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

# I. Summary<sup>1</sup>

The Bank of Japan completely revised its eligible collateral framework and related system infrastructure during the period from late 2000 to early 2001. In June 2002, the Bank began to release data on the amount outstanding of collateral it accepted. Eligible collateral is selected with emphasis on "creditworthiness" and "marketability" of financial instruments the Bank accepts to ensure the soundness of the Bank's balance sheet. The range of instruments eligible as collateral includes Japanese government bonds (JGBs), financing bills (FBs), corporate bonds, bills, CP, and other financial assets. The amount outstanding of collateral accepted, mainly consisting of JGBs, was approximately 70 trillion yen as of the end of December 2002, of which nearly 50 percent was actually being used for liquidity provision by the Bank.

### **II. Introduction**

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")2 to ensure the appropriate and efficient handling of collateral and 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"3 in place of the previous framework whereby collateral was segregated by type of mechanism used by the Bank to provide liquidity. At the same time, the Bank modified its system infrastructure for accepting and managing collateral (hereafter "liquidity provision and collateral system"), which reduced the operational burden, and sought to make collateral use smoother and more efficient.

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

# III. Outline of the Eligible Collateral Framework

### **A. Functions of Eligible Collateral**

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

The Bank provides liquidity to the market mainly through 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 differ from other liquidity provision facilities, the Bank provides temporary intraday overdraft facility to financial institutions for funds and JGB settlements (Chart 1).

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

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

For a currency to function properly as a medium of exchange, public confidence in the soundness of

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<sup>1.</sup> This paper is a revised version of "The Bank of Japan's Eligible Collateral Framework and Recently Accepted Collateral," which was originally published as Market Review 2003-E-1.

<sup>2. &</sup>quot;Guidelines on Eligible Collateral" is available on the Bank of Japan's English-language Internet Web site (http://www.boj.or.jp/en) in "Principal Terms and Conditions for Market Operations" under "About the Bank."

<sup>3.</sup> The Bank of Japan formerly specified eligible collateral at each branch for each liquidity provision facility. With the introduction of the pooled collateral scheme, however, the total value of the collateral provided needs only to have a value equal to or above the total amount of credit provided by the Bank, i.e., the total of overdrafts, bill purchases, and credit for the security of treasury funds operations. Thus, it is no longer necessary to specify the type of collateral assets for each credit facility. Additionally, in December 2001 the Bank introduced an on-line lending facility based on pooled collateral, and as a result the pooled collateral framework was also applied to the Bank's complementary lending facility.

a central bank's assets is essential. Accordingly, it is important to ensure the soundness of the financial instruments that the Bank of Japan accepts as collateral when providing liquidity to financial institutions.

To these ends, the Bank emphasizes "credit-worthiness" and "marketability" of the assets in its criteria for selecting eligible collateral, which are judged by the certainty of principal and interest payments ("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 has increasingly been accepting such new financial instruments as eligible collateral, provided that the financial instruments fulfill the Bank's "creditworthiness" and "marketability" criteria. This should indirectly contribute to the development of the markets for these instruments.

### C. Details of the Eligible Collateral Framework

In accordance with the basic policy outlined above, the Bank of Japan accepts debt issued by public-sector institutions as eligible collateral. These include JGBs, FBs, government-guaranteed bonds, municipal bonds, loans on deeds to the Government's Special Account 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 debt issued by private-sector 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 debt, the Bank evaluates collateral eligibility based on its own criteria for assessing a firm's creditworthiness (debt-servicing capacity).<sup>4</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 collateral value ratios that account for market risk. The Bank has a robust collateral management system whereby the valuation of collateral is more strict for instruments that 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 emphasize creditworthiness and marketability of the instruments they accept in defining eligible collateral.

