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Bank of Japan

Toward a Robust Financial Market and the Role of the Bank of Japan

Keynote Address at the International Swaps and Derivatives Association (ISDA) 31st Annual General Meeting

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I. Introduction

It is a great honor to have the opportunity today to deliver a keynote address at the 31st Annual General Meeting of the International Swaps and Derivatives Association (ISDA).

Since its establishment in 1985, ISDA has taken various initiatives to foster safer and more efficient derivatives markets as the sole international inter-industry association for derivatives transactions. I would like to express my respect for the work it has done over the years. I would also like to express my gratitude to the members of ISDA Japan for providing us with valuable suggestions through discussions with staff members of the Bank of Japan.

Today, under the title "Toward a Robust Financial Market and the Role of the Bank of Japan," I would like to begin by outlining the relationship between central banks and derivatives markets.

Central banks first discussed macroeconomic and monetary policy issues in the context of growing derivatives markets in a report published by the BIS (Bank for International Settlements) in 1994.[1] That report concluded that "derivatives are likely to improve the efficiency of financial markets," and "under normal conditions, therefore, derivatives markets seem likely to have a stabilizing influence on underlying markets." It also found that "derivatives may provide central banks with additional information to guide their monetary policies."

Based on this understanding, people involved in derivatives markets have made efforts to increase the transparency of the transactions for the sound development of the markets. In 1998, the BIS began publishing regular derivatives market statistics based on a proposal by a working group chaired by then Advisor Yoshikuni of the Bank of Japan's International Department.[2] Through lessons learned from the global financial crisis following the bankruptcy of Lehman Brothers, the trend toward greater transparency has led to OTC (over-the-counter) derivatives market reforms, including mandatory trade reporting and central clearing. As you are aware, ISDA has made tremendous and positive contributions

[1] Bank for International Settlements (1994), "Macroeconomic and Monetary Policy Issues Raised by the Growth of Derivatives Markets," CGFS Publications No 4. The report is available at http://www.bis.org/publ/ecsc04.pdf.

[2] Bank for International Settlements (1996), "Proposals for improving global derivatives market statistics," CGFS Publications No 6.The report is available at http://www.bis.org/publ/ecsc06.pdf.

toward formulating various measures regarding this issue.

Currently, not only derivatives markets, but financial markets around the world are facing changes such as the implementation of various financial regulations and unconventional monetary policies. In order to adapt to those changes and to achieve sound market development which is the purpose of financial regulations and which facilitates monetary policy implementation, relevant parties involved in derivatives markets including the public sector are further required to cooperate closely and work toward robust financial markets.

II. Robustness of Financial Markets

There is no single definition of what it means for a financial market to be "robust." Here, I would like to define that as a situation where a financial market is fully functioning in a sustainable manner. In other words, a robust market has abundant liquidity and is resilient to various stresses.

The following three elements are required to increase the robustness of financial markets. First, there must be ingenuity and innovation to reduce uncertainties, second, there must be market conventions that maintain market order and ensure the safety and efficiency of transactions, and third, there must be crisis preparedness to minimize market turmoil even at times of crisis associated with physical stress. Let me elaborate on these elements.

The first point is the reduction of uncertainties. Financial markets can never be free from uncertainties. Of course, most of them are derived from risks which are intrinsically linked to profit opportunities, and those should be managed by the market participants themselves. However, there would be fewer market uncertainties and robustness would improve if financial markets as a whole reduce risks that market participants would never want to assume and improve the efficiency of risk management. One example is the ISDA Master Agreement, which effectively reduced the legal risk of derivatives. Another example is the development of a standard initial margin model, or the ISDA SIMM for OTC derivatives, which contributes significantly to greater standardization and improved efficiency of risk management.

