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# Perspectives of "Unconventional Monetary Policy" Message from Financial Markets Panel

## **Purpose of Discussion**

Two years have passed since the financial crisis erupted. Many financial markets have been affected, and the global economy has been hit by job losses and a sharp contraction in international trade. Central banks have engaged in unprecedented policy responses, supplying huge amounts of liquidity and purchasing corporate obligations. This approach to monetary policy has been labeled as "unconventional" because, unlike standard policy, it is not based on the use of interest rates. Another unusual aspect is the scale and concurrent application of such policies by the world's central banks in response to the global crisis.

Although central banks have strived to clarify the intent of their policies through official statements, speeches, and published reference materials, the fact remains that they have implemented a number of individual policies in response to rapidly unfolding developments in the financial crisis and the attendant recession. A broad understanding of unconventional monetary policy therefore requires a systematic examination based on a global perspective. In addition, we sometimes find inappropriate discussion on effects and risks of unconventional policies, due to implicit application of the evaluations which are only viable under well-functioning financial system. We think Japan has a unique contribution to lead the proper discussion, because it can offer unbiased and critical assessments based on analysis of the policies under mal-functioning financial system during its earlier crisis.

The Financial Markets Panel has met three times to discuss unconventional monetary policy in the current crisis, and its findings are summarized here. A better understanding of the impact and risks of unconventional monetary policy is essential when deciding whether to continue or terminate individual policies. It can also provide important clues about how to prevent the next financial crisis or mitigate its impact.

# The Financial Markets Panel and its "Message"

The Financial Markets Panel was established in March 2009 under the aegis of the Nomura Research Institute. At its regularly scheduled meetings the Panel seeks to develop a better understanding of financial market trends and to consider market-related policy options. By publishing its discussions, the Panel hopes to encourage debate among both researchers and practitioners and to influence policymakers in Japan and elsewhere (please see the details on page 14). Proceedings from the Panel's meetings have been released in both Japanese and English on the website of the Nomura Research Institute

(http://www.nri.co.jp) and views have been exchanged based on the results of discussions with domestic and overseas experts. We hope to further communicate the findings of these talks through conferences and publications.

The Panel respects the various opinions of individual members and does not seek to forge a single consensus. In that sense, this document represents the greatest common divisor of members' views and contains a number of differences of opinion.

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#### **Summary**

## Defining unconventional monetary policy

1. Normally, monetary policy uses the tool of short-term transactions with financial institutions to achieve the goal of adjusting short-term interest rates. Policies employing exceptional tools or goals when short-term interest rates have lost their ability to affect the economy are broadly referred to as unconventional monetary policy.

2. There are various types of unconventional monetary policy. But three main variations have been used in the current crisis and in Japan's earlier crisis: <u>quantitative easing</u>, <u>time</u> <u>commitment</u>, and <u>credit easing</u>.

# Three types of unconventional monetary policy

3. <u>Quantitative easing</u> refers to the supply of large amounts of liquidity to the financial markets. Japan's experience during the previous crisis suggests its limitation to produce marked improvements in the economy or prices under mal-functioning financial system. However, the economic environment is different today, and attention is focused on the impact that the massive supply of liquidity by the world's central banks will have on prices in global economies.

4. <u>Time commitment</u> is a promise to maintain policy for a certain period of time. In Japan, the BOJ's <u>time commitment</u> succeeded in stabilizing medium-term interest rates but also produced some side effects due to excessive expectations. When terminating unconventional monetary policy, central banks are expected to adopt <u>time commitment</u> with trying to curb the side effects.

5. <u>Credit easing</u> refers to attempts to alleviate stress in the financial markets. In the current crisis, large-scale <u>credit easing</u> has contributed to a recovery in financial transactions. <u>Credit easing</u> helps to correct the undershooting of asset prices, but in the markets there is also a misperception that it raises asset prices.

# Risk management and the central bank's role in unconventional monetary policy

6. <u>Credit easing</u> is the role of the central bank because it enhances the impact of monetary policy. However, the rescue of individual financial institutions and operating companies via the purchase of financial assets under <u>credit easing</u> is not a role for the central bank and should be left to the government.

#### Risk management and the central bank's role in unconventional monetary policy

7. Purchases of corporate bonds, commercial paper, and other credit assets under programs of <u>credit easing</u> prevent governance of financial markets over individual financial institutions and operating companies. As such, they should be kept to a minimum and carried out under an appropriate risk management framework.

