Toshihiko Fukui: Challenges for monetary policy in Japan

Speech by Mr Toshihiko Fukui, Governor of the Bank of Japan, at the Spring Meeting of the Japan Society of Monetary Economics, on the occasion of its 60th anniversary, Tokyo, 1 June 2003.

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Introduction

I am honored to have this opportunity today to address such a distinguished audience. Members of this esteemed society are generous enough to provide us at the Bank with their opinions and the fruits of their researches, which we in our turn take into consideration when we examine our policy measures from all angles. I should like, therefore, at the outset of this speech, to express my sincere gratitude to all of you for continuing to stimulate the intellectual debate in this way.

The society and the Bank have a long history of good communication, as indeed is recorded in our Archive, and the first example of this was a speech given by Keizo Shibusawa, then Deputy Governor of the Bank, at the inaugural meeting of the society in June 1943. The meeting was held incidentally a year after the Bank of Japan Law of 1942, modeled on the law governing the Reichsbank, the then central bank of Germany, became effective under wartime legislation. In his speech, Deputy Governor Shibusawa emphasized the principle of maintaining the value of the currency when formulating monetary policy, stating that, although the demands on policy of a given time or situation may exert some influence, the fundamentals of this principle do not change. While I can only guess what was actually in Deputy Governor Shibusawa's mind at the time he made this statement, my own understanding is that, at a time when the war was producing upheaval in both the economic and the financial environment, he wished to remind his listeners of the importance of orthodox central banking. At the same time, I believe he wished to convey his sincere hope that the society's members would continue to analyze the fundamentals of the currency system, making full use of their expertise.

Another example may be found in a speech given at the 40th anniversary meeting of the society in 1983, when the Japanese economy was at the peak of its postwar prosperity. Discussing the mandate of the Bank of Japan, Governor Haruo Mayekawa stated that, in conducting monetary policy, the highest priority should naturally be placed upon the stability of prices. He concluded his speech by observing that the formulation and execution of successful policy could only be achieved if the policy measures employed had a solid theoretical foundation.

Ten years ago in June, I was, as an Executive Director of the Bank, invited to the 50th anniversary meeting of the society and presented a speech titled "Missions and Responsibilities of a Central Bank in a Contemporary Context." At that time, the economy was deteriorating following the bursting of the asset price bubble, and looking back, as I prepared my speech for today's occasion, at the path trodden by Japan's economy over the last decade, I was impressed by the fact that the surrounding environment has become much more severe, although the basic mandate of the central bank, to maintain the stability of prices, has not changed in the least.

Even if we restrict our attention to the area of monetary policy, there have undoubtedly been a number of changes worthy of note.

The first and most important of these is the change that has taken place in the financial environment, and here the substantial decline in interest rates is most notable.

In fact, the level of interest rates was already low a decade ago, as the economy continued to deteriorate following the bursting of the asset price bubble, and weak balance sheets in both the corporate and financial sectors suggested that deep adjustments were inevitable. In these circumstances, the Bank took a series of monetary easing measures, and the official discount rate had declined to the then unprecedented level of 1.75 percent by the end of 1993. The same period saw a moderate decline in the overnight call rate to the range of 2.0-2.5 percent from 3.5-4.0 percent.

At that time an official discount rate of 1.75 percent was considered extremely low and was indeed the lowest level of this rate since the Bank began operation in 1882, a period that included the financial crisis of 1927 and the fiscal expansion policy adopted by Finance Minister Korekiyo Takahashi in the 1930s. In retrospect, however, there was an enviable amount of room left for interest rate reductions, and hence interest rates were useful as policy tools.

Recently, in contrast, not only the overnight call rate but almost all money market rates have declined to a level close to zero percent. Moreover, since spring 2001, the Bank has moved into territory unexplored by any central bank in history by implementing quantitative easing with interest rates already at the zero bound.

