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## The Bank of Japan's Eligible Collateral Framework and Recently Accepted Collateral

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February 2003

# arket Review

*The Bank of Japan completely revised its eligible collateral framework and related system infrastructure in late 2000 and early 2001. In June 2002, the Bank also began publicly releasing data on the outstanding levels of collateral accepted by the Bank. Eligible collateral is selected, with emphasis on "creditworthiness" and "marketability" in order to ensure the soundness of the Bank's assets. The range of instruments covers government bonds, financing bills, corporate bonds, bills, CP and other financial assets. The amount outstanding of accepted collateral, mainly consisting of government bonds, is presently approximately ¥65 trillion, of which nearly 50% is actually being used for liquidity provision by the Bank.*

### Preface

In October 2000, the Bank of Japan stipulated a new framework for all basic conditions and procedures concerning the treatment of eligible collateral (Guidelines on Eligible Collateral<sup>1</sup>) to ensure the appropriate and efficient handling of collateral and to enhance the transparency of the Bank's business operations. In January 2001, together with the implementation of Real Time Gross Settlement (RTGS), the Bank started to accept "pooled collateral"<sup>2</sup> in place of the previous system whereby collateral was segregated depending on the type of mechanism used by the Bank to provide liquidity. At the same time, the Bank also modified its system infrastructure for accepting and managing collateral (hereafter, "liquidity provision and collateral system"), which reduced the processing burden, and pursued other efforts to make collateral use smoother and more efficient.

Since January 2001 the Bank has continued to amend its eligible collateral framework, in accordance with changes in financial markets and other developments. In June 2002, the Bank began to publicly release data on the collateral accepted by the Bank.

This paper outlines the Bank's eligible collateral framework and its basic policy, and also reviews the recent trends in collateral accepted by the Bank.

### Outline of the Eligible Collateral Framework

#### *Functions of Eligible Collateral*

The Bank of Japan continues to provide an abundant amount of liquidity to the market to prevent continuous price declines and to support the stable and sustained growth of the Japanese economy.

The Bank provides liquidity to the market mainly via market operations such as outright purchases of JGBs, purchases of JGBs under repurchase agreements, purchases of CP under repurchase agreements, and outright purchases of bills drawn by financial institutions. In addition, the Bank, through its complementary lending facility, provides loans at the official discount rate in response to requests from financial institutions. Furthermore, while the characteristics of overdrafts are different

**Table 1: Liquidity Provision Facility of the Bank of Japan and Collateral Accepted**

		(trillion yen)	
Liquidity Provision Facility (average amount in October 2002)		Outstanding amount of Actual Collateral Accepted (end of October 2002)	
Total provision utilizing collateral accepted	29.5	Total Collateral Accepted	63.9
Outright Purchases of bills	26.4	Total bonds	47.9
Complementary lending facility	0.0	Government bonds	44.2
Overdraft <sup>1</sup>	2.2	Total bills	1.1
Security of treasury fund operation <sup>2</sup>	0.8	Total loans on deeds	14.8
Government bonds borrowed and TB/FB and CP purchased under repurchase agreements	30.9	} To borrow or purchase these assets every time the Bank provides liquidity	
Government bonds borrowed against cash collateral	3.1		
TB/FB purchased under repurchase agreements	0.0		
Outright purchase of TB/FB	25.5		
CP purchased under repurchase agreements	2.2		
Total Liquidity Provision	60.4		

Note 1: Peak amount of overdraft during the day.

Note 2: Necessary Collateral of agents and revenue agents.

from other liquidity provision methods, the Bank provides temporary intraday overdraft financing to financial institutions (daylight overdrafts) for cash and government bond settlements (see Table 1).

Under repurchase operations, government bonds and CP purchased by the Bank have, in effect, the same function as collateral. The Bank requires collateral for bill purchase operations, complementary lending and overdrafts. In this manner, the Bank acquires two layers of credit protection. First is the soundness of the financial institutions, which are the recipients of the liquidity provided by the Bank, and second is the credit value of the collateral assets themselves. In principle, central banks worldwide provide liquidity only on a collateralized basis. The same principle is stipulated by the Bank of Japan Law (Bank of Japan Law, Article 33-1-2).

