Daiwa Securities

Daiwa's View

JGB yield outlook for 2022 (Part 2)

- Our end-2022 outlook is a 20yr yield of 0.8% and 30yr yield of 1.1%

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JGB yield outlook for 2022 (Part 2)

Our end-2022 outlook is a 20yr yield of 0.8% and 30yr yield of 1.1%

Our end-2022 forecasts for the 20yr and 30yr JGB yields are 0.8% and 1.1%, respectively. We think that the Jul-Sep or Oct-Dec quarter could bring an important JGB buying opportunity. If risk-off sentiment deepens, the market is expected to post developments under the downside scenario, similar to our US yield forecasts.

JGB Yield Forecasts for 2022 (%)

	Jul-Sep			Oct-Dec		
	Lower limit	Upper limit	Term-end	Lower limit	Upper limit	Term-end
IOER	-0.10	-0.10		-0.10	-0.10	
2Y	-0.20	0.00	-0.09	-0.20	0.00	-0.09
5Y	-0.15	0.10	0.00	-0.15	0.10	0.00
10Y	0.13	0.25	0.21	0.08	0.25	0.20
20Y	0.49	1.00	0.82	0.42	1.00	0.80
30Y	0.74	1.44	1.14	0.67	1.45	1.10

Source: Compiled by Daiwa Securities.

◆ Conclusion of the BOJ's Comprehensive Assessment is still appropriate

In the bond market, it is widely recognized that the BOJ intends to allow relatively free fluctuations of superlong yields. I also think this view is true (still appropriate) provided the following two points are confirmed—(1) operations to control long-term yields are not obstructed and (2) the impact on the economy (output gap) is not large.

In its Comprehensive Assessment in September 2016, the BOJ examined the impact of the term structure of interest rates on economic activity and prices, and stated that "short- and medium-term interest rates have a larger impact on economic activity than longer-term rates," and "an excessive decline and flattening of the yield curve may have a negative impact on economic activity by leading to a deterioration in people's sentiment, as it can cause uncertainty about the sustainability of financial functioning in a broader sense." Also, the BOJ examined the effect of the decline in the yield curve on the output gap (Appendix 8), and concluded that "decreases in short- and medium-term yields have larger monetary easing effects than decreases in long- and super-long-term yields."

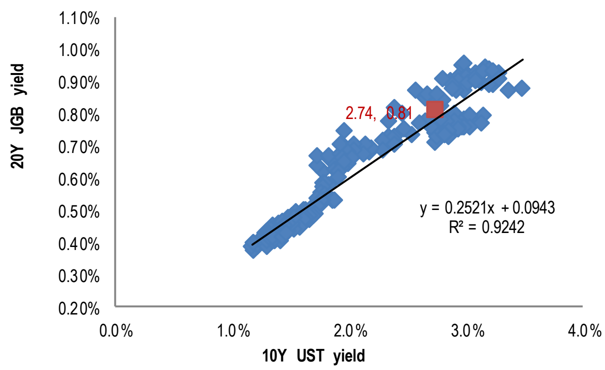
Comprehensive Assessment: Developments in Economic Activity and Prices as well as Policy Effects since the Introduction of Quantitative and Qualitative Monetary Easing (21 Sep 2016)

・The impact of interest rates on economic activity and prices as well as financial conditions depends on the shape of the yield curve. In this regard, the following three points warrant attention. First, short- and medium-term interest rates have a larger impact on economic activity than longer-term rates. Second, the link between the impact of interest rates and the shape of the yield curve may change as firms explore new ways of raising funds such as issuing super-long-term corporate bonds under the current monetary easing, including the negative interest rate policy. Third, an excessive decline and flattening of the yield curve may have a negative impact on economic activity by leading to a deterioration in people's sentiment, as it can cause uncertainty about the sustainability of financial functioning in a broader sense.

◆ Superlong JGB yields are correlated with US long-term yield
We can observe a strong correlation between overseas yields and the 20yr JGB yield, for which free fluctuations are largely accepted. For example, the scattered diagram using data from June 2021 derives a beta between the 20yr JGB yield and a US long-term yield of around 0.25, an intercept of around 0.1, and a determination coefficient of at least 0.9. In addition, the trends of the 20yr JGB yield as well as the average for 10yr US and German yields also show a very close correlation between the two. This data strongly suggests the possibility that global factors (not speculation about policy revisions by the BOJ) are the main cause of the surge in the 20yr JGB yield since the beginning of the year.

