

JGB Insight

JGBis: Scenario of BEI falling below 0bp is too pessimistic

- BEI has declined to around 20bp, the lowest level since July 2016
- Environment surrounding JGBis is not favorable due to anticipated weak inflation and lingering caution about slowdown in global economy
- That being said, it is too pessimistic to expect falling below 0bp
- Expecting good support at 10-20bp level

[BOX] BOJ JGB Purchases in February

Strategic Memorandum DSTE289 FICC Research Dept.

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Daiwa Securities Co. Ltd.

BEI has declined to around 20bp, the lowest level since July 2016

After the previous JGBi auction went well at the BEI of around 41bp in November 2018, the BEI of JGBis (on-the-run issue basis) declined close to 20bp, the lowest level since July 2016, amid increasing risk-off activities due to the emergence of caution about a slowdown in the global economy. The background factor appeared to be the combination of negative factors such as a plunge in crude oil prices, a sharp decline in the US TIPS BEI amid lingering concerns about downward pressure on prices due to a series of cuts in mobile phone charges, in addition to the decline in nominal yields of JGBs. Since the beginning of 2019, the BEI has mostly remained flat at around 20bp reflecting a pause in the downtrend of crude oil prices and the decline in the US TIPS BEI.

Environment surrounding JGBis is not favorable due to anticipated weak inflation and lingering caution about slowdown in global economy

Let's check the environment surrounding JGBis. First, we look at the trend in the observed inflation. According to the latest announcement on January 18, the nationwide core CPI increased by 0.7% y/y in December 2018. It was slightly undershot v. the market consensus, but posted inflation for 24 months in a row. Going forward, the y/y growth rate is expected to slow to around 0.5% toward this spring due to (1) the absence of the positive contribution from rising energy prices thus far and (2) the emergence of the impact from the plunge in crude oil prices since November 2018 with a time lag. We also need to pay attention to factors that would lower prices such as free early childhood education and reductions in mobile phone fees. Once the current subdued inflation is confirmed at the time of release of indicators, investor sentiment for JGBis may worsen. While the market participants appear to be rather strengthening caution about a slowdown in the global economy and crude oil prices are losing upward momentum at the \$50-55 level, we are unable to say that the environment surrounding JGBis is favorable.

That being said, expecting BEI falling below 1.0bp is too pessimistic

In such an environment, if we have a pessimistic view about the BEI, a concern would be the fact that the BEI fell far below 0bp in the global financial crisis triggered by the Lehman Brothers bankruptcy (Chart 9). At that time, the JGBi market was apt to collapse substantially in the midst of the global recession because the principal of JGBis was not guaranteed and overseas investors held more JGBis than domestic investors Meanwhile, there are currently some supportive factors as follows: (1) the principal of existing JGBis is guaranteed, (2) the amount of JGBis held by domestic investors is large, (3) sustainable purchases of JGBis from them are expected, and (4) purchases and buybacks by the BOJ and the MOF amount to around 190bn yen vs. the issuance amount of 400bn yen. The possibility of the BEI falling below 0bp appears very slim.

It appears that market has well factored in lower mobile phone fees. but it has not reflected consumption tax hike

In October 2018, Prime Minister Shinzo Abe stated, "The government will raise the consumption tax rate from 8% to 10% on October 1, 2019 as stipulated by the law." Last month's administrative policy speech also confirmed his firm intention to raise the consumption tax rate. However, many market participants are still skeptical about the tax hike itself. In the recent BEI downtrend, the market appears to have well factored in, for example, the cut in mobile phone charges, a factor to push down the CPI. On the other hand, the market does not appear to have reflected the consumption tax hike, which should

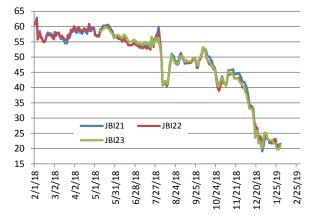


push up the CPI (charts 7-8).

Expecting support at 10-20bp level

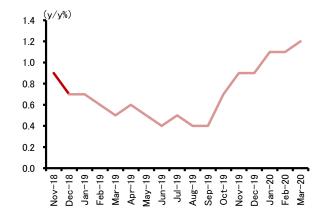
Since the BOJ introduced the "Quantitative and Qualitative Monetary Easing" with the 2% price stability target in April 2013 and the MOF started to issue principal-guaranteed JGBis in October 2013, the lowest BEI is 10-20bp level (Chart 9). Keeping this in mind, we would like to take a stance of confirming the support at the level.

Chart 1: JGBi BEIs (bp)



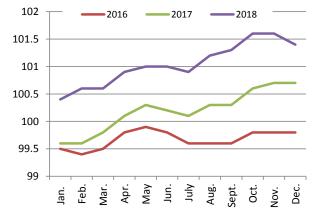
Source: Daiwa Securities

Chart 3: Nationwide Core-CPI Growth Outlook (y/y %)



Note: Actual for Nov.-Dec. 2018 Source: Daiwa Securities

Chart 5: Nationwide Core-CPI Seasonality



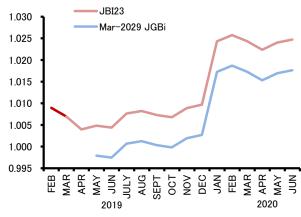
Source: Ministry of Internal Affairs and Communications, complied by Daiwa Securities

Chart 2: JBI23 and JB350 Yields (%)