8. The purchase of government bonds can both enhance the impact of <u>quantitative easing</u> and mitigate concerns about supply and demand (<u>credit easing</u>). However, thorough consideration should be given before the crisis. Possible side effects include central bank losses and an aggravation of concerns about fiscal discipline.

#### Future administration of unconventional monetary policy

9. If a recovery in financial functions reduces the need for <u>credit easing</u> while risks to the economy require the continued application of monetary accommodation, the termination of unconventional monetary policy will be a two-stage process. The approach taken in specific instances should be left to the central bank based on its dialogue with the markets.

10. Central bank efforts to provide fuller explanations of monetary policy during the current crisis have contributed to better understanding in the markets and enhanced policy effectiveness. When terminating unconventional monetary policy, central banks need to share information about their strategies—including attached conditions and expected duration—with market participants.

# 1."Unconventional Monetary Policy": Methods and Impact

# <Defining "Unconventional Monetary Policy">

- (1) Monetary policy is generally conducted with the *goal* of adjusting short-term interest rates using the *method* of buying and selling short-term financial assets or providing short-term credit to financial institutions. The *objective* of these adjustments is to satisfy the central bank's mandate to facilitate economic activity by maintaining price stability. The advanced economies have broadly adopted this type of framework since the end of the inflationary period of the 1970s and the subsequent policy emphasis on the money supply. It is often referred to as *conventional* monetary policy.
- (2) However, there can be phases in which the effectiveness of short-term interest rates as a policy instrument is impaired due to (i) the so-called zero boundary during severe recessions and (ii) dysfunction of the financial system during a financial crisis. The use of unusual methods or goals to reach policy objectives at such times is broadly referred to as unconventional monetary policy. Central banks have attempted a variety of initiatives over the past two decades under the legal frameworks available to them.
- (3) Inasmuch as unconventional monetary policy is the product of central bankers' creative efforts, many variations should be possible, at least in theory. But in the policy response to Japan's previous financial crisis and the current global crisis, unconventional monetary policy has consisted mostly of *quantitative easing*, *time commitment*, and *credit easing*.

(Table 1: Classification and examples of unconventional monetary policy) (Exhibit 1: Methods and objectives of unconventional monetary policy)

# <Overview of Quantitative Easing>

- (4) In *quantitative easing*, the central bank supplies large amounts of funds through asset purchases or other operations. This may involve the purchase of short-term financial assets from financial institutions—which is no different from conventional monetary policy—or the purchase of longer-term government securities or credit assets. The methods employed, therefore, can be either conventional or unconventional. But by definition, asset purchases under quantitative easing tend to be much larger than under conventional policy. And since the funds must be supplied at a time when the policy rate is effectively zero, the *goal* of *quantitative easing* is always unconventional.
- (5) The Bank of Japan pursued a policy of *quantitative easing* from 2001 to 2006. The policy was initially expected to ease deflation and stimulate the economy through two avenues of transmission. First, by fostering inflationary expectations, it was supposed to encourage businesses and households to front-load capital expenditures and consumption. Second, it was supposed to lead to

a portfolio rebalancing effect whereby financial institutions would use the cash proceeds of asset sales to the central bank to purchase risk assets. However, empirical studies conducted subsequently have failed to confirm such an impact. And while Bank of Japan officials and industry practitioners believe that *quantitative easing* helped reduce liquidity risk by alleviating bank funding concerns, the drop in liquidity risk may also be attributable to improvements in the balance sheets of Japanese financial institutions during this period.

(Exhibit 2: Economic backdrop for quantitative easing in Japan)

(6) These assessments are in general applicable to the cases where financial systems fail to function properly. Moreover, pursuing the functions of *quantitative easing* by some economies in the current financial crisis where their banking sector play dominant roles, despite their prospectively limited effects, is similar to Japan during the previous crisis. And it should be noted the UK is the only country among advanced economies that label their policy as *quantitative easing*.

However, we should be cautious to expect that the assessments of the Japan's previous crisis could apply to global economies in the current crisis. During Japan's crisis, a widening output gap triggered by the recession was compounded by strong deflationary pressures through the prices of imports from emerging economies including China. In the current crisis, however, deflationary pressures are not solely dominant—many nations have implemented massive fiscal stimulus programs, and commodity prices are rebounding. From a technical standpoint, Japan's *quantitative easing* was carried out mostly with the purchase of short-term financial assets, whereas today's US and European versions include massive purchase of longer-term assets. To that extent, they may be better able to nurture inflationary expectations. Another difference is that Japan's use of *quantitative easing* under zero interest rates created a situation in which FX intervention was effectively unsterilized. Some argue that there has not been enough study of the downward pressure on the exchange rate from *quantitative easing*.

