Inflation Targeting Discussions in Japan
– unconventional monetary policy under deflation:
How People Have Argued; Why the BOJ Opposes Adoption.

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Abstract

Inflation targeting has been adopted by many central banks all over the world, and has brought about the successful result of reducing inflation rates and enhancing the central bank's independence, transparency and accountability. Could this regime also effectively work in Japan, whose economy has been suffering from deflation, by creating inflationary expectations?

Krugman's suggestion in 1998 that Japan introduce an unconventional monetary measure to get out of a liquidity trap by fueling inflation triggered the debate about inflation targeting. A number of economists, policymakers, journalists and central bankers both inside and outside of Japan have hotly argued the policy and their opinions range from the mundane to the esoteric. This paper seeks to examine both sides of the inflation targeting argument and tries to sort through the confusing discussions.

Part of the reasons the discussions appear too complicated and controversial for the general public to understand, apart from technical aspects, stem largely from such factors as the existence of two types of inflation targeting, ambiguity of definitions of the policies, emotionally charged arguments and a welter of opinions built on different assumptions and foundations. The Bank of Japan is the biggest opponent to implementation of this monetary policy, and, behind its persistent rejection of the policy lies the Bank's history of its struggle to gain independence from the government.

The debate over inflation targeting under deflation in Japan can be described as conflicting viewpoints on the use of conventional methods versus unconventional methods to set monetary policy solutions for the current economic crisis. Japan's fight against deflation with inflation targeting discussions could lead to some lessons for the world economy, which might face the same fears of deflationary downturn as Japan has experienced, specifically as to how policy discussions evolved as the economy was moving into uncharted territory.

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1. Introduction

On March 20, 2003, a new governor of the Bank of Japan was inaugurated. Toshihiko Fukui, who replaced Masaru Hayami, is expected to play the role of guardian angel for the Japanese economy. Observers are watching closely to see if he adopts unconventional monetary policies to eradicate deflationary pressures.

During the so-called "lost decade" in Japan, the most prominent feature of the economic downturn was described as long-running deflation,[1] a persistent price decline, which virtually no other industrialized country had experienced since the end of the World War II. Deflation has adverse effects on the Japanese economy by increasing real debt burdens, weakening the profit position and reducing consumer demand. Given that expansionary fiscal policy measures are considered to have reached the limit of their effectiveness due to the expansion of Japan's government debt to as much as 140 percent of the nation's gross domestic product, the general consensus seems to be that the most promising revival tool available to stop deflation is monetary policy.

The question is then: what should the central bank do to help the Japanese economy recover under zero interest rates? In 1998 Paul Krugman [1998 a, b, c, d] gave an interesting answer to that question. He said that the central bank should create inflationary expectations, which in turn cause interest rates to decrease, with the end result being that Japan could pull out of a liquidity trap. His unexpected suggestion suddenly became controversial and was followed by heated debates about inflation targeting among economists, central bankers, the government,

[1] According to Japan's Cabinet Office [2002], consumer prices temporarily decreased after 1995 and the decline has become consistent since the autumn of 1999. On a year-to-year basis, consumer prices fell 0.4 percent in fiscal year (FY) 2000 (April 2000-March 2001) and 0.8 percent in FY2001 (April 2001-March 2002). Domestic wholesale prices fell 0.1 percent in FY2000 and dropped 1.1 percent in FY2001. The GDP deflator, which indicates domestic price trends, shows that a downward trend has continued since FY1994 and fell 1.9 percent in FY2000 and 0.9 percent in FY2001.

politicians and the media both inside and outside of the country.

How hotly the issue has been argued was often reported by the media; however, it is unlikely that the general public is aware of the finer points of the discussion, despite the fact that most people are familiar with the phrase "inflation targeting," or *infure mokuhyô* in Japanese. Since the controversy on inflation targeting has emerged in Japan, arguments have been getting more and more heated and complex. Why is the concept of inflation targeting so difficult for the public to grasp? What factors other than technical questions complicate the discussions? This paper seeks to examine both sides of the inflation targeting argument, and tries to sort through the complicated, confusing and sometimes emotional aspects of those arguments. We'll also take a look at what stance the monetary authority has taken and whether the monetary authority has succeeded in discharging accountability for its position on inflation targeting.

Since many economists have argued brilliantly in other venues whether or not inflation targeting under deflation is effective, if inflation targeting with zero interest rates is feasible and what possible side effects need to be considered – all without reaching a decisive conclusion, this paper will not examine the technical aspects of inflation targeting. Instead, it will serve as a forum to scrutinize the foundations of each side of the argument, as well as the issues of the central bank's independence, credibility and the relationship between the central bank and the government.

Japan's prolonged deflation-led recession has been at the heart of one of the main concerns about the world economy. Currently, disinflation forces are being expanded globally. The U.S. Federal Reserve and the European Central Bank have shown their concerns about disinflation. As seen in Japan, where the nominal interest rate is essentially zero, once deflation grips an economy, it is extremely difficult to combat it.

This paper will also examine implications for those countries that might face the same fears and reactions as Japan, specifically how policy discussions evolved as the economy was moving into uncharted territory. At the same time, some lessons can be drawn from these debates for future policy discussions in Japan, where public policy discussions are not so common, serving as a forum for ways to improve the policymaking process.

The paper is organized as follows:

- Section 2 defines the concept of inflation targeting and looks at lessons learned from economies that have experienced inflation targeting.
- Section 3 examines how inflation targeting discussions began in Japan and introduces some aspects that have made the arguments more controversial.
- Section 4 offers an overview of the main arguments of proponents and opponents among economists, the government, the media and business leaders.
- Section 5 reviews the central bank's monetary policy since 1998, examines how it has argued against inflation targeting, and describes the key points of the debate.
- Section 6 explores what is the central bank's mission and studies the monetary authority's independence and credibility.
- Section 7 looks at what lies ahead and concludes the paper.

2. What Is Inflation Targeting?

Over the past decade, the policy of inflation targeting has been adopted by many central banks around the world, from industrialized countries to emerging economies or transitional countries, and there is a growing interest in the implementation of such a policy, and its results.

In this section, the actual definition of inflation targeting is discussed, and we'll take a look at which countries have introduced the policy and what lessons can be drawn from their experiences.

2.1. Definition of Inflation Targeting

There is not yet a precise definition of inflation targeting primarily because institutional arrangements differ from one country to another country, leaving room for ambiguity in the description. A comprehensive study of inflation targeting by Bernanke, Laubach, Mishkin and Posen [1999] explained it as follows:[2]

> *Inflation targeting is a framework for monetary policy characterized by the public announcement of official quantitative targets (or target ranges) for the inflation rate over one or more time horizons, and by explicit acknowledgement that low, stable inflation is monetary policy's primary long-run goal. Among other important features of inflation targeting are vigorous efforts to communicate with the public about the plans and objectives of the monetary authorities, and, in many cases, mechanisms that strengthen the central bank's accountability for attaining those objectives.*[3]

The authors emphasize that inflation targeting is a *framework* for monetary policy that allows for the exercise of "constrained discretion,"[4] as opposed to a *rule* since there is not an absolute rule in practice for monetary policy. Although there are some variations from country to

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[2] Top executives of the Reserve Bank of New Zealand, a country that has the longest history with inflation targeting regime, often referred to this definition in their speeches. See, for example, Brash [2002] and Sherwin [1999].

[3] See Bernanke et al. [1999], p.4.

[4] See Bernanke et al. [1998], pp.4-6 and pp.299-301. The authors wrote, "By imposing a conceptual structure and its inherent discipline on the central bank, but without eliminating all flexibility, inflation targeting combines some of the advantages traditionally ascribed to rules with those ascribed to discretion."(p.6)

country, the core elements above are commonly shared. In short, therefore, inflation targeting is described as a framework through which central banks make an explicit commitment to achieve a publicly announced numerical inflation rate within a particular time frame.

2.2. Countries Adopting Inflation Targeting

New Zealand was the pioneer in introducing a formal inflation-targeting regime in 1990. It was soon followed by: Chile and Canada in 1991; Israel and the United Kingdom in 1992; Sweden and Finland in 1993; Peru, Australia,[5] and Spain in 1994; Czech Republic, Korea, and Poland in 1998; Mexico, Brazil, and Columbia in 1999; Switzerland, South Africa, and Thailand in 2000 and Hungary in 2001 (See Table 1). The two biggest global economies do not set inflation targeting. The United States has never adopted a regime of explicit inflation targeting[6] under the Federal Reserve Act, which requires the Fed both maximize employment and price stability, while policymakers of the Fed have often stressed the importance of controlling inflation. There are advocates for an explicit numerical inflation target and bills have been introduced on several occasions in Congress that call on the Fed to set inflation targeting, but none have been adopted. As for the other major economic power, the European Central Bank does not identify itself as an inflation-targeting regime; however, the ECB set an explicit numerical target for inflation[7] as the Maastricht Treaty determined price stability as its principle objective.

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[5] The Reserve Bank of Australia considers that it began inflation targeting in 1993, however, the Governor's declaration about an inflation target was made in September 26, 1994. See Bernanke et al.[1999] and Ball and Sheridan [2003]

[6] Mankiw [2001] called Fed's policy "covert inflation targeting."

[7] The ECB announced in May 2003 that it would aim for an inflation rate of close to 2 percent over the medium term, while at the same time it would maintain its definition of price stability as an inflation rate of below 2 percent. (*AFX European Focus*, May 8, 2003)

<Table 1> Design of Inflation Targeting (in some industrialized countries, August 2003)

Country	Date Adopted	Target Index	Target Width	Time Horizon	Target Set by
New Zealand	Mar. 1990	CPI	1-3%	Medium term	Jointly Gov & CB
Canada	Feb. 1991	CPI	1-3% (midpoint 2%)	2006 (every 5yr)	Jointly Gov & CB
UK	Oct. 1992	RPIX	2.5%	Indefinite	Gov
Sweden	Jan. 1993	CPI	2±1%	Indefinite	CB
Australia	Sep. 1994	CPI	2-3%	Medium term	Jointly Gov & CB

Sources: Each central bank's web pages, Ball and Sheridan [2003], Cargill et al. [2000] and Mishkin and Schimidt-Hebbel [2001a]

Essential factors in determining implementation features during the design phase of inflation targeting are:

- Who sets a target
- Which measure is used as a target price index
- What is the numerical target width, point or range, in what level
- What is the target time horizon
- Whether escape clauses are set
- Whether accountability of target misses is required
- How the central bank communicates with the public for accountability

In most countries that have used inflation targeting, though many variances are observed, inflation targets are set by the central bank or jointly by the central bank and the government, for a measure of the Consumer Price Index (CPI), with point targets or midpoint targets ranging from one to three percent, in a one to multi-year time frame.

2.3. Lessons from Experiences

Has inflation targeting effectively worked? There are a number of good references on inflation targeting, and many have examined its impact on the economy in countries that have adopted this policy. Based on some of those citations,[8] the tentative conclusions drawn are:

- The independence of the central bank has been reinforced.
- Communication, accountability and monetary policy transparency of a central bank have been enhanced through the publication of inflation reports, policy board meeting minutes and monetary policy statements.
- Inflation targeting has helped in decreasing inflation rates and inflationary expectations.
- Public understanding of monetary policy has been increased.
- Inflation targeting has been effective in providing a nominal anchor for monetary policy.
- Inflation targeting has increased the central bank's flexibility in conducting monetary policy.

Some add that a formal inflation targeting regime would bolster the credibility of the central bank's commitment to price stability. However, credibility is obtained by the performance of the central bank, comprehensively judged from whether it has met its explicit goal and discharged its responsibility and accountability with coherent policy management.[9] Just introducing inflation targeting does not seem to subsequently enhance the central bank's credibility, but it is likely that an increase of accountability and openness about monetary policy may in turn strengthen the central bank credibility.

While inflation targeting does have some advantages, it also has disadvantages. Mishkin [2001b] discussed seven major disadvantages of this regime noted by critics. Four of those disadvantages are that inflation targeting is too rigid; that it allows too much discretion; that it

[8] For example, Bernanke et al [1999], Meyer [2001] and Mishkin and Schimidt-Hebbel [2001]

[9] Meyer [2001] said, "Whether an explicit inflation target or a formal inflation-targeting regime would boost the credibility of the central bank's commitment to price stability is more debatable. In my judgment, credibility is primarily earned by performance."

has the potential to increase output instability, and that it lowers economic growth. Mishkin argued that these four factors are not serious objections to a properly designed inflation targeting that is best characterized as constrained discretion. The other three disadvantages are that inflation targeting can produce weak central bank accountability; that it cannot prevent fiscal dominance, and that it may cause financial instability due to exchange rate flexibility necessary for inflation targeting. Regarding these problems, Mishkin suggested some conditions with which inflation targeting is likely to be more an effective strategy.

