

## Mr Hayami: Price stability and monetary policy

Speech given by Mr Masaru Hayami, Governor of the Bank of Japan, to the Research Institute of Japan, in Tokyo, on 21 March 2000.

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I am honored to be invited to this meeting and given an opportunity to address such distinguished guests.

More than a year has passed since the Bank of Japan launched the zero interest rate policy in February 1999. During that time, Japan's economy has shown significant improvement thanks to aggressive monetary easing, fiscal stimulus measures, and the restoration of financial system stability. Underlying conditions for the recovery of private demand such as business fixed investment and household consumption have also continued to improve. Nevertheless, we still need to carefully monitor the effects of such improvement on the spending behavior of households and firms, particularly since the economy is faced with various structural problems. And, in view of the fact that Japan's budget deficit is the largest among major industrial countries, it should be noted that further stimulus from the fiscal policy side is not an easy option.

Under such circumstances, voices calling for additional measures on the monetary policy front have tended to become louder. And, some have begun to argue for tolerating a little bit of inflation. In fact, we have been receiving an increasing number of questions asking our views on "inflation policy" and inflation targeting. Though there is no single definition of inflation policy, it includes all policies which somehow artificially create inflation or inflationary expectations. Before responding to the questions, we first need to review the significance of price stability. In this regard, the Bank of Japan has recently announced that it will conduct a comprehensive study on price stability, and today's speech can be regarded as a prelude to such study.

### 1. Why is price stability important?

#### *Significance of price stability*

The new Bank of Japan Law which came into effect in April 1998 stipulates that the objective of monetary policy is to "contribute to the sound development of the national economy through the pursuit of price stability". When we emphasize the importance of price stability, we are sometimes criticized that the Bank of Japan is only concerned with inflation regardless of current economic conditions. Let me start by explaining that such criticism is not to the point.

Price stability is important because it provides the foundation for all kinds of economic activity and the people's livelihood.

The market economy is a structure within which firms and households make decisions regarding consumption and investment based on prices of individual goods and services. And, the general price level is a concept that consolidates individual prices of various goods and services traded in a country. In other words, the levels of individual prices can be evaluated against the general price level as a yardstick. In this framework, price stability means that this yardstick is reliable. If so, changes in consumer preferences and the progress of technological innovation will be efficiently translated into changes in individual prices. Thus, firms will be able to use changes in relative prices as a signal for their future business strategy. From a macroeconomic viewpoint, when the economic environment is continuously changing, stable prices facilitate the smooth reallocation of such resources as labor and capital and also technological innovation in response to, for example, consumer trends, thereby ensuring sound economic growth over the long run.

If prices fluctuate considerably and the yardstick becomes unreliable, then the signaling function of individual prices will be greatly weakened. In this case, labor and capital will not be easily transferred to growth industries, and the inefficient allocation of resources will ensue. In addition, an economy with unstable prices will likely experience unstable business cycles. This, in turn, will make it difficult for firms and households to formulate prospects regarding profits and income, which obstructs sound investment activity. Thus, if price stability is impaired, the long-term growth rate will decline.

Furthermore, price fluctuation distorts income distribution. For example, if inflation occurs, those with financial assets which are fixed in nominal terms, such as bank deposits, will see a fall in their real value. Conversely, those with financial liabilities will benefit from a reduction in their real value. As a result, inequality between those with assets and those with liabilities will arise. In contrast, if deflation occurs, the reverse inequality will follow.

### ***Policy objective of the Bank of Japan***

As such, price stability lays the foundation for sound economic development from the viewpoint of both efficiency and fairness.

The Bank of Japan has been aiming at price stability that is neither deflationary nor inflationary. It is a mistake to think that the Bank is concerned only with inflationary risks.

This can be understood from the conduct of monetary policy in the recent period. In February 1999, the Bank embarked on drastic monetary easing, namely the zero interest rate policy. And in April, it made clear its firm intent to maintain this policy until deflationary concerns are dispelled.

