •0% -> 0.25% (2006/7-2007/2)  •0.25%->0.50% (2007/2-)	-0.1% is applied to a portion of the Bank of Japan's current account.
	Government bond purchase policy	-	Purchase long-term JGBs 1.2 trillion yen per month	"Purchase of long-term JGBs in necessary amounts with no upper limit to keep the 10-year JGB interest rate at around 0%." (Reference) Average monthly purchases for all years from April to September 2023: 7.8 trillion yen per month
Outstanding government bonds		FY1999 average 62.0 trillion yen FY2000 average 66.1 trillion yen	FY2006 average 84.8 trillion yen FY2007 average 71.9 trillion yen	FY2023 (April-September) average 584.2trillion yen
	% to nominal GDP	FY1999 <b>11%</b> FY2000 <b>12%</b>	FY2006 <b>15%</b> FY2007 <b>13%</b>	FY2022 (April-September) 201%

Notes: Nominal GDP for July-September 2023 is estimated to be unchanged from April-June of the same year. Source: Made by MHRT based upon the Bank of Japan and Cabinet Office.

### Reference

Refer to the original Japanese report by clicking the URL below for the reference material <a href="https://www.mizuho-rt.co.jp/publication/report/research/express/2023/express-mk231018.html">https://www.mizuho-rt.co.jp/publication/report/research/express/2023/express-mk231018.html</a>

change in long-term interest rates explained by the Bank of Japan's share of JGB holdings expanded to about -1% as the BOJ's share of JGB holdings rose, and it continues to have roughly the same level of downward effect.

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