

Shortening the Settlement Cycle of JGBs to T+1

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In Japan, efforts to shorten the settlement cycle of Japanese government bonds (JGBs) have reached the final phase. Market participants and financial market infrastructures are currently working toward shortening the period from trading to settlement (settlement cycle) for outright transactions of JGBs from two business days (T+2) to one business day (T+1), aiming for implementation in the first half of fiscal 2018. At the same time, with regard to repurchase transactions (repos) of JGBs, which are closely related to outright transactions, preparations to introduce a new transaction scheme – GC repos under the Subsequent Collateral Allocation Method – are under way. Such efforts are expected to help reduce settlement risks arising from unsettled positions, and also enhance the efficiency, convenience and competitiveness of Japanese financial markets.

Introduction

The importance of reducing settlement risks is one of the key lessons learned from the Lehman crisis. There has been notable progress in the reduction of settlement risks in major economies by shortening the settlement cycle regarding cash transactions of securities.

[Chart 1] Recent initiatives to shorten settlement cycles in major economies

	US	EU	Japan
Govt bonds	T+1	T+3 ↓ T+2* (from Oct 2014)	T+2 ↓ T+1 (scheduled in Apr/May 2018)
Stocks	T+3 ↓ T+2 (scheduled in Sep 2017)	T+3 ↓ T+2 (from Oct 2014)	T+3 ↓ T+2 (scheduled in Apr/May 2019)

* T+1 applies to UK.

Similarly, major initiatives have been taken in Japan to shorten the settlement cycle of securities. With regard to JGBs, the Japan Securities Dealers Association (JSDA) established the "Working Group on Shortening of JGB Settlement Cycle" (WG)¹ in

September 2009 as a platform to facilitate in-depth discussions among market participants with varying business models. The Bank of Japan has been strongly supporting the discussions at the WG.

[Chart 2] Initiatives to shorten settlement cycles of JGBs in Japan

Date	Event
Jul 1986	Scheduled settlement on 10 th , 20 th and 30 th every month (with varying settlement cycles)
Aug 1987	Scheduled settlement on 5 th , 10 th , 15 th , 20 th , 25 th and 30 th every month (with varying settlement cycles)
Sep 1996	Rolling settlement (T+7 cycle)
Apr 1997	T+3 cycle
Apr 2012	T+2 cycle
1H FY2018	T+1 cycle

As an initial outcome of the WG, the settlement cycle of outright transactions of JGBs was shortened from T+3 to T+2 in April 2012. The WG is currently working to achieve a T+1 cycle as a final wrap-up of the efforts to shorten the settlement cycle of JGBs, which originally started in the 1980s². The WG is aiming to implement the T+1 cycle in the first half of fiscal 2018, and the project has just reached the final phase.

This paper describes the significance, challenges and future prospects of the JGB T+1 project.

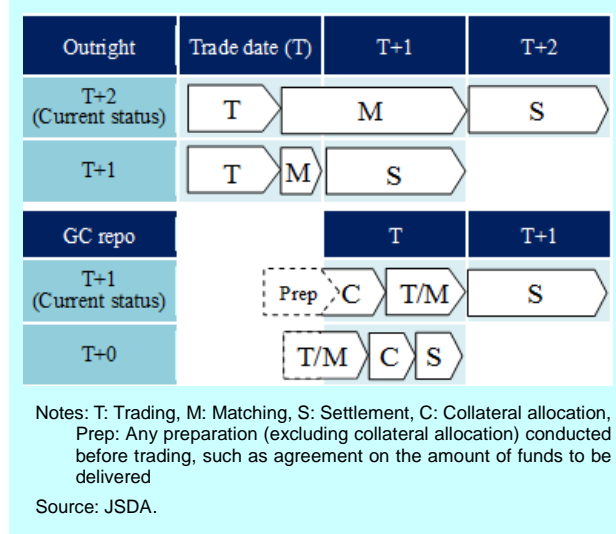
Significance of Shortening the Settlement Cycle of JGBs

Shortening the settlement cycle directly reduces settlement risks, namely replacement cost risks and liquidity risks, arising from unsettled positions.

In addition, it is expected to enhance the liquidity, stability, efficiency and competitiveness of Japanese financial markets through the development of infrastructure to shorten the settlement cycle.

T+1 outright transactions call for T+0 general collateral (GC) repos, since GC repos are often used to adjust excesses and shortages of cash resulting from outright transactions. The WG has agreed on the introduction of a new transaction scheme to enable T+0 GC repos, and accordingly concluded that new infrastructure should be established to ensure its operational feasibility. At the same time, the WG has decided to take this opportunity to proceed with initiatives to further enhance the function of repo markets.

[Chart 3] Overview of T+1 Cycle



These initiatives are expected to enhance the convenience and attractiveness of the JGB market. They will also result in establishing a new money market that offers same-day liquidity. Currently, the dominant T+0 funding market in Japan is the unsecured overnight interbank market. The emergence of a new, large T+0 secured market, i.e., the T+0 GC repo market, will lead to a safer and more efficient Japanese money market³.

