Daiwa's View

Where is the rational midpoint?

➢ Is Japan's terminal rate around 0.9-1.15%?

Fixed Income Research Section
FICC Research Dept.

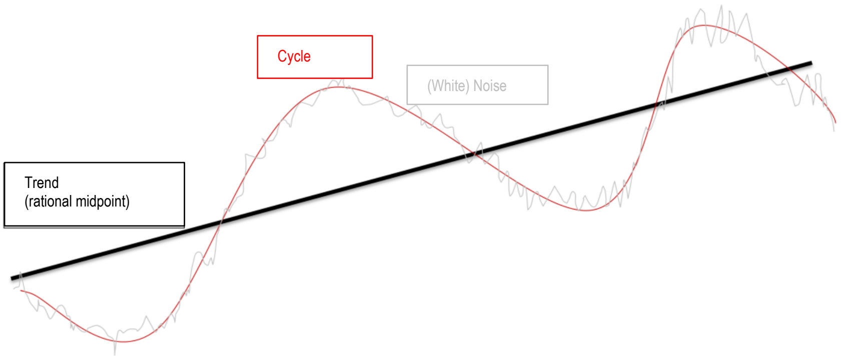
Chief Strategist
Eiichiro Tani, CFA
(81) 3 5555-8780
eiichiro.tani@daiwa.co.jp

Daiwa Securities Co. Ltd.

Where is the rational midpoint?

The rational midpoint generally exerts a kind of magnetic pull, bringing the thing that's cycling back from an extreme in the direction of "normal." But it usually doesn't stay at normal for long, as the influences responsible for the swing toward the midpoint invariably continue in force and thus cause the swing back from an extreme to proceed through the midpoint and then carry further, toward the opposite extreme. It's important to recognize and accept the dependability of this pattern. (Source: Excerpted from Mastering the Market Cycle by Howard Marks.)

Trend (rational midpoint)**, Cycle, and Noise** (pattern diagram)



Source: Compiled by Daiwa Securities.

Is Japan's terminal rate around 0.9-1.15%?

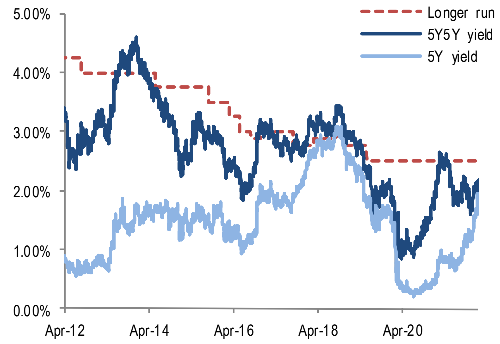
Currently, the most worthwhile questions to ask about interest rates are when the terminal rate will be reached and where the rational midpoint is. In the US, the long-term forward rate (terminal rate) is currently stable while rate hikes are expected to continue as interest rates approach (slightly exceed) their terminal rate, and this is causing a rapid flattening of the yield curve. In Japan (unlike in Europe and the US), the long-term forward rate has recently risen rather sharply. The question is whether this sharp increase can be attributed to a sharp increase in the terminal interest rate (i.e., to a change in the rational midpoint), or whether a cycling back to the rational midpoint sparked by speculation over policy normalization by the BOJ has gone beyond bringing rates from extremes back to their rational midpoint and is now pushing them toward the opposite extreme? The answer to this question should eventually be of value as a guide toward making the correct investment decision on whether to buy or sell. In both Japan and the US, it is difficult to make investment decisions without an understanding of terminal interest rates.

◆ What is the rational midpoint in the US?

The debate over the rational midpoint in the US provides clarity here. The median longer-run interest rate indicated by the FOMC's dot chart is 2.5%, while the New York Fed's surveys of primary dealers and market participants, which it conducts every FOMC meeting, show those medians to be 2.25% among primary dealers and 2.00% among market participants (there was no change in the median shown by the latest surveys released last night). It is possible to converge on a view of what that rational midpoint is by looking at what FOMC members, who actually move the policy rate, think as well as at market participants' understanding of what the longer-run rate is as revealed by the surveys taken every FOMC meeting.

It is of course possible to merely ask the question of whether the longer-run interest rate as understood by the Fed and by the primary dealers and market participants are correct. It is unrealistic, however, to expect anyone to have the intellectual backbone to refute arguments regarding the rational midpoint made by the leading economists (at least over the near term), and market participants have no realistic option other than to accept those arguments. Hence, the rational midpoint in the US is considered to be 2.0-2.5% and there is unlikely to be any major divergence from this view.

UST 5Y Yield, 5Y5Y Yield, Longer Run



Source: Bloomberg; compiled by Daiwa Securities.