By pledging ample amounts of eligible collateral to the Bank in advance, financial institutions have prompt and certain access to liquidity when necessary, through the complementary lending and overdraft facilities (see BOX).

### **Basic Policy of the Eligible Collateral Framework**

In order for a currency to function properly as a medium of exchange, public confidence in the soundness of a central bank's assets is essential.

Accordingly, it is important to ensure the soundness of the collateral assets that the Bank of Japan accepts when providing liquidity to financial institutions.

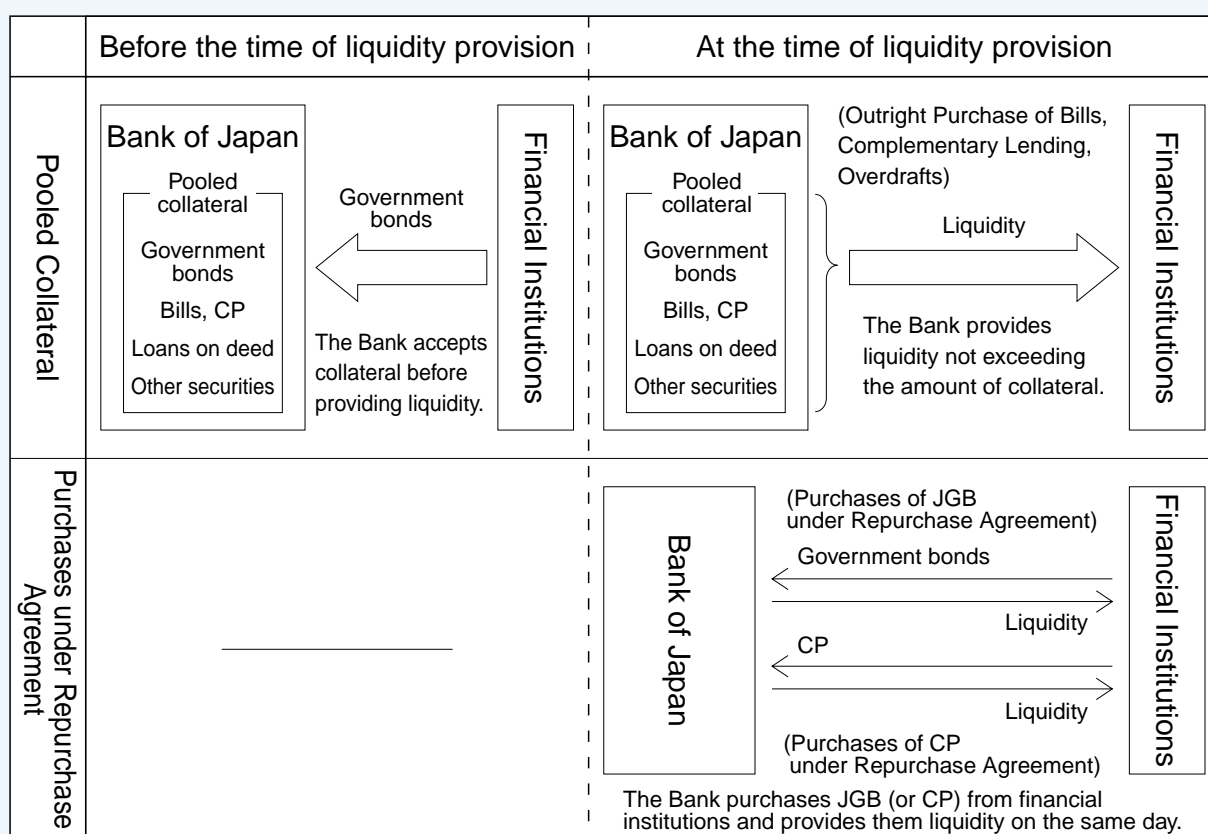
To these ends, the Bank emphasizes "creditworthiness" and "marketability" in its criteria for accepting financial assets as eligible collateral. The Bank selects eligible collateral based on two main factors: the certainty of principal and interest payment ("creditworthiness"), and the ease of realizing its value through market sales ("marketability").

The recent growth of new financial markets, such as those for securitization, has been noteworthy. Given this rapid development, the Bank is moving to actively accept such new financial instruments as eligible collateral, provided that the financial instruments fulfil the Bank's "creditworthiness" and "marketability" criteria. This should indirectly contribute to the development of the markets for these instruments.