# D. Outline of Recent Amendments to the Framework

Even after the major revisions to the eligible collateral framework from the end of 2000 through the beginning of 2001, the Bank amended the framework as outlined below. Measures have been implemented with a view to securing the stable functioning of financial markets, enhancing the effects of monetary easing policies, and reinforcing the Bank's money market operation tools. The Bank's acceptance of ABCP as eligible collateral was also implemented with the expectation that this would substantially facilitate smoother corporate financing.

# 1. Inclusion of ABCP as eligible collateral and as instruments used in market operations under repurchase agreements

In Japan, the issuance of ABCP has been increasing as a way to diversify funding tools and streamline 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-sized 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 and also

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<sup>4.</sup> These evaluations are made in a comprehensive manner based on quantitative analyses of the financial statements of debtors and qualitative assessments of their future profitability and 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 Analysis" (available only in Japanese).

purchase ABCP under repurchase agreements in its market operations from February 2002.<sup>5</sup>

Additionally, from January 2003 the Bank decided to accept ABCP guaranteed by the Bank's counterpart financial institutions or their affiliated firms as eligible collateral as a temporary measure until the end of March 2005. The Bank will promptly deny the eligibility of any ABCP whenever a considerable part of its underlying assets defaults and the guarantee is exercised. This approach maintains the appropriate balance between the principle of eligible collateral, that is, the Bank does not accept the debts of counterpart financial institutions, and the utilization of ABCP as eligible collateral considering the characteristic of ABCP, that is, ABCP is a financial product often guaranteed by financial institutions through the backup line facilities.<sup>6</sup>

# 2. Expansion of the range of underlying assets for eligible ABS collateral

The Bank formerly restricted the types of underlying assets for eligible ABS collateral to standardized assets with a large amount outstanding. They were lease receivables, credit receivables, corporate bonds, and loans to corporate bodies. From February 2002, the Bank added ABS backed by housing loans 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.

# 3. Inclusion of loans to the Local Tax Special Account and to the DIC as eligible collateral

To enhance its liquidity provision capacity, the Bank approved the inclusion of loans to the Local Tax Special Account (from March 20, 2002) and loans to the DIC (from March 26, 2002) as eligible collateral,

when transferability restrictions for such loans were abolished.

Furthermore, from December 27, 2002 the Bank began to apply different collateral value ratios for assessing the collateral value of loans on deeds by categories of debtors and by original loan maturities. This has helped financial institutions increase the efficiency of their collateral use. At the same time, the Bank began accepting loans on deeds with original loan maturities of over five years but less than ten years as eligible collateral.

# **4. 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 releasing data on "Collateral Accepted by the Bank of Japan" in June 2002 to further improve the transparency of its 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 amount outstanding of JGBs borrowed by the Bank against cash collateral, sof treasury bills (TBs) and FBs purchased by the Bank under repurchase agreements, and of CP purchased by the Bank under repurchase agreements.

# IV. Collateral Accepted by the Bank of Japan

The developments in collateral the Bank has accepted since January 2001 are summarized as follows (charts 2 and 3).

(1) The amount outstanding of collateral accepted has steadily expanded since 2001. As of the end of December 2002, the amount outstanding was approximately 70 trillion yen, of which nearly 50 percent was utilized as collateral for the

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<sup>5.</sup> The Bank's Financial Markets Department hosted the "Study Group on the Securitization of Small to Medium-sized Enterprises' Receivables," which was held from December 2001 to February 2002 and considered ways to improve channels used by small and medium-sized enterprises to finance directly from markets so that they can enjoy the benefits of securitization, which has recently expanded. Through this type of activity, the Bank is supporting 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>6.</sup> In many cases, the principal and interest of ABCP are guaranteed by financial institutions through the backup line facilities. Such guarantees are exercised when special purpose companies (SPCs) cannot recover the cash flow from underlying assets because of the obligors' defaults or owing to the SPCs' temporary funds shortages at the time of refinancing. These types of guarantees play a very important role in ensuring the creditworthiness of ABCP.