Since the history of inflation targeting is relatively short, much more discussion and analysis will be expressed in the future about the pros and cons of this policy. However, short-term assessment suggests that it is a successful policy, as interest in its possibilities grows and more countries apply this strategy every year.

2.4. Inflation Targeting Under Deflation

In general, inflation targeting has been used to lower inflation rates in order to achieve price stability. A question then arises: is there any country that has tried to *increase* prices using an inflation-targeting regime? The answer to such a question is of extreme interest to Japan, since a price increase is precisely what the Japanese economy needs under its current deflationary phase.

There are two prime examples of countries using the same tactic. One is Sweden in the 1930's, which attempted to pull its economy out of deflation by using a similar policy. Sweden applied explicit price-level targeting when it left the gold standard in 1931. The monetary program of price stabilization using all means available was announced, but there was no numerical target of a particular price index. The policy appeared to be effective to stop price declines and enhanced economic recovery with the rise of the CPI and the Wholesale Price Index (WPI), although it did not stop depression abruptly.[10]

Though both current Japan and Sweden in 1930s have deflationary problems, some differences of economic fundamental situations are observed between the two. At that time, Sweden didn't face a financial crisis, had sufficient room to cut interest rates with 8 percent as the starting point[11] and depreciation of the currency helped prevent price falls.[12] These differences may indicate that it is not convincing to say that the Bank of Japan (BOJ) should take the same measures used in Sweden solely because it could overcome deflation in that way. Thus, it is unlikely to draw broader conclusions from Sweden's experience, though the case, in general, is considered successful.

The other example is New Zealand. With the economy moving into recession affected by the Asian financial crisis, the annual CPI inflation in 1999 fell to –0.4 percent in June, –0.5 percent in September and rose to 0.5 percent in December.[13] Donald Thomas Brash, Governor of the Reserve Bank of New Zealand at the time, said in March of 1999 that having the headline inflation figure (the CPI including interest rates) go below zero wouldn't be a breach of the Policy Targets Agreement, which requires the Reserve Bank to maintain CPI inflation in the range of 0 percent to 3 percent, because the Policy Targets Agreement is explicitly defined in terms of the CPI excluding interest rates.[14] The new definition of the CPI was introduced in the third quarter of 1999 and the new CPI excluded interest rates and land prices. The New Zealand Treasury [2000] pointed out that the annual rate of CPI inflation included two quarters of the old definition of the CPI (including interest and land prices) and two quarters of the new definition

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[10] See Cargill [2001]
[11] See Berg and Jonung [1999]
[12] See Yamaguchi [2001]
[13] See New Zealand Treasury [2000]
[14] See Reserve Bank of New Zealand [1999]

of the CPI (excluding interest and land prices), and said "a consistent definition of inflation on the old basis shows that annual inflation fell from 1.5 percent in June to 1.1 percent in September before ending up at 1.3 percent in December 1999."

Positive proof of whether New Zealand's inflation targeting made any contribution toward the increase of prices seems in question, and Brash [2000] attributed the economic revival to the strong recovery in the overall world economy and very relaxed monetary conditions. Even though New Zealand had experienced a deflationary downturn in 1999, it was a very short period of time compared with Japan, which has been suffering from deflation for more than three years.

New Zealand introduced inflation targeting in 1990, in an attempt to improve its inflation performance, considered at the time among the worst in inflation performance for economies in developed countries. The fact is that the Reserve Bank continued inflation targeting even under conditions of falling prices. Useful lessons of inflation targeting effectively working under deflation are not likely to be drawn using the New Zealand example.

3. Emergence of Inflation Targeting Discussions

In May 1998, a controversial paper was posted on the Internet, advocating that Japan should try an unconventional monetary measure to get out of a liquidity trap by fueling inflation. This paper was "Japan's Trap" written by Paul Krugman [1998a].

Inflation targeting had been adopted by countries seeking to reduce inflation, so would it work for Japan under deflation? Economists, academics, policymakers and central bankers both inside and outside of the country have joined the debates of this strategy. The phrase "inflation targeting," or *infure mokuhyô* in Japanese, is now more familiar to the Japanese people, although whether they understand the intricacies of the definition is somewhat in doubt.

The arguments, pros and cons, have gotten heated, confused and more complicated. This section describes the main points of Krugman's idea, and examines several elements behind the discussions that may have escalated controversy and complexity.

3.1. Krugman's Idea

According to Krugman [1998a, b, c, d], Japan has been caught in a liquidity trap, a condition where monetary policy loses its effectiveness, because the nominal interest rate is essentially zero, with the result of injecting a monetary base into the economy has no effect. In a liquidity trap, the IS-LM model shows that desired savings exceed desired investment at full employment - even at a zero real interest rate. The nominal interest rate cannot fall below zero. To match savings and investment, the full-employment equilibrium real interest rate should be negative. Therefore, the Japanese economy needed a negative interest rate, which means expected inflation. The central bank must make a commitment to future monetary expansion, so as to create expectations of inflation. Based on this analysis, Krugman suggested a 4 percent inflation rate for 15 years.

Krugman added that the market sees that the BOJ, as responsible monetary authority for price stability, will seek to tighten the money supply when prices rise. He argued that the central bank should "credibly promise to be irresponsible"[15]; to make monetary policy effective, that is, convince the market that the central bank will permit inflation to occur. He admitted, "This sounds funny as well as perverse."[16] As the author himself acknowledged that this idea was unusual, his paper gained notoriety throughout Japan, to a chorus of criticism. The response to Krugman's suggestion ranged from "His idea itself is irresponsible" to "He is exploiting his

[15] See Krugman [1998a], [1998d]
[16] See Krugman [1998a]

reputation,"[17] but it did have the effect of triggering a general discussion about the effectiveness of inflation targeting in Japan.

3.2. Language Matter - Two Types of Inflation Targeting

Krugman called his suggestion "managed inflation,"[18] so his concept was introduced into Japan using a Japanese translated word *chôsei infure*[19]. Krugman [1998b] wrote, in the next month following the publication of his first controversial paper, that his recommended policy was basically the same as inflation targeting adopted by New Zealand or the UK. Despite his further explanation, his theory has not been defined as inflation targeting or *infure mokuhyô* and is still considered a different concept from inflation targeting.

In its history of the Japanese economy, the phrase of *chôsei infure* was not new; but the objective of the original policy of *chôsei infure* was totally different from that of Krugman's idea. In early 1970s, Yasuhiro Nakasone, Minister of International Trade and Industry at that time began using *chôsei infure* as the phrase to symbolize the thought that Japan needed to prevent the Japanese yen from appreciating by creating inflation under the floating exchange rate system, because the stronger yen was a big threat to the export-oriented economy. (*Nikkei Financial Daily*, July 5, 1994) Hence, people who know well Japan's oil shock era may confuse Krugman's *chôsei infure* with the currency policy.

Aside from language differences, we have two types of inflation targeting in Japan, which are rarely reported to overseas markets. One is *chôsei infure* ("managed inflation" or "inflation

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[17] Yamagata [1998] wrote, "A lot of people including myself, at first, thought it was a joke that didn't make it on April Fool's Day."
[18] See Krugman[1998c] and [1998d]
[19] C*hôsei* means manage or control in Japanese.

policy").[20] The other is *infure mokuhyô* (inflation targeting). What is the difference between the two?

Chôsei infure or "inflation policy" is not a well-defined concept, as many say that its definition is unclear. According to the BOJ, *chôsei infure* means "a policy which aims at somewhat high inflation rate of 4 to 5 percent and mobilizes all possible measures to achieve this target,"[21] while *infure mokuhyô* or inflation targeting is "a scheme under which: 1) a desirable inflation rate from a long-term perspective is set as a target; and 2) a central bank adjusts monetary policy in a forward-looking manner when an actual inflation rate is expected to deviate from the target."[22] Until recently, even news media confused both and some said that the two were identical.

A major newspaper distinguished inflation policy from inflation targeting by defining that inflation policy is set as high as around 10 percent[23], which sounds too extreme. Moreover, some media confused inflation targeting with price-level targeting. Nonetheless, in general, inflation policy, as originated by Krugman, is usually considered aiming at an inflation rate of around 4 percent or more - higher than that of inflation targeting. In fact, Krugman suggested, in his latest book published in Japan, that the BOJ should adopt an inflation target of between 2.5 and 3 percent.[24] Therefore, on the basis of BOJ's interpretation of *chôsei infure* (inflation policy), Krugman no longer asserts inflation policy, because his recommended inflation rate is less than 4

[20] Krugman at first expressed his idea as "managed inflation." Once it was translated into *chôsei infure* in Japanese, *chôsei infure* was re-translated into "inflation policy" in English. Although both "managed inflation" and "inflation policy" are used to mean *chôsei infure*, this paper takes the word of "inflation policy" as the BOJ uses it.

[21] See Hayami [2000]

[22] See Bank of Japan [2001]

[23] *Mainichi Shimbun* wrote that inflation policy aims at inflation rate of 10 percent in the short-term, while inflation targeting aims at inflation rate of 2-3 percent in the medium- and long-term. (*Mainichi Shimbun*, September 28, 2001)

[24] See Krugman [2002]. For publication of this book, the author of this paper interviewed Krugman. He said if he chose 4 percent, it would upset people, so he would accept 2.5 percent; but if he could sneak in at night and erase the number, he would put in 3, because higher is better.

percent.[25] However, Krugman's first paper was so sensational that he is still regarded as an advocator of *chôsei infure* or inflation policy.

To further confuse the issue, several similar words have been derived from the term "inflation targeting," such as an "inflation reference target" or *infure sanshôchi* – a desired increase in prices with no deadline for its achievement, and a "price target" or *bukka mokuhyô*. The fact that the differences among these terms have not been sufficiently explained has left the general public even more bewildered.

3.3 Heated Arguments Grow

One of Krugman's most salient points made in his paper is his explanation of the significant fundamental economic problem Japan faces by using macroeconomic models to shed new light on the issue of a liquidity trap. Regardless of how scholarly his approach, his untraditional way of thinking stunned conventional thinkers who held that inflation is an evil that hurts living standards.

Economies traditionally have battled inflation in every country in the world at one time or another, and thus it is easy to imagine how Krugman's ideas, expressed in his direct and cynical style, probably upset staid central bankers accustomed to adhering to a conventional program in monetary policy. Krugman [1998d] wrote, for example, " it (the BOJ) is doing so (some quite unconventional monetary operations) in a surreptitious, almost shamefaced manner, and therefore not creating the sort of credible promise to be irresponsible that I argued was necessary," and "They (many economists and economic commentators) know that price stability

[25] Some people distinguish inflation policy from inflation targeting by its objective, saying that inflation policy is to stimulate the economy in the short-term and inflation targeting is to enhance the central bank's accountability and transparency of its monetary policy. However, analysis in this paper is based on the BOJ's view, that is, inflation policy means setting an inflation rate of 4 percent or more.

is good, inflation bad – and are so anxious to uphold the cannon (of orthodoxy and soundness) that their normal analytical sense seems to desert them." These are only a few examples of the Krugman style. As often shown in his articles in *The New York Times*, his style comes across as ironic and sometimes even aggressive, considerably anti-establishment and non-traditional. This, in particular, seems to have offended Japan's central bankers' feelings.