In view of current economic conditions and price developments, Japan's economy is judged not to be in the middle of deflation. What is frightening about deflation is that it induces a vicious circle called a deflationary spiral whereby price declines reduce corporate profits and wages which, in turn, leads to a slowdown in business activity and further price declines. These can be called "pernicious price declines". In fact, there was a very high risk of Japan's economy falling into a deflationary spiral up until around the spring of 1999, but concern over such risk materializing has greatly subsided in the past year. Both CPI and WPI have been almost level. Corporate profits have been increasing and economic activity gradually picking up. Though it is true that prices of a number of products have been declining, this is against the backdrop of various revolutionary changes including the so-called IT revolution, that is, the progress of technological innovation in information and telecommunications, as well as the revolution in distribution networks represented by the emergence of so-called "category killers". Such phenomena cannot necessarily be regarded as pernicious price declines.

Nevertheless, the Bank has been continuing its extremely accommodative policy symbolized by the zero interest rate policy. This is because, in our judgment, we might again face the risk of pernicious price declines until such time we can be confident that Japan's economy has achieved a recovery underpinned by private demand.

As such, the Bank of Japan has been conducting monetary policy by paying due consideration not only to inflation but also to deflation.

## **2. Problems with inflation policy**

### ***Two views of inflation targeting***

Recently there have been various discussions on setting a specific numerical target to the inflation rate in order to achieve price stability, namely inflation targeting.

At the outset, it should be noted that two different views have been discussed in Japan under the title of inflation targeting. Originally, inflation targeting is a policy framework to enhance the transparency regarding the conduct of monetary policy and to strengthen the credibility of the commitment to price stability. However, not a few advocate so-called inflation targeting in the same vein as inflation policy.

Thus, before discussing inflation targeting in its original concept, let me say a few words about the problems involved with inflation policy.

Inflation policy is not a well-defined concept. Most typically, as Professor Krugman of MIT advocates, it is a policy which aims at a somewhat high inflation rate of 4 to 5% and mobilizes all possible measures to achieve this target. Professor Krugman appears to have asserted this rather extreme policy prescription based on a very pessimistic view of Japan's economy. As a matter of fact, however, Japan's economy has started to improve. And, it is our judgment that, under such economic conditions, we should never adopt a policy that is contrary to price stability.

There is a variation of inflation policy that says a moderate inflation rate of 2 to 3% is tolerable and it may vitalize economic activity. However, given the current situation in Japan where prices are almost level, such a proposal is tantamount to artificially creating inflation. Furthermore, to implement such a proposal, many have suggested that the Bank of Japan should increase its outright purchase of government bonds or underwrite them. Some even advocate that the Bank of Japan should purchase stocks or real estate. Thus, what started as a proposal aiming at a moderate inflation rate of 2 to 3% under the disguise of inflation targeting for price stability has ended up being the same as inflation policy in that inflation should be artificially created at any cost.

### ***Inflation is no solution to economic problems***

Regarding inflation policy, first and foremost, I would like to point out that inflation is no solution to economic problems. Inflation policy assumes that moderate inflation will revitalize economic activity, alleviate the debt burden of firms as well as financial institutions, and relieve the fiscal deficit problem. Apparently those who advocate inflation policy argue, while taking due account of its negative effects, that the intended positive effects would be greater than the negative effects under the current situation. But, if we look more closely, the intended positive effects themselves would not likely be achieved.

Needless to say, financial markets today are sufficiently developed in major industrial countries, including Japan, and integrated on a global scale. And thus prospects for the economy and prices in Japan are of considerable interest to investors worldwide. Here, let us assume that the Bank of Japan announces a target inflation rate and market participants both at home and abroad believe that the announced target will be achieved. A well-developed financial market would immediately discount this announcement and long-term interest rates such as the yield on government bonds would rise even before we actually observed inflation. In theory, the nominal interest rate is defined as the sum of the real interest rate and the expected rate of inflation. Therefore, with such an announcement, the nominal interest rate would be pushed up by the same degree as the rise in the expected rate of inflation, leaving the real interest rate, which influences economic activity, unchanged.