<sup>7.</sup> Data on collateral accepted by the Bank as of the end of each month are released in the evening on the second business day of the following month on the Bank of Japan's English Internet Web site (http://www.boj.or.jp/en) in "Collateral Accepted by the Bank of Japan" under "Statistics."

<sup>8.</sup> In September 2002, the Bank introduced a new operational tool, the "purchase/sale of Japanese government securities with repurchase agreements," and abolished two operational tools—"sales/purchases of TBs/FBs under repurchase agreements" and "borrowing of JGBs against cash collateral." The Bank established new guidelines for this new operational tool and started sales/purchases of Japanese government securities under repurchase agreements on November 11, 2002. Accordingly, the Bank started to release data on the amount outstanding in "Collateral Accepted by the Bank of Japan" from December 2002.

Bank's bill purchasing operations, complementary lending, and overdrafts, and for the security of treasury funds operations (collateral required of agents and revenue agents).

More specifically, the amount outstanding was 45 trillion yen as of the end of January 2001, and increased more or less consistently to 70 trillion yen by the end of December 2002. The utilization rate was initially around 20 percent. This was because financial institutions increased the amount of pledged collateral significantly while reducing their settlement volume, to have sufficient funds against any unexpected intraday liquidity shortage at the time RTGS was introduced for the settlement of funds and Japanese government securities (JGSs) in January 2001.

Subsequently, the amount outstanding of collateral accepted increased as the utilization rate rose. This development was influenced by the following two factors: (a) the Bank implemented quantitative easing measures in March 2001 by setting the operating target for money market operations at the outstanding balance of current accounts at the Bank and has increased the amount of liquidity provision; 9 and (b) amid this increase in liquidity provision, the Bank utilized bill purchasing 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 yen in January 2001 to 27.8 trillion yen in December 2002).10

The utilization rate was around 40 percent from the middle of 2001, and has remained stable at nearly 50 percent 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 that financial institutions adjust the amount of eligible collateral they submit to the Bank every day by considering the maximum value of their daily settlement obligations and their potential needs for securing liquidity in emergency situations.

(2) By type of collateral, JGSs account for 70–80 percent of collateral accepted. Financial institutions seem to be adjusting their overall collateral levels by controlling the amount of JGSs that they submit to the Bank.

The main reason why financial institutions choose to use JGSs to control the amount of collateral they deposit with the Bank is that the amount of JGSs owned by financial institutions is increasing together with the increase in the volume of issuance. This choice is also attributed to the fact that JGSs 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 JGBs pledged as eligible collateral in March 2002, in preparation for possible large deposit withdrawals when the blanket guarantee on time deposits was lifted. Meanwhile, beginning in April 2002, the amount outstanding of loans to the Local Tax Special Account and to the DIC submitted as collateral increased by about 2 trillion yen each month, and surpassed 20 trillion yen at the end of December 2002. In contrast, the amounts of JGSs and CP submitted as collateral decreased by approximately 12 trillion yen and 0.4 trillion yen, respectively. This indicates that financial institutions changed their collateral composition by replacing JGBs with loans to the Local Tax Special Account and to the DIC.

(3) From the end of January 2001 to the end of December 2002, the share of collateral submitted by city banks to the total collateral submitted by all financial institutions declined from 47.6 percent to 42.4 percent, and that by regional banks dropped from 11.1 percent to 8.1 percent. In contrast, the share of securities companies rose from 2.8 percent to 7.8 percent over the same period as they actively participated in the Bank's bill purchasing operations.

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<sup>9.</sup> For details, see Market Review 2002-E-3, "Money Market Operations in FY 2001."

<sup>10.</sup> The bill purchasing operations became more convenient as the pooled collateral framework enabled flexible 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.