Masaru Hayami, former Governor of the BOJ, vehemently opposed Krugman's ideas. Hayami's incisive tongue, as a result, occasionally fueled heated debates with proponents of the policy. During his tenure, he reportedly mentioned that inflation policy was foolish. This, in turn, upset policymakers who were backing inflation targeting, causing additional controversy on the subject as the policymakers now had an emotional stake in the issue.[26] Hayami also called inflation targeting a "reckless gamble" (*Asahi Shimbun*, February 26, 2003), and said that inflation targeting is what socialist countries do.[27] In such a way, Hayami's remarks seemed to have a direct effect on the sometimes troublesome disputes. One article even suggested that he had "a tendency to invite confusion." (*Nihon Keizai Shimbun*, March 20, 2003)

Emotionally charged phrases among economists have also been observed. Ryutaro Komiya [2002], Professor at Aoyama Gakuin University, wrote that the chorus calling on the BOJ to setting inflation targeting is "harassment" against the Bank. He said that advocates of

[26] The following is an example. On September 21, 2001, at the Monetary and Financial Committee of the Lower House, Kozo Yamamoto, member of the Liberal Democratic Party, asked Hayami to exactly define what inflation policy is. Yamamoto was strongly supporting inflation targeting with an inflation range of 2 to 4 percent for two years, the latter rate that was possibly regarded as inflation policy based on BOJ's definition. Hayami answered that inflation policy seems to achieve its goal by any measures, "ignoring side effects and risks," a phrase which seems to be interpreted by Hayami from Krugman's original words "announced intention of doing whatever is necessary to achieve that (target) rate."(Krugman [1998b]) Since Hayami did not define inflation policy with a numerical value at the committee, Yamamoto accused Hayami of not being able to identify what he actually criticized and was lacking the sense of crisis of the Japanese economy. See the transcript of the meeting, www.yamamotokozo.com.(in Japanese)

[27] The comment of Hayami was held at the meeting of the Council of Economic and Fiscal Policy on February 27, 2002. Heizo Takenaka, Minister of State for Economic and Fiscal Policy, argued that the UK and Canada adopted inflation targeting, and the discussion continued - exceeding the schedule by 30 minutes. (*Nihon Keizai Shimbun*, March 7, 2002)

inflation targeting insist the Bank must take responsibility for the outcome after it adopts inflation targeting, but given the present circumstances there is no measure to create inflation as the monetary authority itself wishes to make the CPI inflation rate no fewer than zero with the result of a continuous price decline.

The word "harassment" brought fierce backlash from proponents of inflation targeting such as Kikuo Iwata, Professor at Gakushuin University and Takatoshi Ito, Professor at Tokyo University. Ito [2002] wrote that they were supporting the policy for the sake of the BOJ, not to harass the Bank, and added that Komiya should not criticize inflation targeting with an emotional word like "harassment."

Compared to the arguments in the US where people learn how to debate in schools and there is a clear barrier between arguments and individual personality; debates in Japan sometimes turn into emotionally overheated arguments, where people attack the personality of advocates rather than addressing the issue itself. Needless to say, policy discussions should be conducted rationally; however, this may be particularly difficult in Japan, given the Japanese tendency of inability to be able to distinguish individual personality from policy positions. Emotional considerations are hard to set aside in these arguments, with the result being a bitterly-contested debate over inflation targeting.

4. Arguments For and Against Inflation Targeting

A wider group of people including lawmakers, government officials, academics and the media both domestic and international has joined the heated arguments. That some of them have changed their viewpoints[28] has only spurred controversy and added complexity to the unsettled

[28] Koichi Hamada, Professor at Yale University, former Director of the Economic and Social Research Institute of the Cabinet Office, at first opposed inflation policy (Hamada [2000a], originally published in

debates. This section illustrates a rough sketch of who are proponents and who are opponents among the debaters. (See Table 2). The biggest opponent is, of course, the BOJ, and its monetary policy and arguments will be studied in the following section.

<Table 2> Arguments For and Against Inflation Targeting

	Government/Policymakers/BOJ	**Economists**	**Media/ Business**
FOR		**Paul Krugman**, Princeton U. 4% for 15years (1998) 2.5-3% at least 10 years (2002)	
		Ben S. Bernanke, FRB Price level target: 5% above the level in 1998 for 2003, followed by 1% rise annually **Lars E. O. Svensson**, Princeton U. price level-and inflation-targeting **Adam S. Posen**, IIE initially 3%, three years later 2%	**Yomiuri**
	LDP Anti-deflationary Committee **LDP Financial Panel** **Taku Yamasaki**, LDP Secretary General **New Komeito Party** **New Conservative Party** **Heizo Takenaka,** Minister of Economic and Fiscal Policy	**IMF** **A group of 9 professors including** **Takatoshi Ito**, Tokyo U. 1-3% **Kikuo Iwata**, Gakushuin U. 1-3%	**JCCI**
	Masajuro Shiokawa, Minister of Finance		**Nikkei**
	Junichiro Koizumi, Prime Minister **Hiromu Nonaka,** former LDP Secretary General **Opposition Party**	**Izuru Kato**, Totan Research **Eisuke Sakakibara**, Keio U. **Ryutaro Komiya**, Aoyama Gakuin U.	**Mainichi** **Keidanren** **Doyukai**
Against	**BOJ**		**Asahi**

Weekly Toyo Keizai, November 13, 1999), in the next, showed sympathy to inflation targeting (Hamada [2000b], originally published in *Weekly Toyo Keizai*, March 11, 2000) then said that the BOJ may set a target for an inflation rate of 2 percent to 3 percent at the panel meeting of the Council on Economic and Fiscal Policy (*Japan Economic Newswire*, December 13, 2002).

Hiroshi Yoshikawa [2000], Professor at Tokyo University and a member of the Council on Economic and Fiscal Policy, a key government panel, wrote that Krugman's model couldn't be a solid foundation for effectiveness of inflation targeting to boost the Japanese economy. Yoshikawa is now among 9 economists advocating a policy proposal of inflation targeting. (*Nihon Keizai Shimbun*, March 19, 2003)

4.1. Economists

Takatoshi Ito [1999], Professor at Tokyo University, wrote an article for *The Financial Times* on October 19, 1999, proposing that the BOJ commit to an inflation target of 1 to 3 percent to be achieved in two years. Ito was Deputy Vice-Minister for International Affairs in the Ministry of Finance at that time, and the article was highly noted, though he authored it in a personal capacity. His primary objective in the article was to draw attention to the importance of enhancing the central bank's accountability and clarity for its monetary policy to ensure its solid independence from the government. Since then, he has been considered one of the representative proponent economists for inflation targeting.

In October 2001, he formally proposed with other professors, Mitsuhiro Fukao at Keio University and Takeo Hoshi at University of California at San Diego, that the BOJ adopt inflation targeting of 1 to 3 percent of CPI inflation rate a year. In March 2003, a group of 9 prominent economists including Ito urged the BOJ to achieve price growth of around 3 percent in the next two years and of around 1 to 3 percent in the following years through unconventional measures of increasing outright purchases of outstanding government bonds and of buying Exchange-Traded Funds (ETF) and Real Estate Investment Trusts (REIT). The other 8 economists were Hiroshi Yoshikawa, Motoshige Ito, Masahiro Okuno, Kiyohiko Nishimura, Tatsuo Hatta (all five at Tokyo University), Yoshio Higuchi, Mitsuhiro Fukao (both at Keio University) and Naohiro Yashiro (at Japan Center for Economic Research). (*Nihon Keizai Shimbun*, March 19, 2003)

Kikuo Iwata [2003], Professor at Gakushuin University proposed an inflation target of 1 to 3 percent over a period of 1 to at most 2 years to be achieved. He advocated that, to attain the target, the BOJ should increase outright purchase of long-term government bonds to about 3 trillion yen a month from the present 1.2 trillion yen, saying that the Bank should commit itself to reaching the target and hold itself accountable if it fails. (*Asahi Shimbun*, February 4, 2003)

Opponents to inflation targeting are such as Ryutaro Komiya at Aoyama Gakuin University, Eisuke Sakakibara at Keio University and Izuru Kato, Chief Economist of Totan Research. Since the basis of their objections are shared with the BOJ and BOJ economists, we will leave those details for further examination in Section 5.

Many economists within Japan have discussed this issue, but we are focusing on those economists who have expressed their opinions clearly in books, papers, or articles and whose written works or comments have been widely noted as main debaters in this discussion.

Economists overseas have also hotly debated this topic. Although many experts have proposed ideas to rescue the Japanese economy, some of those experts whose policies are obviously related to inflation targeting will be introduced here.

Ben Bernanke, U.S. Federal Reserve Board Governor, said that an inflation target might not prove a sufficient tool to stop the downturn of prices in Japan, and suggested a better strategy would be "a publicly announced, gradually rising price-level target." (*Kyodo News International*, May 31, 2003) He recommended that the BOJ announce its intention to restore price levels to the value they would have reached if a moderate inflation of around 1 percent over the past five years had occurred.[29] To reach the targeted price-level, he called for close policy coordination between the BOJ and the Ministry of Finance, saying that the BOJ should increase government bond purchases in explicit conjunction with a governmental program of tax cuts so that tax reduction is in effect financed by money creation.

Adam S. Posen [1998] at the Institute for International Economics wrote that the BOJ

[29] Bernanke said as an example of his idea that the BOJ would set the price level in 2003 at a value of 5 percent above the actual level in 1998 and thereafter aim at a one percent rise per year. (*Kyodo News International*, May 31, 2003)

should announce an inflation target of 3 percent annually and over some appropriate longer term, within three years for example, the rate would decline to 2 percent.

Lars E. O. Svensson [2001a] at Princeton University suggested a "foolproof way" to jump-start the Japanese economy, which is to announce 1) an upward-sloping price-level target path to be achieved; 2) a deprecation and a temporary peg of the yen; and 3) the future abandonment of the peg in favor of inflation targeting when the price-level target path has been reached.

The International Monetary Fund also has joined the chorus for the policy. IMF [2003] urged the BOJ to state clearly that it will do whatever is necessary to restore inflation within the short term and set a sufficiently positive inflation rate in the medium term, though it did not officially specify an inflation rate. IMF officials called on radical policy steps including buying foreign assets to break out of a crippling deflationary trap.[30,31]

4.2. Government and Policymakers

Within the Japanese government, there is not a marked sense of unity in the discussions. This sub-section illustrates key figures' positions in Koizumi's administration and the ruling party.[32,33]

The Liberal Democratic Party (LDP)'s anti-deflation panel headed by Hideyuki Aizawa

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[30] Anne Krueger, IMF's First Deputy Managing Director argued, "a medium-term inflation target combined with clear communication of the strengthened strategy would help convince the public that deflation will end and encourage spending," and "in current circumstances in Japan, an inflation target of any magnitude of range would clearly enable the situation to improve." (*Channel News Asia*, June 5, 2003, Media Corporation of Singapore Pte Ltd.)

[31] Kenneth Rogoff, IMF Chief Economist, urged the BOJ to set a general target range for inflation. Jonathan Ostry, Assistant Director of the IMF Research Department said that an inflation target should be set at 2 percent in terms of historical experiences. (*Japan Economic Newswire*, April 9, 2003 Kyodo News Service)

[32] All positions of policymakers described here are as of August 2003.

[33] Information of the sections of 4.2 and 4.3 is mainly based on such sources as *Asahi Shimbun, Mainichi Shimbun, Nihon Keizai Shimbun* and *Yomiuri Shimbun.*

submitted a proposal on February 26, 2002 to Koizumi, the Prime Minister, which urged the BOJ to introduce an inflation target annually 1 to 2 percent for the CPI,[34] and to purchase securities and foreign bonds. It also called for a provision of the BOJ Law to set a desirable inflation target with a time frame to achieve it. In December 2002, LDP's finance panel adopted an emergency appeal calling on the BOJ to set an inflation target. While calls for the policy became strong, policymakers have been divided over the issue.

The prime advocate of inflation targeting is Taku Yamasaki, LDP Secretary-General. On the other side, Hiromu Nonaka, LDP former Secretary-General, has voiced opposition to the idea. Takenori Kanzaki, Leader of the New Komeito Party and Hiroshi Kumagai, Leader of the New Conservative Party, both parties being part of a tripartite ruling coalition along with the LDP, agree on the policy. While there is no strong sense of a unified front among the opposition parties, they do appear to oppose the policy for the most part.

Heizo Takenaka, who doubles as Minister of State for Economic and Fiscal Policy as well as Minster of Financial Affairs, has long advocated the policy, saying that the BOJ should take a bold and flexible approach to increasing the money supply and setting an inflation target would be one possible way. He stated that the government could set policy targets and then let the BOJ decide measures to achieve them. He also called on the BOJ to consider purchasing Exchange-Traded Funds (ETF) to increase the money supply. The Annual Report of the Cabinet Office [2001], submitted by Takenaka to the cabinet, proposed the introduction of inflation targeting policy with the aim of stabilizing prices in the medium- and long-terms.

Masajuro Shiokawa, Minister of Finance, who had repeatedly requested the BOJ to ease its monetary grip to boost economy, said that the Ministry of Finance has not decided to call for

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[34] They named the policy *bukka antei mokuhyô* with an English expression of price-level targeting, but it is actually identical to inflation targeting.

inflation targeting,[35] but that it is one of the policy tools to be considered to bolster prices. He stated that it would be good if overall price levels rise to the level of 1997, a view which is regarded as not the same as inflation targeting. He reportedly said that considering inflation targeting could be necessary, but also said on another occasion that it would be difficult to cause a specific rate of inflation under a certain time frame. Shiokawa stated in August 2001, that inflation targeting is dangerous because it would send the economy spinning out of control. His remarks are subject to various interpretations due to the ambiguity of his words, but in general he is thought to be not opposed to inflation targeting.