The second point is improvement in market conventions. Market conventions are a set of rules that form the consensus of market participants as to the concepts and rules of market transactions. Appropriate market conventions are essential to maintain an orderly market and to ensure the safety and efficiency of market transactions. The development of market conventions is a considerable challenge that requires in-depth knowledge of market practices and market structures. Nevertheless, the establishment of market conventions is critical at the dawn of a new market. It is also necessary to revise market conventions to adapt to subsequent changes in market conditions. A good example is the way the ISDA definitional booklet has been revised on several occasions to support the steady development of derivatives markets.

The third point is crisis preparedness. Financial markets need to also be resilient against crises stemming from outside of the financial system. As unlikely as they may be, there have been disastrous events that have had a significant impact such as the attacks of September 11, 2001, the Great East Japan Earthquake in 2011, and Hurricane Sandy in 2012. From the current 2002 version, the ISDA Master Agreement has included termination rights and termination procedures in the case of a force majeure event such as a disaster or an act of terrorism to prevent chaos in the market. Furthermore, with further globalization of market transactions, initiatives to enhance the resilience of market functioning in light of regional characteristics such as frequent natural disasters are also important, particularly in major markets.

I would now like to describe how market participants in Japan are making efforts with respect to these three elements -- reducing uncertainties, improving market conventions, and crisis preparedness -- by looking at specific initiatives and how the Bank of Japan is engaged in those initiatives.

III. Initiatives Taken in Japan

Reducing Uncertainty — Identification of the Risk-Free Rate

First, I would like to talk about efforts to identify the risk-free rate, which is proceeding as part of the reform of interest rate benchmarks.

Concerns were raised about the reliability of interest rate benchmarks following the attempted LIBOR (London Interbank Offered Rate) manipulation scandal, and the reform of interest rate benchmarks has been discussed at international forums such as the BIS and IOSCO (International Organization of Securities Commission) since the middle of 2012. As a result of those discussions, a report on possible reforms for desirable interest rate benchmarks was published by a working group, which was chaired by current Deputy Governor and then Assistant Governor Nakaso of the Bank of Japan, in March 2013.[3] Following that, in July 2014, the FSB (Financial Stability Board) published a report on reforms of major interest rate benchmarks.[4] The Market Participants Group, whose Vice-Chair was from ISDA, made significant contributions in the preparation of that report.

All of the aforementioned reports point out the importance of not only improving existing benchmarks such as the LIBOR but also expanding the choices of interest rate benchmarks in order to improve the reliability of those benchmarks. Currently, market participants in major countries and regions are working on reforms of so-called IBORs (Interbank Offered Rates), such as the LIBOR, the EURIBOR (Euro Interbank Offered Rate) and the TIBOR (Tokyo Interbank Offered Rate), and they are also considering the introduction of risk free rates.

The aim of improving the IBORs is to increase the credibility of those rates as benchmarks by introducing a more transparent calculation process based on actual transaction data as much as possible. On the other hand, initiatives to identify risk-free rates are expected to contribute to reducing uncertainty in financial markets in a different way from improving the IBORs.

Let me elaborate on this point. Unlike IBORs, which reflect bank funding costs, as the name suggests, risk-free rates include virtually no credit risk of trading participants. Those two types of benchmarks might therefore diverge depending on the credit risk conditions of reporting financial institutions. Market participants would benefit from having different types of benchmarks because they can enjoy flexibility in choosing benchmarks according to the characteristics of the transactions they conduct. For example, while it would be reasonable to use an IBOR as a benchmark for a cash flow hedge linked to that IBOR, it would be reasonable to use a risk-free rate for interest rate hedging, which is not directly

[3] Bank for International Settlements (2013), "Towards better reference rate practices: a central bank perspective." The report is available at https://www.bis.org/publ/othp19.pdf.
[4] Financial Stability Board (2014), "Reforming Major Interest Rate Benchmarks." The report is available at http://www.fsb.org/wp-content/uploads/r_140722.pdf.

related to the credit risk of a financial institution. Initiatives to identify alternative risk-free rates are expected to contribute to the robustness of financial markets in that they provide market participants with alternatives to reduce risk stemming from divergence of interest rates, or so-called basis risk, which arises when market participants use a benchmark not corresponding to the trading purposes.

