

**Topics** Review and Outlook of Unconventional Monetary Policy

**Dates** January 11, 2017 (5:15pm - 6:00pm)

**Participants** **Ms. Miyako Suda**, Special Advisor, The Canon Institute for Global Studies  
**Mr. Ryuzo Miyao**, Professor, Graduate School of Economics, The University of Tokyo  
**Tetsuya Inoue**, General Manager, Nomura Research Institute (Moderator)

## Key Discussion Points

1. Impact of unconventional monetary policy
2. Characteristics of unconventional monetary policy and consistency with theory

### 1. Impact of unconventional monetary policy

#### Inoue (moderator):

• I have informed Ms. Suda and Mr. Miyao in advance of a number of issues we would like to discuss today. The first of these is the impact of unconventional monetary policy. The developed economies have implemented unconventional monetary policy in a variety of forms for a variety of objectives, including the restoration of financial market functions and the stabilization of financial markets and prices. As such, these policies should be assessed only after taking into account the specific financial and economic structures in each country as well as differences in the international financial environment. Given our time constraints today, I would like to focus on cases thought to be particularly important.

#### Ms. Suda:

• In the beginning, unconventional monetary policy was designed as a response to the global financial crisis. A variety of empirical analyses and my own experience of Policy Board member both suggest that the crisis countermeasures were the most effective of the various unconventional policies that were tried. Specifically, these included funding assistance for financial institutions, among all the supply of dollar funding to European financial institutions. At a time when the markets of financial assets like CPs were severely impaired, central banks supported market liquidity by serving as market makers of last resort (MMLR). In the end, after returning risk premia to ordinary levels, the central banks smoothly wound down their crisis measures.

• Having taken policy rates in Japan, the US, and Europe to zero, the central banks then adopted quantitative easing (QE) in an attempt to bolster the real economy and inflation. This policy was

### 3. Outlook for unconventional monetary policy

least effective in Japan, which began with the least room to lower rates, but the US and Europe eventually found themselves in the same situation following gradual but steady declines in rates across the curve. The side effects of QE also became more pronounced. In Japan in particular, QE has reduced liquidity in the JGB market and extinguished the signals traditionally sent by that market. Additionally, the low-interest-rate environment has stymied progress in fiscal consolidation and structural reforms, caused fiscal deficits to increase to the point of no return, and hindered productivity improvements at the macroeconomic level by keeping so-called zombie companies alive.

• I think the Fed's QE2 was too large given that it is not clear what the expected outcome was. As a result, other countries—including Japan—were forced to carry out large asset purchase programs of their own. The FRB bears much of the responsibility for starting this “competition” of sorts. In my own experience, the monetary base and the size of the central bank's balance sheet do not necessarily have a substantial impact on inflation expectations. However, once the markets started to focus on this factor, the central banks were probably forced to continue expanding these measures despite concerns about their lack of impact.

• Negative-interest-rate policy (NIRP) can be viewed as a response to the limitations inherent in quantitative expansion. The BOJ wanted to achieve a parallel shift of the curve with these policies, but in the event the curve flattened. Consequently, the BOJ left itself open to heavy criticism from financial institutions even though it adopted a three-tiered structure for the rates applied to excess reserves. Household sentiment also deteriorated to a greater extent than expected. I think we need to view the yield curve control policy that followed the “comprehensive assessment” within this context.

•The key issue for yield curve control lies in adjusting the target for the 10y JGB yield. The BOJ says it is estimating the “most appropriate” yield curve at each Monetary Policy Meeting and deciding policy based on that estimate. If so, it needs to take a flexible approach to setting this target. Moreover, inasmuch as this policy will be sustained until the BOJ winds down monetary accommodation, the target needs to be set with an eventual exit in mind. To the extent that the market and the BOJ appear to diverge in their views of what constitutes the “most appropriate” yield curve, we need a more robust dialogue and sharing of findings.