Junichiro Koizumi, Prime Minister, had appeared cautious about the policy, saying that introduction of inflation targeting is difficult, because once inflation starts, it would not be controlled. Before his decision of choosing a new governor of the BOJ, he mentioned, in the winter 2002, that a person with an aggressive will to overcome deflation would be desirable for the post, which was interpreted that Koizumi has changed his position on the policy, and is now in favor of it. However, growing opposition from influential lawmakers seems to have discouraged him from pursuing the idea, and he commented that he never used the word of inflation targeting. Koizumi finally appointed Fukui, who has expressed reservations about the policy, to head the BOJ.

4.3. Media and Business

Yomiuri Shimbun has often written its supporting position of the policy, and urged the BOJ to implement it as soon as possible. It wrote that the benefit of an inflation target would not

[35] Top officials of the Ministry of Finance wrote an article for *The Financial Times* in December 2002 and issued the opinion that the BOJ should set an explicit inflation target of 3 percent in stages: 1 percent in a year and 2-3 percent within the following two years. They were Haruhiko Kuroda, Vice-Minister for International Affairs at the Ministry of Finance and Masahiro Kawai, Deputy Vice-Minister for the same division. (Kawai and Kuroda [2002])

be limited to a temporary revitalization of the economy, but it would also make it easier for the public to understand monetary policy. It also said that the policy would increase the BOJ's accountability and determine its responsibility should it fail to meet the target. (*Yomiuri Shimbun*, August 22, 2001, April 9, March 5, 2003)

Mainichi Shimbun wrote that excessive interference from the government and politicians toward monetary policy have had a negative effect. It said that inflation-targeting countries seek to prevent price increases, so such a policy cannot be automatically implemented in reverse by Japan, and that the decision of inflation targeting should require the approval of the Diet and the public must also be persuaded. (*Mainichi Shimbun*, October 21, 2001, March 30, 2003)

Asahi Shimbun clearly takes the opposing position to the policy, asserting that setting targets for inflation is not the way to economic recovery. It wrote that the effects of inflation targeting cannot be predicted with confidence, and that inflation is uncontrollable once it begins, with the end result that trust in the currency could be endangered. It also stated that people worry about social welfare systems and possible steep tax increases, so unless these problems are resolved, they are not likely to start spending again, even if inflation targets were set. It held the opinion that the BOJ was right to reject such a policy, and that the government should return to main path of steadily proceeding with writing off bad debts and promoting structural reforms, not exerting unjustifiable pressure on the central bank. (*Asahi Shimbun*, August 27, September 20, November 24, 2001, March 19, 2003)

Nihon Keizai Shimbun (Nikkei) does not clearly state its position in its editorial pieces; instead it often runs viewpoints of the issue, from both proponents and opponents from various sectors, although its staff writers sometimes voice their personal views, whether positive and negative, in their individual columns.

Although there is no widely-shared consensus in the business world about this issue, it appears that a majority of business leaders have voiced reluctance to support the policy. Among the country's three major business organizations, Hiroshi Okuda, Chairman of the Japan Business Federation, known as Nippon Keidanren[36] and Yotaro Kobayashi, former Chairman of the Japan Association of Corporate Executives or Keizai Doyukai[37] do not support inflation targeting. By contrast, Nobuo Yamaguchi, Chairman of the Japan Chamber of Commerce and Industry (JCCI), has different position. Reversing his previous stance against the unorthodox monetary policy, Yamaguchi called on the BOJ to adopt bolder steps including inflation targeting with the added condition that the government also take anti-deflation measures on the fiscal and tax fronts. (*Jiji Press*, March 6, 2003, *Nihon Keizai Shimbun*, March 4, 2003) According to the survey of business people conducted by the Japan Association of Corporate Executives, of the 324 valid replies, 56 percent were against the adoption of inflation targeting, while 19 percent supported it. (*Jiji Press*, March 18, 2003) Another study by *Nihon Keizai Shimbun* shows that among 100 corporate leaders, 63 percent disapproved the policy. (*Nihon Keizai Shimbun*, February 26, 2003) The result of the public-opinion poll conducted by TV-Asahi also presents that 57 percent of the respondents took an opposing position.[38]

5. BOJ's Monetary Policy

This section briefly reviews the BOJ's monetary policies, followed by studies about what stance the monetary authority has taken and how it has explained its position against the calls for

[36] Okuda told a news conference that inflation targeting is unrealistic and would not work. (January 6, 2003. www.keidanren.or.jp)
[37] Kobayashi's term expired in April 2003 and his successor is Kakutaro Kitashiro. Kobayashi stated at a news conference that implementing inflation targeting in Japan would have little effect since structural changes in the global economy largely affect fall of prices. (January 21, 2003. www.doyukai.or.jp)
[38] The research was conducted in 125 locations in Japan with 1,000 people on January 25 - 26, 2003 and its retrieval rate was 60.5 percent. (www.tv-asahi.co.jp/n-station/reaserch)

inflation targeting. The section also tries to illustrate what frameworks can be set to characterize the discussions, providing key points of the debate.

5.1. Decisions of Board Meeting

First, let's review the major decisions, in chronological order, of the BOJ Monetary Policy Board after the new Bank of Japan Law went into operation in April 1998. (See Table 3)

<Table 3> BOJ Monetary Policy

Dates	Discount Rate	Purchase of long-term gov. bonds/month	Outstanding balance of current accounts	Overnight call rate
02/12/99	**Zero interested rate policy implemented**			decline from 0.15
08/11/00	**Zero interested rate policy lifted**			0.25
10/13/00	Decision to release outlook and risk assessment of the Economy and Prices (GDP, WPI and CPI) twice a year			
02/09/01	0.35	−	−	−
02/28/01	0.25	−	−	0.15
03/19/01	**Main target for money market operations changed: from current uncollateralized overnight call rate to outstanding balance of current accounts** **Quantitative easing until CPI registers stably 0% or an increase year to year**			
	−	increase from 400 billion yen	5 trillion yen	close to 0
08/14/01	−	600 billion yen	6 trillion yen	−
09/18/01	0.1	−	over 6 trillion yen	−
12/19/01	−	800 billion yen	10-15 trillion yen	−
02/28/02	−	1 trillion yen	−	−
09/18/02	**Announcement of a plan to buy shares from commercial banks**			
10/30/02	−	1.2 trillion yen	15-20 trillion yen	−
03/25/03	−	−	17-22 trillion yen	−
04/18/03	**Examination for the possibility of purchasing asset-backed securities**			
04/30/03	−	−	22-27 trillion yen	−
05/20/03~	−	−	27-30 trillion yen	−

Source: BOJ − means no change or n/a.

Since the collapse of the bubble economy and facing increasing uncertainty about the economic outlook and stability of financial system, the BOJ has eased its monetary grips in stages. The official discount rate decreased nine times after July 1991 to 0.5 percent in July 1995. In September 1998, the uncollateralized overnight call rate target was lowered to 0.25 percent; while previously, the target level had been slightly below the official discount rate of 0.5 percent. The BOJ's monetary policy since then can be divided into three stages:

A) Implementation of a zero interest rate policy

In February 1999, The BOJ began the zero interest rate policy and decided to encourage the uncollateralized overnight call rate to move as low as possible. In April of the same year, the Governor said that the BOJ would keep the uncollateralized overnight call rate at virtually zero percent until deflationary worries subside.

B) Lift of the zero interest rate policy

The zero interest rate policy lasted for one and a half years. In August 2000, the BOJ lifted the zero interest rate policy with the statement "Japan's economy is showing clearer signs of recovery" and "Japan's economy has reached the stage where deflationary concern has been dispelled,"[39] and decided to set the target level of the uncollateralized overnight call rate at 0.25 percent. Then, the BOJ in phases reduced the official discount rate to 0.25 percent and encouraged the uncollateralized overnight call rate to settle around 0.15 percent in February 2001.

C) Adoption of quantitative easing policy

[39] See BOJ [2000a]

On March 19, 2001, the BOJ decided to change the main operating target for money market operations from the current uncollateralized overnight call rate to the outstanding balance of the current accounts, and to continue the new procedures of monetary easing until the CPI (excluding perishables) registers stably a zero percent or an increase year to year. It set the immediate target of the outstanding balance of the current accounts at about 5 trillion yen, an increase from 4 trillion yen, and decided to increase the amount of its outright purchases of long-term government bonds from 400 billion yen per month. Since then, the BOJ has conducted additional monetary easing by reducing the discount rate to 0.1 percent, increasing the purchase of the government bonds to 1.2 trillion yen and raising the outstanding balance of current accounts to 27-30 trillion yen.

Other than quantitative easing, the Bank decided in September 2002 to purchase shares from private-sector banks to help shield the lenders from stock market volatility, a decision which surprised economists and policymakers at home and abroad. It also decided in April 2003 to examine the possibility of purchasing asset-backed securities for small and midsize corporate borrowers. Both policies were seen as bold steps by the central bank.

As shown above, the BOJ tried to boost the economy by using the zero interest rate policy from February 1999 through August 2000, and virtually restored it in March 2001. The BOJ's decision of lifting the zero interest rate policy in August 2000 has been strongly criticized. Many emphasized that the BOJ's policy was clearly wrong, in terms of results, and that it had a hand in Japan's prolonged recession. Hayami said, at his news conference upon retiring as Governor, that he wished to lift the zero interest rate policy a little earlier than it had been to make the interest rate policy function normally in the markets. He added that he believed that people who understood the significance of normal interest policy probably appreciated the plan in lifting the zero interest rate policy. Asked if he ever considered voluntarily stepping down in order to accept responsibility for making a poor judgment call in the decision of lifting the zero interest policy; a decision that was roundly castigated by the government, lawmakers and market players, Hayami said that he never considered the thought of resignation and intended to complete his term. However, newspaper accounts said that he unofficially had expressed his intention to resign. (*Asahi Shimbun*, March 24, 2003)

Hayami's successor, Fukui has demonstrated a more flexible stance than Hayami's, taking swifter action toward monetary easing. For example, after Fukui became the Governor in March 2003, the BOJ increased its target balance of current accounts by 10 trillion yen in three months, compared to Hayami's term, in which it took 19 months to increase the balance by 15 trillion yen. Soon after taking office, Fukui mentioned that the Bank's quantitative easing policy was effective in underpinning the economy, but it must do more to restore economic growth. The Bank subsequently announced a plan to purchase asset-backed securities to provide liquidity for the corporate sector.

Despite continuous quantitative easing, it seems not to have yet had the effect of significantly boosting the economy, and there are few statistics that indicate money is flowing into businesses or into various forms of assets.[40]

5.2 How Has the BOJ Argued Inflation Targeting?

When BOJ decided in March 2001 that it would continue its quantitative monetary easing policy until the CPI registered a stable zero percent or a slight increase year to year, this

[40] According to the Monthly Report issued by BOJ [2003] in August 2003, while the year-to-year growth rate of the monetary base has largely increased by around 20 percent, the growth rate of the money stock (M2+CDs) remained less than 2 percent. CPI continues to decline and lending by private banks is decreasing by more than 2 percent on a year-to-year basis.

statement was welcomed by proponents of inflation targeting since the Bank policy seemed to approach inflation targeting. Could this policy actually be regarded as inflation targeting? The BOJ denoted, after the Board Meeting where the quantitative easing policy was decided, that "Although it (the new policy) is not inflation targeting, it shows the Bank's determination to prevent a continuous price decline and to form a basis for a sustainable growth."[41] Hayami himself explicitly said that this is not inflation targeting, and since the implementation of quantitative easing, the BOJ has consistently objected to the adoption of inflation targeting. To study how the BOJ has argued against the policy after quantitative easing, let's begin with reviewing what Hayami said regarding inflation targeting at his monthly news conference. (See Appendix 1)

In short, Hayami repeated that 1) the BOJ's quantitative easing policy is not inflation targeting; 2) there is no country adopting inflation targeting to fight deflation; 3) knowing its advantage to enhance transparency of monetary policy, the BOJ would examine inflation targeting, but it would not implement the policy. Hayami did not elaborate on the reason why the BOJ rejected the policy at the news conference. However, since the news conference was the best opportunity to communicate the BOJ's policies to the general public, if he had successfully provided the basis of objection to the policy without going into the technical details, BOJ's viewpoints would have been more persuasive and understandable for the public. Even the press, which is generally against inflation targeting, said that the BOJ should come up with a convincing explanation as to why it doesn't agree with inflation targeting. (*Asahi Shimbun*, August 27, 2001)

Fukui, who replaced Hayami, has launched bold initiatives about monetary policies as described in the previous sub-section, but he also maintains a rather cautious attitude toward

[41] See BOJ [2001]

inflation targeting, saying, “It’s not a magic wand.”(*Yomiuri Shimbun*, March 6, 2003) At a Lower House committee meeting on April 18, 2003, he remarked that inflation targeting is one important tool for a central bank, but commented that adopting it now, when the liquidity mechanism is impaired, would be ineffective since the Bank wouldn’t be able to explain how it achieved a target. (*Nihon Keizai Shimbun*, April 18, 2003) His opinion of the policy was expressed clearly in his speech given at the spring meeting of the Japan Policy Meeting of Monetary Economics on June 1, 2003. Fukui [2003] addressed that the Bank’s current commitment of the quantitative easing policy has significant implications beyond standard inflation targeting. According to Fukui, the Bank’s policy states that the BOJ will continue drastic monetary easing measures, even after the economy has started to improve and inflationary expectations are emerging, unless year-to-year changes in the CPI become positive on a sustainable basis. He said that this might run a risk in the direction of greater inflation than in the case of standard inflation targeting, because with a standard inflation targeting regime a central bank raises interest rate when the expected inflation rate rises above the target rate even if the actual inflation rate is below the target rate.