Furthermore, since uncertainty regarding the future normally increases as inflation rises, there would be a greater possibility that long-term interest rates might rise more than the amount corresponding to the increase in the expected rate of inflation because of risk premium accompanying higher uncertainty. If this happened, the debt burden of firms and the fiscal deficit would likely increase rather than decrease in real terms. The increase in long-term interest rates would also have an adverse impact on economic activity such as business fixed investment. Therefore, a policy to create inflation would most likely turn out to be counterproductive to the objective it was initially intended to achieve.

Those proposing the solving of economic problems by way of inflation often refer to the experiences of history or developing countries. But, compared to such experiences, Japan today is placed in a totally different situation in terms of the development of its financial markets and globalization. Indeed, we would face the problem I just mentioned whether the target inflation rate were 4 to 5% or 2 to 3%. In this regard, it should be emphasized that what Japan needs now is an increase in real economic growth, not a rise in inflation.

### ***Difficulty of controlling inflation***

The second point is that inflation is most likely uncontrollable once triggered. Once inflationary expectations take a firm hold on society, they tend to proliferate. Workers would demand higher wage increases than would otherwise be the case. If wage costs rise, firms would try to pass them on to product prices. Such an economy has a built-in risk of increasing inflationary pressure.

Some argue that since the Bank of Japan is an independent central bank, it can raise the inflation rate to 2 to 3% and then contain it around that level even if there exists further upward pressure. However, if we tried to contain inflation after it had gained momentum, we would need very strong monetary tightening, which might result in a substantial deterioration of economic activity and a steep climb in unemployment. While it is true that the Bank of Japan has the power to contain inflation, it is also true that enormous costs would be imposed on society to suppress inflation once triggered.

In fact, prevailing thought in major industrial countries until the 1970s held that economies would be better off if a little inflation were tolerated. Partly because of such lax monetary policy, the world economy experienced high inflation from the 1970s through the first half of the 1980s. And to contain such inflation, many countries had to experience such hardships as higher unemployment. Because of such bitter historical experience, major industrial countries have now discarded the idea that a little bit of inflation will improve economic activity. Mainstream thinking now says that price stability should be maintained by a policy which prevents inflation from arising in the first place.

### ***Problems with further monetary easing***

The third point concerns measures to create inflation. In Japan, we have already exhausted orthodox monetary easing measures. Even if we wanted to create very modest inflation, we would have to resort to such unorthodox measures as an increase in our purchase of government bonds or even underwriting them. But here it should be noted that there is a risk that the negative side effects might be quite large once the Bank implemented such unorthodox measures. The severity of Japan's fiscal situation has attracted attention from all over the world. Thus, if the Bank of Japan started purchasing government bonds in large quantities, credibility in them would most likely be impaired. Long-term interest rates would rise because of a higher risk premium occasioned by a deterioration in the creditworthiness of the Japanese government. Adoption of such a drastic policy would run the high risk of eroding not only fiscal discipline and the smooth functioning of financial markets but also the credibility of Japan itself.

### ***Effects of the zero interest rate policy***

Having said all this, we should ask ourselves whether there is anything more to do in terms of monetary policy. As a matter of fact, the zero interest rate policy is an extremely powerful policy tool for monetary easing. Under the framework that the zero interest rate policy will be maintained until deflationary concerns are dispelled, if uncertainty about the economic outlook increases, the timing of lifting the zero interest rate policy will be automatically delayed. By taking account of this automatic prolongation of current monetary policy, long-term interest rates will promptly decline. Thus, the zero interest rate policy is powerful in that it possesses flexibility of automatically absorbing, to a certain extent, the effects of any negative shock on the economy.

