

November 2015

Trends in the Money Market in Japan

—— Results of the Tokyo Money Market Survey (August 2015) ——

Financial Markets Department

Bank of Japan

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Results of the Tokyo Money Market Survey (August 2015)

■ Introduction ■

The Financial Markets Department of the Bank of Japan (the Bank) has conducted the Tokyo Money Market Survey since 2008 to understand developments in the Japanese money market. Initially, this series of surveys was conducted every other year. However, to observe market trends more precisely, the Bank decided to conduct the survey annually beginning with the 2013 survey. In August 2015, the sixth survey in the series was carried out (the survey was conducted as of end of July 2015).

As with the previous surveys, this survey covers all eligible counterparties in the Bank's money market operations, as well as other major participants in the money market. The number of respondents in the survey was 298 (with a response rate of 100 percent), up from 296 in the 2014 survey, due to a rise in the number of eligible counterparties in the Bank's money market operations.

The Bank intends to capture comprehensively and from various angles the situations and structural changes in the money market, utilizing the results of this survey as well as the results of the Bond Market Survey, which was launched this year. The Bank will continue to enhance dialogue with market participants by taking advantage of the Meeting on Market Operations and the newly introduced Bond Market Group, which was established this year, to actively support the relevant parties in their efforts to enhance the Japanese financial markets, including the money market. The Bank intends to contribute significantly to such endeavors in its capacity as Japan's central bank.

1

Number of Respondents in the Tokyo Money Market Survey (August 2015)

	2014 survey	2015 survey
Total respondents	296	298
Eligible counterparties in the Bank's money market operations	264	268

Note: In addition to the eligible counterparties in the Bank's money market operations, several major life insurance companies, general insurance companies and major asset management companies participated in the survey (with a response rate of 100 percent).

■ Overview ■

The amount outstanding in the money market increased, with that on the cash borrowing side marking the highest figure since the survey was first conducted in 2008.¹

It appears that the increase in the cash borrowing side was underpinned by factors such as (1) an increase in arbitrage transactions against a benchmark of the 0.1 percent interest rate paid by the Bank on excess reserves under the complementary deposit facility; and (2) an increase in yen funding through the foreign exchange (FX) swap market by those holding foreign currencies, driven by the decline in the FX swap-implied yen rate.

On the cash lending side, market participants such as investment trusts, whose surplus funds increased due to rising stock prices, boosted lending in the money market, while there was also an expansion in yen lending through the FX swap market aimed at making overseas loans or investment in assets in foreign currencies. In these circumstances, as yields on treasury discount bills (T-Bills) generally hovered at around zero percent, some market participants increased transactions in the call market (including both uncollateralized and

¹ The discrepancies between the figures on the cash lending side and borrowing side are due to the constraints regarding the counterparties covered by this survey (e.g., non-residents are not included), and the fact that some types of transactions are recorded only on one side (e.g., transactions with the Bank are recorded only on the cash borrowing side, while treasury discount bills [T-Bills] are recorded only on the lending side).

collateralized transactions) to secure investment yields.

Meanwhile, although about 20 percent of all respondents replied that the functioning of the money market had decreased from the previous year against the backdrop of a fall in yields, some 70 percent of all respondents replied that it had remained more or less unchanged from the previous year.

These results suggest that the functions of the Japanese money market have been maintained on the whole. However, the Bank intends to continue to observe closely the developments in the money market through day-to-day monitoring activities, implementation of the Tokyo Money Market Survey, and dialogue with market participants.

Amount Outstanding in the Money Market

Cash Borrowing Side Cash Lending Side tril. yen Transactions with the Bank tril. yen T-Bills CD/CP, CD/CP repos CD/CP, CD/CP repos Yen funds transactions with overseas counterparties Yen funds transactions with overseas counterparties ☐ Repo transactions Call (collateralized/uncollateralized) transactions ☐ Call (collateralized/uncollateralized) transactions

Note: "Yen funds transactions with overseas counterparties" refers to the total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

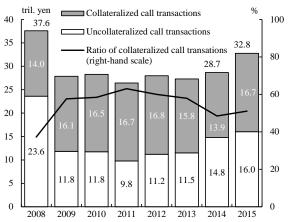
1. An Increase in Call Transactions

The amount outstanding in the call market, both for uncollateralized and collateralized call transactions, increased from the previous year.

This was mainly attributable to an expansion in transactions in the call market by investment trusts whose surplus funds had grown due to rising stock prices. As background, market participants pointed out that the higher and stable yields of call market transactions were more favorable than the yields on T-bills.

As a result, on the cash lending side of the call market, there was a further increase in the presence of financial institutions not eligible for the complementary deposit facility (and therefore are not paid interest on excess reserves) such as investment trusts.

Amount Outstanding in the Call Market and the Ratio of Collateralized Transactions

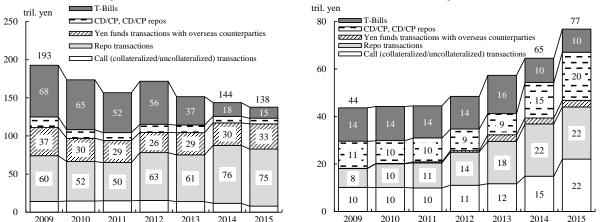


Note: Cash borrowing side.

