# Japan's Approach to Monetary Policy

The goal of monetary policy as conducted by the Bank of Japan is to contribute to the sound development of the national economy through the pursuit of price stability. The objective of price stability, however, is not precisely defined as it has been for other central banks. Following the implementation of the new Bank of Japan Law in 1998, the monetary policy framework is characterized by central bank independence, the primacy of the price stability objective, instrument independence, and policy decisions made by a monetary policy committee with regular meetings and published minutes. At its meetings, the monetary policy committee discusses the economic and financial situation and then decides matters relating to monetary policy, including the following: the guideline for money market operations; the official discount rate; reserve requirements ratios; the Bank's view of economic and financial developments; and the types, terms, and conditions of bills and bonds used in money market operations.

## Bank of Japan's Main Monetary Policy Instruments

In recent years, the Bank of Japan has targeted a specific level of the uncollateralized overnight call rate, with open market operations aimed at increasing the provision of funds when the overnight call rate is above target, and at decreasing the provision of funds when the overnight call rate is below target. The funds whose provision the Bank modifies in its day-to-day open market operations are the current account balances that private financial institutions hold at the central bank. These balances are

# Giovanni P. Olivei

Economist, Federal Reserve Bank of Boston.

giovanni.olivei@bos.frb.org

made for the most part by the legal reserve requirements of depository institutions, and for the rest by the working balances of both depository and nondepository institutions.<sup>1</sup>

The practice of influencing the price of liquidity supplied through open market operations reflects the central role that discretionary operations now play in the management of liquidity. Market operations are geared to balancing the market for current account balances as a whole, and financial institutions are not expected to rely on standing facilities. Since mid-1995, the Bank of Japan has steered the overnight rate below the discount rate, thus rendering the discount window ineffective as a tool for active liquidity management.

While under ordinary circumstances the Bank of Japan targets the overnight call rate, in March 2001 the Bank enacted new procedures for market operations that will stay in place until the deflationary pressures subside. Under the new procedures, the Bank sets a target for the outstanding balance of current accounts. The target for the outstanding balances held at the Bank is currently set with the goal of driving the overnight call rate to around zero.<sup>2</sup> However, by setting a reserve target, the Bank intends to allow, up to a point, fluctuations in the overnight call rate. The concomitant introduction of a Lombard facility provides a ceiling for the overnight call rate and limits its range of fluctuation.

## **Standing Facilities**

Until mid-1995, the Bank of Japan employed the discount window as a tool for active liquidity management. The amount and maturity of credits granted through the window were entirely discretionary, and the Bank could also recall loans at will. However, the window became ineffective when the Bank steered the overnight call rate below the discount rate, and in January 1996 the Bank announced it would no longer use discount credit as part of its regular liquidity management operations.

With the introduction of the new Lombard facility, the Bank of Japan suspended the discounting of commercial bills. The Lombard facility is fully collateralized and is activated at the request of the counterparties. The interest rate charged is the posted official discount rate (now called the "basic loan rate"). A penalty, however, is levied to counterparties that use the facility longer than five days per month on a cumulative business-day basis.<sup>3</sup> At present, only government bonds and loans on deeds can be pledged as collateral,

but effective December 2001 the collateral for the Lombard facility will be merged with pooled collateral used for bill purchasing operations, daylight overdrafts, and the security of Treasury fund operations. While in principle all counterparties that maintain balances at the Bank of Japan are eligible to use the Lombard facility, depository financial institutions are more likely to access it, since securities companies must pay a higher tax on borrowing from the facility.

The Bank of Japan also provides fully collateralized intraday overdrafts to all Bank of Japan account holders. Eligible collateral is pooled collateral that conforms to the "guidelines on eligible collateral" discussed below. No quantitative limit is imposed on the amount of intraday liquidity, and no interest rate is charged. As usual, if the liquidity provided intraday is not repaid by the end of the business day, the Bank will levy a considerable penalty interest rate.