I stated at my inaugural press conference that a central bank conducting monetary policy with very little room left for interest rate reductions is like a boxer fighting with his hands tied behind his back. Even with our hands tied, we at the Bank have not given up fighting and are indeed doing the best we can. It was, however, beyond anyone's imagination in 1993 that the Bank would be fighting against deflation under such a constraint.

The second major change concerns the revision of the Bank of Japan Law.

A sense that the previous Bank of Japan Law was not quite in tune with the current of change characterizing the world's central banking systems and financial markets would no doubt have already existed in 1993, but this had not yet advanced to the stage of making specific proposals for revisions to the Law. The situation changed rapidly, and four years later, in 1997, the revised Bank of Japan Law was enacted, and has been in effect since April 1998.

The focus of the revision has been greater independence for the Bank in conducting its monetary policy and calls for improved transparency. This in its turn has led to a significant reorganization of the Policy Board, through which the Bank makes monetary policy decisions independently, and the Bank marked a new start with a completely new governing structure.

The transparency of the Bank's policy conduct was also improved by the publication of the minutes of every Monetary Policy Meeting (MPM) of the Bank's Policy Board. Any visitor to the Bank's Web site can see that, in addition to the minutes, a significant amount of information is being released including reports of the Governor's press conferences, texts of speeches given by senior officials, and an abundance of research materials detailing the background to policy decisions.

The third and the most recent change concerns the increasing global interest in monetary policy within economies suffering from deflationary trends.

In 1993, in spite of the similar background situation, that is, strong downside risks to the world economy and consistently falling inflation rates, there seemed to be no particular concern anywhere in the world about the decline in inflation rates per se. A quick check of the keywords appearing in articles in major newspapers at that time reveals that people's attention was overwhelmingly focused on inflation rather than deflation.

Recently, however, as disinflation has progressed, interest rates have fallen across the world. An international comparison of the levels of money market rates reveals several countries whose current rates lie within the 0-1.0 percent bracket, in particular Switzerland at 0.2 percent and Singapore at 0.5-0.6 percent. In the United States, the policy interest rate currently stands at 1.25 percent, which, if we make a direct comparison, is the level seen in Japan at the beginning of 1995. An increasing number of people are now interested in deflation.

Looking back at developments over the last decade, I have been struck anew by how immensely important it is for the central bank to gain reliable insights into the outlook for the economy. At the same time, we clearly cannot be too surprised at the fact that, with the passage of time, changes have taken place in the debate surrounding monetary policy.

We at the central bank must continue to make efforts to gain new insights and learn from new ideas, while not allowing ourselves to fall captive to whatever mindset is dominant at a particular point in time. I feel acutely the importance of further interaction with the academic world, because cutting-edge research on financial and economic theory is fundamental to our efforts.

Since I assumed the office of Governor in March this year, and indeed before, I have had the opportunity to listen to a wide range of advice, and have learnt much from opinions voiced about the Bank and forwarded to me not only from members of the society but also from other academics both at home and abroad. At the same time, I am afraid that I must admit to feeling a certain degree of frustration, in the light of my long years of experience as a central banker, as I listen to some of the opinions. I cannot help but feel that there is still significant progress to be made in establishing a creative process whereby the Bank first provides academics with sufficient information about the issues it is facing, and then works together with them based on the same information in its search for fresh policy solutions.

We are fortunate to have among the current nine members of the Policy Board three members who have spent a number of years in senior academic positions. In addition, there are an increasing number of former Bank staff currently working at academic institutions and devoting their efforts to bridging the gap between theory and practical policy. With their help, we expect to be able to extend our links with the academic world, thus not only gaining the benefit of academics' advice but also contributing to their research by sharing our practical experiences.

This has been a somewhat protracted introduction. My aim today, however, is to share with you, as frankly as possible, my own current thinking with regard to the conduct of monetary policy, which I hope will be of interest to you. I hope also that my remarks will play a part in further strengthening the constructive relationship that already exists between academics and the central bank.

