

Role of Money Markets

— Japan's Perspective —



September 2018

Seiichi SHIMIZU
BANK OF JAPAN

The views presented here are those of the author and do not necessarily reflect those of the Bank of Japan

Outline

- I. Strengthening the Framework for Monetary Easing (MPM Decisions on July 31)
- II. Three-tire System and Money Markets
- III. Role of Money Markets
 - I. Formation of Short-term Interest Rates
 - II. Transmission to the Yield Curve
 - III. Provision of Safe Assets -- Global Linkage of Money Markets
- IV. Closing

I. Strengthening the Framework for Monetary Easing (July 31 MPM Decisions)

More time than expected is needed to achieve the price stability target of 2 percent.
Maintaining the output gap as long as possible within positive territory is appropriate.



Persistently Continuing with Powerful Monetary Easing

> Introducing forward guidance for policy rates

The Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices including the effects of the consumption tax hike scheduled to take place in October 2019.

> Enhancing the sustainability of "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control"

Long-term interest rate: The Bank maintains the target level of around zero percent. While doing so, the yields may move upward and downward to some extent mainly depending on developments in economic activity and prices. etc.

> Reducing the size of the Policy-Rate Balance

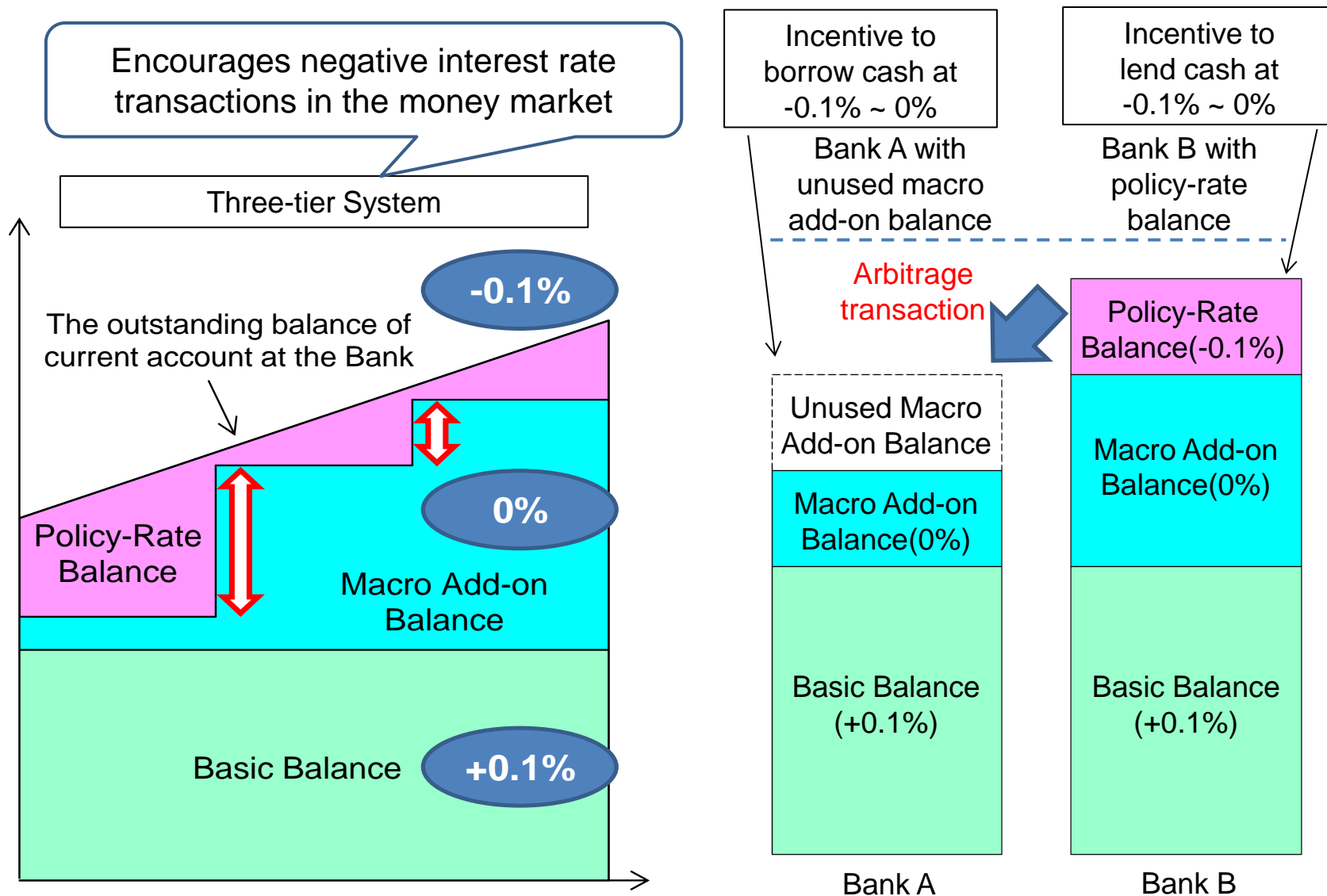
The Bank, under the condition that yield curve control can be conducted appropriately, reduces the size of the Policy-Rate Balance in financial institutions' current account balances at the Bank -- to which a negative interest rate is applied -- from the current level of about 10 trillion yen on average.



Achieving the price stability target of 2 percent at the earliest possible time while securing stability in economic and financial conditions.

