Introduction

Kunio Okina, Hiroo Taguchi, and Shigenori Shiratsuka

The theme of the Ninth International Conference organized by the Institute for Monetary and Economic Studies of the Bank of Japan was "The Role of Monetary Policy Under Low Inflation: Deflationary Shocks and Policy Responses," and the conference was held on July 3 and 4, 2000.

The purpose of this conference was to discuss the role that monetary policy can and should play when there are deflationary shocks, such as the collapse of an asset price bubble occurring in an environment of low inflation, the experience in Japan in the 1990s being a case in point. When inflation rates are low and nominal interest rates become close to zero, there are limits to the effectiveness of monetary policy through ordinary interest rate channels. While monetary policy will very likely depend heavily on expectation formation, how expectation will be formed in such circumstances is not very certain, since there are hardly any examples of such a situation in modern economic history that we can learn from, with the exception of the Great Depression in the United States in the 1930s and the economic stagnation in Japan in the 1990s. However, there is no guarantee that these cases will remain remote outliers in the future, since most industrial economies have now opted for, and are achieving, low inflation.

The organizers of this conference felt that it would be valuable to bring together the wisdom of both theoretical and empirical analysts, as well as policy makers, and ask them to focus on this challenging topic. Throughout the conference every effort was made to draw implications for the conduct of monetary policy in practice.

The conference began with an opening speech by Masaru Hayami (Governor, Bank of Japan), followed by keynote speeches from Allan H. Meltzer (Carnegie Mellon University) and John B. Taylor (Stanford University), both of whom are honorary advisors to the Institute for Monetary and Economic Studies. The following four sessions dealt with more specific aspects, featuring two papers each. The conference concluded with a panel that attempted to summarize the entire discussion.

Governor Hayami's opening speech touched upon the lessons of the bubble period and from the monetary policy of the 1980s, and suggested the need for central banks to aim at price stability that supports medium- to long-term sustainable growth, not price stability at a particular point in time.

In his keynote speech ("Monetary Transmission at Low Inflation: Some Clues from Japan in the 1990s"), Allan H. Meltzer emphasized that the fundamental cause of Japan's prolonged stagnation was that the yen had appreciated in spite of the relative decline in productivity in Japan compared to the United States, and stressed that an adaptive policy rule for the growth of monetary base would have mitigated the problems that Japan had faced, especially in 1997–98. John B. Taylor also reviewed the experience of Japan in the 1990s in his speech ("Low Inflation, Deflation, and Policies for Future Price Stability"), and emphasized the need for central banks to have an inflation target, even if the target is implicit or stated indirectly. While he thought the zero interest rate policy adopted in Japan is a contingency plan and is a form of monetary policy rule, he argued that the Bank of Japan should be transparent about what will come after the zero interest rate policy.

Session 1 was titled "An Overview of Monetary Policy under Asset Price Fluctuation and Deflation." The paper by Naruki Mori, Shigenori Shiratsuka, and Hiroo Taguchi ("Policy Responses to the Post-Bubble Adjustments in Japan: A Tentative Review") analyzed financial and economic developments and the responses of both monetary and prudential policies in Japan after the bursting of the asset price bubble in the 1990s. The authors' main conclusion was that the timing and extent of easing was adequate if assessed as a response to an ordinary recession, but with the benefit of hindsight it is possible to argue that a more aggressive easing may have been needed to cope with the negative impacts of the bursting of the bubble. The second paper, presented by Thomas F. Cargill ("Monetary Policy, Deflation, and Economic History: Lessons for the Bank of Japan") also reviewed the development of the Japanese economy in the 1990s and compared it with historical experiences, primarily the U.S. Great Depression in the 1930s, but also those of Sweden and Japan during the same decade. As a lesson from these episodes, he concluded that concern with its independence made the Bank of Japan, similar to the Federal Reserve in the 1930s, reluctant to take the needed aggressive measures, and recommended inflation targeting as a future strategy.