Challenges and Way Forward

The WG published the "Grand Design for Shortening of JGB Settlement Cycle (T+1)" in November 2014,

and the market participants and financial market infrastructures have proceeded with the projects according to the agendas outlined in the Grand Design as follows⁴.

Making post-trade processing swift and efficient

In order to implement the T+1 cycle, the WG concluded that it is necessary to shorten the time required for post-trade processing and proposed to review and revise related market practices, including bringing forward the cutoff time for reconciliation of transactions, and to promote the use of electronic and straight-through processing in the post-trade processing.

Following the suggestion made by the WG in the Grand Design, the JSDA reviewed and made necessary changes to the market practices, namely the "Japanese Government Securities Guidelines for Real Time Gross Settlement" (RTGS Guidelines)⁵ and related guidelines, which apply to all market participants in the JGB market in principle.

Introduction of GC repos under Subsequent Collateral Allocation Method

The WG concluded that T+0 GC repos would not be achievable without a drastic change in the traditional repo transaction scheme, and proposed to introduce a new transaction scheme (the "GC repos under the Subsequent Collateral Allocation Method"). In the new scheme, at the time of trade, parties will agree on the amount of funds to be delivered and type of collateral such as "JGBs with maturity of less than 10 years", while the specific issue of JGBs will be allocated by a third-party market infrastructure from the inventory of JGBs of a delivering party, just before the settlement. Trading based on the new scheme will enable market participants to adjust the amount of excess funds more swiftly, and is expected to reduce administrative costs for identifying collateral to be delivered.

The WG proposed to establish a market infrastructure to provide necessary collateral management services in order to create a level playing field for a wide range of market participants with varying market presence. The WG also suggested that an existing central counterparty (CCP) for transactions of JGBs would be a major candidate for providing the proposed collateral allocation service for GC repos under the Subsequent Collateral Allocation Method, as the use of CCP for transactions of JGBs has been

increasing.

Following the proposal, the Japan Securities Clearing Corporation (JSCC), the CCP for transactions of JGBs, decided to provide such service and released the "Outlines of Japanese Government Bond OTC Transactions Clearing Business associated with Shortening of Japanese Government Bonds Settlement Cycle" in May 2015⁶, which documents the framework for providing the new collateral management service.

Enhancement of function of the repo market

In view of the growing global demand for JGBs, the JGB market needs to develop a globally-accepted transaction framework to enhance its international competitiveness. In other economies, repo transactions are in general structured legally as sale/purchase transactions with a repurchase/resale agreement (*gensaki* transaction). However, in the Japanese repo market, most repo transactions are structured as borrowing/lending of securities with cash collateral (*gentan* transaction) for historical reasons. This unique feature is sometimes regarded as a hurdle for foreign investors to participate in the Japanese repo market.

Therefore, the newly introduced GC repos under the Subsequent Collateral Allocation Method will be structured as a *gensaki* transaction, which is a repurchase agreement consistent with the global standard. In addition, repo transactions other than the newly introduced GC repos are also expected to migrate to and adopt the *gensaki* transaction.

Another point worth highlighting is the introduction of a daily automated process for collateral substitution built into the GC repos under the Subsequent Collateral Allocation Method, which is expected to reduce the operational burden for substituting collateral⁷. This automated substitution process is expected to encourage term transactions and contribute to the improvement of price discovery function for secured term transactions as well as better structuring of yield curves.

Revision of master agreement for repo transactions

The introduction of GC repos under the Subsequent Collateral Allocation Method requires a revision of the repo master agreement as well as clarifications on accounting and reporting practices and other regulatory record-keeping requirements.

The revision of the master agreement of repo transactions, which was also conducted by the JSDA,

had two purposes: adding contractual clauses required for GC repos under the Subsequent Collateral Allocation Method, and incorporating detailed aspects of the transactions that were traditionally agreed individually outside the master agreement but were widely accepted as a market standard.

Such revision of the master agreement is expected to contribute to not only the smooth introduction of GC repos under the Subsequent Collateral Allocation Method but also reduce the administrative burden through the standardization of transactions.

Preparation for market-wide running test

Currently, the JSCC is developing necessary procedures and systems for providing JGB collateral allocation services to market participants using GC repos under the Subsequent Collateral Allocation Method. At the same time, participants are reviewing their administrative operations and systems to achieve a T+1 cycle, and developing necessary systems for GC repos under the Subsequent Collateral Allocation Method.

In order to ensure the smooth transition to T+1 cycle and to minimize operational risks it may entail, the WG decided to conduct a market-wide running test prior to the implementation of the T+1 cycle. In June 2016, the WG published an outline of the test, which is scheduled to start from October 2017. The WG announced that the relevant market infrastructures will provide the opportunity to: check the function of the new system developed by the JSCC for GC repos under the Subsequent Collateral Allocation Method; check the operational feasibility of revised market practices for the T+1 cycle; and migrate from the *gentan* transaction to the *gensaki* transaction where appropriate.

