Takehiro Sato: Toward further development of the Tokyo financial market – issues on repo market reform

Keynote speech by Mr Takehiro Sato, Member of the Policy Board of the Bank of Japan, at the Futures Industry Association Japan (FIA Japan) Financial Market Conference 2015, Tokyo, 13 May 2015.

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Introduction

It is a great honor to have the opportunity today to exchange views on the further development of Japan's financial markets with distinguished participants from major financial institutions, pension funds, and portfolio managers in Japan, the United States, Europe, and other Asian countries.

Today, I would like to talk about the repo market in Japan. The Bank of Japan, collaborating with market participants at home and abroad, is taking active steps to help create a market-wide infrastructure. This is done with the aim of further enhancing the functioning of Japan's financial markets – which are a focus of the Bank's monetary policy implementation and a touchstone of policy effectiveness.

The repo market plays the extremely important role of supplying liquidity to the primary and secondary markets, as does the Japanese government bond (JGB) futures market. Repos and futures transactions are an integral part of market-making activities and the markets' price discovery mechanism. In this sense, the futures market works hand in hand with the repo market. In the same vein, the development of the repo market drives further development of the futures market by boosting the liquidity of the JGB market. Hoping for such positive feedback to continue, I would like to talk about the international discussions on repo market reform. I will also touch on issues related to the role of market participants and the Bank in such discussions.

As you are well aware, repos are transactions that involve the exchange of cash and securities for a set of period. The repo market is an important place for borrowing and lending of cash and securities in many global financial markets. The amount outstanding of repos in Japan declined temporarily in 2008 due to the collapse of Lehman Brothers, but has regained its size markedly in recent years. It now accounts for almost half of the total transaction amount in the money market (Charts 1 and 2).

Currently, market participants are taking initiatives in repo market reform in accordance with international discussions. In my view, these initiatives center on four key ideas: transparency, stability, efficiency, and globalization. I would like to touch on each idea.

I. International discussions on repos

Drawing on the lessons learned from the recent global financial crisis, discussions on repos have taken place at international forums such as the G20 and the Financial Stability Board (FSB), with the aim of further increasing the transparency and stability of the repo market. The Bank is also taking part in these discussions (Charts 3 and 4).

The awareness here is that the financial crisis was worsened by the large increase in repos using illiquid securitized products, particularly in the United States. Excessive leveraging and risk taking in the repo market posed a serious threat to financial stability. This development drew attention to the so-called shadow banking problem. To prevent the repo market from seizing up, the FSB deemed it necessary for regulatory authorities to closely monitor the repo market. It also required further strengthening of risk management by setting haircuts appropriately. In sum, from a prudential policy perspective, there has been an international agreement that increasing transparency and stability of the repo market is an important step in addressing global financial stability risks.

A. *Reforms to increase transparency (building of a data collection framework)*

With regard to transparency – the first key idea that I mentioned – the FSB set out its policy recommendation for strengthening repo data collection at both the national and the global level. This was aimed at collecting detailed data on repos such as the type of collateral. By collecting such data, national authorities can monitor financial stability risks such as a buildup of leverage, the degree of maturity mismatch, and the risk concentration among certain market participants. An FSB Data Experts Group is working on the details of this data collection framework, and the Bank is also taking part. A consultation paper containing details such as the data template was released in November 2014, and the framework will be finalized by the end of 2015, after taking account of the results of public consultation.

In the coming months, active discussion on the domestic data collection framework will take place in Japan, mirroring developments at the global level. To facilitate the smooth introduction of the framework, it is necessary to pay due attention to the burden on market participants and implications for the market.

National authorities see the data collection project as marking significant progress toward increasing transparency of the repo market as well as shadow banking activities. The project should also help to contain financial stability risks. Active participation in it will contribute to global financial stability. Furthermore, the project will enhance Japan's international competitiveness by ensuring global trust in the nation's money markets. In cooperation with stakeholders both at home and abroad, the Bank will continue to contribute actively to this project.

B. *Reforms to increase stability (implementation of appropriate risk management)*

The second key idea concerns the stability of the repo market. In this regard, "haircuts" are intended to increase the safety of a transaction by reducing the market value of the collateral in proportion to factors such as fluctuations in the collateral price. At the height of the financial crisis, the prices of asset-backed securities (ABSs) plunged. These securities were used as repo collateral, and the level of haircuts for them rose sharply. This led to a further decline in prices and liquidity, destabilizing the entire repo market.