Amount Outstanding of Funds Lending by Institutions Eligible and Those Not Eligible for Remuneration

Institutions Eligible for Remuneration Institutions

Institutions Not Eligible for Remuneration



Note: "Yen funds transactions with overseas counterparties" refers to the total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

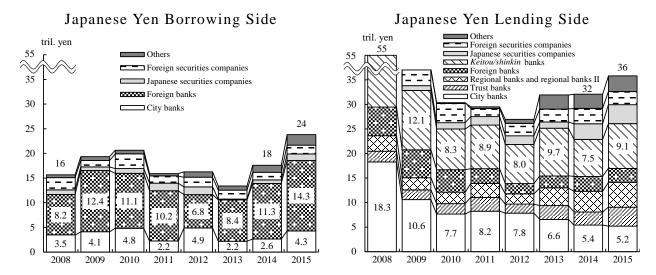
2. An Increase in Yen Funds Transactions with Overseas Counterparties

The amount outstanding of yen funds transactions with overseas counterparties (e.g., yen lending/funding through the FX swap market and loans to/borrowing from overseas offices of financial institutions) increased from the previous year.

The rise in yen funding (e.g., yen funding through the FX swap market and borrowing from overseas offices of financial institutions) was attributed to an increase in yen funding through the FX swap market driven by the decline in the FX swap-implied yen rate.²

The rise in yen lending (e.g., yen lending through the FX swap market and loans to overseas offices of financial institutions) was attributed to the increase in yen lending with overseas counterparties aimed at earning returns abroad through loans to overseas borrowers or investment in assets in foreign currencies.

Amount Outstanding of Yen Funds Transactions with Overseas Counterparties



Note: The total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

² This refers to the total funding cost of raising U.S. dollars in the uncollateralized market and converting the proceeds into yen through an FX swap transaction.

3. Repo Transactions Generally Remained at Previous Year's Levels

The amount outstanding in the repo market,³ both for general collateral (GC) repos⁴ and special collateral (SC) repos,⁵ generally remained at the previous year's levels.

More specifically, transactions aimed at profiting from the spread in the matched trading of bond lending in SC repos and cash lending in GC repos were still actively carried out, and there were also reports that arbitrage transactions were carried out using the funds raised through repo transactions to earn profits under the complementary deposit facility.

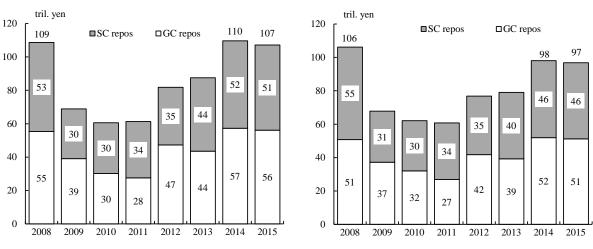
On the other hand, it was also indicated that as the supply and demand conditions of Japanese government bonds (JGBs) tightened due to the progress in the Bank's purchases, the needs for securities companies to finance their inventories through GC repos declined.

Against these backdrops, some reported that -- on the cash borrowing side of the repo market -- the degree of influence of high-ranking counterparties in terms of transaction volume on the market increased.

Amount Outstanding in the Repo Market

Cash Borrowing Side

Cash Lending Side



³ In this paper, the market for cash-collateralized securities lending transactions (the so-called *gentan* repo) and securities repurchase transactions (the so-called *gensaki* repo) is called the "repo market."

⁴ These are repo transactions in which the securities to be used as collateral are not specified.

These are repo transactions in which the securities to be used as collateral are specified.

4. Further Spread of Arbitrage Transactions

A broader range of market participants engaged in arbitrage transactions compared to one year ago.

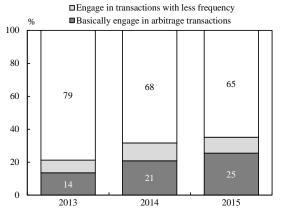
As interest rates on repo transactions and other major money market instruments fell, among financial institutions eligible for the complementary deposit facility (institutions to which the Bank pays interest on excess reserves), the proportion of counterparties responding that they "basically engage in arbitrage transactions" increased. Such counterparties typically engage in arbitrage transactions in which funds raised at rates below the Bank's rate on excess reserves (0.1 percent) are deposited in the current account at the Bank.

The proportion of counterparties responding that they "basically engage in arbitrage transactions" also increased among those not eligible for the complementary deposit facility. It was reported that these respondents were engaging in arbitrage transactions in which funds raised through repo transactions were managed in the call market, which offered higher yields on a stable basis.

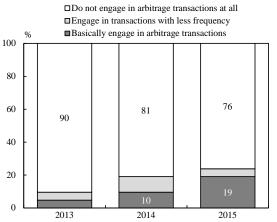
Stance on Arbitrage Transactions

Institutions Eligible for Remuneration

Do not engage in arbitrage transactions at all



Institutions Not Eligible for Remuneration



Stance on Holding Excess Reserves

Others

Do not set a standard (e.g., target, range, or limit) Set a standard (e.g., target, range, or limit) % Basically do not hold excess reserves 100 80 59 68 76 75 60 40 17 18 20 16 16 22 2013 2015

5. Perceptions of Market Participants on the Functioning and Profitability of the Money Market

Roughly 70 percent of the respondents answered that the functioning of the money market remained "mostly unchanged" from the previous year.