I. Functions of the quantitative easing framework

First, I would like to briefly explain the basic framework underlying current monetary policy and to describe how monetary policy measures have been implemented within this framework.

The current framework we are adopting is called quantitative easing and was introduced on March 19, 2001. It has three main features. I will explain the implications of each point in as contemporary a context as possible.

A. Adoption of quantitative indicators in money market operations

The first feature of the quantitative easing framework is the change in the operating target for money market operations from the uncollateralized overnight call rate to the outstanding balance of current account deposits at the Bank. Whether it is possible to enhance monetary easing effects even after short-term interest rates reach the zero bound is a major issue that continues to attract debate. Still, it was quite natural for a central bank to pay attention to the amount of liquidity provision and expect effects from a further increase in liquidity provision even when short-term interest rates had fallen to zero percent, or rather for the very reason that they had reached this zero bound.

When the quantitative easing framework was introduced in March 2001, the target for the outstanding balance of current account deposits at the Bank was 5 trillion yen, which exceeded the total reserve requirement at the time by slightly less than 1 trillion yen. When I took office as Governor, the target range for the outstanding balance had already been set at "around 17 to 22 trillion yen," and the Bank has since steadily raised it. At the MPM on April 30, the Bank raised the range by 5 trillion yen to "around 22 to 27 trillion yen," and then again to "around 27 to 30 trillion yen" at the MPM on May 20.

As a result, the outstanding balance has increased sixfold over the course of the last two years. The Bank's repeated raising of the target for the outstanding balance was decided in view of the economic outlook and the financial market situation. As mentioned in the Bank's "Outlook and Risk Assessment of the Economy and Prices," released in April, monetary easing measures have effectively blocked the channels through which various shocks induce liquidity concerns, and have thereby secured financial market stability, helping to prevent the economy from falling into a deflationary spiral.

On the other hand, it should also be pointed out that, even though the outstanding balance of current account deposits has increased considerably since the introduction of the quantitative easing framework, the Bank's drastic quantitative easing has not been quite strong enough by itself to boost the economy and prices. Why is this so?

It may have been because the adjustment pressure on the economy was, and is, still quite strong. However, one of the effects expected from the introduction of quantitative easing was the so-called "portfolio rebalancing effect." The Bank thought that, even when the marginal value of liquidity services became zero, people would start to rebalance their portfolios by investing in assets with higher marginal values whether these were real or financial assets, if the Bank increased further its provision of liquidity. The aim of this process was thus to generate positive economic momentum, acting, for example, to push up asset prices. So far, however, the effect has not been widely observed.

It might also be fair to touch upon the issue of the decline in the functioning of financial markets, especially the money market, since the introduction of the quantitative easing framework. With zero interest rates, money market participants have been less willing to invest their funds in the market, because returns from such transactions have not been sufficient to cover their trading costs. Due to the Bank's ample provision of liquidity, there has been a sharp decrease in trading volume among

market participants, with the exception of trading carried out with the Bank. As a result, more market participants have become concerned about whether they will be able to raise funds in the market smoothly in the future even if they offer higher interest rates.

Ironically, the decline in the functioning of the money market has increased the precautionary demand of financial institutions for increased current account deposits at the Bank. At the time of the introduction of the quantitative easing framework, there were doubts about whether the Bank would be able to provide sufficient liquidity to achieve its target for the outstanding balance. In fact there were frequent cases of undersubscription, where bids fall short of the Bank's offers, in the Bank's funds-supplying operations. However, such undersubscription has not occurred recently, and the Bank has been able to push through substantial increases in its target for the outstanding balance of current account deposits. The more the Bank proceeds with monetary easing to secure financial market stability, the more demand for current account deposits increases due to the impaired functioning of the market. As a result, the Bank will have to meet this increased liquidity demand in order to secure market stability. This is the dilemma the Bank currently faces.