II. Three-tier System and Money Markets (1)

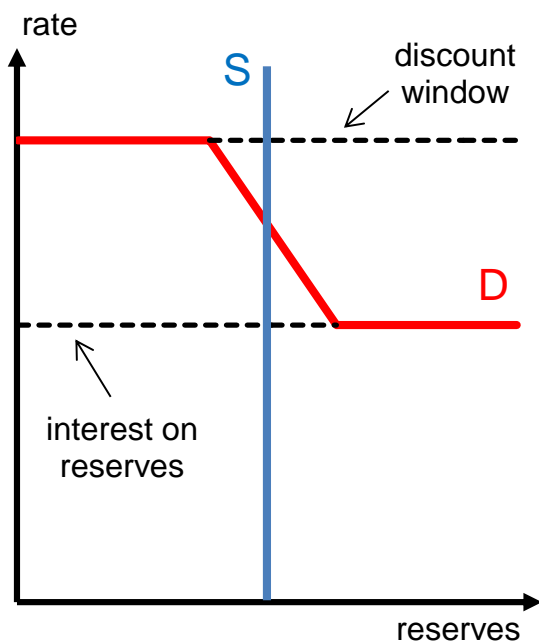
-Three-tier System and Arbitrage Transactions



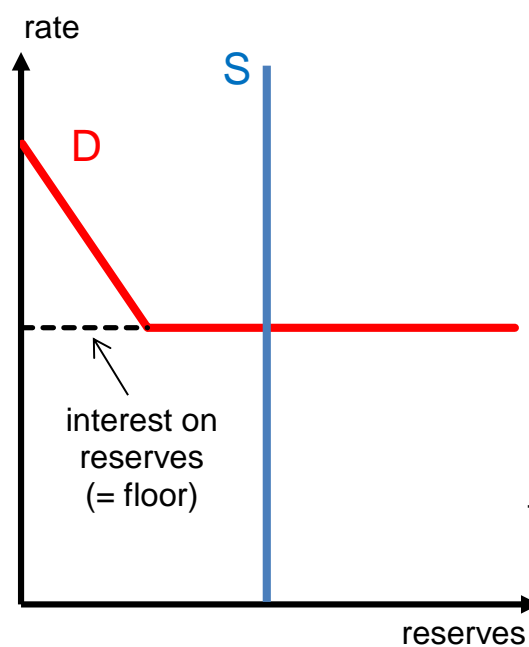
II. Three-tier System and Money Markets (2)

-Reserve Demand Curve

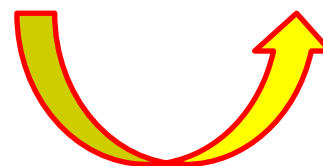
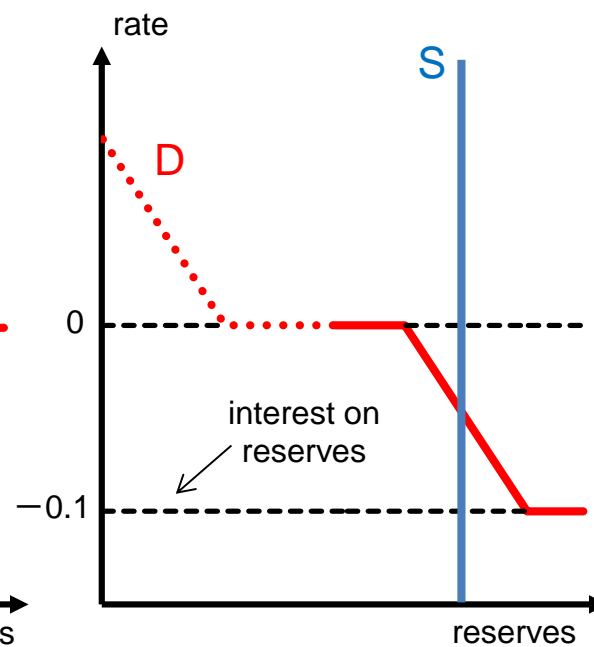
Corridor System



Floor System



Negative Interest Rates with Three-tier System



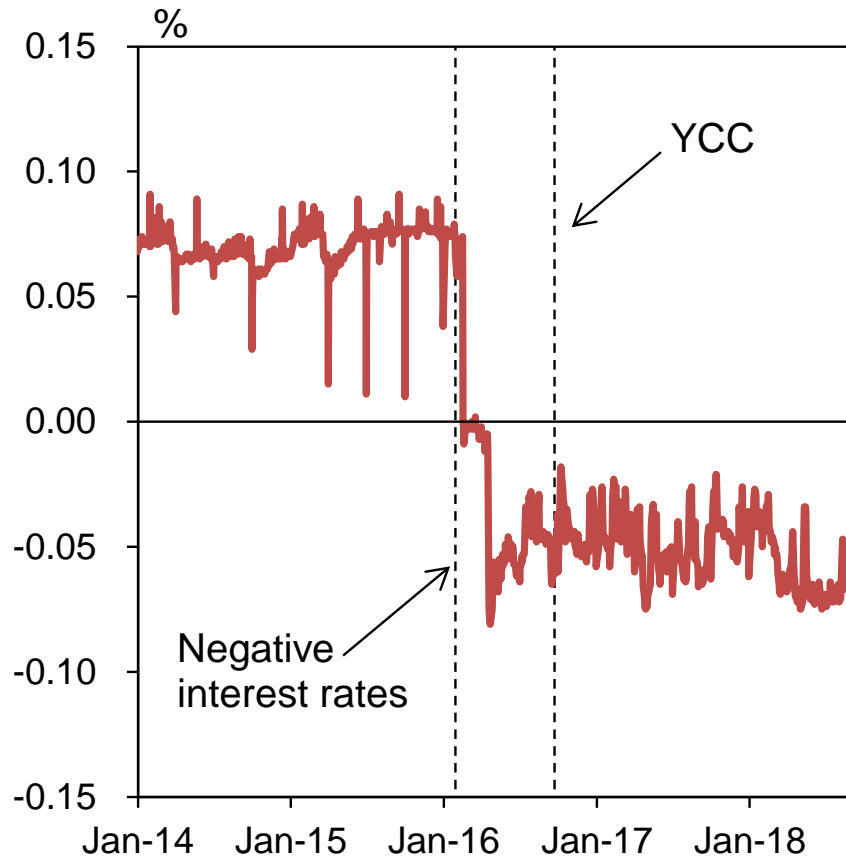
III. Role of Money Markets

1. Formation of Short-term Interest Rates
2. Transmission to the Yield Curve
3. Provision of Safe Assets
 - Global Linkage of Money Markets