In Japan, the Study Group on Risk-Free Reference Rates was established by market participants in April 2015 and has discussed the identification and use of a Japanese yen risk-free rate. The Study Group published a consultation paper on March 31 this year and that is based on the deliberations up to this point with significant contributions from ISDA Japan, which is a key member of the Study Group.[5] In that consultation paper, the uncollateralized overnight call rate was set as the primary candidate for the risk-free rate. With a view to encouraging the use of the risk-free rate, the paper includes an estimate of the scope of risk-free rate use in Japanese yen interest rate swap transactions which currently refer to the IBORs as a benchmark. It also contains proposals to promote OIS (Overnight Index Swap) transactions which refer to the uncollateralized overnight call rate as a benchmark.

The use of a risk-free rate contributes to a rational objective: to reduce the basis risk. However, for the risk-free rate to actually be used in addition to the LIBOR, which has been used for a long time, it is important for a wide range of market participants to share their objectives and to promote that change. The Bank of Japan serves as the secretariat of the Study Group and supports various studies conducted by the Group, and it will continue to be actively involved in those initiatives taken by market participants.

Development of Market Conventions - Shortening of the JGB Settlement Cycle and Development of the Repo Market

Next, I would like to discuss shortening the JGB settlement cycle and developing the repo market.

In Japan, market participants are working toward shortening the period from trading to settlement for outright JGB transactions from two days (T+2) to one day (T+1) with an aim of implementing that in the first half of fiscal 2018. That is part of the global initiative to

[5] The report is available at http://www.boj.or.jp/en/paym/market/sg/rfr1603c.pdf.

reduce settlement risk arising from unsettled positions based on lessons from the Lehman crisis which caused settlement failures and an associated surge in delivery failures in the JGB market.

To realize T+1 for outright JGB transactions, it is essential to introduce a T+0 settlement cycle for general collateral (or GC) repos. GC repos are used to adjust excesses and shortages of cash or securities resulting from transactions such as outright JGB transactions. In the case of Japan, that means the establishment of a new money market that offers same-day liquidity.

Those initiatives cannot be accomplished simply by improving the IT systems of market infrastructures and market participants -- they must be accompanied by significant revisions of market conventions including transaction agreements, matching and clearing processes, and accounting practices. If market conventions are not properly revised, that would instead cause confusion and financial markets might become less robust. The market participants therefore established a working group at the Japan Securities Dealers Association as early as 2009. Since that time, the members of that working group have had in-depth discussions across different business models.

I have described initiatives taken in Japan, but there have also been discussions globally on increasing the robustness of the repo market. According to a report released by the FSB in November 2015, the introduction of numerical haircut floors and data collection is expected to be implemented in 2018, the same year as the shortening of the JGB settlement cycle.[6] The Japanese repo market is now at a turning point that deserves to be called a "reform," and the people involved including those in the public sector must proceed with their initiatives in an even more systematic and intensive manner.

Up to this point, the Bank of Japan has supported the initiatives of market participants by hosting two forums to which it invited major players in the repo market, financial market

6 Financial Stability Board (2015), "Transforming Shadow Banking into Resilient Market-based Finance, Standards and processes for global securities financing data collection and aggregation." The report is available at http://www.fsb.org/wp-content/uploads/FSB-Standards-for-Global-Securities-Financing-Data-Collection.pdf.

infrastructures, industry associations, and the Japan Financial Services Agency. That enabled a wide range of participants to discuss the shortening of the JGB settlement cycle and repo market reforms. In light of the discussions at those meetings, the Bank has also started to prepare to contribute by collecting repo market data in line with recommendations by the FSB.

Crisis Preparedness - Strengthening of the Market Level Business Continuity Plan

Finally, I would like to discuss strengthening the market level business continuity plan (BCP).