Many structural factors influence the transmission mechanism and effectiveness of monetary policy. From among them, Session 2, on "Transmission Mechanism and Structural Rigidities," took up the issues of stability of the financial system and employment adjustment. Marvin Goodfriend ("Financial Stability, Deflation, and Monetary Policy") argued that a central bank could be "fooled by its own credibility" for low inflation into being insufficiently preemptive in a business expansion, and then constrained by the zero bound from reducing the real interest rate sufficiently in the subsequent recession. He examined how this chain of events, leading to deflation and stagnation, could be weakened or broken by a quantitative monetary policy and carry tax on the currency, and argued that another option, fiscal policy, is relatively ineffective at best and counterproductive at worst. The paper by Hiroshi Fujiki, Sachiko Kuroda Nakada, and Toshiaki Tachibanaki ("Structural Issues in the Japanese Labor Market: An Era of Variety, Equity, and Efficiency or an Era of Bipolarization?") illustrated recent structural changes in the Japanese labor market, with particular focus on "peripheral workers," e.g. women, youths, and older workers. They thought that careful assessment of these structural changes is important in the proper formation of monetary policy.

Session 3, "Expectation Formation and Monetary Policy," started with a theoretical paper by Lars P. Hansen and Thomas J. Sargent ("Acknowledging Misspecification in Macroeconomic Theory"). Their paper took up the issue of the misspecification of models upon which policy decision is to be based. Their analysis indicated that for robust policy control under uncertainty, policy makers must act more aggressively than in a standard case. The second paper, by Makoto Saito and Shigenori Shiratsuka ("Financial Crises as the Failure of Arbitrage: Implications for Monetary Policy") interpreted the widening of the discrepancy observed in 1997–98 in offshore money markets between rates offered to Japanese banks and foreign banks as evidence of a malfunctioning of market arbitrage. The authors argued that the central banks' intervention in such a crisis is effective in resuming the function of the markets.

Session 4 was designed to shed light on "The Implications of Low Inflation and Interest Rates for the Conduct of Monetary Policy." The first paper, by Lars E. O. Svensson ("The Zero Bound in an Open Economy: A Foolproof Way of Escaping from a Liquidity Trap"), proposed a combination of price-level targeting, a currency devaluation, and a temporary exchange rate peg as a foolproof way of "jump-starting" an economy facing a deflationary spiral and a zero bound on nominal interest rates. Nobuyuki Oda and Kunio Okina ("Further Monetary Easing Policy under Non-Negativity Constraints of Nominal Interest Rates: Summary of Discussion Based on Japan's Experience") reviewed the background to and workings of the zero interest rate policy, and discussed the feasibility and effectiveness of various policy recommendations raised on Japan. They also examined the desirability of inflation targeting under zero interest rates and concluded that, given the social and political environment, it could undermine the flexibility of monetary policy.

It was the intention of the conference organizers to promote a general discussion on the role of monetary policy under low inflation. However, it was only natural that the discussions tended to concentrate on current monetary policy in the Japanese economy. Again naturally, no conclusion was reached on many issues, partly due to the differing degrees of understanding among the participants of Japanese economic conditions, but mainly due to the multifaceted nature of the problem. Nonetheless, the organizers felt that a consensus was reached among the participants about the importance of addressing these issues, and that the conference succeeded in contributing to this end.

Although the theme of the conference was relatively clearly specified, the spectrum of issues and discussion that were brought forward was much broader than we expected. Below is our summary of the main points.

(1) Deflation can be even harder to deal with than inflation. Therefore, it is important to attempt to achieve price stability by preventing inflationary as well as deflationary risks in a preemptive manner. This was one of the few points on which most of the participants agreed.

(2) Several recommendations were made for economies that are at the zero lower bound on nominal interest rates and are experiencing a deflationary shock: (1) enhancing the announcement effect of a zero interest-rate policy; (2) devaluing the domestic currency; (3) purchasing a large amount of long-term government bonds; (4) setting a target for the inflation rate or the price level; (5) imposing negative interest rates by the introduction of a cash-carrying tax; and (6) some combination of the above proposals. Views differed on each of the proposals, both in the assessment of their applicability in general and to the present Japanese economy in particular. The cause of

this difference rested partly on how to evaluate the effectiveness of such measures, but mostly on how to weigh the possible positive impacts against the possible negative side effects. However, there was to some extent a common awareness of the need to provide an "anchored expansion" framework in order to avoid monetary expansion going too far and the economy becoming uncontrollable.

(3) There was a broad consensus in favor of a "constrained discretion" in inflation targeting, which may contribute to improving the transparency of monetary policy management and dealing flexibly with short-term shocks. However, there was disagreement about the desirability of adopting inflation targeting in Japan in the present economic, social, and political environment.

(4) With regard to policy rules, opinions were divided as to whether monetary policy should react aggressively or conservatively to changes in observed information variables under uncertainty.