## Open Market Operations<sup>5</sup>

Since the beginning of 2001, the Bank of Japan has shifted from a designated-time net settlement system to a real-time gross settlement system (RTGS), which allows the Bank to process every transaction in real time and on an order-by-order basis. The average size of the Bank's daily market operations is significantly greater than the average size of the Federal Reserve's operations, because daily fluctuations in banknotes in circulation and in the Treasury balance are much wider in Japan than in other industrialized countries.<sup>6</sup>

The operational tools available to the Bank of Japan are listed in Table 1. The type and tools of mar-

40 Second Quarter 2002 New England Economic Review

<sup>&</sup>lt;sup>1</sup> Balances held at the Bank of Japan are not remunerated. Nondepository financial institutions are securities firms and *tanshi* (money market brokers) companies.

<sup>&</sup>lt;sup>2</sup>As of December 19, 2001, the Bank of Japan conducts money market operations aiming for an outstanding balance of current accounts held at the Bank of about 10 to 15 trillion yen. In the event of financial market instability, the Bank will provide as much liquidity as needed, irrespective of the target.

<sup>&</sup>lt;sup>3</sup> The penalty rate is at least 200 basis points in excess of the basic loan rate.

<sup>&</sup>lt;sup>4</sup> The fact that currently Lombard loans are not processed electronically, like all other Bank of Japan market transactions, puts a burden on the borrower in terms of additional operational and insurance costs. These additional costs may explain why overnight call rates rose well above the Lombard rate on the last day of the fiscal year 2001.

 $<sup>\</sup>frac{5}{5}$  Miyanoya (2000) provides a comprehensive description of the Bank of Japan's market operations.

<sup>&</sup>lt;sup>6</sup> Miyanoya (2000, p. 12) notes that in 1998, the average weekly fluctuation in banknotes in Japan was approximately seven times larger than in the United States, while the average weekly fluctuation in the Treasury balance was approximately four times larger.

#### Table 1

## Tools of Market Operations

#### Provision of short-term funds

Purchases of Treasury bills/financing bills (TBs/FBs) under repurchase agreements

Outright purchases of TBs/FBs

Borrowing of Japanese government bonds (JGBs) against cash collateral (JGB repos)

Outright purchases of bills

Purchases of commercial paper under repurchase agreements

#### Absorption of funds over a short term

Sales of TBs/FBs under repurchase agreements

Outright sales of TBs/FBs

Outright sales of bills issued by the Bank of Japan

### Provision of long-term funds

Outright purchases of JGBs

ket operations conducted by the Bank depend on the underlying purpose of the operation. In order to meet the secular increase in the demand for currency that accompanies the long-run trend of growth in the economy, the Bank conducts outright purchases of Japanese government bonds.<sup>7</sup>

The Bank of Japan uses, instead, a wider set of tools for its day-to-day operations. Specifically, the Bank increasingly relies on repurchase agreement transactions involving government securities: Japanese government bonds (JGBs), Treasury bills (TBs), and financing bills (FBs) and commercial paper (CP). In addition, the Bank relies on outright purchases (sales) of TBs and FBs,<sup>8</sup> and outright purchases of bills.<sup>9</sup> The considerable expansion of the repo market in the past few years and the merits of repo transactions in terms of risk management are usually cited as the main reasons behind the Bank of Japan's increasing reliance on repos for its short-term provision (absorption) of funds.

In the past, because of the large size of the bill market, the Bank of Japan relied heavily on outright purchases of bills for its market operations. With a view toward facilitating their use in market operations, the Bank has recently revised the principal terms and conditions pertaining to bill-purchasing operations. In particular, the Bank widened the number of eligible counterparties, extended the maturity of the operations from three to six months, and allowed as collateral a wide range of pooled collateral. <sup>10</sup> Although the Bank in its outright purchase of bills buys master bills issued by operations counterparties only, these bills can be backed by various private sector liabilities

such as commercial paper, commercial bills, and straight bonds.