Currently, Japan's economy has started to improve. Industrial production continues to rise, and the increase in corporate profits is being confirmed. Though there remains uncertainty regarding the future, we have been observing quite a number of new developments in such areas as information and telecommunications. At this juncture, I believe it very important to promote structural reform and create an environment conducive to revitalizing the corporate sector while the economy is underpinned by fiscal and monetary policy.

### **3. Inflation targeting**

#### ***Original inflation targeting***

Next, let me talk about the original concept of inflation targeting. Basically, it is a policy framework that emphasizes the strong commitment of the central bank to maintaining price stability and enhances the transparency regarding the conduct of monetary policy.

Inflation targeting has been adopted by such countries as the United Kingdom, New Zealand, and Sweden since around 1990. For example, in the United Kingdom, the target inflation rate is set at 2.5% for a price index roughly equivalent to CPI. At its monthly Monetary Policy Committee meetings, the Bank of England discusses the outlook for inflation and determines any necessary change in interest rates taking due account of the time lag for the effects of monetary policy to materialize so as to bring inflation to around 2.5% over the span of two years. Once every quarter the Bank of England releases an inflation report in which it explains the conduct of monetary policy and describes prospects for the economy and prices during the course of the following two years.

While implementation of inflation targeting differs from country to country, the fundamental common factors are (a) setting a target inflation rate, (b) conducting monetary policy with the aim of achieving the target over the medium term, and (c) making available a substantial amount of information including the economic outlook which is the basis for policy judgment. It should be noted that the central bank is not required to achieve the target inflation rate in the short run. The aim of inflation targeting is to contain inflationary expectations and enhance accountability regarding monetary policy by making a numerical target the medium-term objective.

This original concept of inflation targeting may have some merits. In fact, we have discussed the subject a number of times in our Monetary Policy Meetings. However, at the moment, I think adoption of such a framework in Japan presents many difficult problems.

#### ***Price developments in Japan***

As far as prices are concerned, they have been very stable in Japan.

Inflation targeting was originally adopted as a policy framework geared toward price stability by those countries who were suffering from high inflation. For example, in the United Kingdom, the average rate of inflation was more than 5% during most of the 1980s, reaching 7 to 8% in 1990 and 1991. And in 1992 inflation targeting was introduced. In the case of the United Kingdom, setting a target inflation rate at 2.5% is equivalent to announcing a strong commitment to containing inflation and maintaining price stability.

In contrast, since the early 1980s when the effects of the Second Oil Shock waned in Japan, the average rate of CPI increase has been very low at around 1%, and was only 3% at the peak of the bubble period when the economy was overheated. In the case of Japan, prices have been extremely stable for nearly twenty years. Thus, we have not been put in a situation where we have to set any inflation target to maintain price stability even if we have not solved such difficult problems as defining and measuring price stability.

#### ***New price revolution***

The problem of defining and measuring price stability is whether we can set an appropriate numerical target for inflation based on a specific price index.

In addition to this rather difficult problem, we need to consider the possibility that major industrial countries, including Japan, are entering a “new price revolution era”. Such development has been born of the rapid expansion of economic activity related to information and telecommunications, in other words the “IT revolution”. This is characterized by extremely rapid technological innovation which induces price declines through the improvement in productivity and the development of new products. Since the mid-1990s the United States has witnessed stable and low inflation under extremely low

unemployment, partly because economic expansion has been supported by the IT revolution. This phenomenon contradicts past experience.

In addition to this worldwide IT revolution, Japan has been experiencing dramatic changes in its distribution and service industries which can be seen as a revolution in distribution networks.