New York Fed's Surveys (longer run)

	Primary dealers	Market participants
	Longer Run	Longer Run
25th Pctl	2.00%	2.00%
Median	2.25%	2.00%
75th Pctl	2.44%	2.50%

Source: Excerpted from New York Fed materials.

We note another critical point that must be understood. Normally, the terminal interest rate is thought to be a function that includes the real potential growth rate and underlying inflation rate as variables, but in the FOMC's Summary of Economic Projections dated December 2021, the longer-run fed funds rate was 2.5%, the longer-run real GDP growth rate was 1.8% and the longer-run PCE inflation rate was 2.0%. Thus, the first of these, the longer-run fed funds rate, is 1.3ppt lower than the number you would get by simply adding the second and third numbers. As we have touched upon in a previous report, we think this reflects the need to apply a deduction to correct for the difference between the natural rate of interest and the potential growth rate, a difference caused by declines in the natural rate of interest, the rate that equates funds supplied with funds demanded at a time of surplus money in the context of aging demographics and rising wealth inequality.

The US longer-run interest rate (2.5%) equals the potential growth rate (1.8%) + the underlying inflation rate (2%) - an "X factor" deduction

◆ What is a rational midpoint for JPY rates?

The debate over Japan's rational midpoint becomes is much more difficult. Data on both the potential growth rate and the underlying inflation rate is considerably less precise. Furthermore, unlike the FOMC, the BOJ does not indicate its view of the longer-run interest rate, and there is no market consensus on what that interest rate is based on an exhaustive debate among Japanese economists. This gives market participants limited material to work with to surmise what the rational midpoint could be. Views on the longer-run interest rate therefore tend to be much more divergent in Japan than in the US. On 6 January this year, the BOJ estimated Japan's potential growth rate to be 0.15%. No trustworthy data on Japan's underlying inflation exists, but we think it is probably around 1%. Because underlying inflation is a function of underlying increase in wages, it is probably safe to say that it is not substantially higher than 1% (note that the moving average of actual inflation is below 1%). This leaves 1.15%, the total of the potential growth rate and underlying inflation rate, as one possible benchmark to work with.

Furthermore, as we just noted regarding the US, there is a need to apply an x-factor deduction to correct for the gap between the natural interest rate and the potential growth rate, and thus the longer-run interest rate is lower than the sum of potential growth rate and underlying inflation rate (the 1.3% deduction we used for the US is based on specific numbers included in the FOMC's Summary of Economic Projections).

If we apply no deduction related to the difference between the natural interest rate and potential growth rate and use as the rational midpoint for JPY interest rates 1.15% based on the 10yr forward 10yr yield, add another 20bp to that to get the 20yr forward 10yr yield (this was the average spread over the past five years), and use the 0.25% cap on the 10yr yield used by the BOJ in its fixed-rate purchase operations for the 10yr yield, we get the following longer-run interest rates for Japan.

10yr: 0.25%
20yr: 0.70% (10yr forward 10yr of 1.15%)
30yr: 0.916% (10yr forward 10yr of 1.15%, 20yr forward 10yr of 1.35%)

Yesterday's yields at the market close (10yr of 0.22%, 20yr of 0.735%, and 30yr of 0.99%) are very close to these rates (albeit with the market closing yields a bit higher). However, these calculations are overly conservative, because they apply zero deduction to the total of the potential growth rate and underlying inflation rate. In fact, given the current sluggishness of the natural interest rate globally, it would probably be appropriate to apply some sort of deduction to reflect the gap between the natural interest rate and the potential growth rate, even if not as large as the 1.3% deduction used in the US.

Assuming we use a 0.25% deduction in Japan rather than the 1.3% deduction in the US, and use a starting point for the 10yr yield of 0.12% (for which, we give explanation in another report), we get the following longer-run interest rates for Japan.

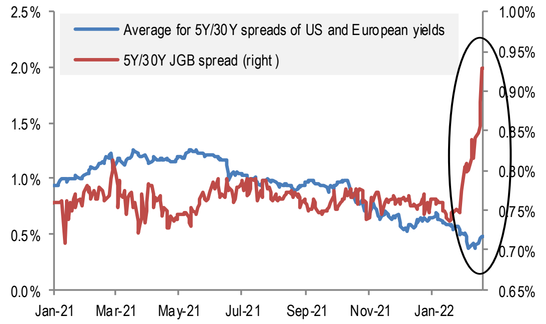
10yr: 0.12%
20yr: 0.51% (10yr forward 10yr of 0.9%)
30yr: 0.70% (10yr forward 10yr of 0.9%, 20yr forward 10yr of 1.1%)

It is true that numerous assumptions must be made for Japan, and that our estimate for the deduction needed to reflect the difference between the natural interest rate and potential growth rate was influenced by what it was in the US, but considering our estimate of Japan's rational midpoint at 1.15%, with a 20yr at 0.51% and 30yr at 0.70%, even using an unrealistic zero deduction to reflect the difference between the natural interest rate and the potential growth rate, we get a 20yr of 0.70% and a 30yr of 0.916%.