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

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

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

Toward the end of December 2002, the collateral utilization rate has remained under 50 percent. Many financial institutions retain JGBs 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 of individual financial institutions, it is also important to confirm whether they are facing any constraints in their participation in private-sector payment systems such as the Domestic Fund Transfer System and the Foreign Exchange Yen Clearing System. In recent years, the collateral needs for settlement have been increasing as financial institutions have tightened their risk management standards. According to discussions with financial institutions, they have ample JGSs and other financial instruments that could be used as collateral, and the volume of assets pledged as collateral for private-sector payment

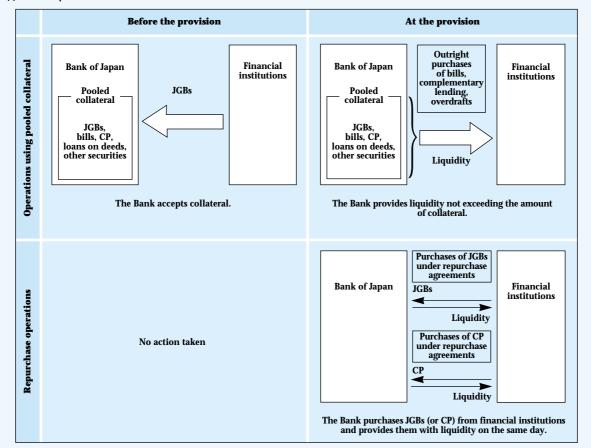
- systems is still quite small compared with that submitted to the Bank. This suggests that financial institutions are not facing any collateral shortage at the present time.
- (2) This situation of ample collateral seems to have contributed greatly to the stability of financial markets. In particular, 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 concern about liquidity and helped to prevent interest rate hikes at the end of accounting periods.
- (3) The indirect effect of the inclusion of ABCP as eligible collateral on the improvement of the market infrastructure has been small as seen by the slow growth in the amount outstanding of ABCP accepted by the Bank. 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 preference for 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 is contributing considerably to improving the market infrastructure and thereby facilitating corporate financing.

Furthermore, improving the efficiency in collateral usage of loans on deeds to companies and expanding the range of ABCP eligible as collateral will facilitate the refinancing of such instruments, and is thus expected to contribute to smoother corporate financing.

### Chart 1

### The Bank's Liquidity Provision: How It Is Secured

### (1) Flow of Operations



# (2) The Bank's Liquidity Provision Facility and Instruments Accepted as Collateral tril. yen

Liquidity provision facility (average amount outstanding in December 2	Instruments accepted as collateral (amount outstanding at the end of December 2002)						
Operations using pooled collateral	30.9	Total	70.3				
Outright purchases of bills	27.8	Bonds	48.7				
Complementary lending facility	0.0	JGSs	45.1				
Overdrafts <sup>1</sup>	2.2	Bills	1.2				
Security of treasury funds operations <sup>2</sup>	0.8	Loans on deeds	20.4				
Operations by purchasing/borrowing JGBs and CP under repurchase agreements	29.9						
JGSs purchased under repurchase agreements	3.2						
JGBs borrowed against cash collateral	0.1	No collateral needed. Instruments used in operations are borrowed or purchased every					
TBs/FBs purchased under repurchase agreements	0.0	time the Bank provides liquidity.					
Outright purchases of TBs/FBs	23.1						
CP purchased under repurchase agreements	3.3						
Total liquidity provision	60.8	•					

Notes: 1. Peak amount of overdrafts during the day.

2. Collateral required of agents and revenue agents.

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### **Amount Outstanding of Collateral Accepted**<sup>1</sup>

