

Daiwa's View

FICC Research Dept.

JGB market pricing in rise of nominal r^* : Conditions for a rate hike seem to be in place

- Japan's nominal equilibrium interest rate (r^*) has likely increased by 75bp since 2023
- Uncollateralized overnight call rate has risen by only 50bp during the same period, widening divergence from nominal r^*
- Conditions for additional rate hike to 0.75% seem to be largely in place
- Excessive speculation about rate hikes being put off at this stage could come at a cost, such as concerns about weaker yen and falling "behind the curve"

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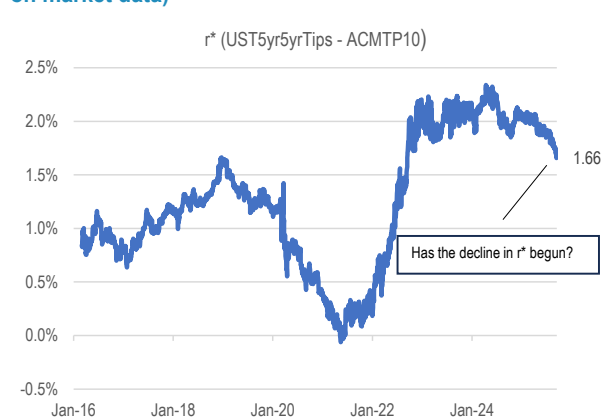
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A 2006 Bank of Japan Review entitled "Yield Term Structure and Monetary Policy" (our translation) by Mr. Shigenori Shirazuka presents a theoretical framework that breaks down long-term forward rates into three components. In last week's Daiwa's View, we focused on the recent divergence between the 5-year forward 5-year (5yr5yr) US real yield and the term premium. Using this theoretical framework, we hypothesized about whether r^* had begun to decline in the US. The charts below show trends in the 5yr5yr real yield and the term premium in the US Treasury market, offering an important perspective regarding changes in the equilibrium real interest rate (r^*).

US 5yr5yr Real Yield, Term Premium

Source: Bloomberg; compiled by Daiwa.

US Equilibrium Real Interest Rate (r^*) (estimated values based on market data)

Source: Bloomberg; compiled by Daiwa.

Bank of Japan Review "Yield Term Structure and Monetary Policy" (Apr 2006, Shigenori Shirazuka)

Long-term forward rate
 = Equilibrium real interest rate
 + Equilibrium inflation rate
 + Term premium

Japan's r^*

Of course, this theoretical framework can also be applied to Japan (JGBs). In the following sections, we consider a change in Japan's r^* . In this report, we examine the "nominal equilibrium interest rate" (nominal r^*), which is the sum of the "equilibrium real interest rate" and "equilibrium inflation rate." We do not delve into the real equilibrium interest rate because the reliability of data from Japan's inflation-indexed bonds (used to calculate the break-even inflation rate) is questionable. We do not think estimating a real r^* based on currently available market data for Japan would be sufficiently accurate.

Long-term forward rate
 =Equilibrium real interest rate (r^*)
 +Equilibrium inflation rate
 +Term premium

Long-term forward rate
 =Equilibrium nominal interest rate (nominal r^*)
 +Term premium

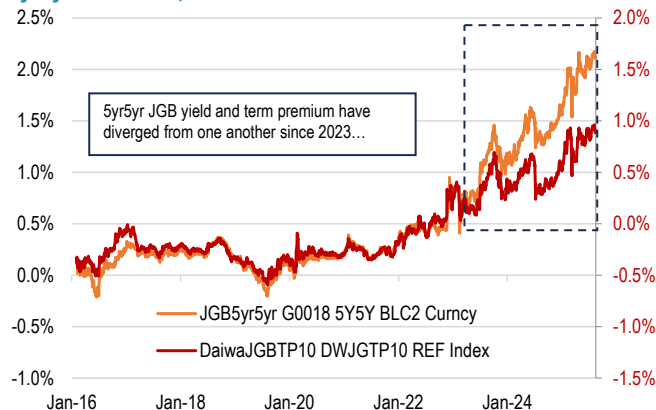
Japan's nominal r^* has risen by 75 bp (equivalent to three rate hikes)

Checking the 5yr5yr JGB yield and [the Daiwa JGB Term Premium](#) (DWJGTP10 REF Index)¹, we found that, while the two data series showed almost the same movement during 2016-2023, they have diverged from one another since the start of 2023 (chart below).

In theory, if nominal r^* were constant, the long-term forward rate and the term premium would be expected to show almost the same movement. The widening gap between the two since 2023 suggests that Japan's nominal r^* has likely changed (risen, in this case). Since 2023, nominal r^* has increased by around 75bp, from just below 0.5% to around 1.23%.