### **Details of the Eligible Collateral Framework**

In accordance with the basic policy outlined above, the Bank of Japan accepts debts issued by public-sector institutions as eligible collateral. These include government bonds, financing bills, government-guaranteed bonds, municipal bonds, loans on deeds to the government's Special Account

**BOX: Means of Liquidity Provision by the Bank: Pooled Collateral and Purchases under Repurchase Agreement**



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for the Allotment of Local Allocation Tax and Local Transfer Tax (hereafter, "loans to the Local Tax Special Account"), loans on deeds to the Deposit Insurance Corporation with government guarantees (hereafter, "loans to the DIC"), Fiscal Investment and Loan Program (FILP) agency bonds, foreign government bonds, and international financial institution bonds. The Bank also accepts debts issued by private institutions as eligible collateral. These include corporate bonds, asset-backed securities (ABS), bills, CP, asset-backed commercial paper (ABCP), and loans on deeds to companies.

For bills, CP, loans on deeds to companies and other corporate debts, the Bank evaluates collateral eligibility based on its own criteria for assessing a firm's creditworthiness (debt servicing capacity).<sup>3</sup> Additionally, for corporate bonds and loans on deeds to companies, the Bank requires debtors to have at least a certain credit rating level from credit rating agencies.

In accepting eligible financial instruments as collateral, the Bank calculates the collateral value by multiplying the market value of the assets (or the face value, when the market value is not available) by certain discount factors which account for market risk. The Bank has a robust collateral management system whereby the discount factors are larger for instruments which show more price volatility and the market value of the collateral is reviewed at least once a week.

Central banks recognize various types of assets as eligible collateral in accordance with the financial market structure and the business practice of financial institutions in each country. However, all central banks place emphasis on the creditworthiness and marketability in defining eligible collateral.

### ***Outline of Recent Amendments to the Framework***

Following the major revisions to the eligible collateral framework from the end of 2000 through the beginning of 2001, the Bank has continued to amend the framework with a view to securing the stable functioning of financial markets, to enhancing the effects of monetary easing policies, and to reinforcing its money market operation tools.

(a) Recognition of asset-backed commercial paper (ABCP) as eligible collateral

In Japan, the issuance of ABCP has been increasing as a way of diversifying funding tools and to downsize corporate balance sheets. In particular, securitized products backed by accounts receivable

and other assets are expected to become important means for firms, including small and medium enterprises, to directly obtain liquidity from the markets without relying on borrowings from financial institutions. Reflecting these developments, the Bank decided to accept ABCP as eligible collateral from February 2002.<sup>4</sup>

(b) Expanding the range of underlying assets for eligible asset-backed securities (ABS) collateral

The Bank formerly restricted the types of underlying assets for eligible ABS collateral to standardized assets with large outstanding amounts. They were lease receivables, credit receivables, corporate bonds and loans to corporate bodies. From February 2002, the Bank added ABS backed by housing loan credits and real estate to the range of eligible collateral, reflecting the increased issuance of such securities. At that time, the Bank also approved pass-through bonds (amortizing bonds), which are common in ABS backed by housing loans, as eligible collateral.

(c) Recognition of loans to the Local Tax Special Account and to the DIC as eligible collateral

From the perspective of enhancing its liquidity provision capacity, the Bank approved loans to the Local Tax Special Account (from March 20, 2002) and loans to the DIC (from March 26, 2002) as eligible collateral, when transfer restrictions for such loans were abolished.

(d) Publication of Data on Collateral Accepted by the Bank

In addition to the expansions in the range of eligible collateral outlined above, the Bank began publicly releasing data on "Collateral Accepted by the Bank"<sup>5</sup> in June 2002 to further improve the transparency of the Bank's operations. These releases include the face value and the collateral value of the collateral accepted, categorized by type of financial asset. They also include, as reference data, the amounts outstanding of government bonds borrowed by the Bank against cash collateral<sup>6</sup>, of government securities (treasury/financing bills) purchased by the Bank under repurchase agreements, and of CP purchased by the Bank under repurchase agreements.