100 mil. yen

Categories of collateral	2001					2002						
	Jan.	Mar.	June	Sep.	Dec.	Mar.	June	Sep.	Oct.	Nov.	Dec.	
Total	450,068	484,926	521,137	556,598	573,606	640,671	609,043	669,187	639,171	674,587	703,670	
Bonds	429,765	462,482	498,928	531,101	542,603	615,056	515,895	515,728	479,399	507,564	487,526	
JGSs	375,439	421,485	456,374	490,068	499,656	568,918	477,853	478,451	442,051	471,445	451,366	
TBs/FBs	140,037	145,569	153,900	148,882	157,462	106,572	118,883	124,366	92,419	90,647	93,424	
JGBs	235,402	275,916	302,474	341,186	342,194	462,346	358,970	354,085	349,632	380,798	357,942	
Government-guaranteed bonds	18,012	19,029	19,966	20,213	19,522	20,668	16,280	15,990	16,006	15,166	15,160	
Municipal bonds	16,693	14,879	16,028	14,816	16,302	18,814	16,192	15,503	14,949	14,666	14,391	
Fiscal Investment and Loan Program (FILP) agency bonds	_	_	_	_	_	29	87	168	253	254	286	
Corporate bonds <sup>2</sup>	9,048	6,768	6,366	5,828	6,867	6,361	5,248	5,458	5,904	5,769	6,063	
ABS	n.a.	288	190	170	251	262	235	158	236	265	260	
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	_	_	_	-	_	_	_	_	_	
Bills	13,541	17,063	17,986	21,056	27,246	17,687	13,626	11,723	11,219	14,634	12,078	
Bills (excluding CP)	10,697	9,133	9,052	12,613	14,807	10,847	11,718	9,793	8,968	12,055	9,164	
СР	2,620	7,930	8,934	8,443	12,439	6,840	1,908	1,929	2,250	2,579	2,914	
ABCP	_	_	_	_	_	781	0	0	57	223	389	
Bills in foreign currency	224	0	_	_	_	_	_	_	_	_	_	
Loans on deeds	6,762	5,381	4,223	4,441	3,757	7,927	79,523	141,736	148,554	152,390	204,066	
Loans on deeds to companies	6,762	5,381	4,223	4,441	3,757	4,774	3,839	3,994	4,369	4,317	4,643	
Loans on deeds to the Government's Special Account for the Allotment of Local Allocation Tax and Local Transfer Tax	_	-	-	_	_	1,608	37,007	76,495	72,937	72,776	102,599	
Loans on deeds to the Deposit Insurance Corporation with government guarantees	_	_	_	_	_	1,546	38,677	61,246	71,248	75,297	96,825	

[Reference] Assets Borrowed or Purchased by the Bank of Japan under Repurchase Agreements or as Outright Purchases<sup>3</sup> 100 mil. yen

	2001							20	02						
	Jan.	Mar.	June	Sep.	Dec.	Mar.	June	Sep.	Oct.	Nov.	Dec.				
JGSs purchased by the Bank under repurchase agreements⁴	_	_	_	_	_	_	_	_	_	12,315	32,777				
JGBs borrowed by the Bank against cash collateral	183,193	188,414	166,254	107,020	109,142	85,019	42,297	43,189	31,064	19,982	1,804				
TBs/FBs purchased by the Bank under repurchase agreements	235,361	256,120	105,111	11,614	4,528	0	0	0	0	_	_				
TBs/FBs purchased by the Bank as outright purchases	0	5,727	134,971	232,445	214,014	300,831	277,545	277,823	255,412	231,152	231,507				
CP purchased by the Bank under repurchase agreements	31,790	16,823	22,480	20,794	27,756	33,804	32,110	25,426	22,526	22,911	33,049				
ABCP <sup>5</sup>	_	_	_	_	-	270	1,308	658	927	773	721				

Notes: 1. On a collateral value basis (on a face value basis until figures for the end of December 2001).

- 2. Figures until the end of March 2001 include "bonds corresponding to corporate bonds."
- 3. Average amount outstanding for each month.
- 4. From November 11, 2002, the Bank began to purchase JGSs under repurchase agreements instead of borrowing JGBs against cash collateral and purchasing TBs/FBs under repurchase agreements.
- 5. Figures for ABCP are the amount outstanding at the end of the month.

Chart 3 **Utilization of Collateral Accepted** 