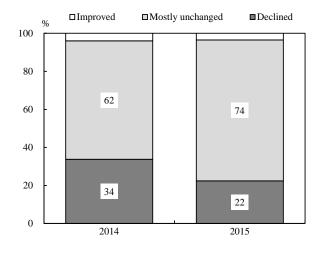
About 20 percent of the respondents answered that the functioning of the money market "declined" from the previous year, mainly citing the facts that yields on T-Bills continued to hover at around zero percent and that the volatility of repointerest rates had increased.

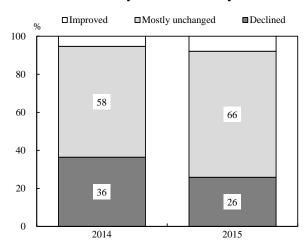
The respondents' answer to the question about the profitability in the money market was mostly similar to their response on the functioning of the market.

Perceptions of Market Participants on Money Market Transactions

Functioning of the Money Market

Profitability of the Money Market





Functioning of JGB Repo Transactions

Profitability of JGB Repo Transactions

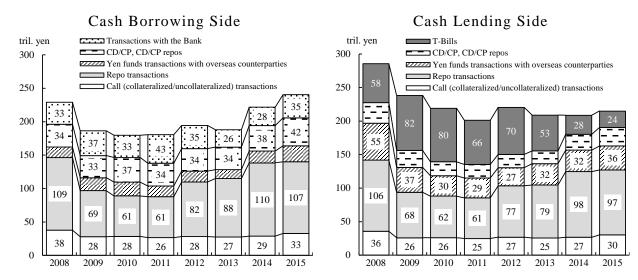


- Notes: 1. Change in the functioning of the money market since the previous year, mainly taking into account whether respondents were able to make transactions with intended rates, prices, terms, and counterparties.
 - 2. Change in the profitability of the money market since the previous year, mainly taking into account investment yield, funding cost, transaction amounts, and fixed cost.

<u>Charts</u>

Chart	1	Amount Outstanding in the Money Market	10
Chart	2	Amount Outstanding in the Money Market by Category	10
Chart	3	Amount Outstanding of Funds Lending by Institutions Eligible and	
		Those Not Eligible for Remuneration	11
Chart	4	Amount Outstanding in the Call Market and the Ratio of	
		Collateralized Transactions	11
Chart	5	Amount Outstanding in the Uncollateralized Call Market by	
		Category	12
Chart	6	Amount Outstanding in the Uncollateralized Call Market and the	
		Ratio of non-group Direct Dealing (DD) Transactions	12
Chart	7	Breakdown of Amount Outstanding in the Uncollateralized Call	
		Market by Term	13
Chart	8	Number of Credit Lines Established	13
Chart	9	Amount Outstanding in the Collateralized Call Market by Category	14
Chart	10	Breakdown of Amount Outstanding in the Collateralized Call	
		Market by Term	14
Chart	11	Frequency of Call Transactions	15
Chart	12	Breakdown of Turnover in the Call Market by Category	15
Chart	13	Amount Outstanding in the Repo Market	16
Chart	14	Amount Outstanding in the GC Repo Market by Category	16
Chart	15	Amount Outstanding in the GC Repo Market by Starting Date	17
Chart	16	Amount Outstanding of GC Repo Transactions by Term	18
Chart	17	Amount Outstanding in the SC Repo Market by Category	18
Chart	18	Amount Outstanding of SC Repo Transactions by Term	19
Chart	19	Frequency of Repo Transactions	19
Chart	20	Breakdown of Turnover in the Repo Market by Category	20
Chart	21	Breakdown of Amount Outstanding in the Repo Market by Type of	
		Collateral	20
Chart	22	Amount Outstanding of Repo Transactions in Managed Securities	
		Trusts by Term	21
Chart	23	Amount Outstanding of Repo Transactions by Collateral Maturity	21
Chart	24	Breakdown of the Amount Outstanding of Repo Transactions	
		by Form of Contract	22
		Implementation of Haircuts	22
Chart	26	Amount Outstanding of Financial Institutions' CP Holdings by	
		Category	23
Chart	27	Amount Outstanding of Yen Funds Transactions with Overseas	
		Counterparties by Category	23
Chart	28	Yen Overnight Index Swap Market	24
Chart	29	Amount Outstanding in the Equity Repo Market	24
Chart	30	Stance on Arbitrage Transactions	25
Chart	31	Stance on Holding Excess Reserves	25
Chart	32	Changes in Administrative Structures	26
		Topics in the Money Market	27
		Perceptions of Market Participants on Money Market Transactions	28
Chart	35	Degree of Concentration in Each Market	30

Chart 1: Amount Outstanding in the Money Market



- Note: 1. Among call transactions, the figures for uncollateralized call transactions are calculated as total transactions through *tanshi* companies (money market brokers) and direct dealing (DD) transactions. The source of data on transactions through *tanshi* companies is "Amount Outstanding in the Call Money Market" by the Bank (the same applies hereafter).
 - 2. Transactions with the Bank denote Funds-Supplying Operations against Pooled Collateral, Purchase/Sale of Japanese Government Securities with Repurchase Agreements, Purchases of CP with Repurchase Agreements, Funds-Supplying Operations to Support Financial Institutions in Disaster Areas, Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth, Fund-Provisioning Measure to Stimulate Bank Lending.
 - 3. The discrepancies between the figures on the cash lending side and borrowing side are due to the constraints regarding the counterparties covered by this survey (e.g., non-residents are not included), and the fact that some types of transactions are recorded only on one side (e.g., transactions with the Bank are recorded only on the cash borrowing side, while T-Bills are recorded only on the lending side).
 - 4. "Yen funds transactions with overseas counterparties" refers to the total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