**Mr. Miyao:**

•To begin with, please allow me—as one of the original members of the Financial Markets Panel—to say that it makes me happy to mark the 40th meeting of this group. Moving to the topic at hand, the BOJ has been engaged in unconventional monetary policy for longer than any other central bank. Although the zero-interest-rate policy was launched in 1999, the BOJ had taken the policy rate down to as low as 0.5% in 1995, which means virtually zero-interest rates have been in place for more than 20 years. Of the various attributes of unconventional monetary policy, I think the most innovative was the policy duration effect, i.e., the telegraphing of future policy actions (“forward guidance”). Specifically, this signifies a continued, open-ended commitment to monetary accommodation via zero interest rates and asset purchases, accompanied with some conditions on the policy goals.

•I would like to discuss the impact of the growth in the monetary base from 2001, when quantitative easing was first implemented, to the present, in light of the findings of empirical analysis. Here I would like to present the findings of my analysis using a kind of stylized technique (a structural vector autoregressive model) analyzing the impact of exogenous increases in Japan’s monetary base not just on financial market variables such as exchange rates, stock prices, and long-term interest rates but also on GDP and the inflation rate. The findings are based on two observation periods: a subperiod prior to quantitative and qualitative easing (QQE), and the full observation period including the QQE regime.

•A comparison of the findings for the two observation periods shows that the estimated impact on real GDP of an exogenous 1% change in the monetary base is greater when we use data from the entire period and not just the pre-QQE era. The reason is indicated by the financial markets’ reaction to monetary base shocks. Estimates derived from the full data set show monetary base growth lowering long-term interest rates more, pushing stock prices higher, and causing the nominal exchange rate to fall farther and in a more sustained way. Under QQE, therefore, the

transmission mechanisms of monetary base growth have manifested themselves more clearly, just as predicted by theory—in other words, in the form of portfolio rebalancing in the markets of financial assets. When the BOJ introduced QQE, the prevailing view was that effects on asset prices would only be temporary and that the BOJ would eventually be forced to carry out additional accommodation, but in fact the additional stimulus by the BOJ was conducted as late as October 2014. It is one of the evidence that QQE had actually a sustained effect.

**2. Characteristics of unconventional monetary policy and consistency with theory**

**Inoue (moderator):**

•Two common characteristics of unconventional monetary policies are that they tend to be sustained over extended periods of time and utilize the central bank’s balance sheet. While these two properties help strengthen the central bank’s commitment, they also mean that it takes a great deal of time to wind down these policies. The second issue I would like to discuss today is the question of how we should view the costs and risks of unconventional monetary policy in light of this point. A related issue is whether the actual costs and benefits of unconventional monetary policy have matched what was predicted by economic theory.

**Ms. Suda:**

•The time needed for a central bank to make adjustments to an unconventional monetary policy results in significant negatives. In particular, impairing the interest rate mechanism at a time of extremely low interest rates essentially eliminates the benchmarks for economic agents’ behavior. That increases the risk of an inefficient allocation of resources and of asset price bubbles, something I am deeply concerned about. Today’s panel discussion covered the question of how to wind down quantitative and qualitative easing with minimal market impact, but given the size of the BOJ’s balance sheet relative to GDP, the likely impact of even small changes is extremely uncertain.

•Unconventional monetary policy also raises a number of issues with regard to the policymaking framework. For instance, individual Policy Board members should be able to make their own assessments if we are talking about an increase or decrease in the policy rate or a simple increase or decrease of the BOJ’s bond purchases. But once unconventional monetary policy becomes this complex, with Board members having to decide which of a wide range of assets to buy and in what quantity, much depends on the information and expertise of the BOJ executive regarding the attendant risks and market neutrality. It also becomes more difficult to leverage the strengths of the open-discussion model, in

which individual Board members bring together a variety of opinions regarding policy direction and discuss the issue until a conclusion is reached. Finally, Board members have a five-year term of office, and it remains to be seen whether those who see a reduced likelihood of an exit during their term would give full consideration to an eventual exit when conducting monetary policy.