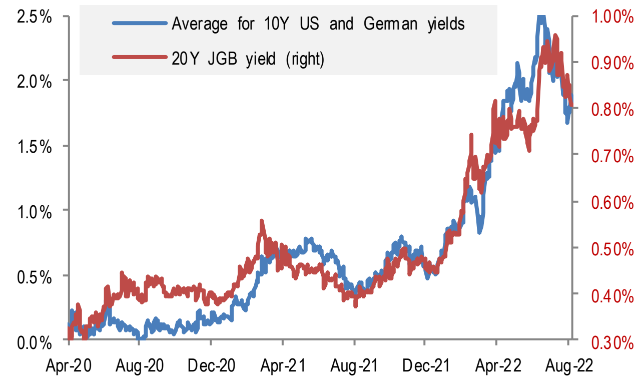
Given this trend, we think that US yield forecasts will provide significant clues when forecasting the 20yr JGB yield at end-2022 (although a slight time lag is expected to occur). In *Daiwa's View* reports, our end-2022 forecast for the US long-term yield is 2.7% (with a lower limit of 1.7% and upper limit of 3.8%). Applying these forecasts to the aforementioned regression equation, the 20yr JGB yield at end-2022 is roughly estimated at 0.78% (with a lower limit of 1.05% and upper limit of 0.53%).

10yr Yields in Japan and US (scatter diagram)



Source: Bloomberg; compiled by Daiwa Securities.

20Y JGB Yield, Average for 10Y US and European Yields



Source: Bloomberg; compiled by Daiwa Securities.

10yr US Yield, 20yr JGB Yield (forecast results via regression equation, %)

Beta	Intercept
0.25	0.10

10yr US yield	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50
20yr JGB yield	0.48	0.54	0.60	0.66	0.73	0.79	0.85	0.91	0.98

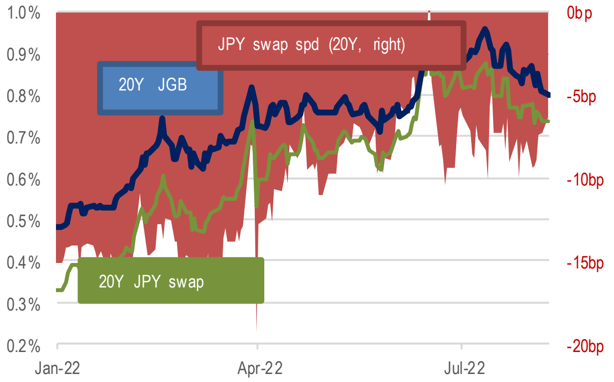
Source: Compiled by Daiwa Securities.

Of course, speculation about the next BOJ governor (post-Kuroda) and differences in where Japan is in the economic cycle compared to US and Europe will likely delay declines in JGB yields compared to US and European yields. Meanwhile, superlong JGB yields have risen sharply largely in line with US yields as their upper limit is not restricted by fixed-rate purchase operations by the BOJ. This is leading to a situation in which we can expect higher investment returns from superlong JGB yields than before. If the tendency for the correlation with US yields continues, investment returns from superlong JGB yields will take on the property of being close to investing in US Treasuries without currency hedging costs.

◆ Fading of speculation by nonresident investors makes it easier to invest
In mid-June, when sharply increasing yields in the US and Europe increased speculation of a BOJ policy change, pressures from the shorting of JGB yields by nonresident investors peaked, the LCH-JSCC spread in the 20yr zone momentarily exceeded 5bp, and the JGB-swap spread rapidly increased from a YTD average of -10bp up to positive territory. Meanwhile, as of 8 August, with the 20yr JGB yield down to 0.8% and the JPY swap rate down to 0.74%, the LCH-JSCC spread narrowed to below 1bp. That the superlong LCH-JSCC spread declined to its level at end-FY21 is an indication there has been an easing of the shorting pressure on JGB yields from nonresident investors. In contrast, the absolute level of the 20yr JGB yield is still high compared with the 0.6-0.7% level at which it was

trading at end-FY21. Its current level can be justified based on the previously noted balance with US long-term rates, but we see the possibility of the 20yr JGB yield dropping back to around the 0.6-0.7% level when US long-term rates eventually recover to their neutral level (2.5%).