Chart 2: Amount Outstanding in the Money Market by Category

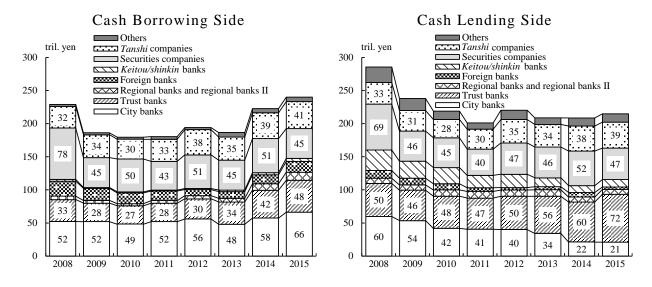
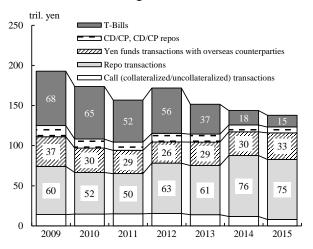
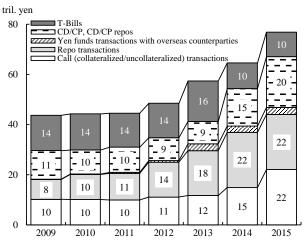


Chart 3: Amount Outstanding of Funds Lending by Institutions Eligible and
Those Not Eligible for Remuneration

Institutions Eligible for Remuneration

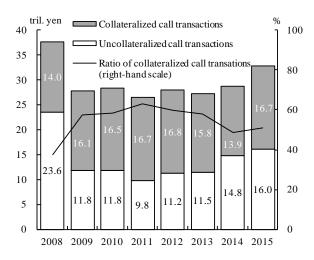
Institutions Not Eligible for Remuneration





Note: "Yen funds transactions with overseas counterparties" refers to the total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

Chart 4: Amount Outstanding in the Call Market and the Ratio of Collateralized Transactions



Note: Cash borrowing side.

Chart 5: Amount Outstanding in the Uncollateralized Call Market by Category

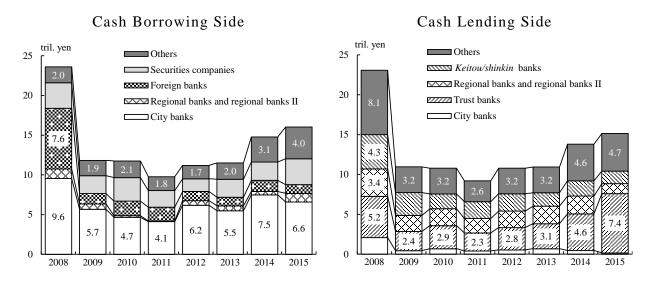
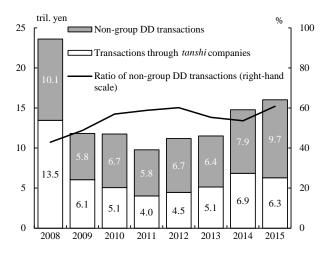


Chart 6: Amount Outstanding in the Uncollateralized Call Market and the Ratio of non-group Direct Dealing (DD) Transactions



Note: Cash borrowing side.

Chart 7: Breakdown of Amount Outstanding in the Uncollateralized Call
Market by Term

Cash Borrowing Side

Cash Lending Side

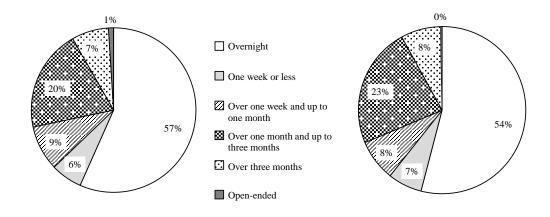
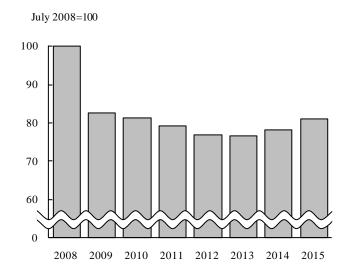


Chart 8: Number of Credit Lines Established



Note: Number of respondents whose total number of credit lines established could be confirmed for all years from 2008 to 2015.

Adjusted for the effects of mergers and other factors.

Chart 9: Amount Outstanding in the Collateralized Call Market by Category

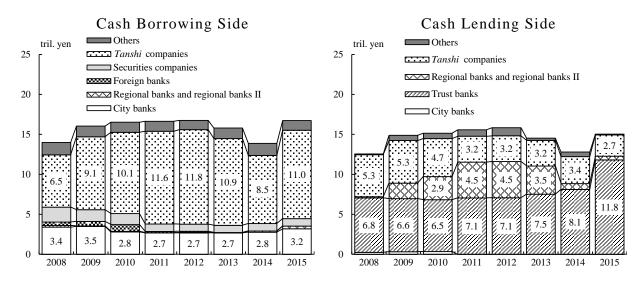


Chart 10: Breakdown of Amount Outstanding in the Collateralized Call Market by Term

