

## JGB Insight

### Higher likelihood of 40-year JGB issuance increase and the yield curve

- ✓ Considering a 20y/30y/40y butterfly position

#### [Appendix] Image of FY2021 JGB Issuance Plan and Calendar-based JGB Issuance

Strategic Memorandum DSTE418  
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#### Considering a 20y/30y/40y butterfly position

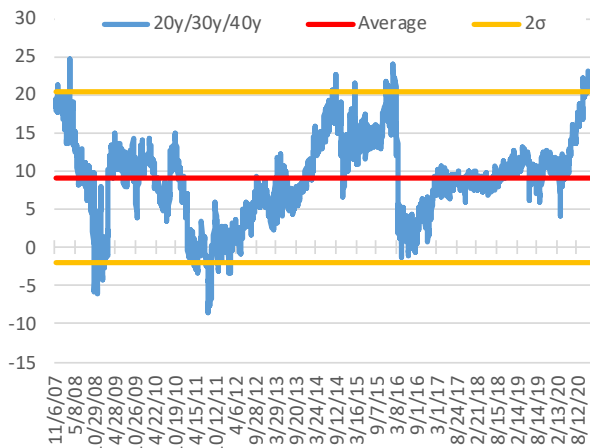
The MOF held a JGB Market Special Participants meeting on December 11. A close reading of the published materials and points of the meeting minutes suggest that not only market participants but also the MOF itself is getting ready for increased 40-year JGB issuance in the FY21 JGB issuance plan. In contrast, there are growing calls to keep the same amount of issuance of 20-year JGBs, which are thought to have potential for increased issuance but be of lower priority to 40-year JGBs, and to either keep steady or reduce the issuance of 30-year JGBs. From the issuance perspective, the 20y/30y spread should either be unchanged or narrow (if 30-year JGB issuance is reduced), while the 20y/40y and 30y/40y spreads are likely to widen. It is within this context that we consider a 20y/30y/40y butterfly position (purchasing 30y and selling 20y and 40y).

The 20y/30y/40y butterfly spread has generally traded in the range of 10-20bp since the first 40-year JGB (JU1) was issued in November 2007 (Chart 1). During this time, the balance of issuance across 20-year, 30-year, and 40-year JGBs has changed (Chart 3) as has the amount and frequency of the BOJ's purchases in the over-10-year zone (Chart 4). The spread has kept within a stable range of around 10-20bp despite these steady changes in conditions affecting the spread. That spread has recently been near the top of its range, making a reversal likely.

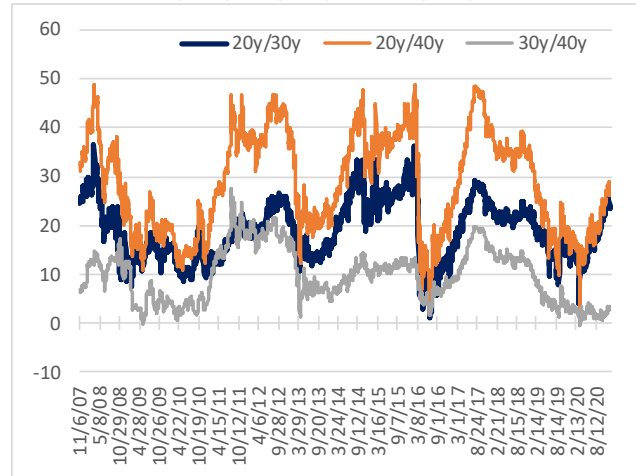
Looking at the correlation that the 20y/30y/40y butterfly spread has separately shown with the 20y/30y spread, the 20y/40y spread, and the 30-year yield over that same period, what little correlation there has been was with the 20y/30y spread. If the amount of 20-year JGB issuance is held steady and the amount of 30-year JGB issuance is either held steady or reduced in FY21, it may further constrain the widening trend in the 20y/30y spread seen since July. That in turn could possibly further constrain widening of the 20y/30y/40y butterfly spread.

We expect the 20y/30y/40y butterfly position to generate profit from either a decrease in curvature or a widening of the 20y/40y spread. We can be ready for a steepening of the 20-year-40-year zone, which may be generated by increased 40-year issuance. We also expect some positive carry even without any change in the shape of the curve in the 20y/30y/40y zone from what it is now (Table 1).