With these experiences in mind, the FSB is requesting regulatory authorities to apply two measures to all the repo transactions that are not cleared by a central counterparty (CCP).

The first measure is numerical haircut floors (Chart 5). The thinking is that in good times market participants tend to underestimate price volatility risk and set haircuts that are too optimistic. By setting a floor, this measure aims to avoid "procyclicality": excessive buildup of leverage in good times and rapid deleveraging in stressed market conditions due to a sudden rise in haircuts.

Repos using government securities are exempted from the numerical haircut floors. This is because price movements in government securities tend not to be procyclical, and haircuts on government securities are zero or close to zero for most transactions. Unlike in the United States, where a considerable amount of repos uses ABSs, government securities are mainly used in Japan (Charts 6 and 7). For this reason, the implementation of numerical haircut floors would have little impact on the repo market in Japan.

The second measure requested by the FSB concerns methodology standards. Regulatory authorities are required to establish qualitative standards for the methodologies that market participants use to calculate haircuts, incorporating stress scenarios.

As just mentioned, nearly all the repos in Japan use government securities, for which haircuts are hardly applied. However, even the most creditworthy and liquid assets such as government securities can entail a risk of price fluctuations. Therefore, to ensure repo market stability, it is important to establish a common understanding among market participants on what risk management, including methodology standards, should entail.

The FSB will establish a monitoring process to prevent market participants from avoiding numerical haircut floors by booking transactions in different jurisdictions. Depending on the results of this monitoring process, the FSB will consider reviewing the scope of the application, which currently excludes repos using government securities, as well as the level of haircut floors as necessary. The Bank deems it necessary to continue actively participating in the international discussions regarding the framework for numerical haircut floors, while making sure that these do not have unintended consequences for liquidity in the global repo markets.

II. Reforms to increase efficiency (shortening of the JGB settlement cycle)

In parallel with the international discussions just mentioned, there is an ongoing initiative on efficiency. In Japan, market participants are aiming to further shorten the settlement cycle for outright transactions of JGBs from two business days (T+2) to one business day (T+1) after the trade date.

This initiative was taken in response to the significant increase in settlement fails in the JGB market at the height of the Lehman crisis. By compressing the unsettled transaction amount, it intends to reduce settlement risks. In addition, shortening the settlement cycle would bring drastic changes to the repo market, because the initiative is accompanied by the creation of a new market-wide infrastructure.

The repo market complements the JGB market, because it accommodates the need to adjust excesses or shortages of cash resulting from outright transactions. Therefore, it is essential to introduce a T+0 settlement cycle for the general collateral (GC) repo market in conjunction with achieving the T+1 settlement cycle for outright JGB transactions. To this end, much greater speed and efficiency are required in processing repo transactions. This leads to the third key idea: increasing efficiency. Japan's repo market is planning to introduce the subsequent collateral allocation method for GC repo transactions. For this purpose, the market will establish a new collateral management infrastructure with sufficient allocation capacity.

Heightened efficiency in the repo market has the potential to bring considerable change to the money market in Japan. More specifically, it could lead to the creation of a significantly expanded T+0 funding market.

If all of the overnight GC repos currently settled on T+1 shift to T+0, the market size is roughly expected to reach 20 to 30 trillion yen (Chart 8). On the other hand, the size of the brokered and uncollateralized overnight call market is currently 2 to 3 trillion yen. This suggests that there is a high probability that the size of the T+0 GC repo market will exceed that of the call market and become the largest money market in Japan, offering same-day liquidity.

As I mentioned, the size of Japan's repo market is expanding. From a broader perspective, while unsecured funding has been diminishing globally after the financial crisis, secured funding has been relatively robust. This result seems to reflect structural factors, such as the increase in the awareness of credit risks of interbank transactions following the financial crisis, as well as the introduction of financial regulations that discourage unsecured short-term funding.

On the basis of this broad trend, the establishment of the T+0 repo market has the potential to not only affect the current call market but also bring structural change to the money market, which is vital to the money market operations of the Bank. Currently, banks and money market brokers are major cash borrowers in the call market, while in the GC repo market securities firms are major cash borrowers (Chart 9). The T+0 repos may greatly increase the depth of the T+0 funding market and the diversity of its participants. These changes could help to further vitalize the money market as a whole.