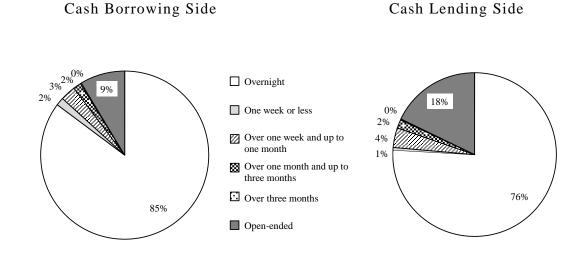
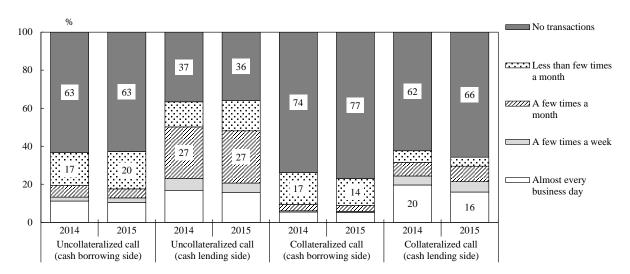
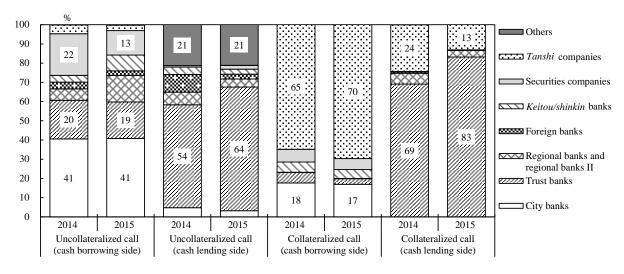


Chart 11: Frequency of Call Transactions



Note: Respondents whose call transactions were confirmed in both the 2014 and 2015 surveys. Adjusted for the effects of mergers and other factors.

Chart 12: Breakdown of Turnover in the Call Market by Category



Note: For transactions that occurred in July.

Chart 13: Amount Outstanding in the Repo Market

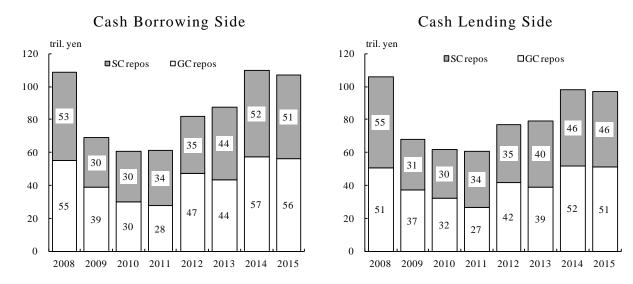


Chart 14: Amount Outstanding in the GC Repo Market by Category

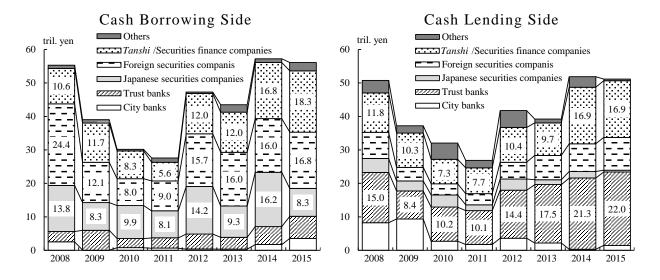
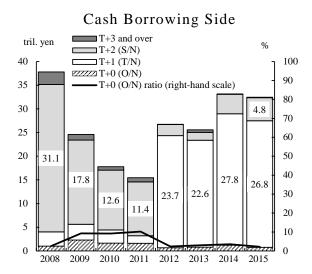
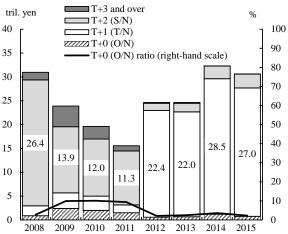