# <Overview of Time Commitment>

- (7) Time commitment is a central bank pledge to maintain its current monetary policy stance until certain conditions are met, with the objective of stabilizing interest rates through the medium term. As long-term interest rates depend on the expected path of short-term rates, fostering expectations that the current monetary policy stance will be maintained for a given period of time can help stabilize interest rates corresponding to that period. *Time commitment* therefore uses an unconventional method—a promise to maintain a given monetary policy stance—to achieve an unconventional goal—the stabilization of medium-term interest rates.
- (8) Some of the empirical research on the Bank of Japan's *time commitment*, which was implemented along with *quantitative easing* from 2001 to 2006, concludes that the policy helped stabilize interest rates corresponding to the expected duration of the zero-interest-rate policy. Similarly, the Federal

Reserve's declaration that it would raise rates at a "measured pace" during the post-IT bubble recovery was in a sense a weak form of *time commitment*, and some analysts believe it helped stabilize medium- and long-term US rates. Meanwhile, there is a risk that *time commitment* will foster stronger expectations than the central bank intends. For example, expectations that subsequent normalization of the policy rate will take place gradually even after the necessary conditions for terminating the commitment are in place could lead to a risk of an overshooting of bond prices on the upside (ie an excessive decline in medium- and long-term interest rates) and a subsequent correction. Some argue that the high volatility in medium- and long-term rates observed in Japan in 2003 was a manifestation of this risk. Some have also noted that the flattening of the yield curve that accompanies *time commitment* can have a negative impact on financial institution earnings.

(Exhibit 3: Yield curve and BOJ statements on time commitment)

(9) Inasmuch as *time commitment* has been observed to stabilize medium-term interest rates in both Japan and overseas markets, it may be possible to employ such a policy by changing the methodology to reduce the risk of side effects. In particular, *time commitment* might be used when terminating unconventional monetary policy—and especially when scaling back purchases of government bonds—to support the market's understanding of policy intentions and curb instability in medium- and long-term interest rates. This is important because high volatility in medium- and long-term rates can lead to sharp price fluctuations not only in bonds but in a wide range of financial assets.

# <Overview of Credit Easing>

(10) Credit easing involves the central bank purchase of assets in markets that are illiquid or otherwise dysfunctional. The type of asset purchased will depend on the kind of market dysfunction. The central bank may buy treasury bills—which it also purchases in the course of conventional monetary policy—or it may purchase a class of government bonds for which the market is no longer functioning. In the current crisis many central banks have purchased commercial paper, MBS, and other credit assets. In general, therefore, credit easing refers to the purchase of "unconventional" assets. Credit easing clearly has an unconventional goal—to reduce the liquidity risk premium or credit risk premium or to lead a revival in financial transactions by restoring or replacing market functions.

(Table 2: Credit easing in advanced economies during current crisis)

(11) In Japan's previous crisis the BOJ engaged in *credit easing* via the purchase of commercial paper, ABCP, ABS, and other credit assets. However, bank lending played a central role in Japan's credit markets, and separate measures were enacted to address lending problems. *Credit easing* 

measures were comparatively small in scale, and there is no clear evidence of their effectiveness. In contrast, the present crisis has been characterized by large-scale *credit easing* by central banks in the advanced economies. The crisis is not over yet, and with the restoration of market functions largely dependent on the repair of financial institution balance sheets, we should not rush to any judgments about the effectiveness of various *credit easing* policies. Still, it is a fact that a decline in risk premia has been observed in many markets where *credit easing* has been implemented.

(Exhibit 4: Credit market conditions in US, Japan and Europe)

(12) If successful, *credit easing* can induce a recovery in asset prices by lowering risk premia. But this merely represents a correction of undervalued asset prices and does not change the fundamental value of those assets. If *credit easing* does provide an economic stimulus, it is because a restoration of market functions has facilitated the flow of funds necessary for economic activity and not because it stimulated spending by boosting asset prices. That said, central banks and market participants may find it difficult to share this correct view, in part because there have been so few historical instances of full-scale *credit easing*. In fact, there is a persistent view among market participants that an unstated goal of government debt purchases by central banks is to curb long-term interest rates by propping up the price of government debt. Like *time commitment, credit easing* risks aggravating volatility by encouraging the overshooting of asset prices and subsequent corrections.