**Table 2: Outstanding Amount of Actual Collateral Accepted<sup>1</sup>**

	(100 million yen)										
Categories of collateral	Jan. 2001	Mar. 2001	Jun. 2001	Sept. 2001	Dec. 2001	Mar. 2002	Jun. 2002	Jul. 2002	Aug. 2002	Sept. 2002	Oct. 2002
<b>Total</b>	450,068	484,926	521,137	556,598	573,606	640,671	609,043	642,503	645,093	669,187	639,171
<b>Total bonds</b>	429,765	462,482	498,928	531,101	542,603	615,056	515,895	535,957	520,724	515,728	479,399
Government bonds	375,439	421,485	456,374	490,068	499,656	568,918	477,853	497,186	483,129	478,451	442,051
Treasury/financing bills	140,037	145,569	153,900	148,882	157,462	106,572	118,883	164,623	147,273	124,366	92,419
Government bonds (excluding treasury/financing bills)	235,402	275,916	302,474	341,186	342,194	462,346	358,970	332,563	335,856	354,085	349,632
Government-guaranteed bonds	18,012	19,029	19,966	20,213	19,522	20,668	16,280	16,533	15,994	15,990	16,006
Municipal bonds	16,693	14,879	16,028	14,816	16,302	18,814	16,192	16,390	15,666	15,503	14,949
Fiscal Investment and Loan Program (FILP) agency bonds	—	—	—	—	—	29	87	162	168	168	253
Corporate bonds <sup>2</sup>	9,048	6,768	6,366	5,828	6,867	6,361	5,248	5,460	5,547	5,458	5,904
Asset-backed securities	n.a.	288	190	170	251	262	235	225	220	158	236
Foreign government/international financial institution bonds	5	5	5	5	5	5	0	0	0	0	0
Bank Debentures	10,568	28	—	—	—	—	—	—	—	—	—
Interest-bearing bank debentures	10,568	28	—	—	—	—	—	—	—	—	—
Discount bank debentures	0	0	—	—	—	—	—	—	—	—	—
<b>Total bills</b>	13,541	17,063	17,986	21,056	27,246	17,687	13,626	14,831	14,447	11,723	11,219
Bills (excluding commercial paper)	10,697	9,133	9,052	12,613	14,807	10,847	11,718	12,436	12,292	9,793	8,968
Commercial paper	2,620	7,930	8,934	8,443	12,439	6,840	1,908	2,395	2,155	1,929	2,250
Asset-backed commercial paper	—	—	—	—	—	781	0	296	149	0	57
Bills in foreign currency	224	0	—	—	—	—	—	—	—	—	—
<b>Total loans on deeds</b>	6,762	5,381	4,223	4,441	3,757	7,927	79,523	91,715	109,922	141,736	148,554
Loans on deeds to companies	6,762	5,381	4,223	4,441	3,757	4,774	3,839	3,698	3,597	3,994	4,369
Loans on deeds to the Government's Special Account for the Allotment of Local Allocation Tax and Local Transfer Tax	—	—	—	—	—	1,608	37,007	42,685	53,000	76,495	72,937
Loans on deeds to the Deposit Insurance Corporation with government guarantee	—	—	—	—	—	1,546	38,677	45,332	53,325	61,246	71,248

Reference: Asset borrowed or purchased by the Bank of Japan under repurchase agreements or as outright purchases<sup>3</sup> (100 million yen)

	Jan. 2001	Mar. 2001	Jun. 2001	Sept. 2001	Dec. 2001	Mar. 2002	Jun. 2002	Jul. 2002	Aug. 2002	Sept. 2002	Oct. 2002
Government bonds borrowed by the Bank against cash collateral	183,193	188,414	166,254	107,020	109,142	85,019	42,297	36,989	48,633	43,189	31,064
Treasury/financing bills purchased by the Bank under repurchase agreements	235,361	256,120	105,111	11,614	4,528	0	0	0	0	0	0
Treasury/financing bills purchased by the Bank as outright purchase	0	5,727	134,971	232,445	214,014	300,831	277,545	281,592	277,300	277,823	255,412
Commercial paper purchased by the Bank under repurchase agreements	31,790	16,823	22,480	20,794	27,756	33,804	32,110	29,184	24,920	25,426	22,526
Asset-backed commercial paper <sup>4</sup>	—	—	—	—	—	270	1,308	267	104	658	927

Note 1: On the collateral value basis (face value basis are used for figures before the end of December 2001).