(5) It was suggested that Japan's monetary policy responses after the bursting of the bubble were broadly adequate for dealing with a normal business contraction, but that the degree of monetary easing might have been insufficient to offset the impact of the bursting of the bubble, whose magnitude was unprecedented. However, it was also recognized that there were limits to what monetary policy alone could do without a fundamental cure for problems in the financial system.

(6) With regard to lessons from the history, there were differences on how to assess fiscal policy under Finance Minster Korekiyo Takahashi during the 1930s (the "Takahashi Fiscal Policy") in Japan. While some argued that it was effective enough to overcome deflation, others pointed out that this policy should be evaluated in connection with the social and economic environment and from a longer-term perspective, since it might not have worked without the cross-border capital movement regulation that existed then; it had also triggered a growing burden of government debt that became evident later on.

(7) Most participants agreed that financial system stability is essential for achieving long-run price stability. There was, however, division among the participants on the role of monetary policy under financial instability: some took the view that the role of monetary policy should be limited to soothing the financial markets by supplying ample liquidity at lower interest rates; others argued that monetary policy should deal more actively with the malfunctioning of financial markets when markets are segmented and arbitrage between them fails due to a tightened liquidity constraint on market participants.

(8) The importance of broadening unemployment statistics to include "discouraged workers" was proposed as a way of capturing more comprehensively the structural changes in Japanese labor markets, particularly changes in the supply of women, youths, and older workers. It was recognized, however, that there were still issues to be addressed concerning how to use information based on such statistics for the conduct of monetary policy.

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PROGRAM

Date/Time		Session		Chairman/Moderator	Paper Presenter/Panelist	Designated Discussant
Monday, July 3	9:00–11:45	Opening Speech		Kunio Okina (Bank of Japan)	Masaru Hayami (Bank of Japan)	—
		Keynote Speeches			Allan H. Meltzer (Carnegie Mellon University), John B. Taylor (Stanford University)	—
	13:00–17:30	1	An Overview of Monetary Policy under Asset Price Fluctuation and Deflation	Masaaki Shirakawa (Bank of Japan)	Hiroo Taguchi (Bank of Japan), Shigenori Shiratsuka (Bank of Japan), Naruki Mori (Bank of Japan)	Georg Rich (Schweizerische National Bank), Charles Collyns (International Monetary Fund)
					Thomas F. Cargill (University of Nevada, Reno)	Mårten Blix (Sveriges Riksbank), Shin-ichi Fukuda (University of Tokyo)
		2	Transmission Mechanism and Structural Rigidities	Jean Hilgers (Banque Nationale de Belgique, S.A.)	Marvin Goodfriend (Federal Reserve Bank of Richmond)	William R. White (Bank for International Settlement), Kazuo Ueda (Bank of Japan)
					Hiroshi Fujiki (Bank of Japan), Sachiko K. Nakada (Bank of Japan), Toshiaki Tachibanaki (Kyoto University)	Jane T. Haltmaier (Board of Governors of the Federal Reserve System), Grant Kirkpatrick (Organisation for Economic Co-operation and Development)
Tuesday, July 4	9:00–11:45	3	Expectation Formation and Monetary Policy	J. Alfred Broaddus, Jr. (Federal Reserve Bank of Richmond)	Lars P. Hansen (The University of Chicago)	Fumio Hayashi (University of Tokyo), Tiff Macklem (Bank of Canada)
					Makoto Saito (Osaka University), Shigenori Shiratsuka	Christine M. Cumming (Federal Reserve Bank of New York), Tim Chung-Ko Ng (Reserve Bank of New Zealand)
	13:00–17:30	4	The Implications of Low Inflation and Interest Rates for the Conduct of Monetary Policy	Kazuo Ueda (Bank of Japan)	Lars E. O. Svensson (Stockholm University)	Glenn Stevens (Reserve Bank of Australia), Job Swank (De Nederlandsche Bank N.V.)
					Nobuyuki Oda (Bank of Japan), Kunio Okina	Spencer Dale (Bank of England), Jack H. Beebe (Federal Reserve Bank of San Francisco)
		Concluding Panel: The Role of Monetary Policy under Low Inflation		Kunio Okina	Vítor Gaspar (European Central Bank), Donald L. Kohn (Board of Governors of the Federal Reserve System), Yutaka Yamaguchi (Bank of Japan), Allan H. Meltzer, John B. Taylor	