With these possibilities in mind, the Bank will work closely with market participants and follow the potential impact of these changes. Specifically, the Bank is greatly interested in the potential impact on the size of call and repo market, the diversity of participants, and the money flow. Changes in these factors might also affect the behavior of the money market rates.

III. Reforms toward globalization (shifting to the new gensaki method)

Another important initiative is the unification of contract types for repos. Recently, market participants agreed on the uniform adoption of the new *gensaki* method, a more globally accepted form of a repurchase agreement. They are now working on the transition process, such as amending the master agreement. This leads to the fourth key idea: globalization.

In Japan, loan-type repos (called *gentan* repos) have been widespread in the market. This is because the securities transaction tax – although now abolished – used to be levied on the purchase and sale of securities. Thus, there have been three types of repo contracts in Japan (*gentan*, new *gensaki*, and old *gensaki*), with correspondingly diverse market conventions (Chart 10). This is considered to be one factor that impedes efforts to improve efficiency and automation in the processing of repo transactions.

In addition, it is often said that the loan-type repos cause difficulties in communication among domestic participants, and overseas authorities and participants, because the loan-type repos have the same legal characterization as securities lending in major overseas markets.

Consequently, the unification of repos to the new *gensaki* contracts will contribute to the further globalization of Japan's money market and lead to the vitalization of Japan's repo market, including transactions with foreign investors who are present here today. Market participants are expected to improve their IT systems, change market conventions, and seek clients' involvement. The Bank is committed to offering support to achieve these goals.

Concluding remarks

Today, I have talked about the four key ideas regarding the reform of Japan's repo market: transparency, stability, efficiency, and globalization. In the creation of a market-wide infrastructure, these four ideas are important for not only the repo market but also the financial markets as a whole.

The share of JGB holdings by foreign investors is expected to expand over the medium and longer term, reflecting changes in domestic savings and investment. Developing a safe and attractive repo market for investors both at home and abroad would contribute to boosting liquidity in the JGB market. This would also increase trust in Japan's financial markets.

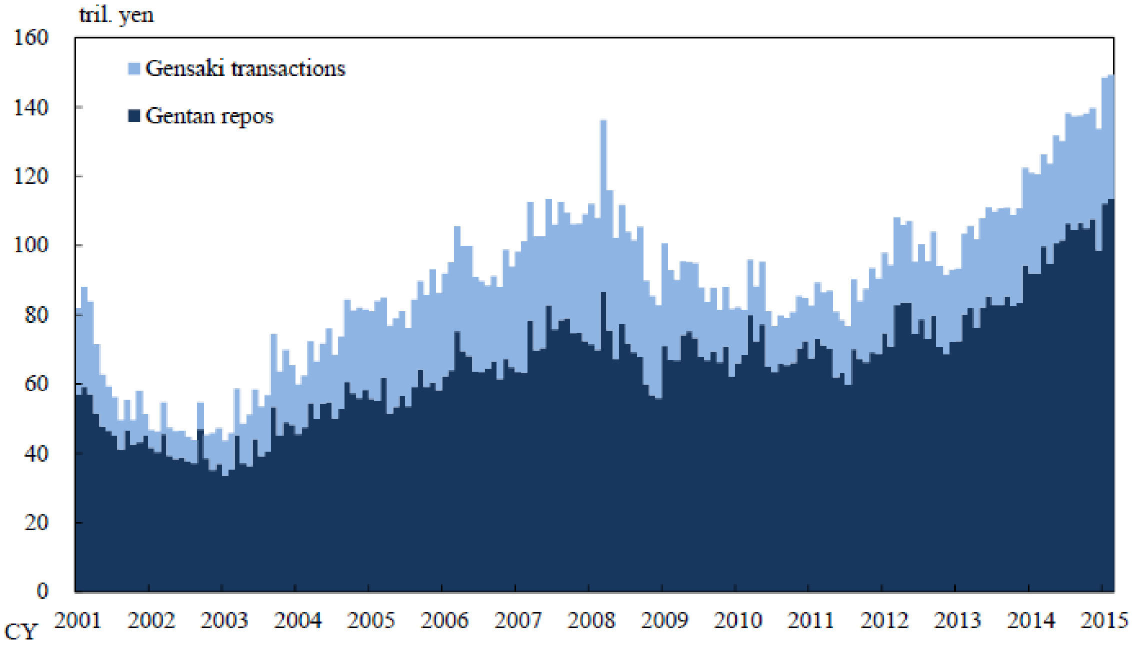
Reforms in the repo market, which were initiated by the failure of the Lehman Brothers, are expected to reach their final stage in two to three years. In this regard, we are at a critical moment for fulfilling the reforms. The Bank judges that it is extremely important for the repo market, the epicenter of Japan's money market, to become more transparent, stable, efficient, and easily accessible for foreign investors.