Note 2: Including "Bonds corresponding to corporate bonds" for figures before the end of March 2001.

Note 3: Average outstanding amount for each month.

Note 4: Figures of asset-backed commercial paper show outstanding amount at the end of month.

## Collateral Accepted by the Bank of Japan

The developments in the accepted collateral since January 2001 are summarized as follows (see Table 2 and Chart 1).

(a) First, the amount outstanding of accepted collateral has steadily expanded since 2001. The amount outstanding is presently approximately ¥65 trillion, of which nearly 50% is utilized as collateral for the Bank's bill purchase operations, complementary lending, security of treasury funds operations, and overdrafts.

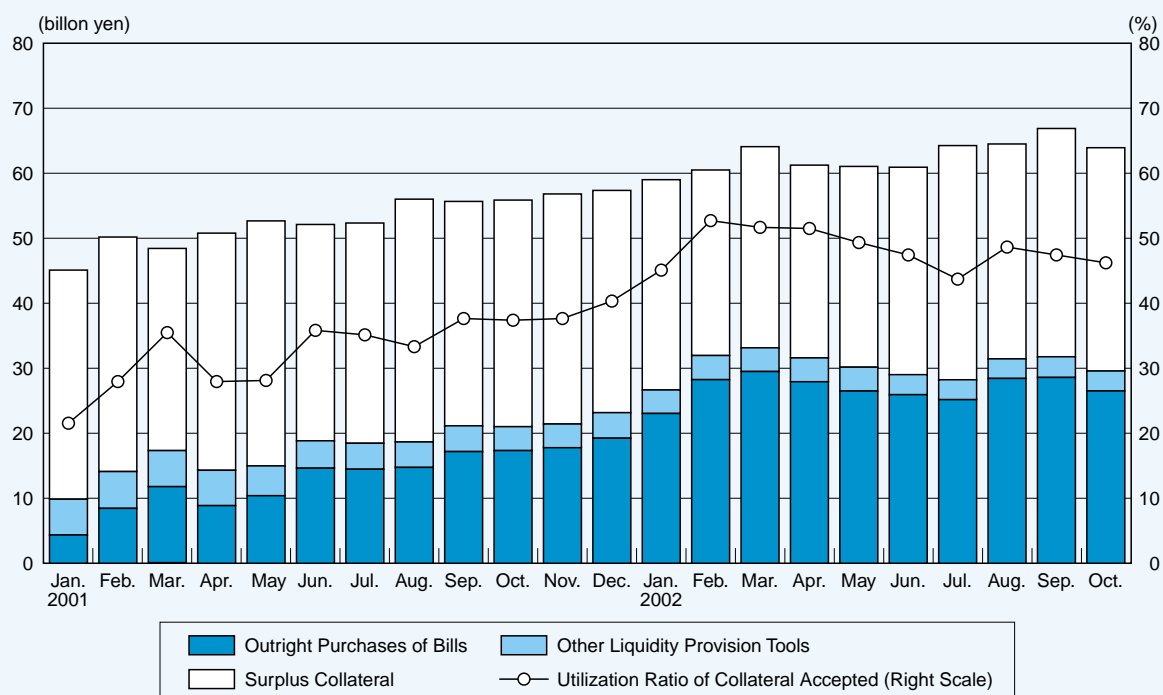
More specifically, the amount outstanding was ¥45 trillion as of the end of January 2001, and increased, almost consistently, to ¥63.9 trillion by the end of October 2002. The utilization rate was initially around 20%. This was because financial institutions increased the amount of pledged collateral significantly while suppressing their settlement amounts, to ensure sufficient funding against unexpected intraday liquidity shortage at the time RTGS was introduced for settlements of fund and

government bonds in January 2001.