20yr JGB Yield, 20yr JPY Swap, Swap Spread



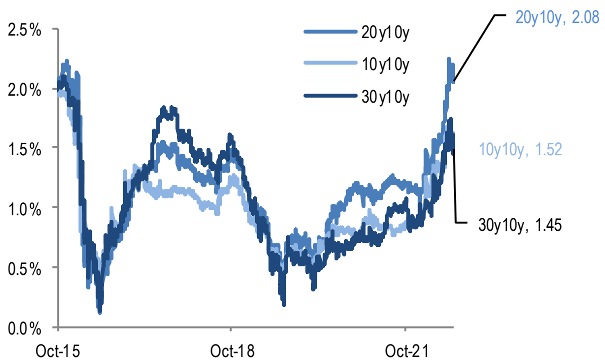
Source: Bloomberg; compiled by Daiwa Securities.

LCH-JSCC (20yr JPY swap)

Source: Bloomberg; compiled by Daiwa Securities.

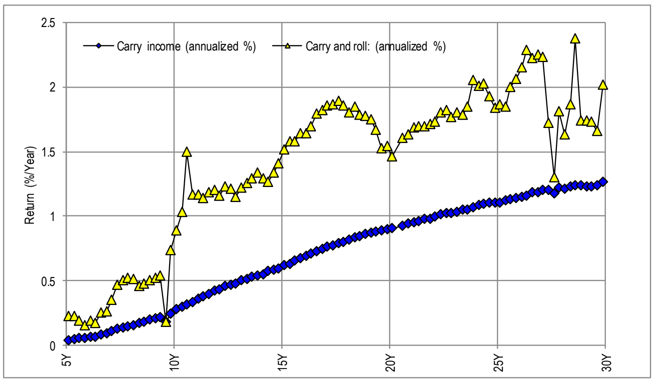
◆ <u>Attractive forward yields above 1.5% and carry and roll profits</u>
The 10yr forward 10yr yield is currently above 1.5%, in balance with the 10yr/20yr spread of 62bp. This shows that the 20yr JGB's carry and roll profits of over 1.5% offer an attractive return. Of course, carry and roll is a measure of the static shape of the yield curve and not necessarily the ideal measure within the current period of high volatility, but if volatility declines, this level of carry and roll will probably attract some attention. Here as well, we expect the stabilization (peaking) of US long-term rates to cause volatility to decline.

JGB 10yr Forward Yields



Source: Bloomberg; compiled by Daiwa Securities.

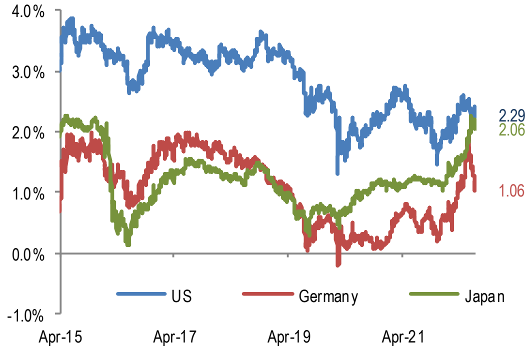
Carry and Roll Return (JGB as of 8 Aug, annualized %)



Source: Bloomberg; compiled by Daiwa Securities.

◆ <u>The 20yr forward 10yr JGB yield is rising toward US levels</u>
Looking at forward yields on 10yr JGBs, the 20yr forward 10yr, a component of the 30yr yield, has risen to over 2%. Compared with overseas, with the 20yr forward 10yr yield currently at 2.29% for US Treasurys and 1.06% for German Bunds, the JGB's forward yield is close to that for Treasurys and about 1ppt higher than for Bunds. This seems somewhat hard to justify, given how Japan's fundamentals compare with the fundamentals of the other two countries.

20yr-forward 10yr Yields in Japan, US, and Europe

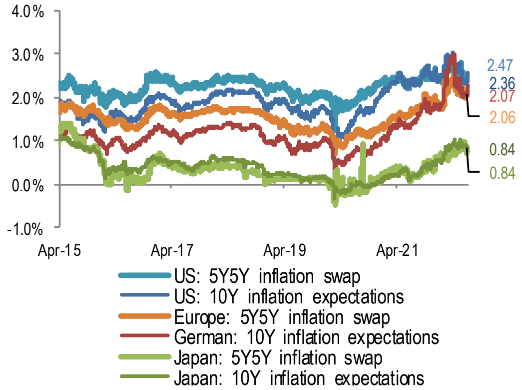


Source: Bloomberg; compiled by Daiwa Securities.

Assuming that Japan's potential growth rate is in the low 0% range, this JGB forward yield above 2% is pricing in an expectation that in 20 years the BOJ will have fully met its price stability target and raised its policy rate to 2%. Although this is a welcome forecast, from an investment perspective, based on the low risk from fundamentals of a future rise in interest rates, this seems to offer a favorable risk/reward trade-off (if the expectation is that the policy rate will be raised to at least 2% and that it can be sustained there, it would be best to short the 30yr forward 10yr yield).