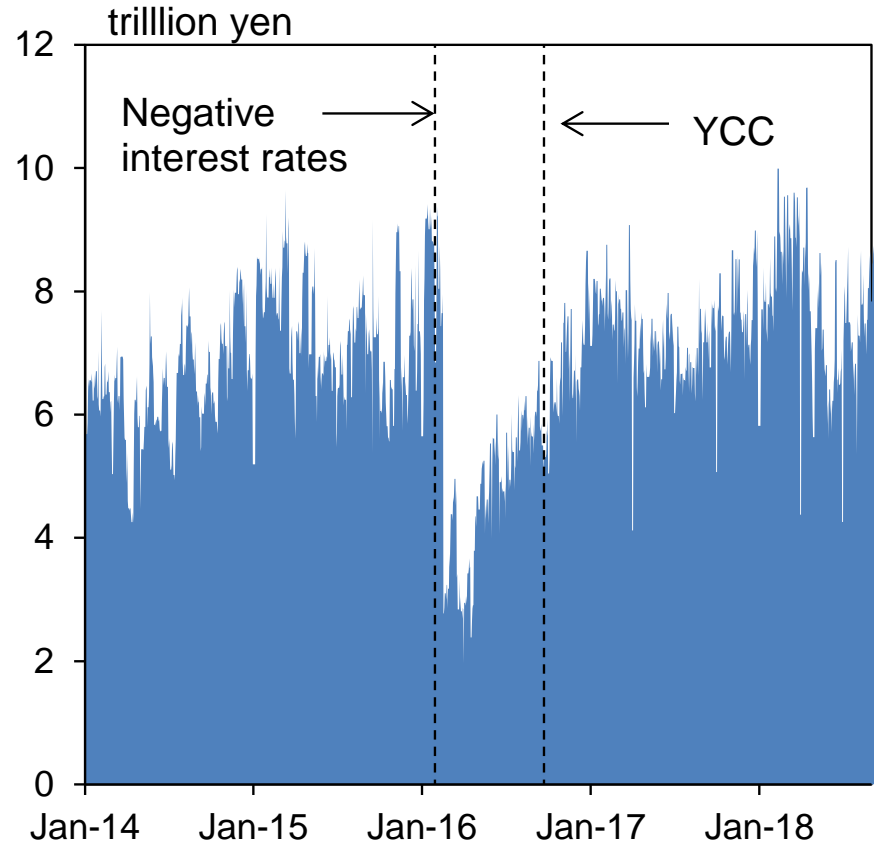
III-1. Formation of Short-term Interest Rates

-Call Market Transactions (1)

Uncollateralized O/N Call Rate



Amounts outstanding in Uncollateralized Call Market



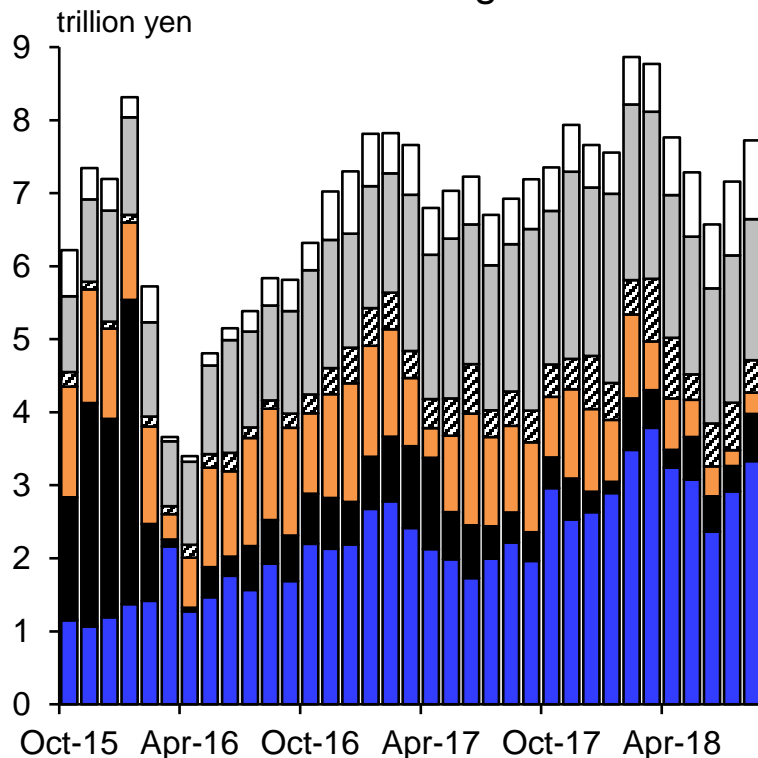
Note: Latest data are as of end-August, 2018.