All drastic policy measures have negative side effects. The fundamental issue, therefore, is not whether such side effects exist; rather, it is how to make effective use of the stimulative effects of quantitative easing measures on the economy and prices, while giving due consideration to the possible emergence of excessive side effects. Before we move on to deal with this point in more depth, I would like to comment on the remaining two features of the quantitative easing framework.

B. Increasing the Bank's outright purchases of Japanese government bonds (JGBs)

The second feature of the quantitative easing framework is the decision to increase the Bank's outright purchases of JGBs when this is deemed necessary for the smooth provision of funds to meet the target balance of current account deposits at the Bank. At the same time, there is a ceiling on the Bank's outright purchases of JGBs which prevents the amount of JGBs held by the Bank from exceeding the outstanding amount of banknotes issued.

With interest rates on financing bills (FBs) and treasury bills (TBs) close to zero, there emerged a situation for holders of FBs and TBs similar to holding the equivalent amount of current account deposits at the Bank. For this reason, it is likely that the demand for holding current account deposits by selling FBs and TBs will become saturated. Realizing this, the Bank decided to secure smooth provision of liquidity by purchasing JGBs. The effect of these increased purchases of JGBs has been to raise total purchases by the Bank to 1.2 trillion yen per month, up from 400 billion yen until March 2001. As a result, the outstanding amount of JGBs purchased by the Bank is at present equivalent to roughly 60 percent of the monetary base.

The Bank's purchases of JGBs have indeed contributed to the smooth implementation of quantitative easing. However, as long-term interest rates have been declining, even JGBs have almost become substitutes for current account deposits at the Bank. At present, ten-year JGBs have fallen to slightly above 0.5 percent and even 30-year JGBs are below 1.0 percent. The average maturity of newly issued JGBs in Japan is currently about five years. The fact that yields on five-year JGBs are in the range of 0.1 to 0.2 percent indicates that the government has already been raising funds at an interest rate of virtually zero percent. Thus, the Bank's execution of a market operation that involves exchanging JGBs for current account deposits at the Bank is becoming equivalent to exchanging ten 1,000 yen notes for one 10,000 yen note.

In opposition to this view, there is an argument that, as long as long-term interest rates are not in fact zero percent, there is still a difference between current account deposits at the Bank and JGBs. The corollary is that market operations involving the exchange of JGBs for current account deposits are indeed meaningful, and a massive large-scale purchase of JGBs by the Bank would be effective. There is also an argument that it is inappropriate to allow long-term interest rates to decline any closer to zero percent. According to this view, the Bank should enhance the effects of quantitative easing not merely by increasing quantity but also by introducing qualitative improvement of quantitative easing measures through the purchase of other types of assets.

C. Policy commitment based on the consumer price index (CPI)

The third feature of the quantitative easing framework is the Bank's explicit commitment based on the year-on-year growth rate of the CPI: namely that the Bank will maintain the current framework for

money market operations until the CPI (excluding fresh food, on a nationwide basis) records a yearon-year increase of zero percent or more on a sustainable basis.

The idea of the first feature, as I have already explained, is to achieve further increases in the Bank's provision of liquidity even after short-term interest rates have reached the zero bound. The idea of the third feature is to achieve an easing effect by the Bank's commitment to keep short-term rates at low levels well into the future. In this way, even if short-term rates come up against the lower bound, the Bank can still "borrow" from the effect of the future low rates. Thus, the fundamental aim of the third feature is to lower longer-term interest rates across the board by "borrowing" future monetary easing through the commitment.

This policy commitment shows the Bank's determination to put a stop to price declines by binding future monetary policy to the actual inflation rate. However, this should not be misunderstood as inflation targeting. I am fully aware of views that the Bank should adopt inflation targeting instead of the current commitment. However, it should be noted that, in a sense, this commitment has significant implications that go beyond those of standard inflation targeting.