The Bank will hold a Repo Market Forum on May 14, and will exchange opinions with major repo market participants on the four key ideas behind the reform. The Bank aims, together with market participants, to contribute further to the development of the repo market and to the Tokyo financial market.

Thank you very much for your attention.

Chart 1

Amount Outstanding of Repos



Source: Japan Securities Dealers Association.

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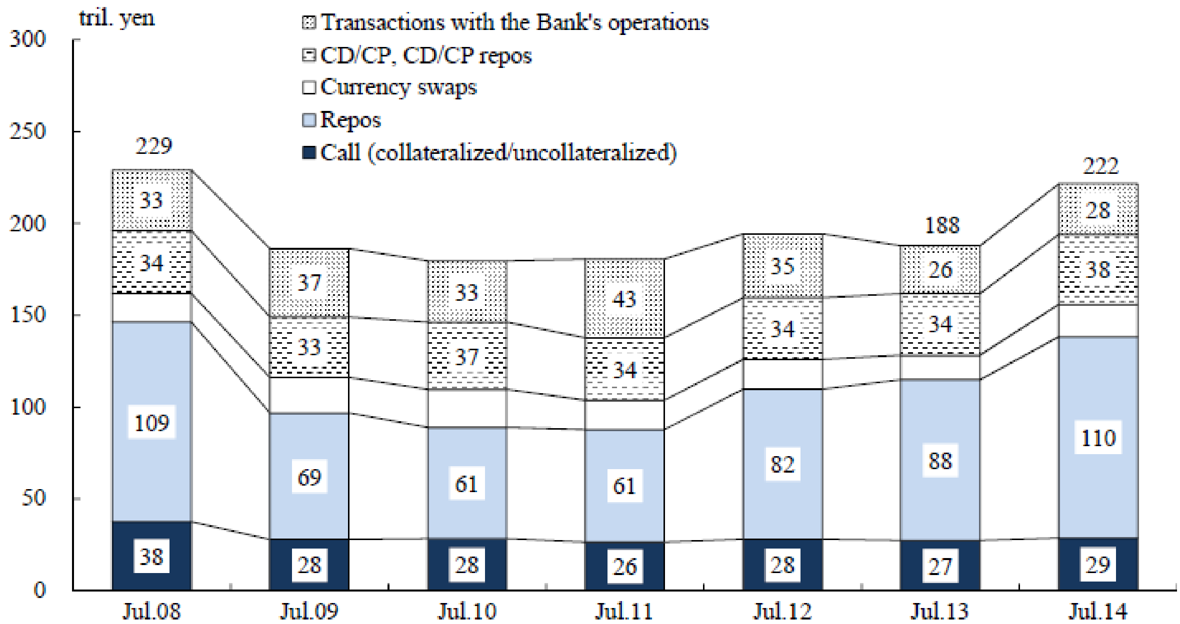
Chart 2

Amount Outstanding in the Money Market



Note: Cash borrowing side.
Source: Bank of Japan

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Chart 3

Discussions by the G20 and the FSB

Nov. 2010	The G20 asked the FSB to develop recommendations to strengthen the oversight and regulation of the shadow banking system (Seoul summit).
Nov. 2011	The G20 acknowledged the FSB report "Shadow Banking: Strengthening Oversight and Regulation," and consideration was begun on strengthened regulation of shadow banking (Cannes summit).
Aug. 2013	The FSB published the report "Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos," and regulation was finalized for securities lending and repos, excluding the regulatory framework for haircuts.
Oct. 2014	The FSB published the report "Regulatory Framework for Haircuts on Non-Centrally Cleared Securities Financing Transactions," and the regulatory framework for haircuts was finalized, excluding some portions.
Nov. 2014	The FSB published the report "Standards and Processes for Global Securities Financing Data Collection and Aggregation."