The maturity of market operations involving the shortterm provision (absorption) of funds is six months or less for purchases/sales of TBs and FBs under repurchase agreements, for JGB repos, and for outright purchases of bills, and three months or less for outright sales of Bank of Japan bills and purchases of CP under repurchase agreements. In the year 2000, the average maturity of repurchase agreements operations in government securities was approximately 50 days. A competitive yield auction is used for all market operations.<sup>11</sup>

Market operations have also been used by the Bank in the recent past to stabilize financial markets. This has in some instances involved "dual" operations with the aim of stabilizing market interest rates across the board. For example, from October to December

Second Quarter 2002 New England Economic Review 41

<sup>&</sup>lt;sup>7</sup> The Bank of Japan would normally accept 10-year and 20-year government bonds for outright purchases of Japanese Government Bonds. In mid-2001, however, the Bank started accepting 2-, 4-, 5-, and 6-year government bonds also.

<sup>&</sup>lt;sup>8</sup> Financing bills are discounted bills issued by the government to raise short-term funds. Until March 1999, FBs were offered at a fixed discount rate below market interest rates. Therefore, private financial institutions rarely submitted bids and the Bank of Japan had been purchasing almost the entire amount issued. Since April 1999, however, public auction has generally been used for the issuance of FBs. Since then, the FBs market has been expanding rapidly.

<sup>&</sup>lt;sup>9</sup> The Bank of Japan purchases bills issued by financial institutions whose drawers, drawees, and payees are the financial institutions themselves. The purchase of bills by the Bank is against collateral.

<sup>&</sup>lt;sup>10</sup> The need to inject large amounts of liquidity into the economy under extraordinary circumstances likely explains the Bank of Japan's heavy reliance on outright purchase of bills in its market operations in recent months. Of the 43.5 trillion yen in outstanding operations at the end of April 2001, 24.7 trillion was for purchases of TBs and FBs under repurchase agreements; 6 trillion for JGB repos; 1.6 trillion for purchases of CP under repurchase agreements; 8.7 trillion for outright purchases of bills; 6.2 trillion for outright purchases of TBs and FBs; and 3.7 trillion for outright sales of bills drawn by the Bank of Japan. At the end of July 2001, the Bank had curtailed purchases of TBs and FBs under repurchase agreements (to 1.5 trillion) and increased JGB repos (to 15.2 trillion) and outright purchases of bills (to 14.3 trillion).

<sup>&</sup>lt;sup>11</sup> For its market operations, the Bank selects bidders according to criteria that are made public. Bidders must hold current accounts at the Bank's head office, they must be of adequate creditworthiness, they must be part of the BOJ-NET network, and they must be active players in the market concerned. For the institutions that have previously been counterparties of the Bank's market operations, the amount of successful bids in the past will also be considered.

## Eligible Collateral for the Purchase of Bills by the Bank of Japan

		Collatera Value <sup>a</sup>
1. Government Bo	nds	
A residual maturity of		99
	(2) more than 1 year and up to 5 years	98
	(3) more than 5 years and up to 10 years	96
	(4) more than 10 years and up to 20 years	94
	(5) more than 20 years	90
2. Financing Bills		99
3. Government-Gu		0.7
A residual maturity o		97 95
	(2) more than 5 years and up to 10 years (3) more than 10 years and up to 20 years	95 90
	(4) more than 20 years	85
4. Municipal Bonds	· ·	
A residual maturity o		97
	(2) more than 5 years and up to 10 years	95
	(3) more than 10 years and up to 20 years	90
	(4) more than 20 years	85
	nt and Loan Program (FILP) Agency Bonds	
A residual maturity o		96
	(2) more than 5 years and up to 10 years	93
	(3) more than 10 years and up to 20 years	85
	(4) more than 20 years	80
6. Corporate Bond		96
A residual maturity o	(2) more than 5 years and up to 10 years	90
	(3) more than 10 years and up to 10 years	85
	(4) more than 20 years	80
7. Asset-backed Se	ecurities	
A residual maturity of	of: (1) Up to 5 years	96
	(2) more than 5 years and up to 10 years	93
	(3) more than 10 years and up to 20 years	85
	(4) more than 20 years	80
8. Foreign Government Bonds		0.4
A residual maturity o	of: (1) Up to 5 years	96
	(2) more than 5 years and up to 10 years (3) more than 10 years and up to 20 years	93 85
	(4) more than 20 years	80
9. International Fin	nancial Institution Bonds	
A residual maturity o		96
	(2) more than 5 years and up to 10 years	93
	(3) more than 10 years and up to 20 years	85
	(4) more than 20 years	80
10. Bills (including commercial paper)		95 <sup>b</sup>
11. Loans on Deeds (collateral eligible until March 31, 2001)		80°
12. Interest-bearing Bank Debentures		96
13. Discount Bank	<b>Debentures</b> (collateral eligible until March 31, 2002)	96
	onding to Corporate Bonds	
	of: (1) Up to 5 years	96
,	(2) more than 5 years and up to 10 years	93
	(3) more than 10 years and up to 20 years	85
	(4) more than 20 years	80