The current market levels of a 20yr at 0.735% and 30yr at 0.99%, more so than reflecting a rational midpoint, seem to represent a cycling back to the rational midpoint sparked by speculation of BOJ policy adjustments, but one that may have gone beyond a return from extremes to the rational midpoint and moved toward the opposite extreme within the cycle.

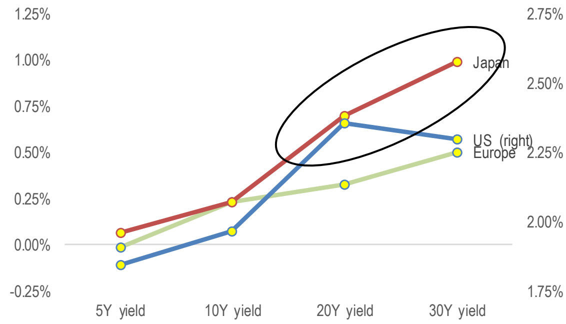
If that is true, although the extent to which the cycle has gone in the other direction merits a separate debate, at the very least the upward deviation from the rational midpoint based on the cycle average suggests that this may be a buying opportunity. Furthermore, if it is only JPY bonds that are reflecting an excessive risk premium (see the Chart below), around the time that investors begin to reconsider their asset allocations, albeit not anytime soon, we expect Japanese investors to return to JPY bonds and nonresident investors to increase their investments in JPY bonds, and we expect that to correct the risk premium. Although conditions vary across investors, we think this could start to happen as early as Mar-Apr, or sometime during 1H FY22.

5Y/30Y Spread: JGBs vs. Average for US and Europe



Source: Bloomberg; compiled by Daiwa Securities.

Sovereign Bond Yield Curves in Japan, US, Europe



Source: Bloomberg; compiled by Daiwa Securities.

IMPORTANT

This report is provided as a reference for making investment decisions and is not intended to be a solicitation for investment. Investment decisions should be made at your own discretion and risk. Content herein is based on information available at the time the report was prepared and may be amended or otherwise changed in the future without notice. We make no representations as to the accuracy or completeness. Daiwa Securities Co. Ltd. retains all rights related to the content of this report, which may not be redistributed or otherwise transmitted without prior consent.

Ratings
Issues are rated 1, 2, 3, 4, or 5 as follows:
1: Outperform TOPIX/benchmark index by more than 15% over the next 12 months.
2: Outperform TOPIX/benchmark index by 5-15% over the next 12 months.
3: Out/underperform TOPIX/benchmark index by less than 5% over the next 12 months.
4: Underperform TOPIX/benchmark index by 5-15% over the next 12 months.
5: Underperform TOPIX/benchmark index by more than 15% over the next 12 months.

Benchmark index: TOPIX for Japan, S&P 500 for US, STOXX Europe 600 for Europe, HSI for Hong Kong, STI for Singapore, KOSPI for Korea, TWII for Taiwan, and S&P/ASX 200 for Australia.

Target Prices
Daiwa Securities Co. Ltd. sets target prices based on its analysts' earnings estimates for subject companies. Risks to target prices include, but are not limited to, unexpected significant changes in subject companies' earnings trends and the macroeconomic environment.

Disclosures related to Daiwa Securities
Please refer to https://lzone.daiwa.co.jp/l-zone/disclaimer/e_disclaimer.pdf for information on conflicts of interest for Daiwa Securities, securities held by Daiwa Securities, companies for which Daiwa Securities or foreign affiliates of Daiwa Securities Group have acted as a lead underwriter, and other disclosures concerning individual companies. If you need more information on this matter, please contact the Research Production Department of Daiwa Securities.

Explanatory Document of Unregistered Credit Ratings
This report may use credit ratings assigned by rating agencies that are not registered with Japan's Financial Services Agency pursuant to Article 66, Paragraph 27 of the Financial Instruments and Exchange Act. Please review the relevant disclaimer regarding credit ratings issued by such agencies at:
https://lzone.daiwa.co.jp/l-zone/disclaimer/creditratings.pdf

Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law
(This Notification is only applicable to where report is distributed by Daiwa Securities Co. Ltd.)
If you decide to enter into a business arrangement with our company based on the information described in this report, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥2 million per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements**.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.
** The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.
Registered: Financial Instruments Business Operator, Chief of Kanto Local Finance Bureau (Kin-sho) No.108
Memberships: Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association