Sources: Bank of Japan

III-1. Formation of Short-term Interest Rates

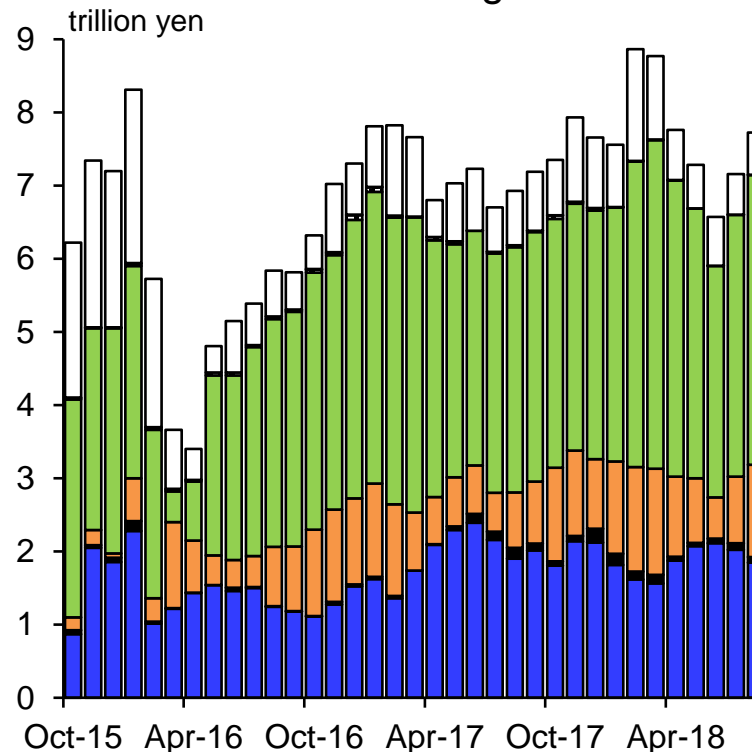
-Call Market Transactions (2)

- Amounts Outstanding in the Uncollateralized Call Market by Sector -
 - Cash Borrowing Side -



- Others
- Securities companies
- Foreign banks
- Trust banks (excluding investment trust)
- City banks
- Regional banks I and II

- Cash Lending Side -



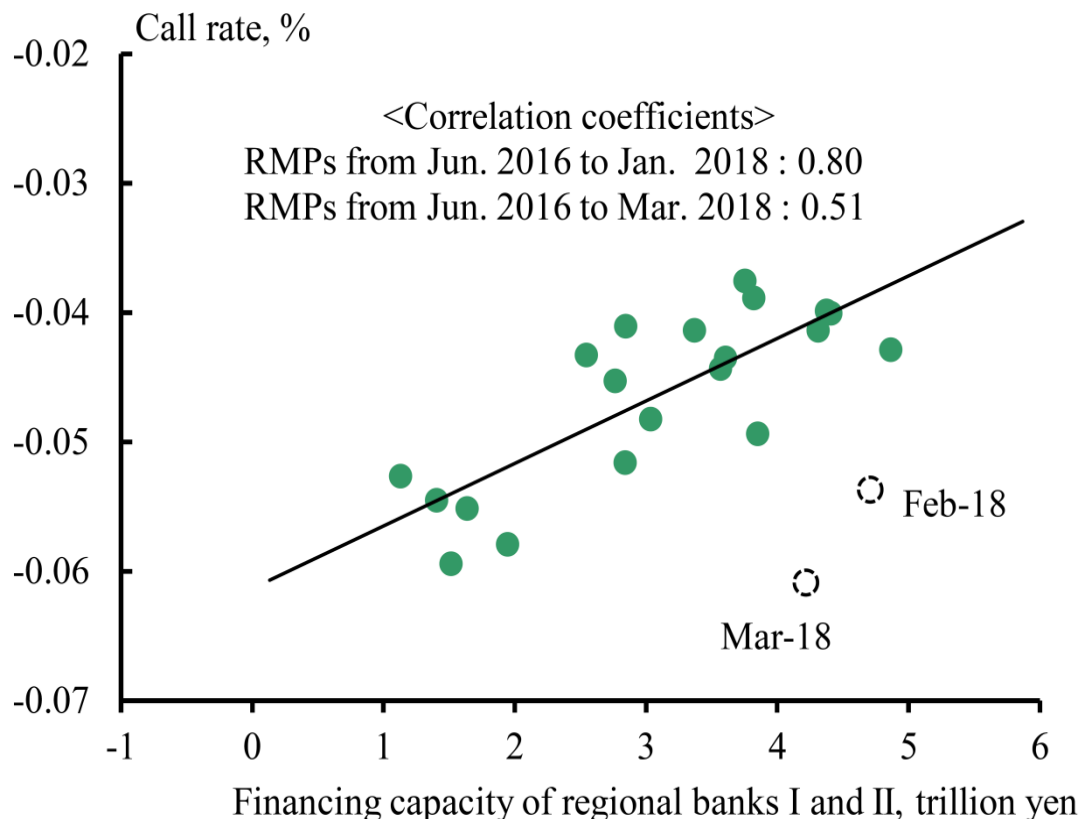
- Others
- Securities companies
- Foreign banks
- Investment trusts
- Trust banks (excluding investment trust)
- City banks
- Regional banks I and II

Note: Monthly average.
 Source: Bank of Japan

III-1. Formation of Short-term Interest Rates

-Call Market Transactions (3)