Chart 15: Amount Outstanding in the GC Repo Market by Starting Date

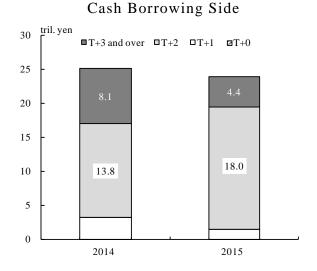
Overnight Transactions



Cash Lending Side



Term Transactions



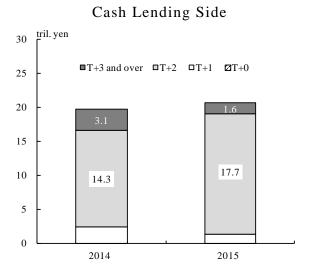


Chart 16: Amount Outstanding of GC Repo Transactions by Term

Cash Borrowing Side

Cash Lending Side

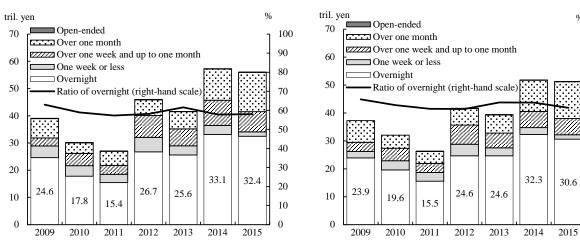


Chart 17: Amount Outstanding in the SC Repo Market by Category

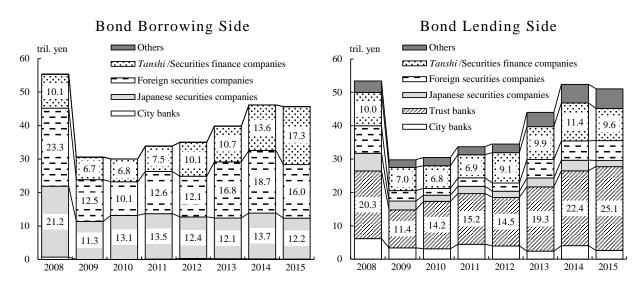
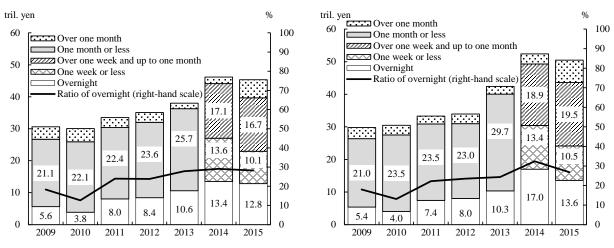


Chart 18: Amount Outstanding of SC Repo Transactions by Term

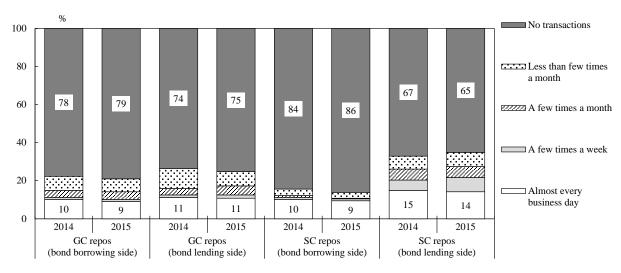
Bond Borrowing Side

Bond Lending Side



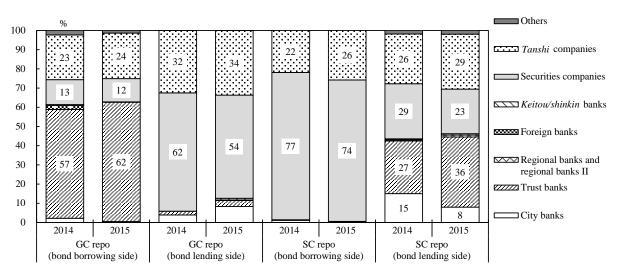
Note: From the 2014 survey, "one month or less" has been subdivided into "one week or less" and "over one week and up to one month."

Chart 19: Frequency of Repo Transactions



Note: Respondents whose repo transactions were confirmed in both the 2014 and 2015 surveys. Adjusted for the effects of mergers and other factors.

Chart 20: Breakdown of Turnover in the Repo Market by Category



Note: For transactions that occurred in July.

Chart 21: Breakdown of Amount Outstanding in the Repo Market by Type of Collateral

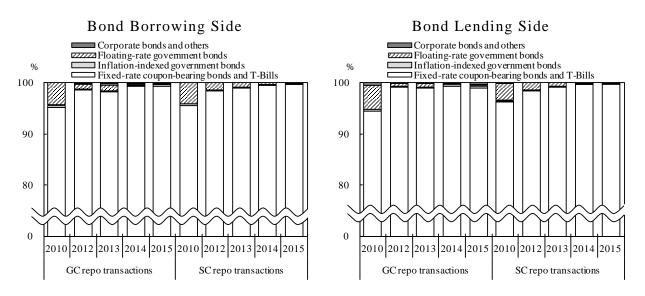


Chart 22: Amount Outstanding of Repo Transactions in Managed Securities
Trusts by Term

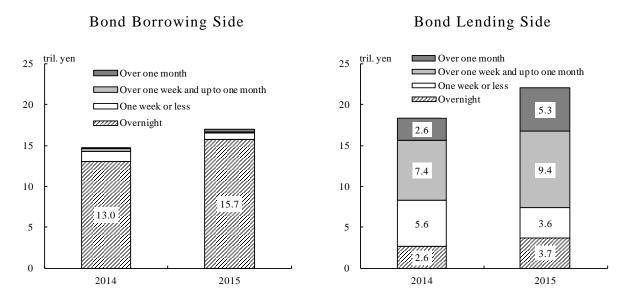
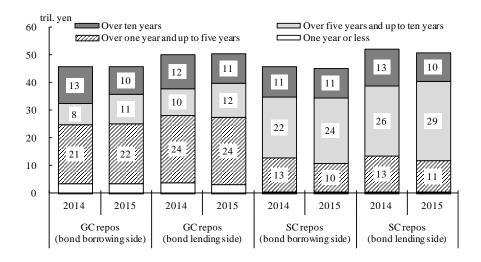
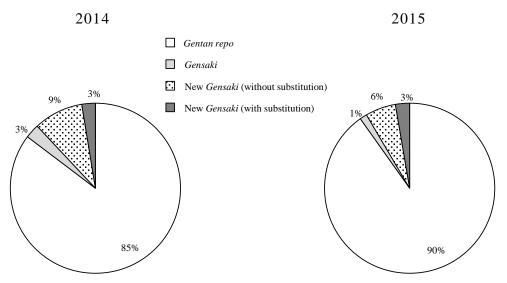


Chart 23: Amount Outstanding of Repo Transactions by Collateral Maturity



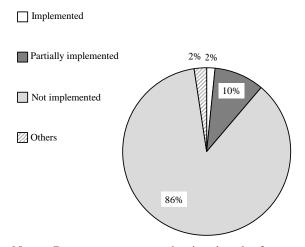
Note: Repo transactions with fixed-rate coupon-bearing bonds as collateral.