Fukui also remarked that he has no intention of flatly denying the concept of policy measures related to inflation targeting, and said whether there is any room for introducing inflation targeting within the policy framework would be examined. Fukui is considered rather cautious in embracing the policy; however, he appears less strongly opposed to the policy than Hayami, who was reported to be stubbornly against inflation targeting. The two Deputy Governors, who were appointed at the same time as Fukui, Kazumasa Iwata, former Director General for Policy Planning at the Cabinet Office, who is close to Heizo Takenaka, Minister of Economic and Fiscal Policy, is apparently taking a stand pro inflation targeting, while Toshiro

Muto, former Vice Minister of Finance, is holding a cautious position.

The monetary policy is decided by majority vote of the Policy Board, thus the assessment of the Governor and Deputy Governors cannot solely generate the guidelines of monetary operations. When reading the minutes of the Monetary Policy Meeting, we can understand in more detail what the Policy Board members have discussed and exactly how they have reached the opposing position to inflation targeting.

The Monetary Policy Board is composed of nine members, BOJ's Governor, two Deputy Governors and six deliberative members. Representatives of the government can also attend meetings to express opinions, although they have no vote. The Monetary Policy Meetings are usually held once or twice a month. The minutes of meetings are disclosed about one month after each meeting; however, what the BOJ calls minutes are not really full transcripts of meetings, but in fact, an outline of discussions without description of speakers' names. (See Appendix 2.) The full meeting minutes are sealed until ten years after the actual meetings, and are not supposed to be read until that time.

Closely reviewing the minutes of the meetings reveals that BOJ's policies are formed by the collective will of the Board members since decisions of the Monetary Policy Meeting are made through a majority vote. There has been a great deal of positive support for inflation targeting, although that position has not dominated the meetings, and the general public continues to receive the impression that the BOJ is strongly against inflation targeting.

For example, in one meeting (see Appendix 2 – meetings with asterisks next to the meeting date), one member submitted a proposal to introduce an inflation target or price level target for votes, saying that it is important to indicate a specific numerical target for price stability and specific time frame in which to achieve it, which would be more easily understood by the public, and that setting a target would be the most effective way to coordinate with the government.

The member persistently advocating inflation targeting was Nobuyuki Nakahara, who suggested inflation targeting for the first time in February 1999,[42] and since then has actively proposed that the Bank take a more aggressive stance such as further easing and price level targeting. He has also often voted against the policy proposals submitted by the Chairman of the Monetary Policy Board, who is actually the Governor of the Bank. Since Nakahara's term expired at the end of March 2002, the Chairman's policy proposals, as of August 2003, have been unanimously approved except for a single meeting.

The BOJ economists have also shown their viewpoints about inflation targeting, defending the BOJ's policy in a theoretical and empirical manner. The following are their representative views, which have frequently become debatable topics among academics. Okina's paper [1999] drew the keen attention of economists at home and abroad. He concluded that the main reason why the BOJ has not adopted inflation targeting is due to difficulties in both setting a target and achieving it. Okina raised the question of whether sound development of the national economy would be attained when the rate of increase in specific price indicators was maintained at a certain level. He also supported the Bank's proposition that given the circumstances that the Bank cannot explicitly show the way to achieve the desired inflation rate, inflation targeting would most likely to result in impairing the BOJ's credibility.

Fujiki, Okina and Shiratsuka [2001] wrote that it is quite inappropriate to introduce unconventional measures merely on an experimental basis, and pointed out that there seems to be an oversimplified idea that the adoption of inflation targeting would be a panacea for the current economic difficulties.

[42] See Nakahara [2000].

Oda and Okina [2001] concluded that inflation targeting is not necessarily easy to distinguish from traditional policy management based on overall considerations (the classical approach), and argued that inflation targeting under zero interest rates might undermine the conduct of monetary policy due to the absence of preconditions for benefiting its intrinsic merits.

Shirakawa [2002] reiterated the BOJ's view that adoption of inflation targeting without effective transmission mechanisms may not enhance the Bank's accountability, and that announcing a target inflation rate alone would most likely to fail to end deflation.

5.3. Points of Debates

As examined, whether or not the BOJ should introduce inflation targeting as its monetary policy has been much-discussed, and the Bank's basic stance has been dominated by opposition arguments. The debates have come up in different contexts in various ways, intricately intertwining with each other and involving technical terms, and such characteristics of the discussions have made the debates more confusing and controversial. As a result, it is not easy to deduce the bottom line of the discussions from summing up respective opinions. This sub-section will try to illustrate the broad points of the argument, reviewing the frameworks of the debates, what lies behind the fundamental conflict over the policy, and what counterarguments have been provided from advocates of inflation targeting against the BOJ's assertions.

Essentially, there are two frameworks for the arguments. The first framework is based on the question of exactly why inflation targeting is necessary. The understanding of the primary objective of inflation targeting differs among people. Some hold that inflation targeting is a tool to enhance central bank's accountability and transparency. Others view it as a way to combat deflation.

The second framework revolves around the question of when inflation targeting should be implemented. Whether or not the policy should be introduced: 1) Under the current economic status where the economy is facing deflationary downturn with zero-bound constraint on the nominal interest rate; or 2) When the economy is functioning under an ordinary situation with a normal interest rate policy – where there is plenty of room left for reducing interest rates.

The fact that people with differing viewpoints about the aim and timing of adoption of the policy have joined the discussions has only amplified the complexity of the arguments, causing a welter of opinions based on different debatable grounds.

It seems that the following can be extracted from the arguments of the BOJ: that the BOJ is not rejecting the principle of inflation targeting per se, as the BOJ officials have often reiterated that the policy would be examined as a means to enhance transparency and accountability of the monetary policy.[43] The view of the BOJ that adoption of inflation targeting would impair the Bank's credibility in the absence of sufficient policy tools and an effective transmission mechanism to achieve a target inflation rate reflects the current uneasy state of the Japanese economy and public opinion of the BOJ. The opinion then also points out the differences of the economic situations between Japan and other countries that have set inflation targeting.

Given the serious economic malaise of the country, the discussions now are revolving mainly around whether inflation targeting would be an effective measure to help revive the Japanese economy. Let's examine the arguments whether inflation targeting under deflation with zero interest rates can contribute to Japan's economic recovery, as well as looking at the BOJ's arguments verses proponents' counterarguments for inflation targeting from three different

[43] For example, Hayami's comment at the news conference, August 29, October 16, 2001,and Deputy Governor Toshiro Muto [2003].

perspectives on the debate:

A) How to set a desirable inflation rate;

B) How inflation targeting is effective in fighting deflation;

C) What possible side effects may occur if the policy is adopted.

A) How to set a desirable inflation rate

The BOJ asserts that it is difficult to determine what an appropriate indicator for measuring prices would be, and how to estimate a desirable inflation rate, because the environments surrounding prices are dramatically changed by such elements as technological revolution, innovation in distribution networks and the progress of deregulation. Proponents of inflation targeting say that the issue of choice of price index is just a matter of decision under the circumstances - there are no perfect price indicators, and that the countries that have adopted inflation targeting simply made a decision on a price index although they have the same problems as Japan. For the most part, recommendations about a desirable inflation rate ranges between 1 and 3 percent.

The issue of how an appropriate inflation rate should be decided is connected to how price stability can be expressed by a numerical value of a particular price index. This will be examined more fully in the next section with the study of what price stability in actual means in terms of the Bank's mission.

B) How inflation targeting is effective in fighting deflation

Opponents say that inflation targeting does not work for the several reasons. First, there exists no credible policy instruments and transmission mechanism to achieve a target in a deflationary environment when interest rates are zero, so announcement of the policy alone cannot increase inflationary expectations.

Advocates of inflation targeting argue that the Bank can purchase more long-term government bonds and other assets such as Exchange Traded Funds (ETF), Real Estate Investment Trusts (REIT), listed stocks and foreign currency bonds. The BOJ says that buying such assets would distort the market mechanism, adding that the BOJ Law stipulates the types of assets the Bank can purchase for monetary operations, and that the risk exposure would impair the Bank's financial soundness. Proponents have voiced opposition, saying that whereas the BOJ emphasized that the purchase of stocks would undermine its balance sheet and harm confidence in the yen, it subsequently decided to buy shares directly from commercial banks, so the Bank can no longer use that as a convincing argument against buying shares in the market.

A second argument opponents use is that inflation targeting has been set to curb inflation and there is no country that has adopted the policy to overcome deflation. Proponents see this argument as unreasonable, asserting that it is ridiculous to refuse to introduce a new policy measure simply because there is no precedent case. Some advocates also make the point that Sweden and New Zealand are the countries that adopted the policy in the past when they were suffered from deflation.

Bank officials also remark that the arguments of proponents are based on the idea that deflation is a monetary phenomenon; however, deflationary pressures come from various causes. Not only demand-side, but also supply-side factors, such as progress in information technology, a more globalized economy which, for example, increases imports of low priced products from China, deregulation and also drastic demographic changes can all have an enormous impact. The point the Bank officials stress is that boosting money in and of itself does not provide a solution, saying that the most important thing is to promote a sustainable and sound growth of economy through structural reforms, and not the creation of inflation. Advocates of the policy argue that as long as deflation exists, industrial revival and fiscal reform would not be achieved, and the top priority of monetary policy should generate expectations of inflation, a precondition for structural adjustment.

The final point the Bank makes is that economic revival cannot be achieved with monetary policy alone. Proponents argue that monetary policy should be an effective tool to help overcome deflation, but policy coordination would, of course, be necessary to solve the fundamental problems the Japanese economy now struggles with, for the goal to be the repair and healing of the economy.

<u>C) What possible side effects may occur if the policy is adopted.</u>

The BOJ comments that once inflationary expectations rise, they are difficult to control. It says if the Bank has to combat inflation, it runs the risk of causing a large swing in economic conditions. Proponents argue that it is a reasonable expectation that when prices begin rise, the Bank will be able to absorb excess funds to prevent the inflation rate from spiraling out of control. Proponents state that inflation targeting has a cap on the inflation rate, which means the central bank manages the inflation rate within its target range, thus concluding that hyperinflation is unlikely to suddenly breaks out.

Opponents assert that while inflation alleviates the debt burden, it also erodes financial assets in real terms, so if inflation occurred now, the government would realize the biggest profits, followed by the corporate sector, but that most households would suffer a loss. They make the point that the depreciation of financial assets due to inflation would aggravate the income distribution problem, which was already an issue under the super-low interest rate policy. For instance, negligible interest rates have made it difficult for pensioners to live off the income from their savings. Proponents argue that continuity of stagnation would enlarge inequality of social benefits because unemployed people pay the cost of recession the most, and when the Japanese economy recovers, households will benefit from the more favorable business conditions. As for the pension questions, proponents said since the face value of pension was not reduced under deflation, recipients of pension had benefits, and such a condition was socially unfair.[44]

Opponents say that if the Bank purchased a large volume of long-term government bonds, financial markets would consider it damaging to fiscal discipline, consequently causing them to sell the bonds. They fear the move to inflation targeting would cause a drop in bond prices, thereby driving long-term interest rates higher, which could be a serious problem for the economy. Proponents doubt the view that the markets would consider the Bank purchasing of government bonds to be a negative, e.g. that the bank is trying to alleviate the government's efforts to decrease a huge debt burden.