- Relationship between “Financing Capacity” and Call Rate -



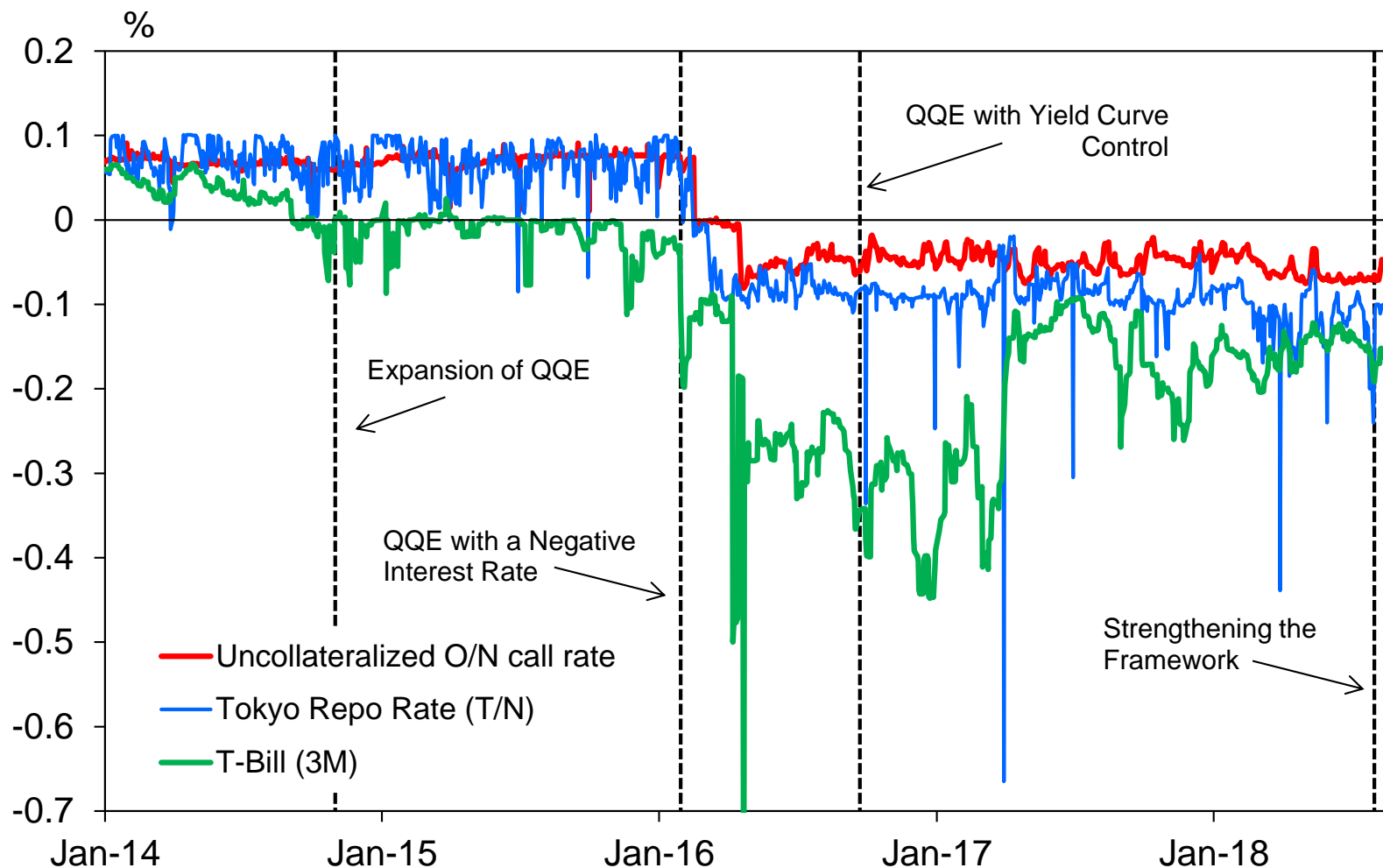
Notes: 1. Retroactive data before the June 2016 reserve maintenance period are not available due to data constraints.

2. “Financing Capacity” is calculated by deducting the balances of current accounts held by regional banks I and II (= the largest cash borrowers in the uncollateralized call market) at BOJ before trade in the uncollateralized call market from the upper bound on their basic balances and macro add-on balances.

Source: Bank of Japan

III-2. Transmission to the Yield Curve (1)

- Arbitrage among Money Market Instruments



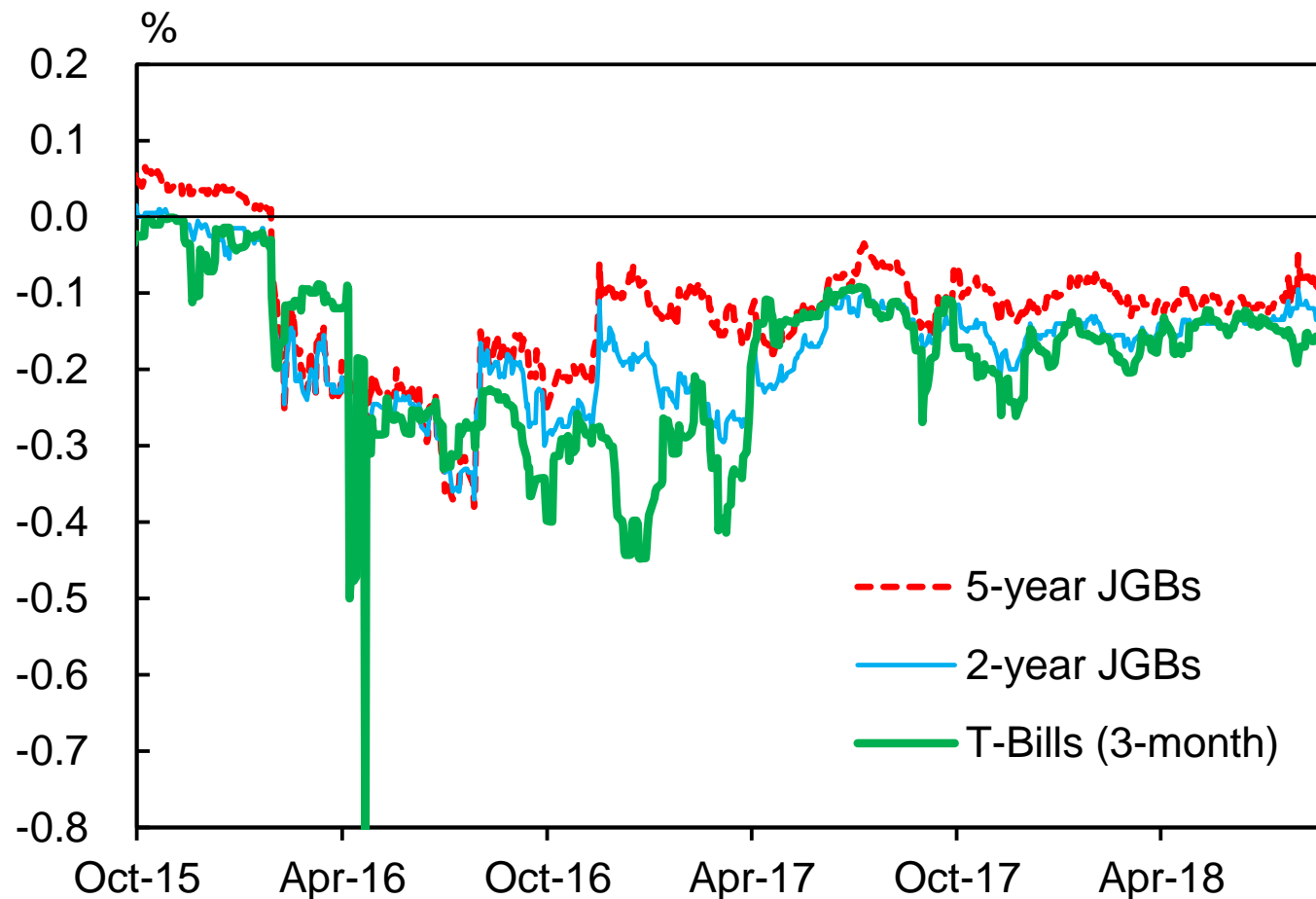
Note: Latest data are as of end-August 2018.