Chart 24: Breakdown of the Amount Outstanding of Repo Transactions by Form of Contract



Note: Total of cash borrowing and lending.

Chart 25: Implementation of Haircuts



Note: Responses were obtained only from those that were engaged in repo transactions.

Chart 26: Amount Outstanding of Financial Institutions' CP Holdings by Category

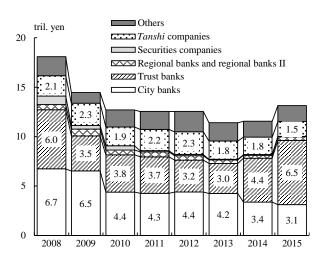
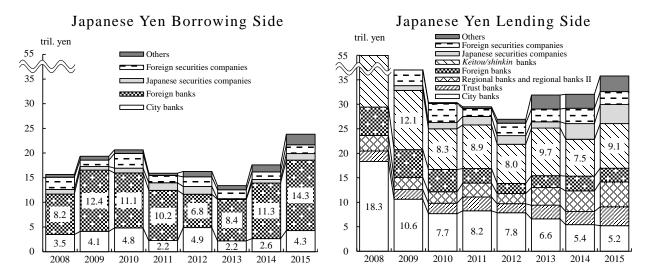


Chart 27: Amount Outstanding of Yen Funds Transactions with Overseas

Counterparties by Category

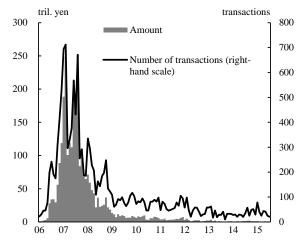


Note: The total of yen lending/funding through the FX swap market (those with a term of one year or less), Euroyen transactions, and yen lending/borrowing transactions with the overseas offices of financial institutions.

Chart 28: Yen Overnight Index Swap Market

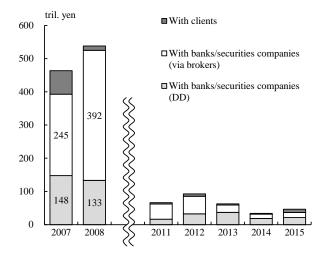
Volume and Number of

Yen OIS Transactions via Brokers



Source: Money Brokers Association.

Amount Outstanding in the Yen OIS Market



Note: Includes transactions by overseas offices of financial institutions. On the basis of notional amounts.

Chart 29: Amount Outstanding in the Equity Repo Market

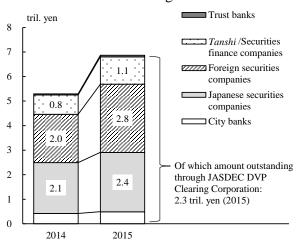
Cash Borrowing Side

tril. yen Trust banks 8 7 1.8 finance companies 1.5 Foreign securities 6 companies ☐ Japanese securities 5 companies 4 4.1 ☐ City banks 4.0 3 Of which amount outstanding through JASDEC DVP 2 Clearing Corporation: 2.1 tril. yen (2015) 1 2.0 1.5

2015

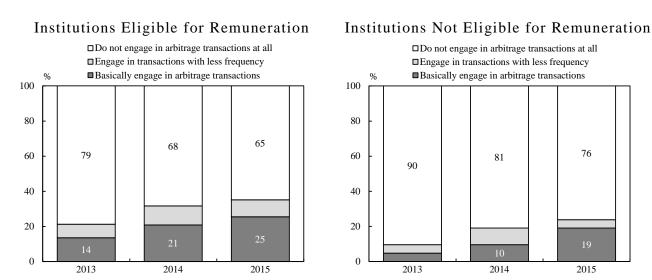
2014

Cash Lending Side



Note: Excludes the institutional credit trading, general margin trading, and equity lending without collateral.

Chart 30: Stance on Arbitrage Transactions



Note: Respondents since 2013. Adjusted for the effects of mergers and other factors.

Others

Do not set a standard (e.g., target, range, or limit)

Set a standard (e.g., target, range, or limit)

Basically do not hold excess reserves

100

80

59

68

76

75

40

17

20

2012

2013

2014

2015

Chart 31: Stance on Holding Excess Reserves

Note: Respondents since 2012, and those eligible for the reserve deposit requirement system.

Chart 32: Changes in Administrative Structures

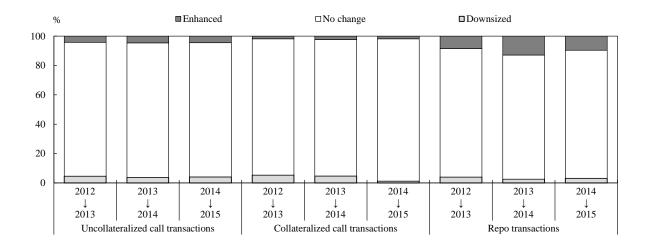
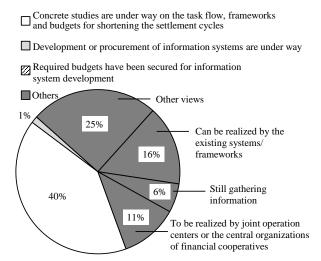


Chart 33: Topics in the Money Market

Shortening the Settlement Cycle for JGBs

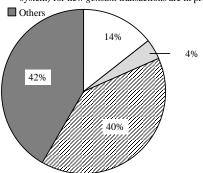


Note: Based on the grand design released in November 2014 for realizing a "T + 1" settlement cycle for JGBs, the financial market infrastructure and market participants are preparing on the assumption that implementation will occur around May 2018. The results above show the extent to which the counterparties covered by this survey have progressed thus far.