•I think it is important to take baby steps on the path to winding down unconventional monetary policy. However, the BOJ is likely to postpone the timing of an exit from QQE because concerns about the impact on the financial system would require it to take into account both fiscal stability and the need to maintain a healthy balance sheet. That raises the possibility of a scenario in which the BOJ is ultimately forced to buy huge quantities of JGBs in order to absorb the upward pressure on interest rates, eventually leading to the worst-case outcome of induced inflation.

**Mr. Miyao:**

•I think—and empirical analysis demonstrates as discussed above—that QQE had the intended effects. When I was involved in making policy decisions, I always weighed the potential costs against the expected benefits. Four main costs of QQE have been cited: 1) a long-term surge in inflation, 2) the creation of asset price bubbles, 3) a sharp increase in long-term interest rates triggered by the monetization of government deficits, and 4) future fiscal costs. However, the magnitude of these impacts will depend to a large extent on conditions in the real economy when the policy is wound down.

•The risk of the first potential cost, a surge in inflation, can be contained to some extent as long as the attention by economic agents continues to be focused on the risk of falling back into deflation (in the euroarea as well as in Japan). As for the second cost, the possibility of asset price bubbles, it is difficult to envision expectations becoming excessively bullish in an economy many believe has entered a period of “secular stagnation”. Regarding the third factor, a surge in long-term interest rates due to deficit monetization, I think other countries will continue to trust Japan as long as Japan remains the world’s largest creditor nation and continues to run current account surpluses. The fourth, fiscal costs, will depend in great part on the actual pace of rate hikes. In the US, for example, the 10y US Treasury yield is currently trading at just 2.5% in spite of the fact that inflation is already approaching 2% and the new administration’s expansive fiscal policies are expected to boost aggregate demand. In any event, the global economy’s recovery since the financial crisis has unfolded much more gradually than is typical, indicating that its overall growth potential has also diminished.

### 3. Outlook for unconventional monetary policy

**Inoue (moderator):**

•The third issue I would like to discuss today is the outlook for unconventional monetary policy. Barring some dramatic shift under the new presidential administration, few in the US appear to expect the structural downtrend in the potential growth rate to reverse. Accordingly, we cannot rule out the possibility of some future shock again increasing the economy’s reliance on unconventional monetary policy. What kinds of risks and costs should the central bank focus on in the event that unconventional monetary policy becomes an established feature of the monetary environment over the long run?

**Ms. Suda:**

•The productivity of Japan’s economy could have been enhanced if QQE had been implemented together with other policies in the three “arrows” of Abenomics. In reality, however, monetary policy played the overwhelmingly dominant role. A key reason for this was that the architects of the Abe administration’s economic policy believed that if they could just bring deflation to an end, businesses and households would begin acting in a forward-looking way and economic growth would pick up, making it easy to clean up the public finances. Hence they asked the BOJ to focus its efforts on ending deflation.

•In 2015 the government began saying that while Japan had not put deflation behind it, it was no longer *in* deflation. However, that did not lead people to become more forward-looking in their behavior, and while wages did not rise prices *did*, depressing the desire to consume. This led to talk of the limitations of monetary policy, with some pundits changing their minds and declaring that it would be difficult to achieve price stability with monetary policy alone and overseas economists discussing the “three arrows” policy mix of monetary policy, fiscal policy, and structural reform. Many in Japan have high expectations for the government’s growth strategy, but I think the government should avoid excessive intervention: once business executives have a shared sense of crisis, private-sector companies will not need any encouragement from the authorities to expand economic activity. I am more concerned about the risk of an extended period of fiscal deficits.