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Chart 4

The FSB's Main Policy Recommendations

Recommendation	Summary
Data collection	Authorities should collect data on the amount of repo and securities lending transactions and on other items at the national/regional level and at the global level to improve transparency.
Qualitative standards for methodologies to calculate haircuts	Authorities should set qualitative standards that must be satisfied by the methodologies used to calculate haircuts on non-centrally cleared repo and securities lending transactions.
Numerical haircuts floors	For non-centrally cleared repo and securities lending transactions in which banks provide financing to non-banks, authorities should introduce the framework of numerical floors for haircuts by type of collateral, excluding government bonds.
Regulations on re-hypothecation of client assets	Authorities should regulate re-hypothecation activity, in which client assets deposited for a certain period as part of repo and securities lending transactions are reused by financial intermediaries in other transactions.

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Chart 5

Numerical Haircut Floors

<table>
<tr><th>Residual maturity of collateral</th><th>Corporate and other issuers</th><th>Securitized products</th><th>Main index equities</th><th>Other assets within the scope of the framework</th></tr>
<tr><td>≦ 1year debt securities, and FRNs</td><td>0.5%</td><td>1.0%</td><td rowspan="4">6.0%</td><td rowspan="4">10.0%</td></tr>
<tr><td>> 1year, ≦ 5years debt securities</td><td>1.5%</td><td>4.0%</td></tr>
<tr><td>> 5years, ≦10years debt securities</td><td>3.0%</td><td>6.0%</td></tr>
<tr><td>≧ 10years debt securities</td><td>4.0%</td><td>7.0%</td></tr>
</table>

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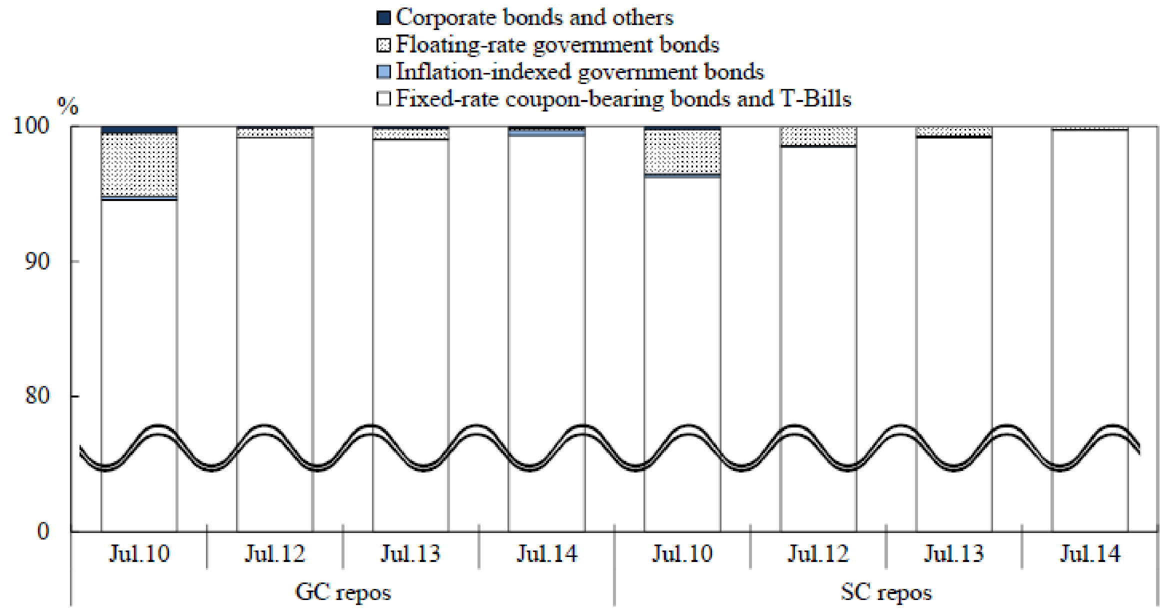
Chart 6

Share of Amount Outstanding of Repos by Type of Collateral Bond



Note: Bond lending side.
Source: Bank of Japan.