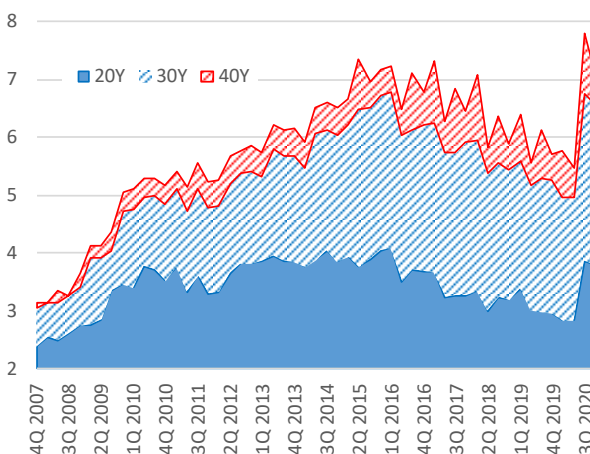
We expect announcements today (December 15) of a Cabinet Decision on a third supplementary budget as well as of the JGB issuance plan to reflect that budget. Based on the media reports thus far, we do not expect any change in calendar-based market issuance from what it was following the second supplementary budget. We also expect a Cabinet Decision on the initial FY21 budget as well as announcement of the initial FY21 JGB issuance plan on Monday, December 21. Although there is likely to be increased demand for superlong JGBs from the main investor types in Jan-Mar, we note that during the period of significant flattening in the superlong zone that occurred in March 2016 there was also a narrowing of the 20y/30y/40y butterfly spread (Charts 1-2). We think the 20y/30y/40y butterfly position offers good opportunity.

**Chart 1: JGB 20y/30y/40y Butterfly Spread (bp)**


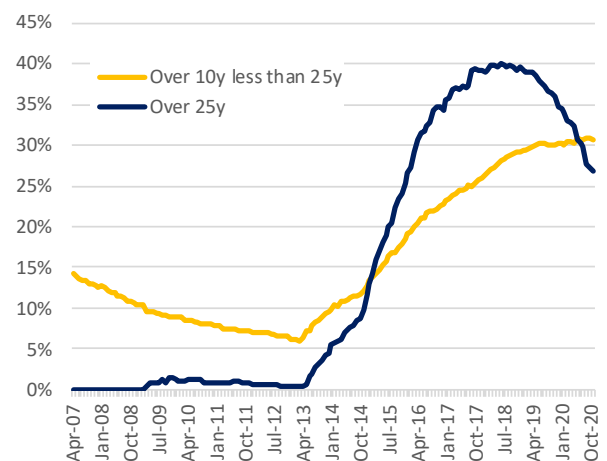
Note: On-the-run compound yield basis  
 Source: Daiwa Securities.

**Chart 2: JGB 20y/30y, 20y/40y and 30y/40y Spreads (bp)**


Note: On-the-run compound yield basis  
 Source: Daiwa Securities.

**Chart 3: JGB 20y, 30y and 40y Issuance Size**


(Unit: Yen trillions)  
 Source: Daiwa Securities.

**Chart 4: BOJ Holding % to Total Issuance by Targeted Zone**


Source: Daiwa Securities.

**Table 1: 20y/40y/40y Butterfly Position Sensitivity**

Change (bp)			Total Return (%)
20y	30y	40y	
0	0	0	0.1
4.5	4.5	4.5	0.0
-5	0	5	1.7
0	0	5	3.4
-5	0	0	-1.6
-5	5	5	-3.4
-5	-5	-5	0.2

Note: Based on change from JL174, JX68 and JU13 closes on Dec. 14; Total return calculated on 3-moth horizon with cash-and-duration neutral weights)  
 Source: Daiwa Securities