In a standard inflation targeting regime, a central bank raises the policy interest rate when the expected inflation rate rises above the target inflation rate, even if the actual inflation rate is considerably below the target inflation rate. Given that people's expectations regarding the inflation rate vary greatly, it may be inevitable that even a slight change in prices triggers speculations at a very early stage about future monetary policy.

In contrast, the Bank's policy commitment states that the Bank will continue to implement drastic quantitative easing until the year-on-year change in the CPI, that is, the change in actual prices, becomes positive. In other words, this policy commitment means that, unless year-on-year changes in the CPI become positive on a sustainable basis, the Bank will continue to implement drastic monetary easing measures even after the economy has started to improve and inflationary expectations are emerging. This is thus an extremely strong policy commitment through which the Bank is implicitly "borrowing" from the effects of future monetary easing.

The Bank's strong policy commitment, which has "borrowed" the effects of low future interest rates and kept long-term interest rates stable at low levels, can be said to have succeeded in keeping real interest rates low enough to prevent the economy, which has been suffering from deflation, from falling into a deflationary spiral. However, the potential growth rate of the economy and the marginal productivity of capital have declined, causing firms to revise downward their forecasts for the GDP growth rate and remain cautious in investing. In accordance with the relationship between the natural and market interest rates defined by Knut Wicksell, while the natural interest rate has been quite low, the market interest rate has continued to be high relative to the natural interest rate, and thus seems to have failed to boost economic activity.

Thus, there still remain many issues that must be resolved for the current framework of quantitative easing to become more effective. It is also true, as I mentioned earlier, that monetary easing measures have effectively blocked the channels through which various shocks induce liquidity concerns, and have thereby secured financial market stability, contributing to preventing the economy from falling into a deflationary spiral. The effects of quantitative easing measures should therefore not be underestimated. In 1997-98, the financial crisis in Asia and the failure of a few large Japanese financial institutions triggered concerns among financial institutions about the availability of liquidity, and as a result, there was a sharp credit contraction and the economy deteriorated rapidly. In contrast, although there have been factors causing uncertainty about the Japanese financial system, such as the terrorist attacks in the United States, the military action against Iraq, and the decline in Japanese stock prices, credit contraction stemming from liquidity concerns has not occurred since the introduction of the quantitative easing framework. And thus, any deterioration of the economy that such a contraction might have caused has been avoided.

As described above, even after short-term interest rates had reached the zero bound, the Bank did not throw up its hands in defeat but rather continued to make efforts by providing ample liquidity and "borrowing" from the effects of future monetary easing.

At present, Japanese financial institutions are still in the process of improving their soundness, and with the globalization of the economy, progress in IT, an extremely rapidly aging society, and an equally rapidly declining birthrate, the economy faces major structural changes. The people of the entire country are struggling to find ways to overcome the difficulties in this unprecedented process of transition. In such a situation, it is natural for the public to have high expectations of the country's

central bank. In order to meet these expectations, I am adamant in my determination to duck no challenges, but to put all my knowledge and experience into overcoming these difficulties.

II. Issues on further improvements in monetary policy

In order to further improve monetary policy, I think it is important to address various issues related to monetary policy and to discuss them thoroughly. Some of these issues may fall within the scope of conventional economic analysis and may thus be dealt with using the appropriate analytical tools. Other issues, such as defining the purview of the central bank and addressing its position within a democratic society, may however fall outside the scope of conventional economic analysis.

Keeping these points in mind, I would like to elaborate in what follows on some issues which need to be clarified with regard to the Bank's efforts to improve the current quantitative easing framework.

Currently, a variety of views are held by people outside the Bank requesting further monetary easing measures. Some of these views are as follows. One view holds that, if the effect of the quantitative easing on the economy and prices is not fairly strong, the Bank should increase the provision of liquidity significantly. This view recommends that, in doing so, the Bank consider the option of purchasing financial assets whose risk profiles differ from JGBs, and which are not, under normal circumstances, the object of central bank purchases. Another view proposes that the Bank seek to exert stronger pressure on public expectations by fundamentally changing the structure of its current policy commitments.