Whether or not long-term interest rates rise when inflation targeting is adopted is also tied to another question; whether or not the Fisher effect works in the current Japanese economy. According to the Fisher equation, the nominal interest rate is the sum of the real interest rate and the expected inflation rate.[45] For example, a 1 percent increase in the expected inflation rate in turn causes a 1 percent increase in the nominal interest rate. This one-for-one relation between the expected inflation rate and the nominal interest rate is called the Fisher effect. Opponents

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[44] Public pension benefits have been cut by 0.9 percent in fiscal year 2003, which began April 1, 2003, to reflect decline in the CPI in 2002. This is the first payout reduction since the price index scheme was introduced in 1973. The government had frozen the pension-price linkage system for the past three years and decided to lift the freeze.

[45] $i = r + \pi^e$, where i is the nominal interest rate, r is the real interest rate and π^e is the expected inflation rate. The Fisher equation is named after an American economist Irving Fisher.

assert that, because of the Fisher effect, when the expected inflation rate rises, the nominal interest rate also increases by just the same amount of increase of the expected inflation rate, but that the real interest rate does not change. Proponents argue that the nominal interest rate does not increase as much as the expected inflation rate because the Fisher effect is not applicable to an economy caught in a liquidity trap, so the real interest rate would actually decline.

As if those arguments weren't enough, another idea put forward by some people is that inflation can be achieved by depreciating the Japanese yen. The BOJ stresses that the Ministry of Finance retains responsibility for exchange rate policy; that the Bank is unable to depreciate the yen solely on its own authority. If the BOJ and the Ministry agreed to weaken the yen, it could be achieved; however, many see that market intervention to lower the yen could cause international friction. With regard to the issue of exchange intervention, while there is a view that the effect of interventions on the foreign exchange rate is reduced if they are sterilized, some say that it is meaningless to discuss the distinction between sterilized and unsterilized interventions under zero interest rates.

Relative to the discussions earlier from the three perspectives, the following part of this sub-section will further study several important key issues about fundamental problems the Japanese economy and the BOJ position.

The Bank reiterates that there is no credible transmission mechanism to achieve a target inflation rate under the current economic situation. Let's first see the problem: conventional wisdom says that high growth in the money supply leads to inflation. In other words, expansion of the monetary base will increase the money supply in a broader sense, eventually causing an increase in prices and business activity.

When evaluating the current conditions of the monetary base, we know the BOJ has provided large amount of high-powered money to the markets in recent years; however, as pointed out in Section 5.1, tangible effects have not yet been realized. The current year-to-year base growth of rate of the monetary base is around 20 percent and its highest rate in recent years exceeded 35 percent, the first time since the 1970's a growth rate of above 15 percent had been experienced – at that time during the "wild inflation" period a bout of inflation being more than 20 percent. Kazuo Ueda [2002], a member of the Monetary Policy Board mentioned that a monetary expert would conclude that Japan is in serious danger of hyper-inflation upon seeing the current growth rate of the monetary base.

In fact, despite the vast quantities of high-powered money injection, the money supply has failed to increase appropriately; with a modest growth rate of less than 2 percent, bank lending has decreased and deflation has persisted. Ueda [2002] pointed out that the ratio of the monetary base to nominal GDP started to sharply rise in the second half of the 1990s and deviated from its past trend.[46] According to Ueda, the usual range of time lag between the infusion of monetary policy changes to the economy and visible effect lies somewhere between six months and two years, but in this case, the sharp growth in the monetary base has continued for more than 5 years and deflation is unabated.

This trend indicates something very unusual happening in the relationship between money and the economy, and transmission mechanism is not working as theoretically assumed. Although the BOJ is actively buying the Japanese government bonds, high-powered money supplied to financial institutions ends up being reinvested in government bonds again, because the financial institutions, laboring under the weight of massive amounts of bad loans, are not

[46] Shinotsuka [2000], who was a member of the Monetary Policy Board until March 2001, said that since 1997, Marshallian k, which is the ratio of M2 + CDs outstanding to nominal GDP has been significantly above the long-term trend from 1970s.

willing to lend to small corporate borrowers out of fear that the loans will eventually become uncollectible; therefore they pour money into government bonds which are safer. In short, the funding pipeline is clogged.

As touched upon in B), some argue the reason that expansion of the monetary base has not increased the money supply is that the amount of injection is not sufficient, so the proponents of this plan feel that the Bank should supply more high-powered money by purchasing listed stocks and real estates. The BOJ opposes that idea, saying that if the Bank purchased such assets, it would be saddled with a credit risk and the risk of price fluctuations, which would result in damage to the Bank's balance sheet, which in turn would put a greater burden on taxpayers as the eventual transfers from the Bank to the national treasury decrease.

Accordingly, the subject of what type of assets the BOJ purchases brings up another serious concern – the fundamental question of how a central bank should function in a democracy. If the policy members of the Bank are not elected by taxpayers, and the decisions those policy members make result in bank losses being transferred to the taxpayers, do the taxpayers have any rights or say in the policy decisions? Can the taxpayers have input on the types of assets the BOJ purchases, or influence any of the decisions the central bank makes?

Given that there are not many methods for policy implementation, if the Bank just relied on announcing adoption of inflation targeting, would it influence people's opinions and produce inflationary expectations? In theory, expectation is one of the important channels through which monetary policy affects the economy. Bernanke [2000] addressed, "On the issue of announcement effects, theory and practice suggest that cheap talk can in fact sometimes affect expectations, particularly when there is no conflict between what a player announces and that player's incentives" and "announcements can serve as equilibrium selection devices." He also said that the effect of the announcement of a sustained zero interest policy on the term structure in Japan is a perfect example of the potential power of announcement effects. By contrast, the BOJ says that the Bank can affect expectation only if the announcement is accompanied by effective policy measures.

Although announcement effect usually exists on implementation of monetary policy, in the case of the BOJ, many agree that solely announcing inflation targeting is unlikely to succeed. Because the BOJ has repeatedly voiced its objection to the policy, if the Bank expressed an abrupt change of its position without including measures to achieve a target rate, people would doubt the Bank's serious willingness to implement the policy.

All in all, inflation targeting discussions can be described as conflicting viewpoints on the use of conventional methods versus unconventional methods to set monetary policy solutions for the current crisis – what the BOJ has done versus what it could still do; whether deflation is a monetary phenomenon or not; if creating inflation is not a solution in and of itself, therefore structural reforms should be attempted first versus what are the first steps that should be taken to stop deflation, without which other economic problems cannot be solved.

Whether to take a particular action, whose results are uncertain, seems to be a major sticking point between those holding the opinion that the Bank should not take action unless it is sure of concrete results and assurances that the negative impact on the economy would be negligible, and the other position emphasizing that the Bank should take the risk if there is the slightest chance of achieving the desired results. The BOJ feels that, as a responsible body, it should not take the risk if that means impairing the Bank's credibility in the future. However, proponents argue that there is a risk in standing by and taking no action whatsoever, which leaves a bad situation unaddressed and unresolved. There appears to be no conclusions, nor a decisive course of action, determined by either side.

6. BOJ’s Mission and Independence

The policy of inflation targeting should be in line with the objectives of the monetary operations of the central bank. If not, then what is the mission of the central bank? Is the call for the policy from the government considered impairing the central bank’s independence? This section analyzes the discussions from the aspect of the BOJ Law, examining the meaning of price stability and relations between the central bank and the government.

6.1. BOJ’s Mission: Price Stability

There is widespread agreement that the primary objective of the monetary policy of a central bank is price stability, along with its other basic functions such as issuing and managing bank notes and controlling the banking system. When we argue inflation targeting, it must be determined if the policy is in accordance with the mission of the Bank. The BOJ states, “The Bank of Japan’s missions are to maintain price stability and to ensure the stability of the financial system.”[47] The new Bank of Japan Law, effected in April 1998, stipulates the principle of objective of currency and monetary policy in Article 2 of Chapter 1 as follows: “Currency and monetary control shall be aimed at, through the pursuit of price stability, contributing to the sound development of the national economy.”

What is price stability in concrete terms? The definition is extremely important in the inflation targeting discussions, as Mishkin [2001b] wrote that inflation targeting requires a decision on what price stability means in practice. If inflation targeting is against price stability as the BOJ defines it, then it is reasonable the Bank does not adopt inflation targeting.

[47] See Bank of Japan, “Missions and Activities of the Bank of Japan.”

A report from the BOJ [2000b], *On Price Stability*, issued in October 2000 concluded, "Price stability is described as a situation which is neither inflationary nor deflationary," "it is difficult to set specific numerical values to the definition of price stability," and "even if some numerical values were announced, they would not serve as a reliable guidepost in the conduct of monetary policy, and exercise would not likely contribute to enhancing transparency of the conduct of monetary policy." It also said that the BOJ would explore whether price stability can be expressed by specific numerical values. In the following year, several workshops on price stability were held. Since then, the Bank has officially issued no decisive public statements about the issue to date.

Among other non-inflation targeting countries, the Federal Reserve has not expressed an explicit numerical objective for price stability. Alan Greenspan, Chairman of the Board of Governors of the Federal Reserve System described price stability as, "Price stability obtains when economic agents no longer take account the prospective change in the general price level in their economic decision-making."[48] The Treaty of European Union does not have a precise definition of price stability; however, the Governing Council of the ECB announced the quantitative definition in 1998 as "Price stability shall be defined as a year-to-year increase in the Harmonized Index of Consumer Prices (HICP) for the euro area of below 2 percent" and also stated that price stability is to be maintained over the medium term.[49]

In the context of price stability of Japan, we will now study two questions raised in relation to inflation targeting. One of the essential factors in designing an inflation targeting plan to be implemented is the choice of a measure of price index for a numerical target of inflation rate. This leads to the first question; whether price stability in practice can be judged from

[48] See Greenspan [1996]
[49] See ECB [2001]

particular existing price statistics? Price indexes are complied from prices of selected goods and services based on certain assumptions and methodologies, so they are incorporated with constraints and limitations, causing the possibility of divergence from the actual movements of the general price level. Especially in this IT revolution era, new products and price developments might not be appropriately reflected in price indexes. Under such circumstances, is there any suitable price index to express a numerical value of price stability?

The second question raised is what is the appropriate numerical value of the inflation rate for price stability when there is upward bias of the price index. It has been observed that inflation rates have tendency of being biased upward since price declines in real terms due to quality improvements are not immediately incorporated into price indexes. Thus, how much bias can be acceptable for price stability?

As to the first question about choice of a certain price index, it may be true that there exist no "perfect" price indexes. However, the countries that have adopted inflation targeting have the same problem, and they decided to introduce the policy, choosing a particular price index to set a target of inflation rate. The arguments of the inherent problems of price indexes should be separated from policy discussions because any policy implementation is based on the given statistics even though price indexes are imperfect by their nature.

The BOJ selected the CPI in March 2001 as a guideline for the duration of the money market operations, i.e., the quantitative easing policy using the outstanding balance of the current accounts as the main operating target and continuing until the CPI registers stably a zero percent or a slight increase year to year. According to the report of *On Price Stability,* while the CPI and the Wholesale Price Index (WPI)[50] are released relatively promptly, the GDP deflator has a lag

[50] The name of the index has been changed to the Corporate Goods Price Index (CGPI) with the announcement made by the BOJ on December 9, 2002.

of more than two months before release and the GDP deflator also has large discrepancies between preliminary and final figures. This seems to be one reason that the BOJ chose the CPI as the index for monetary easing. Nonetheless, the problem of determination of a certain price index appears to be no longer critical issue based on the BOJ's decision on its quantitative easing.

Before considering of the second question, let's review the statement of the conceptual definition of price stability as "neither inflationary nor deflationary." Does this mean zero percent growth of a particular price index, for instance, the CPI? If this is so, then price stability cannot admit inflation targeting with a positive inflation rate. In other words, the question arises of whether inflation or deflation can be expressed as a specific numerical value.

In fact, whether an inflation rate should be zero or a positive number for price stability has been seriously argued at the BOJ's Policy Board meetings. When the BOJ decided to conduct its quantitative easing policy, some members of the Board argued that pinpointing a specific figure is inconsistent with the BOJ's view that it is difficult to express price stability in a specific numerical value, while others argued that a positive number is appropriate due to the upward bias of the CPI. There is another argument, with respect to the zero boundary problem for interest rates, that a positive inflation rate is desirable as a cushion so that the Bank can maintain room for maneuvering monetary operations when a policy response is needed.