The breakdown of "other views" is the result of the analysis and compilation of respondents' comments in response to the invitation in the survey to comment freely on the subject.

Shift to New Gensaki

- The arrangements (clerical work and information system) for new *gensaki* transactions are already in place
- ☐ Work to establish the arrangements (clerical work and information system) for new *gensaki* transactions is underway
- Studies to establish the arrangements (clerical work and information system) for new gensaki transactions are in progress



Note: The grand design and subsequent discussions among market participants have resulted in the adoption of a policy to align the standard agreement used in repo transaction to the new gensaki format. This question was conducted to see the extent to which counterparties covered by the survey have taken steps to reach this goal.

Reponses were obtained only from those that were engaged in JGB repo transactions.

The Back-Up Facility and Market-Level Business Continuity Planning (BCP)

■ Has a back-up office and periodically conducts disaster exercises there

■ Has a back-up office, but conducts periodic disaster exercises only at the offices where the firm normally conducts its business

■ Has a back-up office, but does not conduct periodic disaster exercises in either the back-up office or at the firm's normal place of business

■ Does not have a back-up office, but conducts periodic disaster exercises at its normal place of business

■ Does not have a back-up office and does not conduct periodic disaster exercises

■ Others

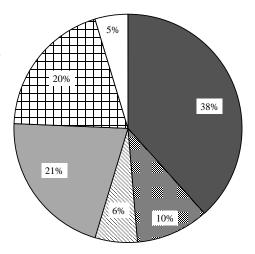
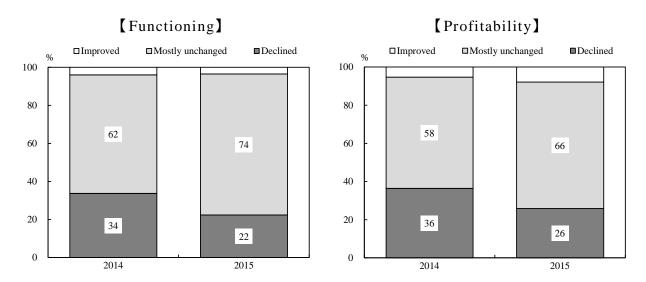


Chart 34: Perceptions of Market Participants on Money Market Transactions



- Notes: 1. Responses were obtained only from those counterparties that were engaged in call money transactions or JGB repo transactions, or in both of them.
 - 2. The question on "Functioning" was designed to find the perceptions of market participants on the change in functioning of the money market since the previous year, mainly taking into account whether respondents were able to make transactions with intended rates, prices, terms, and counterparties. The same applies to the following results.
 - 3. The question on "Profitability" was designed to find the perceptions of market participants on the change in profitability in the money market since the previous year, mainly taking into account investment yield, funding cost, transaction amounts, and fixed cost. The same applies to the following results.

[Functioning] [Profitability]

Improved

Mostly
unchanged
Declined

68%

60%

JGB Repo Transactions

Note: Reponses were obtained only from those that were engaged in JGB repo transactions.

Uncollateralized Call Transactions

[Profitability]

68%

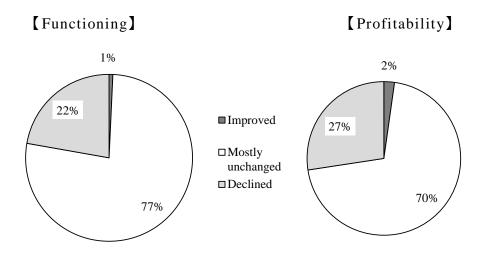
[Functioning]

79%

3% Improved Mostly unchanged □ Declined

Note: Reponses were obtained only from those that were engaged in uncollateralized call transactions.

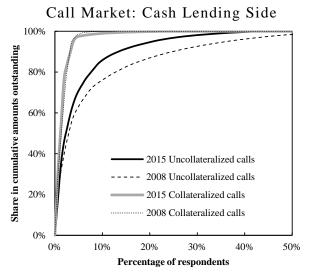
Collateralized Call Transactions

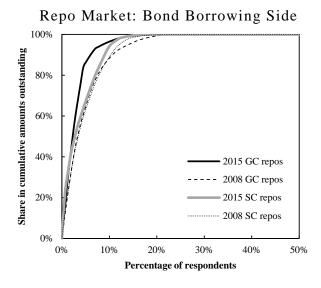


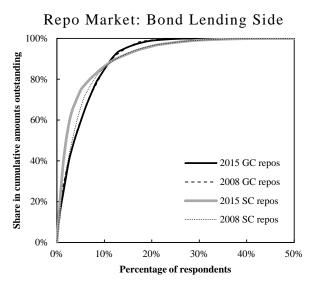
Note: Reponses were obtained only from those that were engaged in collateralized call transactions.

Chart 35: Degree of Concentration in Each Market









Note: Respondents since 2008. Adjusted for the effects of mergers and other factors.