A. Changes in the structure of policy commitments

I would like to start this section by discussing possible changes in the structure of the Bank's policy commitments. Here, clearly, the focus of attention must be whether to adopt inflation targeting.

As I have already mentioned, by comparison with current policy commitments, one of the problems of adopting inflation targeting is as follows. Assuming that a target has been established (for example, at 2 percent), if the expected inflation rate rises above the target and the Bank does not start tightening at that early stage, the actual inflation rate is likely to go beyond the target. Since the Bank's current policy commitments do not assume such a tightening at an early stage, they actually run a risk in the direction of greater inflation than in the case of standard inflation targeting. Therefore, the following issues become very important: whether it is truly desirable at this particular juncture to exchange the current policy commitment for one that might require an earlier and more forceful tightening of monetary policy by setting a target; or whether the Bank should allow a temporary overshooting of the inflation rate; and in either situation, how the Bank would be able to restabilize the expected inflation rate.

When setting an inflation target, either as a certain range or a level of the inflation rate, the Bank would aim to achieve this target within a specified period, although there would be allowance for some slippage. Clearly a prerequisite for such a policy to be convincing to the public is that the Bank is at least reasonably, if not absolutely, confident that it has at its disposal the policy tools necessary to achieve its goal. In this regard, there are those who maintain that the Bank need only boldly commit itself to taking any unconventional policy measures necessary to achieve the inflation target. Indeed, some economists seem to have formed a critical view that it is the Bank's own skepticism about the effectiveness of its monetary policy which is preventing it from hammering out a more forceful commitment and from having a more potent influence on the public's expectations.

However, having had their expectations that the economy would return to a sustainable growth path left unfulfilled so often since the bursting of the asset price bubble, people in Japan are not so naive as to trust unconditionally the mere announcement of an inflation targeting policy by the Bank; nor indeed would the rest of the economy respond by taking an immediate turn for the better. Unless Japan's economy benefits from positive external factors such as a surge in foreign demand, a policy announcement by the Bank aimed at influencing public expectations will become effective only after the Bank has successfully demonstrated that an effective transmission mechanism exists between the Bank's policy and an actual stimulative effect on economic growth. Therefore, it is important for the Bank not only to pursue further monetary easing, but also to devise and implement a variety of policy measures which contribute directly to improving the transmission mechanism.

The Bank is fully aware that inflation targeting enjoys relatively wide support among academics, and that many central banks have adopted inflation targets of one kind or another. It has become one of

the important policy tools for central banks to enhance transparency. In that sense, I have no intention of flatly denying the concept behind the policy measures related to inflation targeting. I would like to examine, in the process of reviewing how to make full use of the monetary easing policy in the future, whether we can reorganize the policy framework of the Bank, and whether there will be any room for introducing such a tool as inflation targeting within that framework. I cannot predict honestly what results will be produced by this wide-ranging discussion, or when.

B. Additional measures to encourage the effects of monetary easing to permeate through the economy

The fundamental policy issue confronting the Bank is what exactly it can and should do in order to encourage the effects of monetary easing to permeate through the economy.

The Bank's quantitative easing policy, by providing ample liquidity in the form of the current account balance at the Bank, aims at improving the overall financial environment for firms and households, and thus at stimulating the economy. If the current quantitative easing does not have a strong effect on the economy, this can be interpreted as follows. The transmission mechanism between the Bank's ample provision of liquidity and the stimulative effect on firms and households is not functioning properly. To put it another way, the liquidity provided by the Bank is circulating within the financial sector and not flowing out of it, or the stimulative effect of low interest rates is not working in such a way as to permeate through the economy.