It is said that around 20 percent of large earthquakes (magnitude 6.0 or greater) in the world occur in Japan,[7] and therefore individual market participants in Japan have been developing contingency plans to prepare for disasters for a long time. However, contingency plans by individual market participants are not enough to prevent the suspension of market functioning in the event of a disaster, and to resume operation of the market promptly and smoothly in the case of its suspension. It is necessary to maintain a network among market participants so that they can ascertain the status of counterparties and market infrastructures in the aftermath of an event, and to consult with each other on temporary modifications of market conventions when necessary.

For this purpose, a secretariat for a market level BCP was established in 2006 for the money market and in 2008 for the foreign exchange market and the securities market. Since then, a framework for a market-wide BCP has been put in place in each market to enable market participants, market infrastructures, and the public sector to continue to communicate with each other through BCP-dedicated websites at times of crisis. Since 2010, those three markets have regularly conducted joint exercises. The practicality of those exercises has been enhanced in several ways. For example, the participants are not fully informed of disaster scenarios and they conduct transactions from their backup sites in practice.

The Great East Japan Earthquake occurred at 14:46 on March 11, 2011 and a very strong tremor was observed in Tokyo as well. However, surprisingly, market participants started to

[7] The number of earthquakes of magnitude of 6.0 or greater that occurred worldwide between 2003 and 2013 was 1,758 and nearly 18.5 percent of those (326 times) occurred in Japan. (Please refer to Appendix 1 of the "White Paper: Disaster Management in Japan 2015" by the Cabinet Office, Japan.)

exchange information through the BCP-dedicated websites only 15 minutes after the event. Although no changes were made to market conventions, as most market transactions had already been settled by that time, that example showed us that the arrangements developed up to that point functioned properly.

In 2003, the Bank of Japan held a forum for leaders from the money market, the foreign exchange market and the securities market to discuss the BCP across the markets and since then, the Bank has been involved in discussions on a market level BCP with market participants. The Bank continues to contribute to improving the effectiveness of the market level BCP in various ways. Not only does the Bank constantly review its own BCP, but it also directly participates in joint exercises as the provider of the BOJ-NET and it supports exercises by, for example, conducting funds-supplying operations for the purpose of exercises, simultaneously with joint exercises.

IV. Conclusion

The three initiatives I have presented today vary in terms of their time horizons and the approaches to global cooperation. However, they share the same goal, which is to enhance the robustness of financial markets. In this regard, I would like to conclude my speech by mentioning three points.

The first is the importance of the active involvement of the private sector. In order to enhance the robustness of financial markets, it is necessary that the public and private sectors share the same objective of developing sound financial markets and work together toward that objective. For example, there are cases where market participants cooperate with the public sector in the process of developing and implementing regulations or recommendations. There are also cases where the public sector supports initiatives taken by the private sector. In either case, I would like to stress that to establish effective measures, it is vital to have active participation by the private sector given its expert knowledge of market practice and innovation.

The second point is the role of central banks. Financial markets play a central role in the implementation of monetary policies by central banks and also carry crucial information regarding the views of market participants on economic and financial conditions. Therefore, central banks also have a strong incentive to enhance the robustness of financial markets. Furthermore, the neutral and impartial nature of central banks can be expected to have a positive effect on cooperation among market participants to enhance the robustness of financial markets. From that perspective, the Bank of Japan will continue to contribute to the efforts of market participants. As for derivatives markets, we expect cooperation with ISDA will become increasingly important.

The third point is that enhancing the robustness of financial markets requires continuous efforts to adapt to changes in external environments. For example, on January 29 this year, the Bank decided to introduce "Quantitative and Qualitative Monetary Easing (QQE) with a Negative Interest Rate." We need to closely monitor the impact of that negative interest rate policy on the Japanese financial market because this is the first time such a policy has been implemented in Japan. In that regard, it is important to consider whether there are any measures that should be taken by the market as a whole so that the market is able to adapt to changes and function properly. The Bank would like to actively support discussions among market participants to contribute to the enhancement of the robustness of financial markets.

Thank you for your attention.