Daiwa's View

YCC observations series (4): Where should YCC's yield level be targeted?

- Point of reference for long-term yield target is "actual market conditions" or "nominal neutral interest rate," but both very uncertain

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Point of reference for long-term yield target is "actual market conditions" or "nominal neutral interest rate," but both very uncertain

The minutes of the June FOMC meeting (released 1 Jul) disclosed that participants discussed and considered "YCC" (called yield caps or targets [YCT] in minutes). Concretely, FOMC staff briefed the American YCC during and after World War II as well as YCC policies currently adopted by the Bank of Japan (BOJ) and the Reserve Bank of Australia (RBA). Then, participants discussed "the foreign and historical experience with YCT policies and the potential role for such policies in the US." As a result, "nearly all participants indicated that they had many questions regarding the costs and benefits of such an approach."

As such, the latest minutes clarified that the Fed will not adopt YCC at least at an early point in time. Meanwhile, participants favored the RBA-type YCC, in which the three-year yield is targeted, seeing "the Australian experience as most relevant for current circumstances in the US." At the same time, all participants agreed that "it would be useful for the staff to conduct further analysis of the design and implementation of YCT policies as well as of their likely economic and financial effects."

◆ Challenge of long-term yield targeted YCC—Setting of target yield level

The conclusion of the minutes is shown in the above paragraphs. Among the three experiences reviewed at the June meeting, potential risks[1] were derived from the experience of the American YCC in the 1940s. In addition, participants favored the RBA's experience, regarding it as "most relevant for current circumstances in the US," while pointing out the challenge of how to combine YCT policies with the types of out-come based forward guidance that many FOMC participants favored. On the other hand, participants touched on neither assessment nor risks of the BOJ's YCC policy in an explicit manner.[2]

Although the reason is not obvious, the FOMC might have been concerned about (paid consideration to) the risk that its direct comments on the BOJ's YCC would have an influence on the policy operations of the Japanese central bank. However, a number of participants commented on "additional challenges associated with YCT policies focused on the longer portion of the yield curve." We presume that this portion is the conclusion derived from the BOJ's YCC policy, in which the long-tern yield is targeted, alongside the American YCC in the 1940s.

[1] Risks of losing control of balance sheet as YCT requires purchases of sizable amounts of gov't debt, and those to independence of the central bank as monetary policy goals may conflict with public debt management goals.
[2] Only concrete explanation is "since 2016, the Bank of Japan has targeted the 10-year yield to continue to provide accommodation while limiting the potential for an excessive flattening of the yield curve."

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Specifically, some pointed out the challenge that "longer-term yields are importantly influenced by factors such as longer-run inflation expectations and the longer-run neutral real interest rate and that changes in these factors or difficulties in estimating them could result in the central bank inadvertently setting yield caps or targets at inappropriate levels." In short, this means that policymakers cannot determine the "rational" target level of longer-term yields.

◆ **Minutes of FOMC meeting on 9-10 Jun 2020** (1 Jul 2020)
・Some of these participants also noted that longer-term yields are importantly influenced by factors such as longer-run inflation expectations and the longer-run neutral real interest rate and that changes in these factors or difficulties in estimating them could result in the central bank inadvertently setting yield caps or targets at inappropriate levels.

In fact, in the case of the short-term to intermediate yields-targeted YCC policies (e.g., "policy signaling approach" and "incremental approach") which work on the market's policy rate expectations and complement forward guidance, their target yield levels are clear because they are set at the effective lower bond of "0% (0% to 0.25%)." On the other hand, in the case that the long-term yield (e.g., 10-year yield) is targeted at "0%," the consistency would be lost unless the Fed intends to show its commitment to maintain its 10-year policy rate at around 0%.

◆ Two types of point of reference for target level of long-term yields

In such a case, there are only two rational "points of reference" to set the target yield level in the long-term yield YCC (long-term approach)[3]. One is the "actual market conditions at the time" and the other is the "nominal neutral interest rate." In fact, "around 0%" in the BOJ's YCC introduced in September 2016 reflected the "actual market conditions" at that time[4].

◆ **New Framework for Strengthening Monetary Easing: "Quantitative and Qualitative Monetary Easing with Yield Curve Control"** (21 Sep 2016)
・With regard to the amount of JGBs to be purchased, the Bank will conduct purchases more or less in line with the current pace—an annual pace of increase in the amount outstanding of its JGB holdings at about 80 trillion yen—aiming to achieve the target level of a long-term interest rate specified by the guideline. JGBs with a wide range of maturities will continue to be eligible for purchase, while the guideline for average remaining maturity of the Bank's JGB purchases will be abolished.

However, this entails a big challenge in terms of policy communication. In short, as "actual market conditions" are of course "variable" in line with a change in economic activities/ prices/financial conditions, "fixing" the policy rate to that level cannot be explained rationally.[5] In fact, the BOJ has never provided a "rational" explanation regarding the target level of "around 0%."