# 2. Central banks' role in Unconventional Monetary Policy

- (1) As noted above, *quantitative easing* and *time commitment* policies have substantial overlap with conventional monetary policy in terms of both methods and goals. They have also been the subject of extensive analysis and assessment by policy authorities and researchers, in part because of their use by the Bank of Japan in the previous crisis. It is now a fairly well-accepted view that when an economic and financial crisis and zero interest rates have rendered conventional monetary policy powerless, it is both necessary and desirable for the central bank to implement *quantitative easing* and *time commitment*.
- (2) In contrast, the current crisis represents the first instance of a large-scale *credit easing*, and no consensus exists on how it should be positioned within the monetary policy framework. Here it would be helpful to focus on the fact that inasmuch as *credit easing* can curb the risk premium and lead a recovery in financial transactions, it can facilitate the implementation of central bank operations and enhance the transmission of policy effects. In short, it increases the effectiveness of monetary policy. It therefore makes sense for central banks to place the tool of *credit easing* at their disposal and use it when necessary as an extension of their continuing efforts to strengthen money.

market and government debt market functions in normal times.

- (3) Meanwhile, the decision of which markets to target with *credit easing* should be made based on the relative importance of those markets and the degree of dysfunction being experienced. *Credit easing* is therefore likely to involve different markets in different countries—if anything, it would generally not be preferable for all nations to mechanically target the same markets. There might be some exceptional situations in which countries ultimately chose to target the same market, either because their decisions happened to coincide or because problems in one market had spread to the same market in other countries.
- (4) It would also be a mistake to assume from this that central bank purchases of credit assets are generally justified. In particular, the use of such purchases to rescue individual financial institutions or nonfinancial companies should be avoided. The central bank's central role in maintaining financial system stability is to prevent systemic risk. The goal of such efforts should be to maintain macro-level market functions, an approach that is consistent with *credit easing*'s role in maintaining micro-level market functions. During the present financial crisis, central banks have found themselves forced to rescue individual institutions because of an absence of necessary legal infrastructure, including bankruptcy legislation and a framework for injecting government money into private sector entities. However, central banks should abandon this role as quickly as possible and pass it on to the government bodies that have the inherent roles of handling such situations.

There are a number of important issues regarding the prevention of systemic risk by central banks, including the need for preemptive oversight. These issues are on the agenda for future meetings of the Financial Markets Panel.

# 3. Unconventional Monetary Policy and central bank risk management

- (1) It is critical when implementing unconventional monetary policy to select tools appropriate to the final objective based on an accurate assessment of conditions in the financial sector and the economy. While this should be self-evident, there have been a number of instances in the current crisis where central banks have not done enough to explain their policy responses. Constraints on other government bodies' ability to address the crisis and the need for an urgent response amid the rapid unfolding of events may have been partly responsible. Still, providing an explanation is important, even if done after the fact, as it also helps facilitate exit strategies.
- (2) Central banks should also avoid incurring losses on assets acquired under unconventional monetary policy. They should particularly avoid having to report a loss on their operations. In past regional financial crises, net losses by central banks tended to undermine confidence in the currency and payments system and sometimes caused a capital flight accompanying a decline in

asset prices, including the value of the currency. In the advanced economies, an operating loss by the central bank is unlikely to trigger an immediate collapse in the economy or financial markets. Nonetheless, the impact could be significant assuming the economy and financial sector are already weak enough that unconventional monetary policy is deemed necessary.

- (3) Central bank losses could also hinder the administration of monetary policy. If the central bank attempts to offset the losses on its own, monetary policy could be fettered by the need to earn a profit. And if the bank relies on the government to cover the losses, it risks future constraints on policy. Even if the government and the central bank agree in advance how losses resulting from unconventional monetary policy are to be distributed—which has the advantage of limiting potential central bank losses—subsequently compensation by the government could still lead to new restrictions on monetary policy by the government or legislature. Accordingly, such an agreement is only a second-best policy.
- (4) The purchase of credit assets should also be limited to cases in which the purchases can be justified in light of a specific objective, as in the case of *credit easing*. This is not only to ensure that the expected policy effect can be achieved but also to prevent losses. We commend global central banks for taking a variety of measures to avoid losses on credit assets purchased in the current crisis—they have required collateral, established conservative haircuts, and diversified their purchases. Still, managing credit asset risk is not an easy undertaking even for private sector experts, and the fact remains that purchasing and holding such assets presents significant risks for central banks, which lack the necessary information and expertise.