•A recent speech by BOJ Governor Haruhiko Kuroda contained a passage stating that the BOJ was effectively supporting government spending by keeping interest rates at extremely low levels. As noted above, however, the government is not taking advantage of this opportunity to reduce its deficits—if anything, I think the BOJ’s powerful monetary accommodation is serving to undermine fiscal discipline. Unconventional monetary policy has not only taken on some of the aspects of fiscal policy but is deeply

tied to fiscal policy in the sense that it has serious implications for the health of the central bank's own balance sheet. The current Bank of Japan Act requires the central bank to maintain a healthy balance sheet in exchange for the independence to conduct monetary policy as it sees fit. The fact that the market is paying more attention to the health of the central bank's finances is probably because it sees a reduced probability of a smooth exit from QQE. It may also have come around to the view that we are no longer in a situation where fiscal deficits could be rendered meaningless by combining the BOJ's accounts with those of the government.

• The question of how the Japanese government proceeds with efforts to clean up its finances then becomes very important. Confidence in the government's fiscal consolidation plans would enable households to accurately forecast the income transfers they will receive in the form of social security and thereby make necessary expenditures for the future. Meanwhile, there are strong incentives for the BOJ to delay a rate hike even if achieves the 2% inflation target inasmuch as it faces the various problems described above. I personally hope the BOJ does not fall into this situation, and I would like to see it use the interest rate mechanism somewhat more flexibly in the conduct of policy.

**Mr. Miyao:**

• Yield curve control is the main pillar of the BOJ's monetary policy, and it is understood that the focus of policy shifted from quantity to interest rates following the "comprehensive assessment." However, another key component of policy is the overshoot commitment, under which the BOJ has pledged to maintain the current pace of growth in the monetary base. In other words, the BOJ will continue to use both interest rates and quantity as policy tools.

• The basic mechanism envisioned under unconventional monetary policy is that the policy rate will be kept low for as long as possible in order to "borrow forward" the effect of monetary accommodation, in case people anticipate a future economic recovery. Recently, more attention has focused on the upside risks to the US economy. Against an outlook for an expanding US economy and upward pressure on US long-term interest rates, simply maintaining the BOJ's current accommodative policy is expected to have a greater impact than it has until now. Meanwhile, forward guidance to increase quantity can be expected to provide a signaling effect. It functions as a commitment device, i.e., a commitment to low interest rates suffers from the problem of dynamic (time) inconsistency, but it can be reinforced by a promise to increase quantity into the future.

**Ms. Suda:**

• I find it difficult to be that optimistic on either BOJ policy or the Japanese economy itself. Under current conditions, taking the inflation-adjusted policy rate below the natural rate of interest will not by itself allow monetary accommodation to work. There are cases in which falling interest rates may actually depress consumption expenditures by exacerbating concerns about future income. Moreover, the level of real interest rates is not the main constraint to capital investment for most business owners or executives. The bigger problem is depressed growth expectations and a loss of confidence in their ability to compete.

• As such, although the BOJ presented the findings of its econometric models on the impact of QQE in the "comprehensive assessment," I suspect the reality is a world in which sentiment influences people's behavior against a backdrop of various uncertainties. While QQE may have lifted inflation expectations to some extent, I think the improvements were probably due more to the yen's decline. Goods experiencing rising prices were those for which import dependence is high or rising, such as food and electrical equipment.

**Mr. Miyao:**

• Both market participants and academic economists have devoted a great deal of attention to the mechanisms by which unconventional monetary policy might be effective. For instance, the mechanism of a commitment to zero interest rates can be derived via a standard framework like Krugman's liquidity trap model. Additionally, even if long-term interest rates fall to near zero, it is theoretically possible for the central bank to prompt portfolio rebalancing in the markets of financial assets by purchasing government bonds, as long as base money and government bonds are not perfect substitutes. And in fact market demand for government bonds persists (for a number of reasons) even though long-term interest rates have turned negative. I think it can be argued that the impact of QQE is due at least in part to theoretical mechanisms and not just to "spirits" or sentiment.

**Inoue (moderator):**

• While we have heard much today about the negative side of unconventional monetary policy in terms of the potential for conflict with fiscal policy and other aspects of economic policy, I think we should also consider the positive aspects in terms of mutual dependence or complementarity with other policies. I hope to explore this topic further at future meetings of the Financial Markets Panel.

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