That said, the BOJ stated that the transmission mechanism of "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control" is the same as that of QQE, which has been assumed since the introduction of QQE. In short, QQE with YCC is aimed at "lowering the real interest rates by raising people's inflation expectations through the BOJ's strong and clear commitment, while exerting downward pressure on the interest rates across the entire yield curve."

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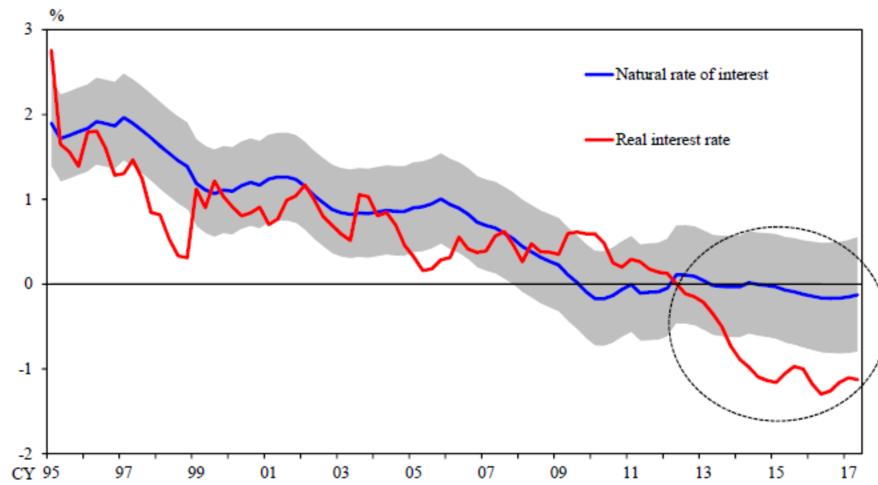
[3] This "point of reference" just means targeted yield guideline, not that this "point of reference" should be set as target.
[4] As shown by accurate explanation by FOMC staff in minutes of Jun meeting, we need to note that keynote of BOJ's YCC was not only to create monetary easing effects but also to limit potential for excessive flattening of yield curve (considering side effects) and maintain policy sustainability.
[5] Some BOJ board members recognized that "around 0%" target level was more flexible "variable target" that changed in line with economic/price conditions, as then board member Takehiro Sato pointed out it in his speech entitled "Recent Economic and Financial Developments and Monetary Policy in Japan" in Mar 2017—"unlike the pegging of long-term interest rates that was adopted in the US until the 1950s, the framework of QQE with Yield Curve Control is a flexible one under which, at each Monetary Policy Meeting (MPM), the target level for the intermeeting period is determined. Under this framework, regarding the control of the long-term interest rate, the Bank's Policy Board judges what the appropriate shape of the yield curve is while taking into consideration economic activity, prices, and financial conditions at the time and the momentum of changes in the situation. … Under the above-mentioned thinking, my view on the policy reaction function concerning the control of the long-term interest rate is as follows: if the Policy Board assesses that economic activity and prices are changing for the better and that market conditions are changing in response to or in anticipation of the improvement, it is appropriate to flexibly adjust the interest rate level in the guideline so that the guideline would reflect market movements," although it is difficult to think so in the current situation.

And more specifically, we can say that QQE with YCC is aimed at suppressing the real interest rate below the natural rate of interest, which was estimated at "around 0%" in the Comprehensive Assessment conducted in 2016 under the new Keynesian framework—"the basic mechanism of monetary easing is to lower the real interest rate below the natural rate of interest."

◆ **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)

・Japan's natural rate of interest has followed a downward trend reflecting the deceleration in the potential growth rate and other factors. While the natural rate of interest is not easy to estimate, a number of calculations suggest that it is around 0%. Under "QQE with a Negative Interest Rate," real interest rates are currently at levels well below the natural rate of interest, so that Japan's financial conditions can be judged to be highly accommodative.

Chart: Japan's Natural Rate of Interest and Real Interest Rate

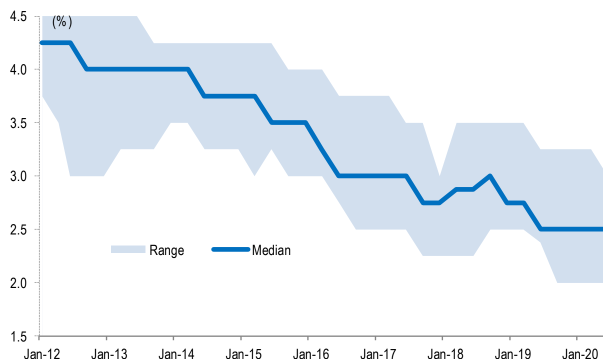


Source: Extracted from speech by then BOJ deputy governor Hiroshi Nakaso in 2017 entitled Evolving Monetary Policy: The Bank of Japan's Experience *at the Central Banking Seminar Hosted by the Federal Reserve Bank of New York.*