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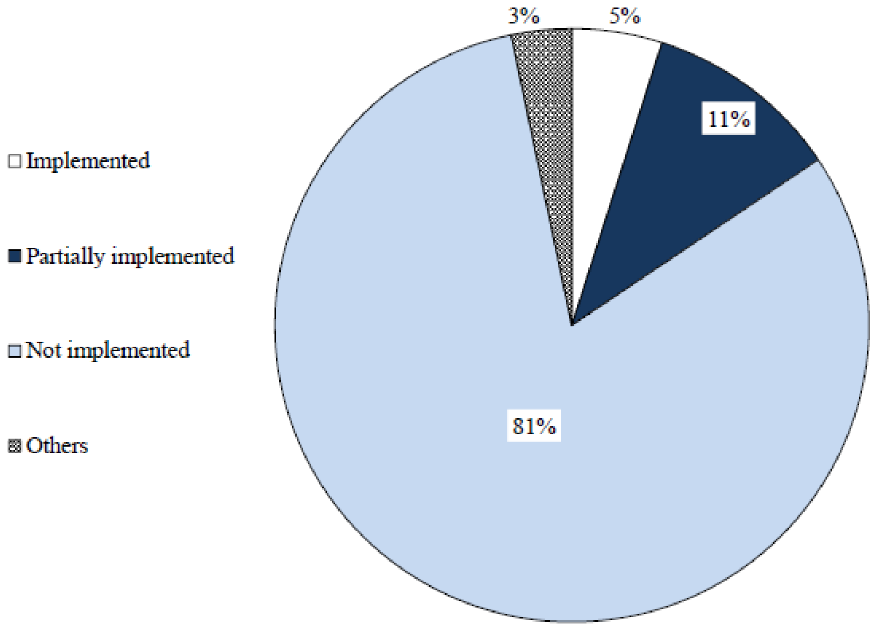
Chart 7

Implementation of Haircuts



Note: Excludes respondents who do not engage in repos. The data are as of July 2014.
Source: Bank of Japan.

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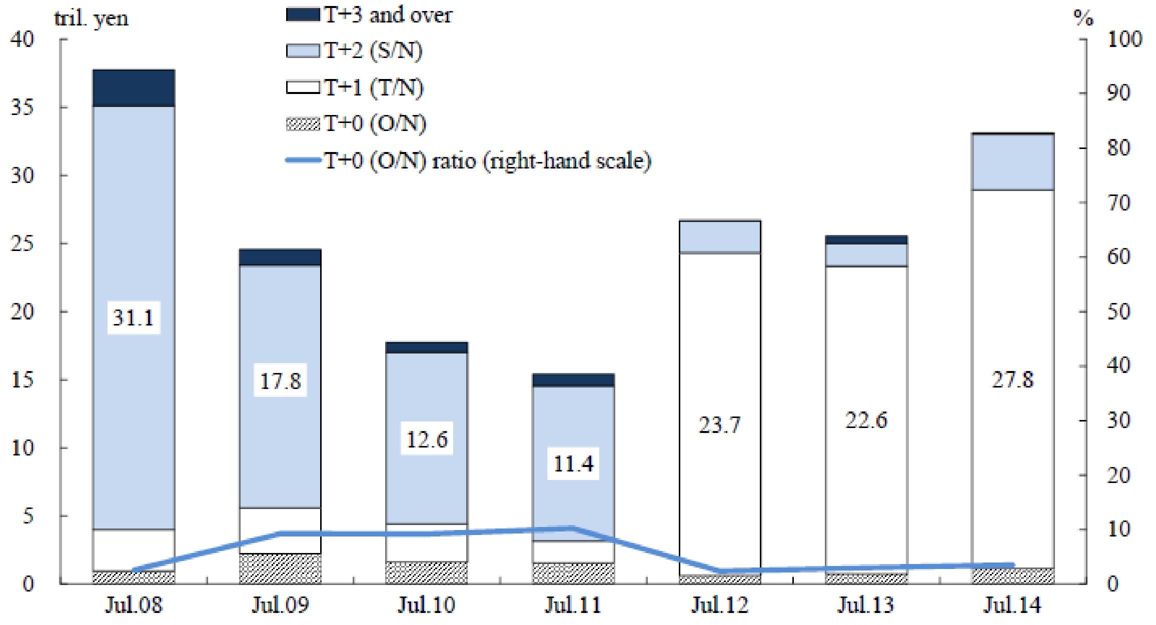
Chart 8

Amount Outstanding of Overnight Transactions in the GC Repo Market by Starting Date



Note: Cash borrowing side.
Source: Bank of Japan.