Implementation target: in the first half of fiscal 2018

As mentioned, the WG aims to implement the T+1 cycle in the first half of fiscal 2018 (currently, the implementation date is assumed to be immediately after the consecutive holidays in April or May 2018)⁸. The specific date of T+1 implementation will be decided after conducting the market-wide running test.

Facilitating settlement of cross-border transactions

Cross-border transactions are not within the scope of this T+1 project led by the WG, since they involve various parties both inside and outside Japan and thus

it is considered both difficult and inappropriate to uniformly shorten their settlement cycles. In fact, many of the transactions with non-residents are currently conducted under a T+3 or a longer cycle even when a T+2 cycle is adopted for domestic transactions. Nonetheless, after the introduction of the T+2 cycle in the domestic market in 2012, an increasing number of transactions with non-residents are settled on a T+2 cycle. Going forward, the shift to a T+1 cycle in domestic transactions may further increase the demand for a shorter settlement cycle (T+2 cycle) for cross-border transactions.

While a shorter settlement cycle for cross-border transactions would naturally lead to a reduction of settlement risks, the challenges in minimizing operational risks and preventing Fails⁹ in the course of shortening the settlement cycle are more significant for cross-border transactions since their administrative burden is comparatively larger than for domestic transactions. Therefore, market participants launched an initiative to enable a smooth T+2 cycle for cross-border transactions, and are currently exploring ways to remove impediments to smooth settlement, including measures to reduce unmatched settlement instructions¹⁰.

Market participants note that it would be beneficial for parties to agree more carefully and thoroughly on the details of settlement at the time of trade execution, as well as to raise the awareness of relevant parties regarding compliance with the cut-off time in Japan for securing enough time for settlement matching.

Concluding Remarks

The introduction of a T+1 cycle marks the completion of efforts to shorten the settlement cycle of JGBs, which started as early as the 1980s. Furthermore, various other initiatives taken not only reduce settlement risks but also enhance the efficiency, convenience and competitiveness of Japanese financial markets. It should be stressed that the introduction of T+1 cycle can be only achieved through the involvement of various market participants and financial market infrastructures to collectively review and improve their systems and operations.

The Bank has recognized the importance of enhancing the safety and robustness of financial markets as well as improving convenience and competitiveness through the reduction of settlement

risks. Therefore, the Bank, as the central bank of Japan, has strongly supported the initiatives to shorten the settlement cycle of JGBs from the beginning of the project, and is committed to contributing to facilitating discussions among market participants for developing better financial markets.

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¹ The WG comprises major market participants and financial market infrastructures for securities. The Financial Services Agency, the Ministry of Finance, the Tokyo Stock Exchange and the Bank of Japan are listed as observers.

² The JSDA set up the "Working Group on Shortening Stock Settlement Cycle" to achieve a T+2 cycle for stocks, etc., as early as possible in 2019 (the implementation date is assumed to be immediately after the consecutive holidays in April or May 2019). The details can be found on the JSDA's website at: http://www.jsda.or.jp/en/activities/research-studies/html/t2_fin_l_report.html

³ Given the market size as of July 2016 and assuming that all T+1 overnight GC repo transactions migrate to a T+0 cycle, the potential market size of the newly introduced T+0 overnight GC repo market is estimated to be around 30 trillion yen. This estimate implies that a T+0 GC repo market may become a significantly large same-day money market, given that the unsecured overnight interbank market is approximately 9 trillion yen in size. For the data used in the estimate, see the Bank's "Trends in the Money Market in Japan – Results of the Tokyo Money Market Survey (August 2016) –".

⁴ The outlines of the Grand Design can be found on the JSDA's website at:

http://www.jsda.or.jp/en/activities/research-studies/files/grand-design_english.pdf

⁵ The RTGS Guidelines (as of October 2015, the revision of which for T+1 cycle is not reflected) can be found on the JSDA's website at:

http://market.jsda.or.jp/shiraberu/saiken/kessai/rtgs/rtgs/files/151013rtgsguideline_e.pdf

⁶ The document can be found on the JSCC's website at:

http://www.jsc.co.jp/en/data/en/2016/03/public_4.pdf

⁷ Many participants in the Japanese repo market avoid collateral substitution partly due to its operational burden, and instead in many cases continue to roll over overnight transactions.

⁸ The outlines of the "Target Implementation Timing for Shortening of JGB Settlement Cycle to T+1" can be found on the JSDA's website at:

http://market.jsda.or.jp/shiraberu/saiken/kessai/jgb_kentou/English_gaiyoubann.pdf

⁹ For guidelines concerning Fails, please refer to chapter three of the RTGS Guidelines, which is referred in footnote 5.

¹⁰ The major reasons behind unmatched settlement instructions arising from transactions with non-residents are said to include: account mismatches; differences over the adoption of the 5 billion yen division rule on the settlement amount; and differences over the adoption of pair-off.

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