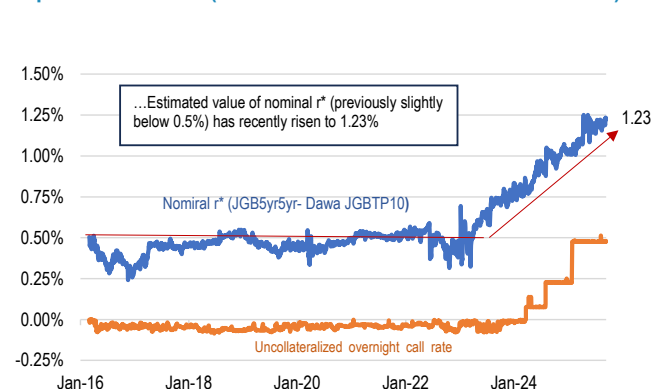
We will leave an examination of the interesting question regarding whether Japan's nominal r^* is actually rising to economists. However, we should take note of the fact that market data indicates that the baseline for Japan's interest rate may have risen 75bp. If there has been a change of this magnitude in the benchmark, it would be hard to envision JGB yields returning to their pre-2023 levels.

5yr5yr JGB Yield, Daiwa JGB Term Premium



Source: Bloomberg; compiled by Daiwa.

Japan's Nominal r^* (estimated values based on market data)



Source: Bloomberg; compiled by Daiwa.

Divergence between nominal r^* and policy interest rate: Implications regarding further rate hikes

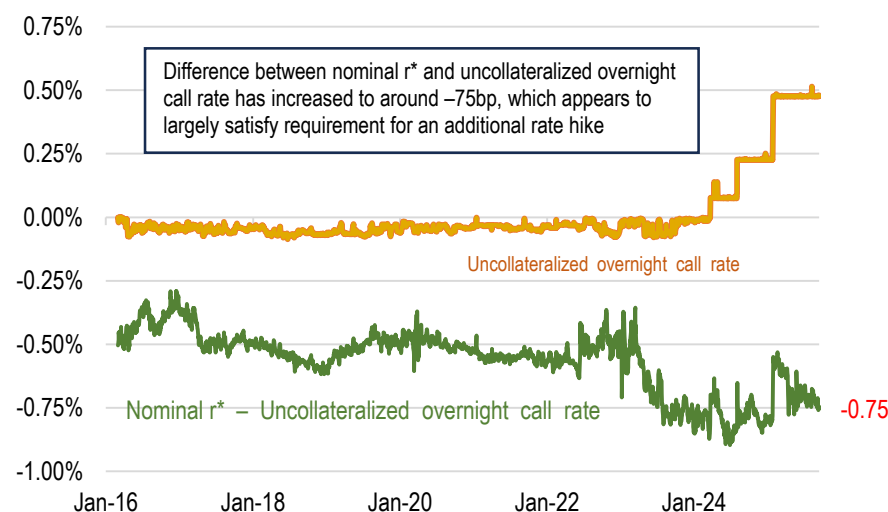
While nominal r^* appears to have risen by around 75bp since 2023, the rise in the uncollateralized overnight call rate (due to BOJ rate hikes) has been limited to about 50bp during the same period (right-hand chart above). If this data is correct, from the standpoint of the widening gap between the nominal equilibrium rate and the policy interest rate, the extent of monetary accommodation has actually intensified. Furthermore, during the roughly eight months since the January Monetary Policy Meeting (MPM), nominal r^* has risen by exactly 25bp. In our view, this also suggests that the conditions for an additional BOJ rate hike are largely in place. Even if there were to be further rate hikes to 0.75%, that would simply constitute a parameter

¹ In this report, we use the "5yr5yr JGB yield" as the long-term forward rate, and the "[Daiwa JGB Term Premium](#)" (DWJGTP10 REF Index) as the term premium.

adjustment to keep the monetary accommodation level constant, and not "normalization" (i.e., lessening of monetary easing).

In other words, a significant postponement of additional rate hikes at this juncture would effectively lead to greater monetary easing (from the perspective of the widening gap between the equilibrium rate and policy rate), potentially intensifying concerns about issues such as yen weakness. An overly cautious stance at this point would likely come with certain costs, such as the emergence of concerns about a weaker yen and falling "behind the curve," so it is important to strike a balance between the pros and cons.

Uncollateralized Overnight Call Rate and Extent of Monetary Easing (Nominal r^* – Uncollateralized overnight call rate)



Source: Bloomberg; compiled by Daiwa.

Impact of QT

If we were to add one reservation to this analysis, it would be the impact of balance sheet reduction, or Quantitative Tightening (QT). This report assumes that the effects of QT are reflected equally in the long-term forward rate and the term premium, and are, therefore, not included in the calculation "Long-term forward rate – Term premium." However, this assumption is predicated on the strict accuracy of the Daiwa JGB Term Premium model. If this assumption were flawed, the effects of QT may not have been eliminated correctly, potentially distorting the nominal r^* calculation. We need to keep in mind that results derived from any model contain a certain degree of uncertainty. We would like to examine and assess the impact of QT in a separate report.

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