In general, industrialized countries have some extent of inflation bias in the CPI.[51] Shiratsuka [1999] presented the point estimate for overall bias in the CPI at about 0.9 percentage point a year, taking into account all information available. In the case of the BOJ aiming for zero percent growth of the CPI, when the Bank achieves the target rate, on the basis of Shiratsuka's estimation, the economy will be considered still under deflation in real terms. Ueda [2001], a

[51] Bernanke et al [1999] said, "A key element in any inflation-targeting regime is the definition of what price stability means in practice. Our recommendation is that price stability be defined as an inflation rate slightly above the consensus estimate of the inflation measurement bias." (p.316)

member of the Monetary Policy Board said in May 2001, of the BOJ's quantitative easing policy: "our commitment to provide large amounts of liquidity is effective only so long as the rate of inflation is below zero." This could be interpreted that the BOJ will stop the quantitative easing when the CPI reaches zero, a situation which would still be considered to be deflation judged from an upward bias of 0.9 percent. This statement might have given the private sector the impression that the BOJ was not prepared to take resolute action to fight deflation, possibly causing markets, firms and households to lose confidence in the central bank's announcements of its monetary control.

Overall, regarding inflation targeting with respect to price stability, given that the BOJ left pending a quantitative definition issue, an inflation targeting policy seems at least not to go against the concept of price stability.

6.3. BOJ's Credibility and Independence

The BOJ's often-stated concern is that adoption of inflation targeting without effective measures to achieve it would undermine the Bank's credibility. Whether or not a monetary policy works out successfully also largely depends on the credibility of the monetary authority. However, it could be said that the Bank had already experienced damage to its credibility by its monetary policy implementations.

Only seven months after the Bank ended the zero interest rate policy, it virtually returned to the policy using another approach. Before the BOJ conducted its quantitative easing policy in March 2001, it had been opposed to an increase in the outright purchase of long-term government bonds, saying that such purchases would induce pressures on long-term interest rates since the markets would see it as damage to fiscal discipline, eventually spreading to the issue of credibility of the Japanese economy itself. Hayami [2001] said, approximately two weeks before the Policy Board's decision on quantitative easing, that a careful examination must be in place before the policy was implemented. Shortly after his statement, however, it was revealed that the BOJ had started the quantitative easing policy, actively buying government bonds. While implementing the policy, the Bank showed doubts about effectiveness of quantitative easing.[52]

As shown above, the BOJ's decisions regarding monetary policy were viewed as not always consistent with their stated positions. Decision such as these could be considered self-contradictory and lead to an undermining of the Bank's credibility from the financial markets as well as the general public. As a central bank, gaining and maintaining the confidence of market players and others is extremely important. Without credibility from the parties concerned, the central bank cannot hope to ensure that its policies will produce the desired effects, and, in fact, its actions could possibly even cause economic confusion.

The Bank has been often criticized for its unclear messages and tactlessness in dialogue with the markets. How does the Bank find itself in this undesirable situation? One key reason may come from the fact that the Bank is often under the government pressure to take action and sometimes yielded to that pressure, resulting in operations being discordant and ill-timed. Hayami was criticized for negating the beneficial effects of monetary operations with his comments that they wouldn't work on their own, possibly because he adopted them under pressure to compromise with the government, despite his disagreement with their effectiveness.

As such, aside from the arguments against inflation targeting as discussed in Section 5,

[52] Nobuyuki Nakahara [2001], former member of the Monetary Policy Board, pointed out that there is a risk that the effect of monetary policies will be diluted when such contradictions become apparent as: "1) being forced to introduce quantitative easing having stated that such a move would be out of the question"; "2) expressing doubts about the effectiveness of quantitative easing having introduced it on the grounds that it would be effective; 3) stressing concerns over hyperinflation while having introduced quantitative easing to combat deflation."

the issue of the relationship between the BOJ and the government is what lies behind some of the inflation targeting disagreements. In fact, the history of the Bank since its establishment has been the story of a long struggle to gain independence from the government.

The Bank of Japan was established in 1882, and the BOJ Law enacted in 1942 under wartime conditions essentially remained the institutional and legal framework for the central bank until 1998. The Law gave the government a great deal of control over the central bank and the BOJ was placed under the virtual supervision of the Ministry of Finance (MOF). After the end of the war, during the Occupation, the 1942 Law was amended to establish the Monetary Policy Board. While this amendment officially weakened the power of the government as the controller over the Bank's operations, the reality of the situation did not change.

Several attempts were made to enhance the central bank's autonomy in the 1950s and 1960s, but these efforts did not result in legislation. The Monetary Policy Board, the decision-making body, was known as a sleeping board, because it generally served, as a matter of practice, as a mere endorsement for decisions made by senior BOJ officials and the MOF. Politicians also sometimes demanded that the BOJ act in accordance with their intentions, using the threat that the prime minister should fire the Bank Governor if the Bank did not accede to their wishes.

After the burst in the Japanese bubble economy during the later 1980s, critics argued that the BOJ acted on the government's wishes by keeping interest rates too low for too long, and as a result asset prices soared, which eventually collapsed along with the rest of the economy. This in conjunction with financial scandals, entertainment-related corruption and general dissatisfaction with the bureaucracy led to a call for revision of the BOJ Law to strengthen the central bank's independence.

The bill for revision was passed in the National Diet in 1997 and the half-century old law was finally revised. The new BOJ Law was enacted on April 1, 1998. The new law expanded the members of the Monetary Policy Board from seven to nine, and stripped the government of powers to dismiss the BOJ Governor. The governmental representatives on the Monetary Policy Board, who are from such as the MOF and the Cabinet Office, can sit on the board as non-voting members. They may request that the Board postpone a vote on monetary control, while the Board has the right to veto requests from the representatives, which actually happened when the BOJ decided to lift the zero interest rate policy. The new law also has provided the Bank with enhanced autonomy in budgets, though the Bank does need to submit its budget to the MOF for authorization, a condition which some argued that the central bank failed to obtain budgetary independency.

Cukierman, Webb and Neyapti [1992] attempted to measure a central bank independence index based on legal characteristics for the 1980 to 1989 period with a 1.0 to 0.0 scale where higher values indicate greater independence. They graded 0.18 for the BOJ under the old law, which was the lowest among the G7 countries measured (Germany 0.69; the US 0.48; Canada 0.45; the UK 0.27; Italy 0.25; France 0.24). Cargill, Hutchison and Ito [2000] applied the ranking methodology used by Cukierman et al. to incorporate the relevant features of the new BOJ Law. They revised the variables of such items as chief executive office, policy formulation, objectives, and limitations on lending to the government, and computed the index under the new law at 0.39. Takahashi [1997] reached a similar result when he evaluated the new BOJ Law using the same method as the independence index of Cukierman et al. Takahashi scored the new BOJ law 0.37 due to improved policy objectives.

Although the revised law has enhanced the central bank's independence, coming from its history, the BOJ still appears considerably sensitive to its independence from the government. In raising outright purchases of long-term government bonds, the BOJ officials have often stressed that they were not reacting to political pressures of expansion of monetary easing, refuting a possible view that the Bank is controlled by the government.

On the other hand, they sometimes unofficially admitted that the government and policymakers were pressuring the BOJ to consider their opinions. As to inflation targeting, if the BOJ introduces the policy, as policymakers rigorously urge, it could be seen that the Bank is succumbing to increasing political pressures, which would indicate the Bank is not independent in actuality. For the most part, setting inflation targeting would be viewed as one way to strengthen the Bank's independence from the government; how ironic if the BOJ's adoption of it would be considered subordinate to the government.

The BOJ might be also afraid that, once it adopts inflation targeting, the government or policymakers would bring pressure on the Bank to strictly achieve the target rate. There is an argument that independence granted to the central bank is operational independence, so even if the objective of monetary policy is decided by the government, it would not harm the monetary authority's independence. The United Kingdom is the example used where the government sets the inflation target; while in other countries it is set by a central bank or jointly by a central bank and the government.

How does the BOJ law stipulate the independence of monetary authority? Article 3 of Chapter 1 addresses the autonomy of the BOJ as follows:

> *The Bank of Japan's autonomy regarding currency and monetary control shall be respected.*

On the other hand, the law also stipulates the relationship with the government in Article

4 of Chapter 1.

In recognition of the fact that currency and monetary control is a component of overall economic policy, the Bank of Japan shall always maintain close contact with the government and exchange views sufficiently, so that its currency and monetary control and the basic stance of the government's economic policy shall be mutually harmonious.

The central bank's independence is crucial since policymakers often tend to pressure the central bank to issue more new money than necessary, which would cause inflation, in order to increase fiscal spending, thus winning voter support. Collusion between fiscal and monetary policies could lead to the loss of policy discipline and economic efficiency. However, it is also important for the Bank not to be drawn into the power game merely to defend its independence, but to maintain the high road by keeping within its sphere of monetary authority.

Some speculation still exists that the Bank wanted to demonstrate its legally granted power of independence when it defied government opposition and terminated its zero interest rate policy in 2000. If the Bank and the government had worked together in harmony for policy coordination at that time, the result would possibly have been different.

Who is responsible for the prolonged recession remains uncertain. As monetary authority, however, the BOJ must share some of the blame for the sluggish performance of the economy. During Hayami's tenure, both the government and the central bank were waiting for the other to take the first step. The government demanded that the Bank further ease its monetary policy and flood the banking system with liquidity. Hayami, a structural reform advocate, argued that the money could not be used efficiently unless the government advanced structural reforms. This blame game will hopefully be changed under the new Governor Fukui. When Koizumi nominated new executives of the BOJ, Shiokawa, Minister of Finance said that there previously was a curtain separating the government and the BOJ, but now that curtain has been removed. (*Asahi Shimbun*, February 27, 2003) Fukui seemed to be trying to establish better relations between the central bank and the government.

Several economists have mentioned the effects of policy coordination. Takatoshi Ito said that when policies are put together in a package, the government and the Bank can offset each other's negative side effects and can generate synergy. (*Asahi Shimbun*, February 27, 2003) Eggertsson [2001] developed economic models, which illustrated that right combination of fiscal and monetary policies will generate inflationary expectations, suggesting that the Japanese Diet or the Cabinet set inflation targeting and the BOJ has the freedom to use its instruments to achieve it. He said that fiscal policy can aid monetary policy and make an arbitrarily high future inflation target credible, if the MOF cuts taxes and increases debt to a level in accord with the desired level of inflationary expectations. He added that cooperative solution is consistent with allowing the BOJ to maintain its operational independence.

7. Concluding Remarks

Inflation targeting is a policy framework that emphasizes the strong commitment of the central bank to price stability and reinforces transparency and accountability about implementation of monetary policy.

Since deflation itself is a very unusual economic phenomenon for an industrialized country, nobody can entirely predict certain outcomes of the central bank's adoption of inflation targeting, and under such great uncertainty the debate over inflation targeting has become heated.

This paper has examined how people have argued inflation targeting and provided some implications as to why the BOJ has persistently rejected introducing the policy and what are the motivations that lie behind the discussions.

As discussed, the complexity and controversy of the arguments are attributed to such factors as the existence of two types of inflation targeting; ambiguity of definitions of the policies; emotionally charged arguments; a jumble of various viewpoints based on different assumptions and foundations; and uneasy relations between the central bank and the government.

All in all, the arguments can be divided into two positions: do nothing until the results are guaranteed; doing something though the results are not guaranteed. People supporting the former position emphasize that the latter idea is too risky and irresponsible to take. On the contrary, those who are supporting the latter position offer a counterargument that taking no action does not mean an absence of risk, because it is another form of risk by ignoring the economic malaise for so long.

These opposing opinions also bring up another question: who is the responsible body as the monetary authority? The BOJ insists that it cannot run a risky venture as a responsible institution and should examine policy measures to be implemented carefully and elaborately beforehand, expressing reluctance to put into practice a strategy with any uncertainties. This could be viewed as a responsible position to take in the decision-making process. Some hold the opinion that no matter how seriously the Bank has discussed monetary operations seeking to repair Japan's economy, unless and until its monetary policy achieves the desired results, it cannot discharge its responsibility. Then the question becomes: should the BOJ be responsible for its decisions of monetary policy or for the results of its operations? This divergence in viewpoints about the central bank's responsibility also could amplify the discrepancy between opponents and proponents of inflation targeting.