Source: QUICK, Japan Securities Dealers Association, Bank of Japan

III-2. Transmission to the Yield Curve (2)

- Transmission to Short-term JGBs

- Yields on T-Bills and Mid-term JGBs -

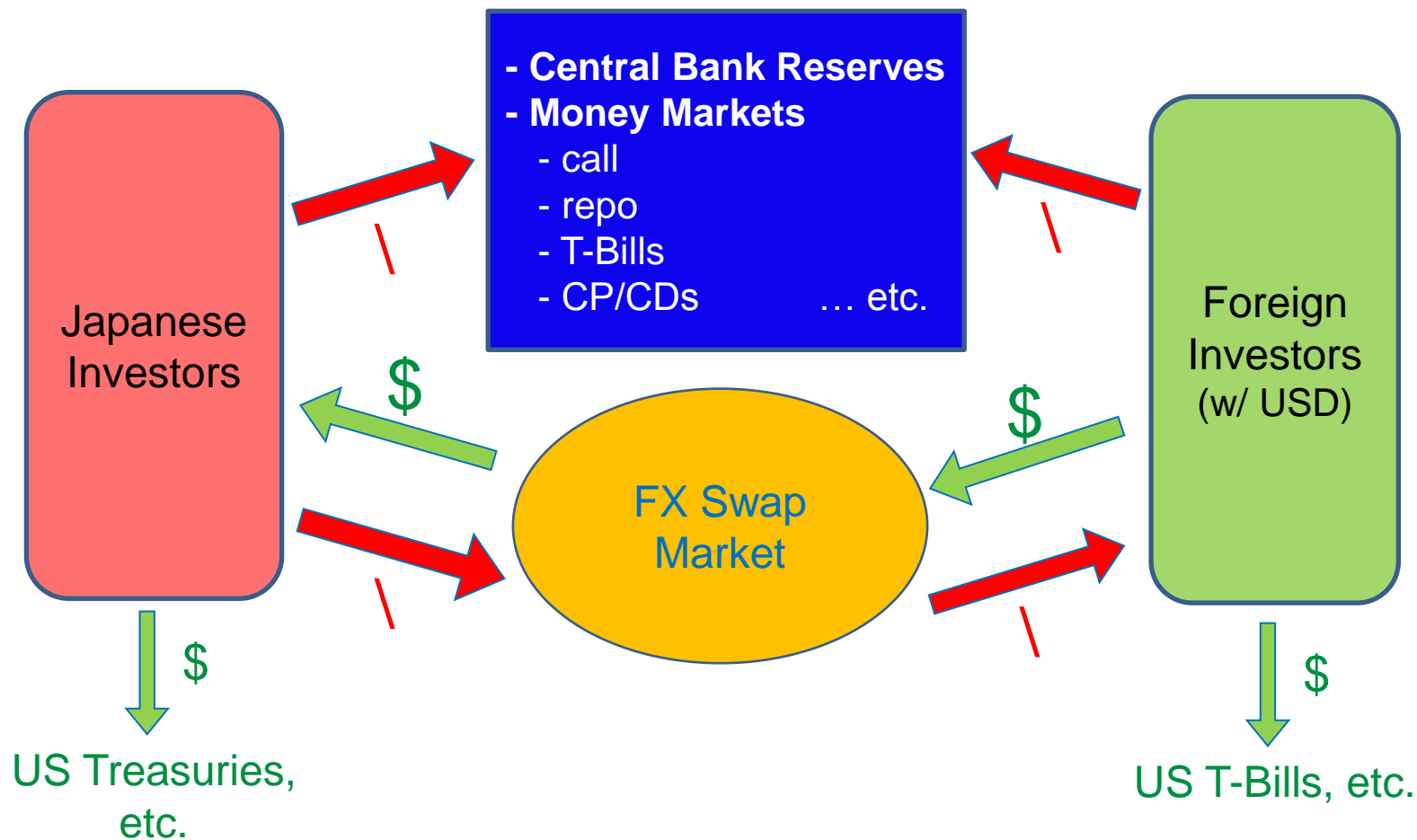


Note: Latest data are as of end-August 2018.