Subsequently, the amount outstanding of accepted collateral has increased as the utilization rate rose. This development was influenced by the following two factors: i) the Bank implemented quantitative easing measures in March 2001 by setting the operating target for money market operations at the outstanding balance of the current accounts at the Bank and has increased the amount of liquidity provision;<sup>7</sup> and ii) amid this increase in liquidity provision, the Bank utilized bill purchase operations, which became more convenient with the introduction of the liquidity provision and collateral system (the average amount outstanding of bills purchased increased from ¥4.1 trillion in January 2001 to ¥26.4 trillion in October 2002).<sup>8</sup>

The utilization rate had stayed around 40% from the middle of 2001, and has remained stable at nearly 50% from the beginning of 2002. Financial institutions do not pledge all of their eligible assets, but rather provide them to the Bank as pooled collateral when necessary. This seems to indicate

**Chart 1: Utilization of Collateral Accepted**



that financial institutions adjust the amount of eligible collateral they submit to the Bank every day by considering the maximum amount of their daily settlements and their potential needs for securing liquidity in emergency situations.

(b) Second, by type of collateral, government bonds account for 70-80% of accepted collateral. Financial institutions appear to be adjusting their overall collateral levels by controlling the amount of government bonds that they submit to the Bank.

The main reason why financial institutions choose to use government bonds to control the amount of collateral they deposit with the Bank is that the amount of government bonds owned by financial institutions is increasing together with the increase in the volume of issuance. This choice is also attributed to the fact that government bonds can now be processed electronically and are thus more efficient and convenient than bills, loans on deeds and CP for submission and withdrawal as collateral to the Bank.

Meanwhile, the collateral volumes of ABCP and ABS, which have only recently been approved as eligible collateral, are still small.

Financial institutions increased significantly the amount of long-term government bonds pledged as eligible collateral in March 2002, in preparation for possible large deposit withdrawals when the blanket guarantees on term deposits was lifted. Meanwhile, beginning in April 2002, the amounts outstanding of

loans to the Local Tax Special Account and to the DIC submitted as collateral increased by about ¥2 trillion each month, and surpassed ¥14 trillion at the end of October 2002. In contrast, the amounts of government bonds and CP submitted as collateral decreased to around ¥12 trillion and ¥0.5 trillion, respectively. This indicates that while the volume of government bonds in the secondary markets increased, financial institutions changed their collateral composition by replacing government bonds with loans to the Local Tax Special Account and to the DIC.

(c) Third, from the end of January 2001 to the end of October 2002, the share of collateral submitted by city banks (among total collateral submitted by all financial institutions) declined from 47.6% to 42.1%, and the share for regional banks dropped from 11.1% to 8.7%. In contrast, the percentage from securities companies rose from 2.8% to 8.9% over the same period as securities companies actively participated in the Bank's bill purchase operations.

### Summary: Effects of Revising the Eligible Collateral Framework

The effects of the revisions to the eligible collateral framework may be summarized as follows.

First, the amount outstanding of accepted collateral has steadily increased. This is due to improvements in infrastructure (i.e., the introduction of the credit provision and collateral system) and the

recognition of additional financial assets (such as loans to the Local Tax Special Account and to the DIC) as eligible collateral. This increase has provided additional support to the Bank's efforts to provide liquidity in an efficient manner.

Recently, the collateral utilization rate has remained under 50%. Many financial institutions retain additional amounts of government bonds and other assets aside from those that they have already pledged as pooled collateral. This implies that, overall, there is still a substantial volume of eligible collateral in the market that has not yet been submitted to the Bank.

In considering the collateral management at individual financial institutions, it is also important to confirm whether they are facing any constraints in their participation in private-sector settlement systems such as the Domestic Fund Transfer System and the Foreign Exchange Yen Clearing System. In recent years, the collateral needs for settlements have been increasing as financial institutions have tightened their risk management standards. According to discussions with financial institutions, they have ample government bonds and other financial products that could be used as collateral, and the volume of assets pledged as collateral for private-sector settlement schemes is still quite small when compared with that submitted to the Bank. This suggests that financial institutions are not facing any collateral shortage at present time.

Second, this situation of ample collateral seems to have contributed greatly to the stability of financial markets. In particular, because pooled collateral is now used for the complementary lending facility, financial institutions can secure sufficient liquidity by submitting sufficient amounts of collateral to the Bank in advance. This has contributed to alleviating concerns about liquidity and helped to reduce interest rates spikes toward accounting period closing dates.