Using two data points, the 10yr BEI and the 5yr forward 5yr inflation swap rate, to determine what inflation expectations are in Japan, the US, in Europe, we get 2.36-2.47% for the US, 2.07% for Germany, and 0.84% for Japan. This data is not consistent with Japan reaching its 2% inflation target.

Market-based Inflation Expectations in Japan, US, and Europe



Source: Bloomberg; compiled by Daiwa Securities.

Using the 20yr forward 10yr yield and the 5yr forward 5yr inflation swap for a simple picture of real forward rates, we get about 0% for the US, around -1% for Germany, and about +1.2% for Japan. Thus, Japan has by far the highest real forward rate. This suggests that the reason the 20yr forward 10yr JGB yield has risen to a level on par with that for US Treasurys can be attributed to either weak supply-demand or demand for a term premium rather than to fundamental factors such as inflation expectations and hitting inflation targets.

One theory that has been circulating in the market to explain supply-demand is that the progress life insurers have made toward regulatory compliance has reduced their potential need for purchasing superlong bonds[1]. In a media interview published on 4 August, the MOF's Financial Bureau Chief Michio Saito, who is known as "Mr. JGB," said that the

[1] Because the average residual maturity of JGBs declined sharply when the pandemic broke out but has since been rising (on a flow basis, it has lengthened since FY20, from six years and eight months, to seven years and three months, and then to seven years and nine months), if there is actually a reduction of JGB issuance, including to ensure resilience to interest rate risk, that is likely to be accompanied by a reduction in the issuance of TDBs, TBs and FBs, as well.

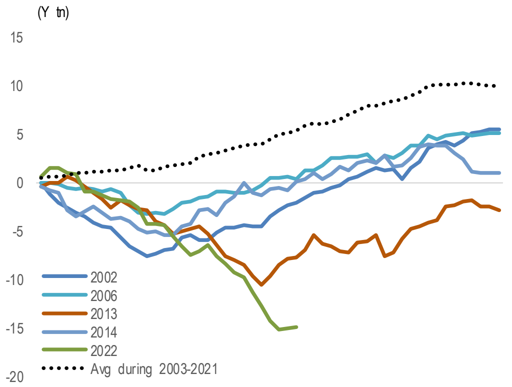
shallowness of the investor base and limited demand in the superlong zone can be attributed to worries that a 50yr JGB will be issued, a comment that supports the theory of worsening supply-demand. Supply-demand is probably one reason why superlong forward yields are as high as they are.

It has not been long since we saw a sharp rise in the 20yr forward 10yr yield for JGBs compared to that for Treasurys and Bunds, and numerous critical events have occurred recently, both overseas with the invasion of Ukraine, consequent rise in inflation, and large rate hikes by the Fed and ECB, and in Japan with the upper house elections and approaching end of BOJ Governor Kuroda's term. Taking this into account, there are plenty of reasons for long-term investors to be cautious, and since the beginning of July hedged Treasury yields have turned negative, considerably worsening the environment for investing in foreign bonds. Based on this, I am currently of the opinion that it is too early to determine whether there has been a structural worsening of supply-demand from life insurers and that there is a good chance of investors' return to JGBs in the second half of CY22.

If continued issuance increases lead to a significant widening of the mismatch between superlong JGB supply-demand and the government's debt management becomes inconsistent with its policy of issuing government bonds steadily and smoothly and holding down medium- to long-term funding costs, the government may consider adjusting issuance amounts in the future.

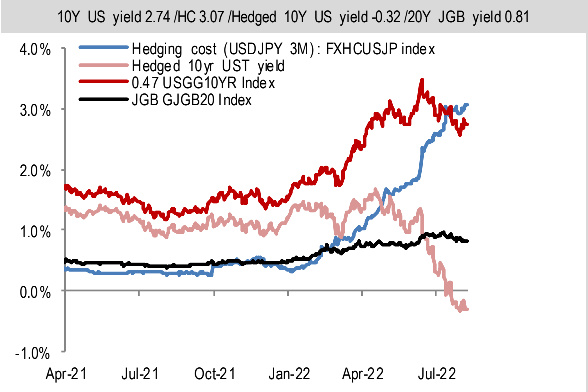
◆ Comparison with hedged foreign bonds
Japan's outward investment in securities (bonds and notes) has totaled over Y15tn of net selling YTD. This is a very large number, even compared with previous years when there was substantial net selling in the first half of the year, including in 2002, 2006, 2013, and 2014 (see Chart below). The well-known cause of this is the decline in hedged foreign bond yields (into negative territory) resulting from yield curve flattening (and inversion) triggered by central bank rate hikes in the US and Europe and from the rise in hedging costs brought by the currency basis becoming deeply negative. Because hedged foreign bonds are unlikely to start generating investment returns in 2H CY22, we still see a high probability of the rising investment attractiveness of JGBs bringing an inflow of funds into the JGB market (a return to JGBs).