This phenomenon of a choked or blocked channel in financing is closely related to the fact that the financial institutions' credit intermediary function is deteriorating due to the nonperforming-loan problem. The most important issue in making the effects of the monetary easing permeate through the economy is to actively support financial institutions' efforts to reestablish their soundness. At the same time, the Bank believes it is necessary also to apply itself on a second, parallel policy front, exercising its ingenuity in devising its own measures in the area of money market operations and corporate financing.

As you are all aware, at the MPM held in early April 2003 the Bank decided to start examining a new scheme to promote smooth corporate financing by nurturing the asset-backed securities (ABSs) market. The Bank's initiative in this regard is unprecedented in the sense that it will be purchasing ABSs, which are private debts, outright and thus stepping into the realm of credit risk. ABSs possess a number of advantageous characteristics. By pooling risks, they act to reduce the overall level of credit risk, relative to the sum of the individual risks. In addition, by restructuring the overall risk into multiple layers representing different degrees of risk, they can also attract investors who have a variety of different risk preferences.

Indeed, the rationale behind the Bank's decision to examine the feasibility of ABS purchases is as follows. Given the current situation in which financial institutions are performing their credit intermediation function only imperfectly, if the Bank can succeed in making use of these features produced by the process of financial innovation, it will be able to promote the interaction between market-based financing and bank lending. And thus it will contribute to establishing a new channel for smooth corporate financing for firms, especially small and medium-sized firms.

Some people argue that the Bank should not restrict its purchases to ABSs but should also boldly purchase a wide range of assets such as those related to stocks and real estate, breaking with the traditional framework. The Bank, of course, is always ready to give serious consideration to any measure that might help bring the economy back to a sustainable growth path. Having said this, I would therefore like now to discuss some of the possible perspectives and criteria important in considering what kind of assets the Bank should and should not purchase.

The first criterion, which may overlap somewhat with what I have mentioned earlier, is whether the Bank's purchases of a particular type of asset will help the monetary easing effects to permeate through the real economy; and whether such a purchase offers any actual improvement over the existing transmission mechanism.

The second criterion is related to whether the Bank's purchases might distort the market mechanism. If the Bank's decision to take on credit risk, as described above, ends up distorting market evaluations of prices and weakening the reflection of risk contained in credit spreads, the supply of credit will not increase and the effectiveness of monetary easing will suffer as a result. If the Bank dares to take on risk by purchasing new types of assets, it is most desirable that the Bank's initiative becomes a catalyst in enhancing the development of the market.

The background of seeking public comment in examining possible purchases of ABSs by the Bank is that we felt it was important to find a way of participating in this market so that the Bank's initiative does not distort the price-discovery function of the market and also enhances the development of the market. Now that we have received many valuable comments from market participants, we are working on the concrete plan of the scheme, referring to those comments.

C. Role of capital for the central bank

I have been discussing how the Bank may be about to expose itself to credit risk by implementing a new measure in starting ABS purchases. The corollary of such a step is the possibility that the Bank might incur a capital loss.

Given the current severe economic and financial situation, when the Bank started to purchase stocks held by banks, it was determined to take any measures, even highly risky ones unthinkable under conventional conditions, if and when they were absolutely necessary to fulfil its mandate. At the same time, we set a principle of limiting the Bank's risk exposure to the level at which it does not impair the Bank's financial soundness. The Bank gave due consideration to the principle when it decided the stock-purchasing plan, and will also apply the principle in drawing concrete plans of the framework for ABS purchases, particularly in assessing risks.

I would like to consider in more detail the subject of a central bank's financial soundness, particularly the role of its capital. I am aware that there are those who do not fully understand, from an economic perspective, why the central bank should be concerned about the soundness of its capital base. It is, after all, reasonable to assume that, unlike ordinary commercial banks, central banks can continue their operations and avoid bankruptcy, even in the face of insolvency, since they have the authority to issue banknotes.