◆ **Uncertainty about nominal neutral interest rate**

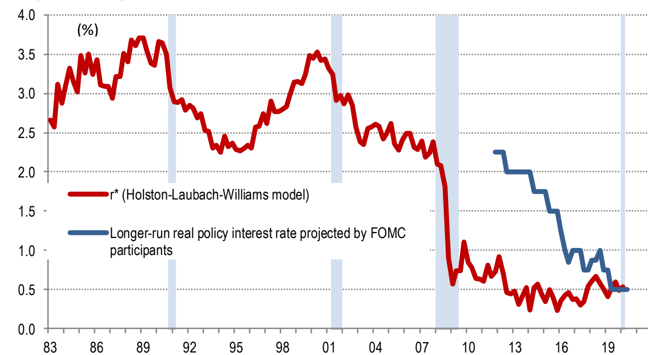
However, because the benchmark of the nominal interest rate, which incorporates the natural rate of interest (long-term neutral real interest rate) and long-term inflation expectations, changes in line with economic/price conditions, and fixation of long-term yields leads to a change in the degree of monetary easing. During the American YCC in the 1940s, the interest rate cap target of 2.5% faced challenges due to the change in expected "equilibrium interest rate" in the market, eventually forcing a substantial change in the Fed's balance sheet structure.

Chart: Nominal Neutral Interest Rate Projected by FOMC Participants



Source: Fed; compiled by Daiwa Securities.

Chart: US Natural Rate of Interest (r*) and Neutral Interest Rate Projected by FOMC Participants



Source: Fed, NY Fed; compiled by Daiwa Securities.
Note: Real policy interest rate = Nominal policy interest rate – 2%.

There is also the issue of the "difficulty in estimating" the neutral interest rate (incorporates natural rate of interest), according to FOMC participants. The FOMC has a consensus that a major hurdle for the introduction of YCC for long-term yields (long-term approach) is this uncertainty about the neutral interest rate.

◆ **Then Fed chair Janet Yellen** (2 Dec 2015)

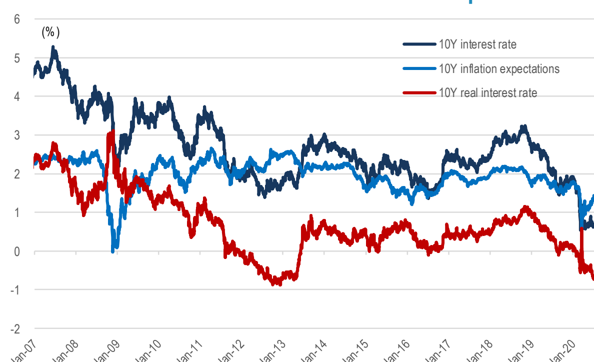
・Our estimates of the neutral federal funds rate represent inferences about a moving target. As a result, although the data provide important signals about the neutral rate, our estimates are necessarily imprecise. In Laubach and Williams (2003), for example, the standard error of the estimate of the neutral rate in one baseline model was about 2 percentage points on average. Moreover, one-sided estimates of the neutral rate—those available to policymakers, based only on data known at the time—are generally noisier than estimates of the neutral rate at some previous time that incorporate all the data available.

That said, the policy logic of creating the monetary easing effects by inducing long-term yields below the economically-neutral equilibrium interest rate (neutral interest rate) under the current monetary policy framework has the merit that it is easy to understand in terms of communications.

According to the minutes, however, FOMC participants recognize that the need is limited to introduce YCC for long-term yields under the current environment, despite this merit. In discussion regarding this YCC policy, a number of participants questioned "the extent of additional accommodation they would provide in the current environment of very low interest rates." In other words, this question has proved the Fed's recognition that the current long-term yields are very low and the effect of the introduction of the YCT policy in this interest rate environment is limited from the viewpoint of costs and benefits.

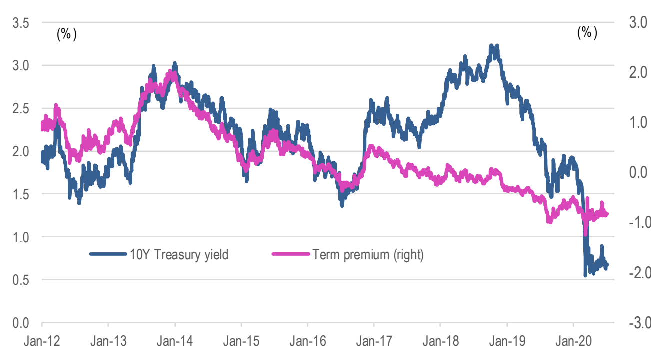
The same applies to discussion regarding YCC for short-term/intermediate yields to complement forward guidance. Given the historical decline in the current real interest rate, we can say that the cost/benefit balance is worsening. The Fed is likely to consider YCC more seriously in the case of an increase in market expectations for early rate hikes and an excessive rise in upward pressure via actual market rates. Until then, the Fed is expected to set aside YCC for later use, while discussing it as an additional easing option.

Chart: US 10Y Real Interest Rate and Inflation Expectations



Source: Bloomberg; compiled by Daiwa Securities.

Chart: US 10Y Yield and Term Premium



Source: NY Fed; compiled by Daiwa Securities.

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Daiwa Securities

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