The progress of technological innovation and the revolution in distribution networks raise two big questions when analyzing prices. The first is whether prices of new products and price developments under the new distribution networks are appropriately reflected in price indexes. This is the oft-discussed issue of biases in price indexes. In view of the large number of new products and distribution networks available, this issue might have become more serious than previously envisaged. The second question is how to assess the price declines due to such revolutionary changes. If the IT and distribution network revolutions continue under the current situation of zero inflation, we cannot rule out the possibility that the economy could recover while the inflation rate is negative in terms of the existing price indexes, even though they may not sufficiently incorporate these revolutionary changes. And, in the case where cost reductions continue thanks to technological innovation, even if the inflation rate is statistically negative it would not be appropriate to judge the economy as being deflationary as long as it is recovering steadily.

When the environment surrounding prices is likely experiencing dramatic changes, we have to carefully examine whether it is possible to set an appropriate target for inflation based on existing price indexes.

### ***Desirable rate of inflation***

Whether an optimal inflation rate should be exactly zero percent or a small but positive number is another argument worth noting. Following are some of the reasons why the optimal inflation rate could be a small but positive number. First, as I mentioned, it appears not so easy for existing price statistics to fully incorporate actual price declines due to such factors as the revolution in distribution networks. This is the problem related to the upward bias of price indexes. Second, since nominal wages hardly ever decline, which is because of the so-called downward rigidity of nominal wages, economic adjustment would proceed more smoothly with a positive rate of inflation. Third is the zero boundary problem for interest rates. Since nominal interest rates, which can be controlled by the central bank, never fall below zero, room for further monetary easing would be limited if conditions worsened. In this regard, there is an argument that it is better to have a positive rate of inflation as a cushion so that the central bank can maintain room for maneuvering when a policy response is needed. Indeed, this argument may be related to the fact that countries which adopted inflation targeting set, in principle, a positive target for inflation, including the United Kingdom which has 2.5% inflation as a target.

However, careful examination seems warranted as to whether these discussions and the examples of foreign countries could be directly applied to Japan. In view of the fact that bonuses have fallen substantially and labor costs have been reduced by utilizing part-time workers and temporary employment agencies over the past one to two years, the downward rigidity of nominal wages in Japan's labor market may not be so strong as has been argued. The idea of tolerating a certain positive rate of inflation to ensure a cushion for monetary policy seems to be something like putting the cart before the horse. As you may know, Japan has had an average inflation rate of only slightly over one percent for nearly twenty years. Thus, it would need a very good reason to accept an inflation rate of 2 to 3%. At this juncture, we should carefully examine the content of price stability that best contributes to the sound development of the national economy by taking due account of the features and structure of Japan's economy.

### ***Toward enhanced transparency of monetary policy***

As I have just described, there seem to exist a number of difficult problems in applying inflation targeting to Japan in the way it is adopted in some foreign countries. As a matter of fact, not only the Bank of Japan but also the Federal Reserve Board and European Central Bank are cautious about

adopting such a framework. Nevertheless, it is true that the Bank of Japan is keenly aware that the transparency of monetary policy should be further enhanced.

Since it is impossible to foresee the economic outlook with certainty, we can neither predetermine the timing of any future policy changes nor set mechanical criteria for deciding policy changes. In fact, even in countries adopting inflation targeting, there is no rule whereby the central bank automatically tightens monetary conditions if inflation hits a certain target rate. In any country, monetary policy is based on the central bank's judgment of future price developments, which are influenced by various factors such as demand at home and abroad, wages, oil prices, foreign exchange rates, and technological innovation. In the conduct of monetary policy, the central bank needs to make an overall judgment by examining the effects of all these factors on prices. In this sense, the overall judgment of the central bank is important regardless of whether a framework like inflation targeting is adopted or not. In other words, adoption of inflation targeting does not mean that people will be able to know in advance when and by how much the policy interest rate will be changed.