1998, the Bank of Japan set out to contain the upward pressure on interest rates on term instruments maturing beyond the year-end, which reflected heightened concern about the stability of the financial system, while preventing the overnight call rate from falling below the target level. For this purpose, on the asset side the Bank increased repo operations and CP operations, while on the liability side the Bank increased items related to bill-selling operations, which were conducted to absorb liquidity in the very short term.

## Margining Practices and Collateral

As concerns repurchase agreements operations and borrowing of JGBs against cash collateral, the Bank of Japan marks to market daily and applies margin calls. An initial haircut also applies. As concerns the purchase of bills, daylight overdrafts, and access to the Lombard facility,12 Table 2 provides a description of the eligible collateral and of the initial haircut applied to the different assets. As already mentioned, the collateral can be pooled. Operation counterparties can substitute collateral at any time, as long as the amount pledged (after the initial haircut) covers the total exposure. The list of eligible collateral tends to be liberal in that, beside governmentguaranteed bonds, it includes bonds issued by public corporations, corporate bonds, and asset-backed securities. In addition, foreign government bonds are also accepted, provided they are denominated in Japanese yen.

Source: Bank of Japan. 2000. Establishment of Guidelines on Eligible Collateral.

<sup>&</sup>lt;sup>c</sup> percent of outstanding principal balance

## Selected Fiscal Issues

Japan has become the largest issuer of net debt among industrial countries, as net government bond issues have increased fivefold since 1990. The general government net debt, at 38 percent of GDP in 1999, is still comparatively small by international standards. Social security assets, however, are more than offset by future pension obligations. Given the underfunded nature of the pension system, a better measure of the government's obligations is given by the net debt excluding social security assets, which, at 88 percent of

The author thanks Atsushi Miyanoya and Sotaro Kato, both of the Bank of Japan, for helpful comments and suggestions. The author is solely responsible for any errors.

## References

Bank of Japan. 2000. 2000 Annual Review. Tokyo: Bank of Japan.

————. Public Statements by the Bank of Japan. Bank of Japan <a href="http://www.boj.or.jp/en/index.htm">http://www.boj.or.jp/en/index.htm</a>.

International Monetary Fund. 2000. Japan: Staff Report for the 2000

Article IV Consultation. IMF Staff Country Report No. 00/98. Miyanoya, Atsushi. 2000. "A Guide to the Bank of Japan's Market Operations." Working paper, Bank of Japan's Financial Markets Department (August).

GDP in 1999, is significantly higher than in most other industrialized countries. In reaction to the rapid deterioration in its fiscal position and the rapid aging of society during the twenty-first century, the Japanese government has started asserting openly the urgent need to improve the current fiscal position and to implement a broad structural reform of public finances.

Second Quarter 2002 New England Economic Review 43

<sup>12</sup> For the Lombard facility, the list of collateral in Table 2 will become effective December 2001, when the form of lending will change from loans on bills to an electronic loan. Currently, collateral must be pledged in advance and only government bonds and loans on deeds are acceptable.