Source: QUICK

III-3. Provision of Safe Assets (1)

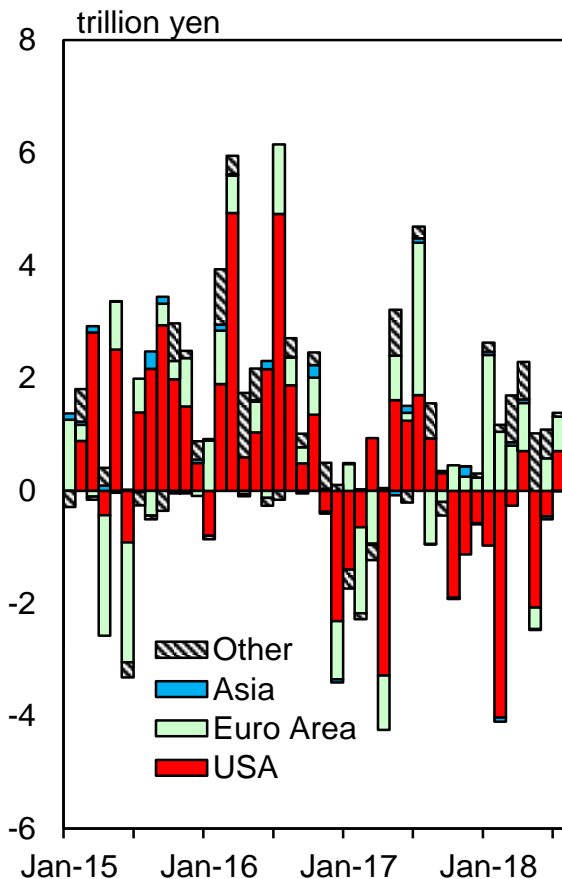
- Money Markets and FX Swap Market



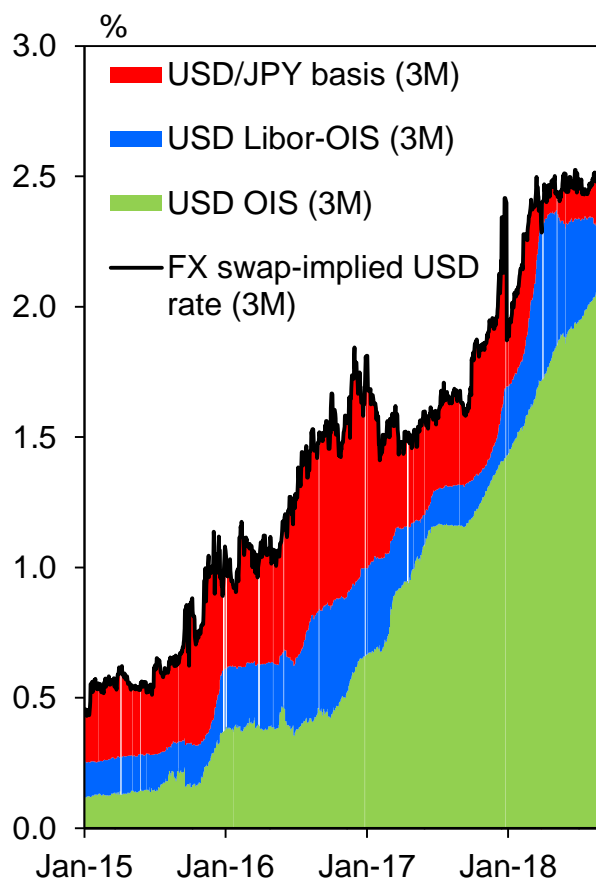
III-3. Provision of Safe Assets (2)

- FX Swap Market and Outward Investments

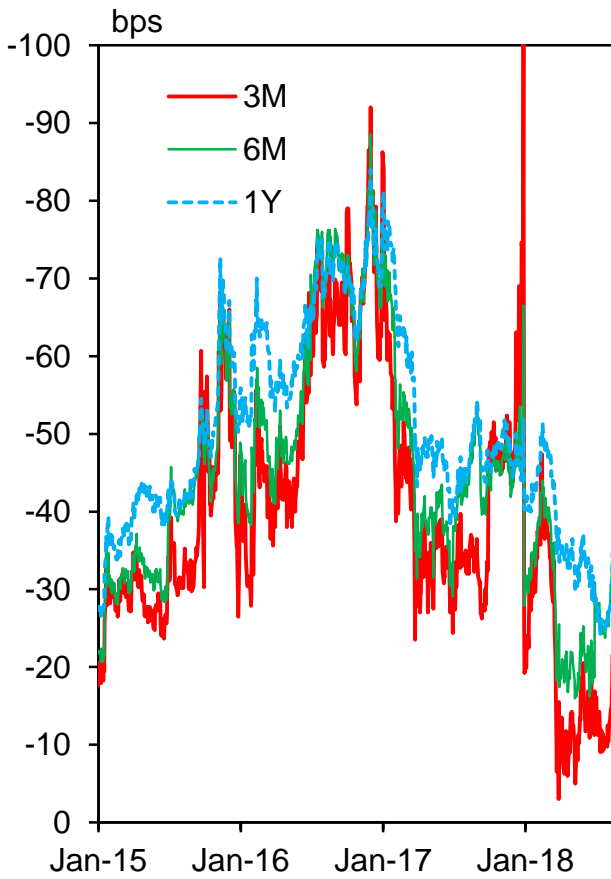
- Japan's Outward Investments -
(long-term debt securities)