Third is the indirect effects of the recognition of ABCP as eligible collateral on the improvement of the market infrastructure. The amount outstanding of ABCP accepted by the Bank as eligible collateral has remained small. This can be attributed to the facts that the ABCP market is still not mature and the market itself is still not very large, and that ABCP investors have a strong tendency toward long-term holdings. Nevertheless, the issuance volume of ABCP is gradually increasing and various new transaction schemes are being considered. It can be concluded from these developments that the Bank's decision to accept ABCP as eligible collateral has contributed to

some extent to the improvement of market infrastructure and has thereby facilitated corporate financing.

<sup>1</sup> Guidelines on Eligible Collateral can be found on the Bank of Japan's English Internet Web site (<http://www.boj.or.jp/en/>) under "About Us," [Law and Organization], "Principal Terms and Conditions for Market Operations."

<sup>2</sup> The Bank of Japan formerly specified collateral at the branch level and by the type of liquidity provision facility. With the introduction of the pooled collateral scheme, however, the total value of the collateral provided must now just have a value equal or above the total amount of credits provided (the total of bank overdrafts, bill purchases, and security of treasury funds operations). Thus, it is no longer necessary to specify the collateral assets for each individual credit provision. Additionally, in December 2001 the Bank introduced an on-line lending system based on pooled collateral, and in this manner the Bank's complementary lending was merged with the pooled collateral system as well.

<sup>3</sup> These judgements are made in a comprehensive manner based on quantitative analyses of the financial statements of debtors and qualitative assessments of their future profitability and of the soundness of their assets. For details, see Market Review 2000-J-3 "Overview of the In-house Credit Risk Assessment System in the Bank of Japan: Assessment Based on Quantitative and Qualitative Analyses" (in Japanese).

<sup>4</sup> The Bank of Japan's Financial Markets Department hosted the "Study Group on the Securitization of Small to Medium-sized Enterprises' Receivables" from December 2001 through February 2002, which considered the improvement of channels used by small and medium enterprises to finance from markets directly to enjoy the benefits of securitization, which has recently expanded. Through this type of activity, the Bank is working to support the development of the ABCP market, especially the issuance of CP backed by accounts receivable. For details, see Market Review 2002-E-2 "Recent Efforts for Developing the ABCP Market: Improving Financing Conditions for Small to Medium-sized Enterprises and Exploiting Opportunities for Securitization".

<sup>5</sup> Data on collateral accepted by the Bank as of the end of each month are normally released in the evening on the second working day of the following month on the Bank of Japan's English Internet Web site (<http://www.boj.or.jp/en/>) under "Statistics," "Bank of Japan Statistics and other Key Statistics," "Collateral Accepted by the Bank of Japan."

<sup>6</sup> In September 2002, the Bank replaced two operation tools – "Sales/Purchases of TBs/FBs under Repurchase Agreements," and "Borrowing of JGBs against Cash Collateral" – with "the Purchase/Sale of Japanese Government Securities with Repurchase Agreements." The Bank established new guidelines for this new operation tool and started Sales/Purchases of TBs/FBs under Repurchase Agreements on November 11, 2002. Accordingly, the Bank started to release the amount outstanding data under "Collateral Accepted by the Bank of Japan" from December 2002.

<sup>7</sup> For details, see Market Review 2002-E-3 "Money Market Operations in FY2001".

<sup>8</sup> The bill purchasing operations became more convenient as the pooled collateral system allowed collateral substitutions. Moreover, the Bank extended the maturities for bills purchased in bill purchasing operations twice (from three months or less to six months or less in May 2002, and from six months or less to a year or less in October 2002).

*Market Review* is edited and published by the Financial Markets Department of the Bank of Japan in order to stimulate comments and discussions from a wide audience. This report, 2003-E-1, is a translation of an original Japanese issue, 2002-J-11, published in November 2002. Comments and questions as well as requests for hard copies should be addressed to Tokiko Shimizu, Manager, Financial Markets Department ([tokiko.shimizu@boj.or.jp](mailto:tokiko.shimizu@boj.or.jp)). *Market Review E-series and Financial Markets Department Working Paper E-series* can be obtained through the Bank of Japan's English Internet Web site (<http://www.boj.or.jp/en/>).