So how can we explain this observation consistently with the fact that most central banks are exerting themselves to maintain substantial capital holdings?

Also, how can we explain cases in developing countries where a country's central bank has fallen into excessive debt on a grand scale, and until its capital position was properly restored, its ability to conduct monetary policy was greatly damaged in practice, even though this phenomenon is not predicted in theory?

The above cases of actual behavior of some central banks indicate that central banks' concern with the soundness of their capital base might not be grounded purely in economic theory but may be motivated rather by the political economic instincts of central bankers. In other words, once the restriction that "the central bank should only take risks consistent with the level of its self-imposed capital base" is violated, the boundary between the functions of the central bank and those of the government may become difficult to discern.

Consider a case where, for whatever reason, a central bank's capital becomes depleted, and the bank requires financial support from the government. The central bank might either run into difficulties in conducting its policy and other business operations or might cause the view to spread that it will, and eventually it will become difficult to maintain public confidence in the currency.

This argument brings us to the fundamental issue of how the central bank should function in a democratic society. There are two problems pertaining to a central bank's significant risk-taking activity of purchasing risk-bearing assets. The first is that it might potentially incur losses, and the burden of this would effectively be transferred to the public through reductions in payments to the national treasury, or, in the worst-case scenario, through injections of public funds to restore the balance sheet of the central bank. The second problem is that such purchases, depending on the central bank's selection of assets, would inevitably affect the allocation of resources at the microeconomic level. Both problems lead us to the question of the role of a central bank, whether it should approach the territory of fiscal policy. The basic principle underlying the determination of how tax revenue should be spent in a democratic nation is as follows: expenditure should be carried out through fiscal policy, following formal approval of the government budget by the Parliament. If resources are to be allocated outside the market mechanism as part of economic policy, it is the government that should take the initiative, not the central bank. The purchase of risk-bearing assets by the central bank should therefore be very carefully planned and conducted with discipline.

Drawing a clear line on such issues is a difficult task. In practice, monetary policy cannot be conducted with any great degree of flexibility and the central bank can only purchase FBs and TBs when there is

a strict rule preventing it from taking on any risk, because to do so would involve stepping into the territory of fiscal policy.

This is the reason why a more feasible practice has been adopted in many countries whereby the central bank reserves the ability to act flexibly within the level of the risk consistent with maintaining an adequate level of capital in the relatively long term.

If the public allows the central bank to take on a certain level of risk within the context of flexible monetary policy, then it would be appropriate for the public to support the risk-taking behavior of the central bank by restoring its capital base should the latter be damaged as a result of taking risks. In such a way, the balance between democracy and a central bank's flexibility in conducting its monetary policy could be maintained.

Concluding remarks

When I attended the society's meeting ten years ago, I concluded my remarks by citing a famous statement by John Maynard Keynes which runs as follows: "There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency." I commented on the quotation that "these words have often been used to describe the evils of inflation and have come to find general acceptance. Yet, I believe that the statement should also be understood to connote the stability of the financial system. I believe that money is truly capable of functioning as the social and economic lifeblood of a country when its value is properly maintained through monetary policy, and also when smooth functioning of the payment and settlement systems is fully ensured." I still believe in the truth of what I said.

I must add here that there is another aspect to the maintenance of price stability that requires particular attention today. That is the necessity of confronting deflation, the new enemy with whom we at the central bank must now engage, and I believe that this should be of equal importance to fighting inflation.

Neither macroeconomics nor finance textbooks have yet managed to provide a practical solution to the problems related to the deflation with which we are now faced. On the other hand, the latest research in the United States has started to produce useful theoretical analyses of the fundamental effects of monetary and fiscal policies under the zero interest rate constraint, one of the issues the Bank has been tackling in the last few years. This is an area of study in which we are eagerly awaiting progress.

I also believe that the Bank's deflation-fighting experiences will add important chapters to finance textbooks in the 21st century.