There are arguments that Japanese policymakers tended to delay taking action, eventually paying the price for their inaction. During the past decade, it is said that the BOJ might have misjudged how serious the situation was, so that stagnation was allowed to lag on far too long. Learning from that mistake, more people pushed the BOJ to aggressively cope with deflation.

In reaction to such a claim, under Hayami's tenure, the BOJ might have been nervous of any possibility of mismanagement of monetary operation, which caused the BOJ to even more strongly resist applying an unconventional monetary policy. With the beginning of the new era of Fukui, however, the situation has appeared to being changed. Fukui was the first governor to be appointed under the new BOJ Law. Since Tadashi Sasaki, who became governor in 1969, the BOJ and the Ministry of Finance had taken turns providing the central bank governor, but the latest appointment is a break with the tradition. None of Fukui's predecessors ever confronted such a complicated formidable riddle as he is now facing.

Fukui showed his willingness to generate a two-way, cooperative relationship with the government and to improve dialogue with financial markets. Fukui said, "It's better to make the move, before it's too late, and it's already too late when the crisis appears to be emerging." (*Yomiuri Shimbun*, May 22, 2003) He is taking bold initiatives and proactive actions. This does not simply mean the BOJ will introduce inflation targeting as Fukui has repeatedly shown a cautious attitude to the policy, but he does not close the door entirely on setting the policy.

There is no precedent guide how to combat deflation for an economy caught in a liquidly trap, and any unconventional attempts of monetary policy to tackle it could be viewed as experimental. Under such unforeseen economic circumstances, for the BOJ to attribute its objection to inflation targeting to the fact that there is no country that has used inflation targeting under deflation, it would not be a persuasive enough argument for the public, since deflation itself is unprecedented among advanced economies.

This paper has examined the hotly debated issue of inflation targeting in Japan. Unlike the US, Japan does not have a well-developed policymaking industry and, for the most part, the general public is not much interested in policy discussions; it is worth noting that a wide variety of people have joined the debate and enthusiastically argued the pros and cons of inflation targeting; an occurrence which should teach a good lesson for further discussions on policy matters.

Although only the future will answer whether or not inflation targeting helps the Japanese economy recover, in the broader view, it could be said that adoption of inflation targeting could contribute to strengthening the monetary authority's independence and transparency. No matter where the emphasis of the monetary policy is put, the central bank needs to fulfill its commitment of being accountable to markets and the public, which would enhance its credibility in the long term.

Japan has been at the forefront of combating deflation, and the rest of the world is watching it closely, with a sense of growing alarm as they view a global spread of disinflationary downturn. Learning from Japan's prolonged suffering, the world's central bankers are coping with economic weakness much more quickly to block the possibility of being caught in the same trap as Japan. No textbooks on economics have presented a workable solution for the country suffering from deflation with zero interest rates, but Japan's experience during this struggle will undoubtedly be introduced in the near future in reference books as a new page of world economic history.

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Appendix 1

Hayami's Comments

03/19/01	Inflation targeting is a means with which a desirable rate from a medium-and long-term perspective is set as a target, and a central bank adjusts monetary policy when an actual inflation rate is expected to deviate from the desirable rate. The BOJ considers that it is hard to express a desirable rate in numerical values, so we don't adopt it now though we continue to study it. The monetary operations we have decided to take are different from inflation targeting.
07/17/01	The BOJ will not use inflation policy. A policy to be examined is inflation targeting; a measure which enhances accountability of monetary policy, but adopting it is not appropriate under the current economic situations.
08/29/01	The policy the BOJ decided to implement in March 2001 is not inflation targeting, but it shows our rigid commitment to prevent continuous price decline. Monetary policy is not all to stop deflation. It should be combined with structural reforms. Inflation targeting is adopted by the countries that aimed to curb inflation, and there is no country that has adopted inflation targeting under deflation. When inflation occurs, it is easier for debtors to return money, but for creditors, especially for the household sector with 1,400 trillion yen, even the value of original principals would decrease, so causing inflation is very hard both politically and socially.
10/16/01	We will not take a policy, which aims to create inflation with any measures, ignoring risks and side effects, but we regard inflation targeting aiming to enforce transparency of monetary policy as a subject for future examination. I believe that central bankers overseas share the view that it is inappropriate for the country suffering from deflation to use inflation targeting, though I don't know whether economists share this.
11/21/01	LDP's study group suggested inflation targeting, but it is not appropriate to introduce that under deflation.
02/13/02	Inflation targeting is for the countries that have difficulties in combating high inflation rates.
03/25/02	Should we start inflation targeting, it would be very difficult to achieve the target. I don't see adoption of inflation targeting is reasonable now.
10/16/02	Inflation targeting could be one possibility for monetary operations if the economic situation were changed.
01/24/03	Introduction of inflation targeting is a gamble, as it would cause undesirable adverse effects under the current economic status of Japan.
03/19/03	There is an argument that the central bank should create inflation. However, if a central bank looses its credibility, inflation going out of control almost surely will occur. To fight deflation is not identical to creating such a situation.

Source: BOJ

Appendix 2

Monetary Policy Meeting

06/14,15/01	One member said that the Bank should consider setting a target for inflation with a specified time frame if the economy deteriorated.
06/28/01	One member commented that a policy to influence the expected inflation rate by inflation targeting might be necessary.
07/12,13/01	One member said that the commitment to continue the current policy was considered to have similar effects to adopt inflation targeting. Some members pointed out the problems of inflation targeting were that it would be difficult to: 1) set a specific numerical target because prices were greatly affected not just by demand-side but also by supply-side factors such as technological innovation and deregulations; 2) to attain a target by means of monetary policy alone under the circumstances where nominal interest rates were close to zero. Another member said that the Bank should consider adopting inflation targeting to increase the transparency of its objective.
08/13,14/01*	One member remarked that there were no measures with no side effects to achieve a target and that the Bank should carefully examine whether it would have favorable effects on the formation of expectations if the Bank referred to a desirable level for prices. A different member said that the Bank should set a specific target within a certain time frame.
09/18/01*	Some members shared the view that the key issue was not deciding whether to set a numerical target for prices but considering what would be effective policy measures to achieve a target. One of them said that it was difficult to stop price declines by means of monetary easing alone. Another member said that it was not appropriate to adopt inflation targeting when the economy was still having structural problems and that a numerical price target should be considered as a means to improve transparency of monetary policy when the economy returned to a normal state. A different member commented that it would be desirable to introduce price level targeting rather than inflation targeting.
10/11,12/01*	One member said that the Bank should definitely not adopt an inflation policy, which involved taking any measure to raise price levels regardless of other consequences and that inflation targeting in some countries overseas was to prevent inflation. The member added that there would not be any available and controllable measures to achieve a target in the current situation under zero interest rates and structural adjustment pressure and that setting a target was an issue to be discussed after deflation came to halt. Another member remarked that defining a medium- to long-term price stability by setting a numerical range could be a matter to examine.
10/29/01*	One member expressed the view that the Bank should introduce a price level targeting and commented that the Bank would have to increase its outright purchases of JGBs(Japanese government bonds) and start to buy foreign bonds to significantly increase the outstanding balance of current accounts.
11/15,16/01*	One member said that the Bank should introduce a price level target, purchase foreign bonds and raise the target for the outstanding balance of current accounts.
11/29/01*	Same as above.
12/18,19/01*	Same as above.
01/15,16/02*	Same as above.
02/07,08/02*	One member proposed introducing inflation targeting, purchase of foreign bonds and raising the target for the outstanding balance of the current accounts. This member said that the target for prices set in terms of the rate of inflation rather than the level of prices would be easier for the public to understand and it was more commonly used by central banks overseas.
02/28/02*	Same as above.
03/19,20/02*	One member said that it was not appropriate to set a numerical target with a specific time frame when there were no concrete means to achieve it, but it would be meaningful if the Bank shared a target with the government as a policy framework.

10/10,11/02	Some members said that it was theoretically not possible to shift inflationary expectations upward unless there were sufficient and credible policy tools and transmission mechanisms to achieve a target, and that setting a target without such tools would impair public confidence in an economic policy as a whole. One member addressed that the Bank had already adopted an inflation targeting policy in a broad sense, and that difference between the Bank's current easing policy and inflation targeting in a strict sense was mainly whether the specific period within which the target was to be achieved was indicated. The person added that the latter policy (inflation targeting) would inevitably require extreme measures that would have serious risks. Another member said that it was difficult to understand why some government officials advocate inflation targeting despite the possibility that it would cause a rise in long-term interest rates and increase the government's interest payments.
12/16,17/02	One member cautioned that adopting inflation targeting would be reckless and inappropriate since it was difficult to increase inflationary expectations by merely announcing a target without credible policy tools. A few members remarked that prices could increase if the government drastically expanded fiscal spending and implemented tax cuts to narrow the output gap, but such policies should not be adopted in the current situation. Another member said that the Bank and the government could agree setting a specific inflation rate, if the government made an explicit commitment to maintain continuous fiscal discipline and if the Bank's flexibility and freedom in conducting monetary policy without a specific time frame to achieve the inflation rate were guaranteed. One member expressed that it was most important to increase expectations of economic growth, not those of inflation.
01/21,22/03	One member said that if both government and the Bank committed to share the same policy target, it could have some positive psychological effects on the public. Some remarked that there was a risk that inflation targeting could destabilize the economy in the present situation, where the traditional monetary policy tools had all been employed already and both structural adjustments and fiscal consolidation were in progress. One member noted that the mechanism of an upward shift in inflationary expectations envisioned by advocates of inflation targeting was highly likely to destabilize people's expectations and this could in turn destabilize long-term interest rates and the economy.
03/25/03 First meeting under new executives	One member said that presenting a target for price stability with a certain time frame could raise the expected inflation rate and a rise of it combined with stabilization of nominal long-term interest rates could make real interest rates decline. Another member said that the Bank's current commitment in terms of the duration of quantitative easing already incorporated many elements of inflation targeting. Many said that if the Bank presented a target, it would not be easy to affect expected inflation rate in the current situation where transmission mechanism of monetary policy was not fully functioning. A few expressed concerns that there was a risk that nominal long-term interest rates might increase before the expected inflation rate rises.
04/07,08/03	One member commented that whether there was a channel through which an announcement of a high inflation rate targeted by the Bank could increase inflationary expectations, leading to a decline in the real interest rate, depended on what kind of policy tools would be available for the Bank to achieve the target. Another member said that the Bank could enhance its accountability and transparency by clearly indicating a target and the time frame, and that setting a ceiling for the inflation rate would be effective in prevention of extremely high levels of inflation in the future, serving to anchor the expected inflation rate. A different member expressed that it would be worthwhile to set a target, if the transmission mechanism could be explained properly based on theory, although there was uncertainty of how the mechanism would operate and there were structural constrains making the target rate difficult to be achieved.
04/30/03	Some member shared the view that it would be useful to express price stability in terms of numerical values as a reference rate of inflation, even if it was not a strict target. One of these members said that a reference rate could serve to anchor the expected inflation rate and reduce time and costs required for price adjustments. A different member said that it was not appropriate to indicate a desirable inflation rate in advance during the process of overcoming deflation because an acceptable level of inflation would vary depending on the momentum for economic recovery. Some other said that neither a target nor a reference of inflation would have much significance in the current situation where there were no tools for achieving it, so it was important to first strengthen the transmission mechanism of monetary easing.

05/19,20/03	One member said that the Bank should start examining introduction of a numerical target for the inflation rate, and suggested, to achieve the target, the possible measures such as an increase in outright purchase of JGBs or purchase of foreign bonds. A different member said that it would be worthwhile to examine a desirable inflation rate consistent with sound economic growth, although the Bank might not set a time frame for achieving it.
06/10,11/03	One said that the Bank should examine basic issues related to setting a numerical target for prices to maintain price stability.
06/25/03	Several members said that they would like to discuss the issue of setting a numerical target for price stability. One said that the Board should reach a conclusion as soon as possible on whether or not to set a numerical target. Another noted that the Board had already discussed the problems a number of times in the past meetings and said that if the Bank were to set a numerical target, various points still needed to be examined. A different member commented that when the Bank terminated the quantitative easing in the future, some sort of numerical target would be necessary to stabilize people's expectations, but, in the current situation, merely indicating or announcing adopting inflation targeting was unlikely to have positive effects. Some agreed with the view and were cautious about proceeding with a discussion solely on a numerical target at this stage.

Source: BOJ. At the meetings with asterisk sign (*), proposal of inflation/price-level targeting was submitted.