The transparency of monetary policy is, after all, nothing more than clarifying what monetary policy is aiming at, and disclosing, to the extent possible, the overall judgment of the central bank with respect to current and future economic and financial conditions. With respect to the former, the new Bank of Japan Law clearly stipulates that price stability is the objective of monetary policy. With respect to the latter, the Bank has been trying to explain its overall judgment as clearly as possible in its Monthly Report on Recent Economic and Financial Developments and minutes of Monetary Policy Meetings. Such disclosure is stipulated in the new Bank of Japan Law. We thus believe that the transparency of monetary policy has been considerably enhanced compared with the situation under the old law.

At the same time, we should be well aware that behind the heated discussion on inflation targeting, market participants and the public are calling for more transparency with respect to monetary policy. Truly, greater transparency is also important for the central bank from the viewpoint of the smooth transmission of policy effects. Furthermore, we recognize that it is an important mandate of the Bank of Japan to plainly explain our thinking on the conduct of monetary policy and price stability.

Bearing such recognition in mind, the Bank has decided to conduct a comprehensive study on the concept of price stability and issue a report by around summer. The issues for study include:

- (a) our basic thinking regarding price stability;
- (b) the measurement of prices, namely, issues regarding price indexes;
- (c) the evaluation of recent price developments in Japan; and
- (d) issues related to the numerical quantification of price stability.

Since I have often been asked about the relationship between this comprehensive study on price stability and the lifting of the zero interest rate policy, let me say a few words on this issue.

The comprehensive study that we have undertaken is intended to review our basic thinking regarding price stability with a view to enhancing the transparency of monetary policy over the long run. And it should be understood that it is independent from the current conduct of monetary policy. Hence, it is not directly related to such issues as the timing of lifting the zero interest rate policy or conditions which must be fulfilled for lifting such policy. In other words, it does not imply that the zero interest rate policy will not be lifted until the study is completed nor that it will be lifted once the study is completed.

Conditions for lifting the zero interest rate policy can be likened to those for a patient in a hospital coming out of the intensive care unit, while our basic study on price stability is similar to a medical study of how to maintain health and physical strength in normal times.

With respect to the condition for lifting the zero interest rate policy, we have clearly stated that we will maintain the current zero interest rate policy until deflationary concerns are dispelled.

#### **4. Concluding remarks: until deflationary concerns are dispelled**

I would like to conclude my remarks today by addressing the question of how we might decide that the economy has reached a stage where deflationary concerns have been dispelled.

What is of central concern in our conduct of monetary policy is to avoid a deflationary spiral, which is a vicious circle of price declines and recession. However, it is difficult to define this spiral by such simple figures as a certain percentage decline in CPI. To reiterate, we cannot necessarily conclude that a situation is deflationary solely from a negative inflation rate when the IT and distribution network revolutions are in full swing. To the contrary, even if inflation is level statistically, stagnant demand would indicate future declines in prices and corporate profits, which means that deflationary concerns have yet to be dispelled. Thus, price developments must be assessed together with underlying factors. Furthermore, the most important point when judging whether deflationary concerns are dispelled is to analyze whether there exists pressure for pernicious price declines stemming from shrinking demand or a widening output gap.

In other words, if we become confident that economic recovery is sustained and that the output gap continues to narrow, then we can say that deflationary concerns have been almost dispelled and Japan's economy could leave the intensive care unit. In this regard, we need to have clearer indication that the economy is on a self-sustained recovery path led by private demand, not by policy and external factors.

Private demand basically consists of household consumption and business fixed investment. While both are necessary for sustainable growth, business fixed investment is believed to play, in many cases, a more important role in giving impetus to a virtuous circle of a self-sustained recovery. Recently, the environment surrounding private demand has been gradually improving as evidenced by higher corporate profits and the improved sentiment of firms and consumers. It is crucial whether such improvement will lead to increased spending. The Bank of Japan will carefully monitor the economy with focus on the strength of private demand centering on business fixed investment.

Today, I have tried to share our thoughts with you on price stability and the conduct of monetary policy by referring to inflation policy and inflation targeting. As always, I would appreciate it if you would continue to give us your understanding and support.