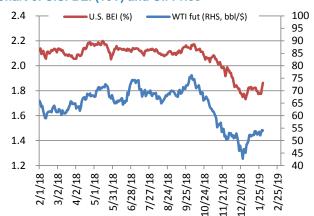
Source: Daiwa Securities

Chart 4: Index Ratio Forecast



Note: Actual for Feb.-Mar. 2019; based on inflation outlook in Chart 3; for the Mar-2029 JGBis, assuming that it will be issued in May 2019 and its base CPI will be Dec. 2018 on our forecast. Source: Daiwa Securities

Chart 6: U.S. BEI (10Y) and Oil Price



Source: Bloomberg



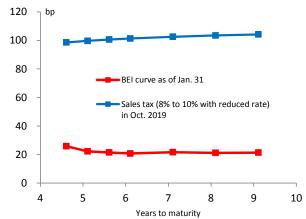
Chart 7: Inflation Outlook

Note: Actual for Nov-Dec 2018

Source: Bloomberg



Chart 8: BEI Curve Comparison



Note: Based on inflation outlook in Chart 7; assuming 1.1% from April 2021 to March 2028 Source: Daiwa Securities

Chart 9: BEI from March 2004 to January 2019



Source: Daiwa Securities.

[Appendix] Floor Option Value

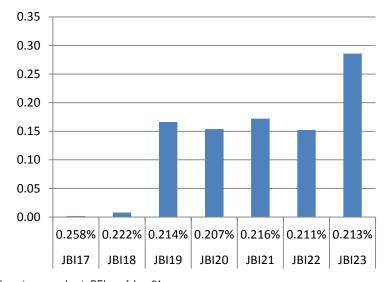
For JGBis, only the principal amount is guaranteed at maturity (floor). Here, we think of the value of the floor option.

The premium of the floor option can be calculated, based on the CPI at maturity as an underlying, and the CPI at issuance as the strike. However, as there is no market to trade such floor options in Japan, we assume the volatility to calculate the option value at 1%, referring to the long-term historical volatility of the nationwide core CPI. Based on this assumption, we estimate that the floor option value of JBI23 is around 0.29 yen, or around 3bp on the yield basis (around 3bp on BEI basis assuming no change in yield of counterpart of JBI23).

Given the non-existence of the floor trading market, we think that there is no strong need to pay attention to the floor option value, excluding the case that investors have strong incentive to pay such premiums.



Floor Option Value (Yen)



Note: Figure above issue number is BEI as of Jan. 31 Daiwa Securities

[BOX] BOJ JGB Purchases in February 2019

At 5:00pm on January 31, the BOJ released its JGB purchase guidelines for February (Outline of Outright Purchases of Japanese Government Securities). The key points are as follows.

- ✓ The number of offers and offer ranges have been kept unchanged from those in January in all the target zones.
- ✓ The number of operation days per month decreased from nine (business days) in January to eight.
- ✓ Similar to January, the BOJ plans to offer to make purchases in the 5-10Y zone on the day after the 10Y JGB auction.
- ✓ The Bank plans to offer to make purchases of JGBs with over 10 years left to maturity on the day before the 20Y JGB auction for the first time.

In particular, we would like to carefully monitor the offer amount in the 5-10Y zone at the first operation of the month. Our impression is that the BOJ can adjust the first offer amount "mechanically." As the Fed chairman Jerome Powell clearly stated that it would end the balance sheet run-off earlier than previously projected, the BOJ now should have a greater need than before to carefully monitor the FX market. In such an environment, if the offer amounts at the first operations of the month (including those in other zones) are kept unchanged, the possibility of adjustments to the offer amounts in February will be quite slim, unless an urgent matter arises. In addition, downward pressure on yields may heighten due to the emergence of speculation on a pause in the BOJ's trimming buying JGBs.



BOJ JGB Purchase Schedule in February 2019

BOJ offer day / JGB auction day		(BOJ start day/ MOF settlement day)	Up to 1 year	Over 1 to 3 years	Over 3 to 5 years	Over 5 to 10 years	Over 10 to 25 years	Over 25 years	JGB Linker	JGB Floater
2/1/19	F	2/4/19								
2/4/19	М	2/5/19		0	0		0	0		
2/5/19	Т	2/6/19	10Y JGB Auction							
2/6/19	W	2/7/19	0			0			0	
2/7/19	TH	2/8/19	30Y JGB Auction							
2/8/19	F	2/12/19		0	0	0				
2/11/19	М	-	Public Holiday (National Foundation Day)							
2/12/19	Т	2/13/19	0				0	0		
2/13/19	W	2/14/19	5Y JGB Auction							
2/14/19	TH	2/15/19				0				0
2/15/19	F	2/18/19	10Y JGB Linker Auction							
2/18/19	М	2/19/19		0	0		0	0		
2/19/19	Т	2/20/19	20Y JGB Auction							
2/20/19	W	2/21/19								
2/21/19	TH	2/22/19	AEL (for 10Y and 20Y JGBs with over 5 to 15.5 years or less to maturity)							
2/22/19	F	2/25/19			_	0	0	0	0	
2/25/19	М	2/26/19			_	_		_		
2/26/19	Т	2/27/19	AEL (for 20Y, 30Y and 40Y JGBs with over 15.5 to less than 39 years to maturity)							
2/27/19	W	2/28/19		0	0	0				
2/28/19	TH	3/1/19	2Y JGB Auction							

Note: © Scheduled by BOJ, O Daiwa forecast Source: Bank of Japan, Ministry of Finance, Daiwa Securities.



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[Standard & Poor's]

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