(Table 3: Managing credit risk for credit easing policies in advanced economies)

- (5) Of the various types of credit assets available for purchase, central bank acquisitions of the bonds or equity of individual businesses can raise problems in terms of governance and arbitrariness. Central banks typically have no expertise in corporate restructuring or workouts. For central banks to hold the debt or equity of a specific company effectively represents an unconditional supply of funds. That could actually delay the company's restructuring or enable the continued survival of businesses that from a macroeconomic perspective would be better off exiting the field. To the extent that the end result is a concentration of funds at specific companies, the purchase of corporate bonds or equities leaves a central bank open to criticism that it acted arbitrarily and contributed to the discretionary distribution of resources. This is true even if the purchases were made via an auction or a similarly transparent framework.
- (6) It is a fact that the purchase of longer-term JGBs in Japan effectively played a role in *quantitative easing*—regardless of whether that was the original intention—during the previous crisis. Some have also noted that the purchases contributed to the smooth absorption of JGBs in the market by eliminating concerns about supply and demand and by stabilizing long-term interest rates. In that

sense the policy was similar in some respects to *credit easing*. The Bank of Japan's decision to purchase floating-rate JGBs during the current crisis can be understood as another kind of *credit easing*. In addition, some argue that if an extended period of low inflation had depressed inflationary expectations, the purchase of JGBs would be preferable to the purchase of credit assets since the latter entail the kinds of problems noted above.

- (7) In general—and this is not limited to Japan—central bank purchases of government debt can potentially raise the level of long-term interest rates and exaggerate volatility when there are concerns about a loss of fiscal discipline. Also in general, the central bank is likely to incur a capital loss on its bond holdings once the economy recovers and long-term interest rates rise. Given that many central banks also purchase government debt as part of conventional monetary policy, risk management for government bond holdings—including the match with banknotes on the liabilities side of the balance sheet—deserves significant consideration.
- (8) Throughout the current crisis, central banks have strived to improve the extent and speed of balance sheet disclosure and explain the implications of monetary policy via statements and speeches. These efforts have helped market participants understand the intentions behind policy, avoided market misunderstandings, and prevented unnecessary increases in asset price volatility. To further check concerns regarding potential portfolio losses and inflation, the central bank needs to communicate its vision of a smooth termination of unconventional monetary policy by presenting a strategy complete with a timeline and conditions for ending the policy.

(Table 5: Developments in Fed, BOJ and ECB balance sheets)

# 4. Future use of Unconventional Monetary Policy

- (1) If the policy focus shifts from financial system instability to economic weakness and a sharp drop in inflation, central banks in the advanced economies may deploy *quantitative easing* under the constraint of an effectively zero policy rate. However, in some advanced economies, *credit easing* policies created massive excess reserves, effectively playing the roles of large-scale *quantitative easing* concurrently.
- (2) The most important factor under these circumstances is the policy mix. If both the economy and the credit markets are smoothly recovering, the exit strategy could be quite simple as *quantitative easing* and *credit easing* could be terminated simultaneously. This would not be the case if the economy remained sluggish even though credit market conditions were improving as major financial institutions cleaned up their balance sheets. In that case, the central bank should shift from *credit easing* to *quantitative easing* by replacing purchases of credit assets with purchases of more

traditional assets. On the other hand, if a widening fiscal deficit had sparked inflationary concerns, the central bank might find it necessary to restrict the supply of funds under *quantitative easing* by scaling back its *credit easing* programs.

- (3) The more difficult issue from a practical standpoint is how to select and combine open-market operations. The specific tactics employed will depend largely on the central bank's market expertise and knowledge of market conditions. Decisions should be left to the central bank's judgment and take into account information gleaned from its dialogue with market participants. Even if credit markets have largely recovered, for example, an attempt to sell off the central bank's considerable portfolio of credit assets all at once could place those markets in renewed danger. Central banks therefore need to carefully consider in what order the assets should be sold and how the sales should be divided and timed. Even with government debt, which is characterized by higher liquidity and a larger potential market, haphazard sales could fuel an unnecessary increase in long-term interest rate volatility, aggravating instability in broader asset prices or harming the real economy. Tactics should therefore be chosen so as to avoid these outcomes.
- (4) One way of facilitating a smooth exit from central bank purchases of government debt might be to bypass the market and sell the debt directly to the government. Another possibility would be the adoption of limited *time commitment* as noted above. If the time commitment is limited in duration and is accompanied by an explicit statement of the normalization process once the policy is terminated, it should be possible to achieve the benefits of *time commitment*—ie the smooth implementation and termination of *quantitative easing*—without most of the unfavorable side effects.

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(Attachment): Charts and Tables, Overview of Financial Markets Panel