Investment in Foreign Securities (intermediate/long-term bonds)



Source: Bloomberg; compiled by Daiwa Securities.

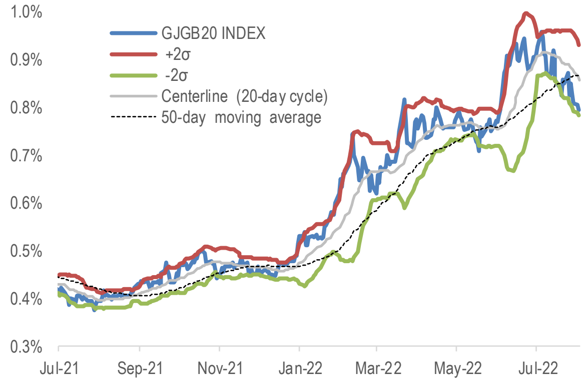
20yr JGB Yield, Hedged 10yr US Yield



Source: Bloomberg; compiled by Daiwa Securities.

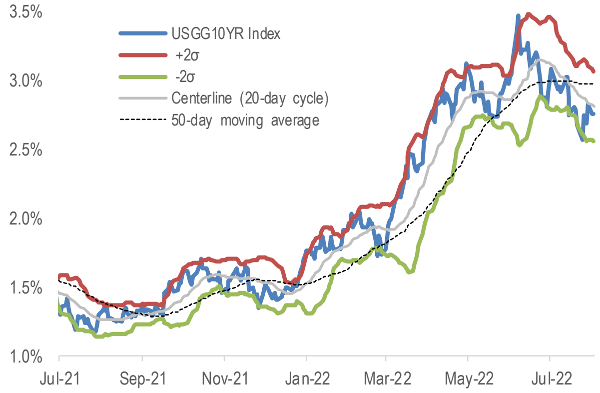
◆ Our end-2022 outlook is a 20yr yield of 0.8% and 30yr yield of 1.1%
Simply put, in 1H CY22 Japanese investors were net sellers of foreign bonds at a record-high levels while also being cautious with JGBs, but in 2H, assuming it remains difficult to invest in hedged foreign bonds, what else is there to invest in besides JGBs? Based on the detailed explanation outlined in this report, although there are still concerns over who will replace Mr. Kuroda as BOJ governor (and who will be named deputy governors) and whether there will be future policy adjustments, as well as a possibility that uncertainty over high inflation in Europe and the US could cause the market to swing back, we expect downward pressure on JGB yields to steadily increase over time and bring the 20yr yield to 0.8% and the 30yr yield to 1.1%. Ultimately, we expect a peaking of US long-term yields and reduction in their volatility to trigger a decline in JGB yields.

20yr JGB Yield Bollinger Band (20-day cycle)



Source: Bloomberg; compiled by Daiwa Securities.

10yr US Yield Bollinger Band (20-day cycle)



Source: Bloomberg; compiled by Daiwa Securities.

UST and JGB Yield Forecasts for 2022 (%)

		Jul-Sep			Oct-Dec		
		Lower limit	Upper limit	Term-end	Lower limit	Upper limit	Term-end
Japan	IOER	-0.10	-0.10		-0.10	-0.10	
	2Y	-0.20	0.00	-0.09	-0.20	0.00	-0.09
	5Y	-0.15	0.10	0.00	-0.15	0.10	0.00
	10Y	0.13	0.25	0.21	0.08	0.25	0.20
	20Y	0.49	1.00	0.82	0.42	1.00	0.80
	30Y	0.74	1.44	1.14	0.67	1.45	1.10
US	FF	2.25	3.50	2.88	2.00	5.00	3.63
	2Y	2.25	4.25	3.20	1.60	5.00	3.20
	5Y	2.00	3.85	2.90	1.65	4.00	2.85
	10Y	1.90	3.75	2.80	1.70	3.80	2.70

Source: Compiled by Daiwa Securities.

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