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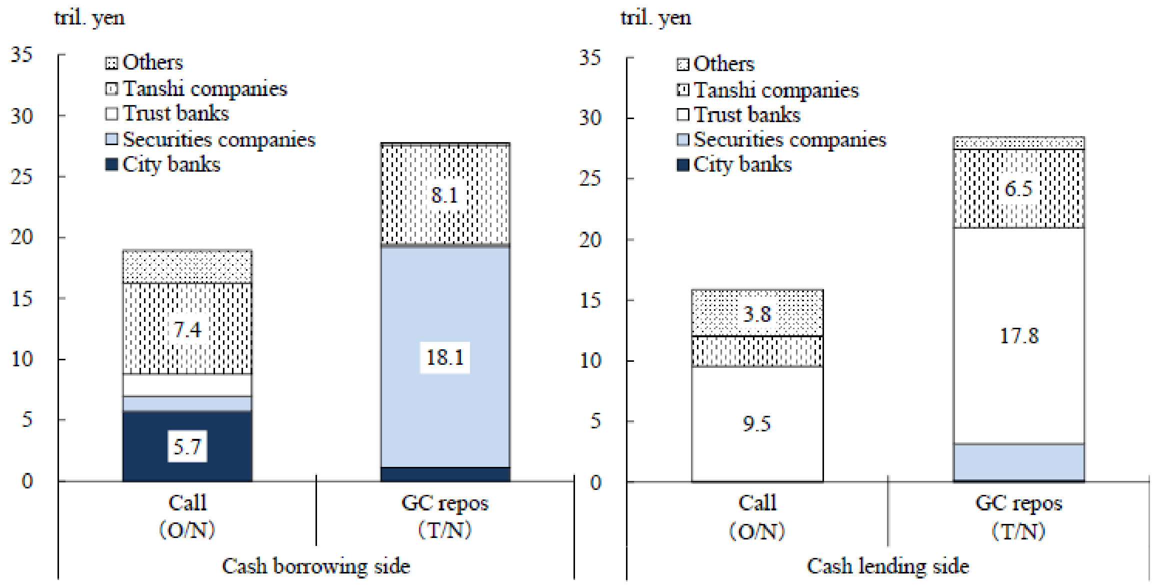
Chart 9

Amount Outstanding of Overnight Transactions in the Call and GC Repo Markets by Sector



Note: Among call transactions, the figures for uncollateralized call transactions include direct dealing transactions.
The data are as of July 2014.
Source: Bank of Japan.

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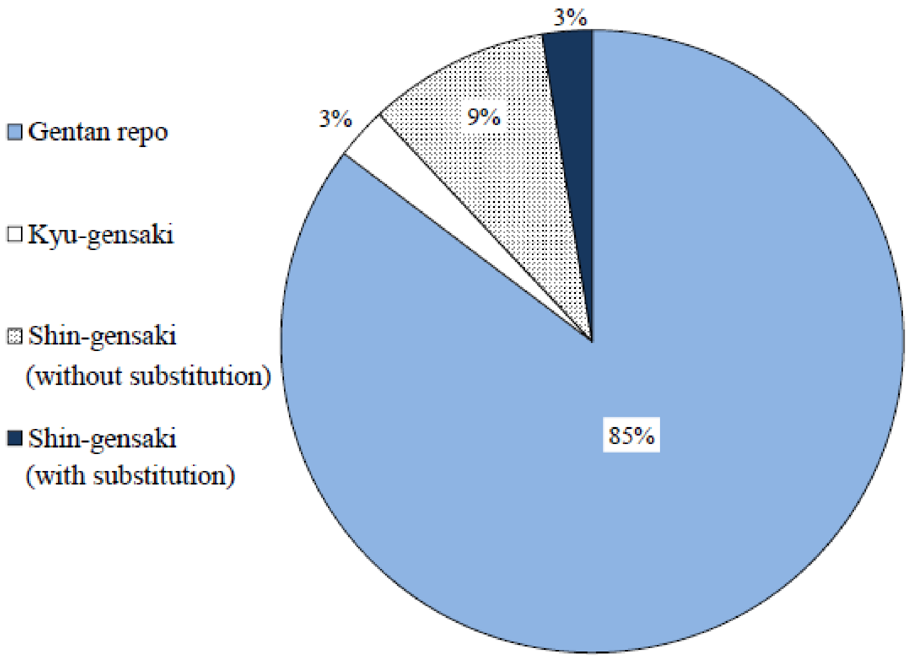
Chart 10

Share of Amount Outstanding of Repos by Type of Contract



Note: Total of cash borrowing and lending. The data are as of July 2014.
Source: Bank of Japan.

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