### Appendix 1: Image of FY2021 JGB Issuance Plan (Yen trillions)

#### <Breakdown by Legal Grounds>

	FY2020 (Initial) <a>	FY2020 (after the 2nd s/b) <b>      <b>-<a>		FY2020 (after the 3rd s/b) <c>      <c>-<a>      <c>-<b>			Image of FY2021 Initial <d>      <d>-<a>      <d>-<c>		
		<b>	<b>-<a>	<c>	<c>-<a>	<c>-<b>	<d>	<d>-<a>	<d>-<c>
Newly-issued Bonds	32.6	90.2	57.6	112.6	80.0	22.4	52.2	19.6	▲ 60.4
Reconstruction Bonds	0.9	0.9	-	0.8	▲ 0.1	▲ 0.1	0.8	▲ 0.1	-
FILP Bonds	12.0	54.2	42.2	40.7	28.7	▲ 13.5	25.0	13.0	▲ 15.7
Refunding Bonds	108.0	108.0	-	109.0	1.0	1.0	136.5	28.5	27.5
<b>TOTAL</b>	<b>153.5</b>	<b>253.3</b>	<b>99.8</b>	<b>263.1</b>	<b>109.6</b>	<b>9.8</b>	<b>214.5</b>	<b>61.0</b>	<b>▲ 48.6</b>

#### <Breakdown by Financing Methods>

	FY2020 (Initial) <a>	FY2020 (after the 2nd s/b) <b>      <b>-<a>		FY2020 (after the 3rd s/b) <c>      <c>-<a>      <c>-<b>			Image of FY2021 Initial <d>      <d>-<a>      <d>-<c>		
		<b>	<b>-<a>	<c>	<c>-<a>	<c>-<b>	<d>	<d>-<a>	<d>-<c>
Financed in the Market	146.5	246.3	99.8	257.7	111.2	11.4	209.1	62.6	▲ 48.6
Calendar-based Market Issuance	128.8	212.3	83.5	212.3	83.5	-	201.4	72.6	▲ 10.9
Non-price Comp. Auction II	8.0	10.1	2.1	7.7	▲ 0.3	▲ 2.3	7.7	▲ 0.3	-
Adjustment between fiscal years	9.7	23.9	14.2	37.6	28.0	13.7	0.0	▲ 9.7	▲ 37.6
Sales for Households	4.8	4.8	-	3.2	▲ 1.6	▲ 1.6	3.2	▲ 1.6	-
BOJ Rollover	2.2	2.2	-	2.2	-	-	2.2	-	-
<b>TOTAL</b>	<b>153.5</b>	<b>253.3</b>	<b>99.8</b>	<b>263.1</b>	<b>109.6</b>	<b>9.8</b>	<b>214.5</b>	<b>61.0</b>	<b>▲ 48.6</b>

Source: Ministry of Finance (MOF), Daiwa Securities.

### Appendix 2: Image of FY2021 Calendar-based JGB Issuance (Yen trillions)

	40Y JGBs	30Y JGBs	20Y JGBs	10Y JGBs	5Y JGBs	2Y JGBs	T-Bill (1Y)	T-Bill (6M)	JGBis	AEL (Tap)	TOTAL
Issue size per auction (a)	0.6	0.9	1.2	2.6	2.5	3.0	3.0		0.2		
after the 2nd-3rd s/b in FY2020	0.5	0.9	1.2	2.6	2.5	3.0	3.5		0.2		
# of issuance per year(b)	6	12	12	12	12	12	12		4		
Total Issuance per year(a)x(b)	3.6	10.8	14.4	31.2	30.0	36.0	36.0	27.2	0.8	11.4	201.4
Change from the 2nd-3rd s/b in FY2020	0.6	0.6	0.9	1.5	1.8	3.0	▲ 0.9	▲ 18.4	-	-	▲ 10.9

Source: Ministry of Finance (MOF), Daiwa Securities.

## Explanatory Document of Unregistered Credit Ratings

In order to ensure the fairness and transparency in the markets, Credit Rating Agencies became subject to the Credit Rating Agencies' registration system based on the Financial Instruments and Exchange Act. In accordance with this Act, in soliciting customers, Financial Instruments Business Operators, etc. shall not use the credit ratings provided by unregistered Credit Rating Agencies without informing customers of the fact that those Credit Rating Agencies are not registered, and shall also inform customers of the significance and limitations of credit ratings, etc.

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- 2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
- 3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
- 4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

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### ■ Credit Rating Agencies

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February 2020

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- 2) Daiwa Real Estate Asset Management is a subsidiary of Daiwa Securities Group Inc. and serves as the asset management company for the following J-REITs: Daiwa Office Investment Corporation (8976), Nippon Healthcare Investment Corporation (3308), Japan Rental Housing Investments (8986).
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