- FX swap-implied USD rate -
(USD/JPY, 3M)



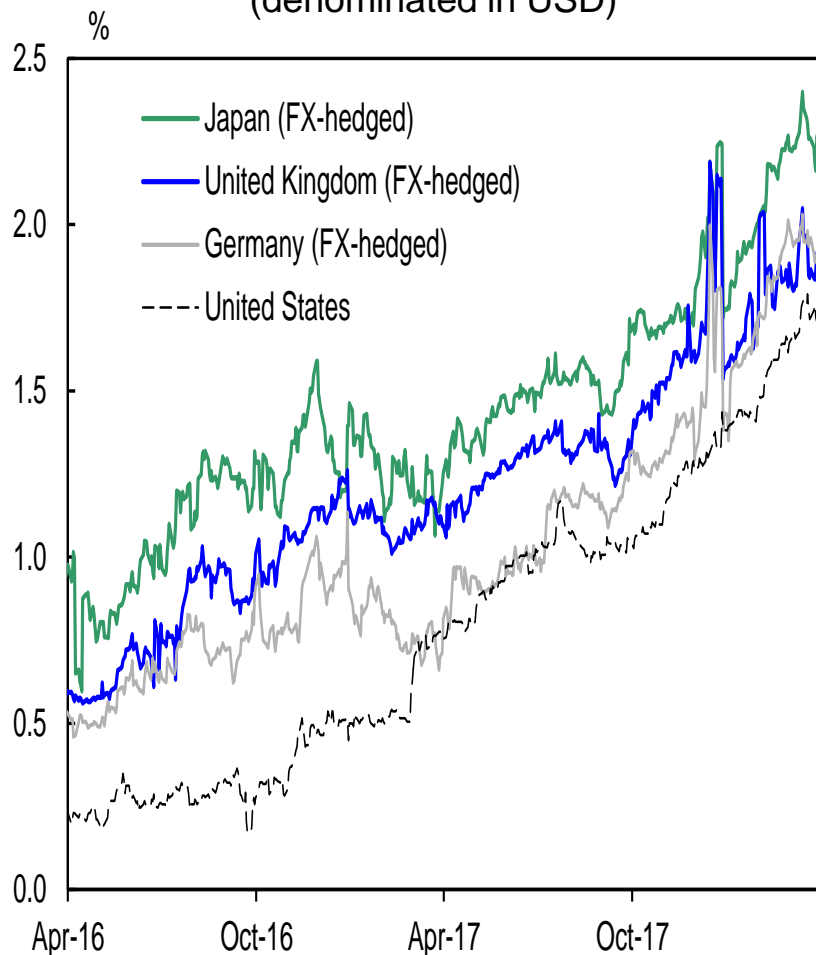
- XCCY basis premiums -
(USD/JPY)



Note: Latest data are as of end-July 2018 (left panel) or end-August 2018 (middle, right panel).
 Source: Bloomberg, Bank of Japan

III-3. Provision of Safe Assets (3)

- T-Bills (3M) Yields of Major Countries -
 (denominated in USD)

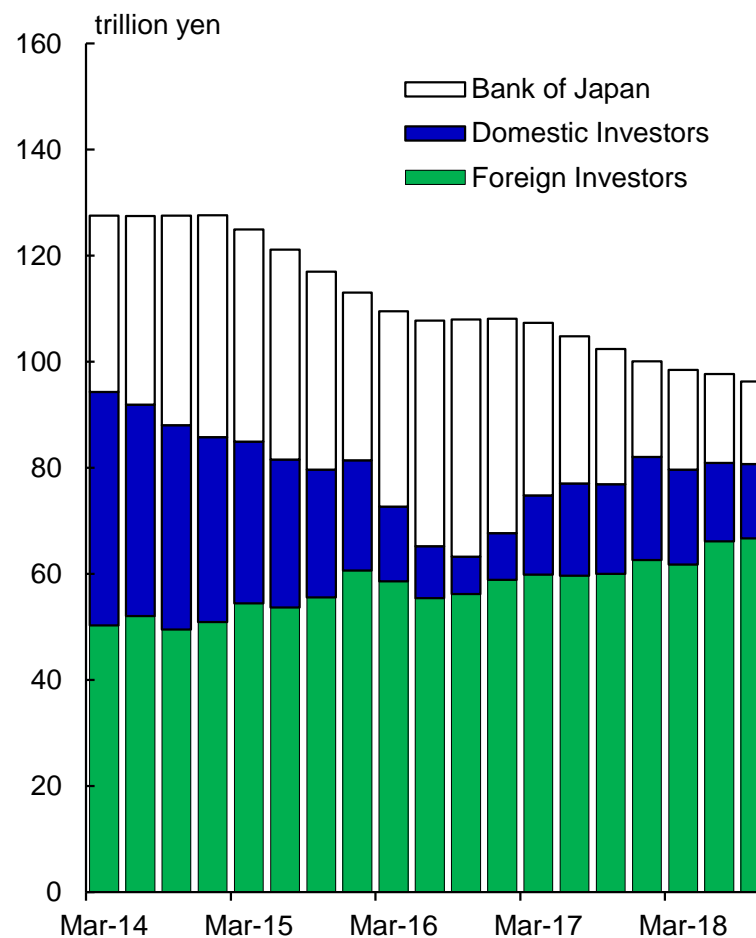


Notes: 1. FX-hedged yields are returns on investments in T-Bills/Bills with local currencies raised through FX swap transactions (proving U.S. dollars).

2. Latest data are as of end-March 2018.

Source: Bank of Japan

- T-Bills Holdings by Entity -

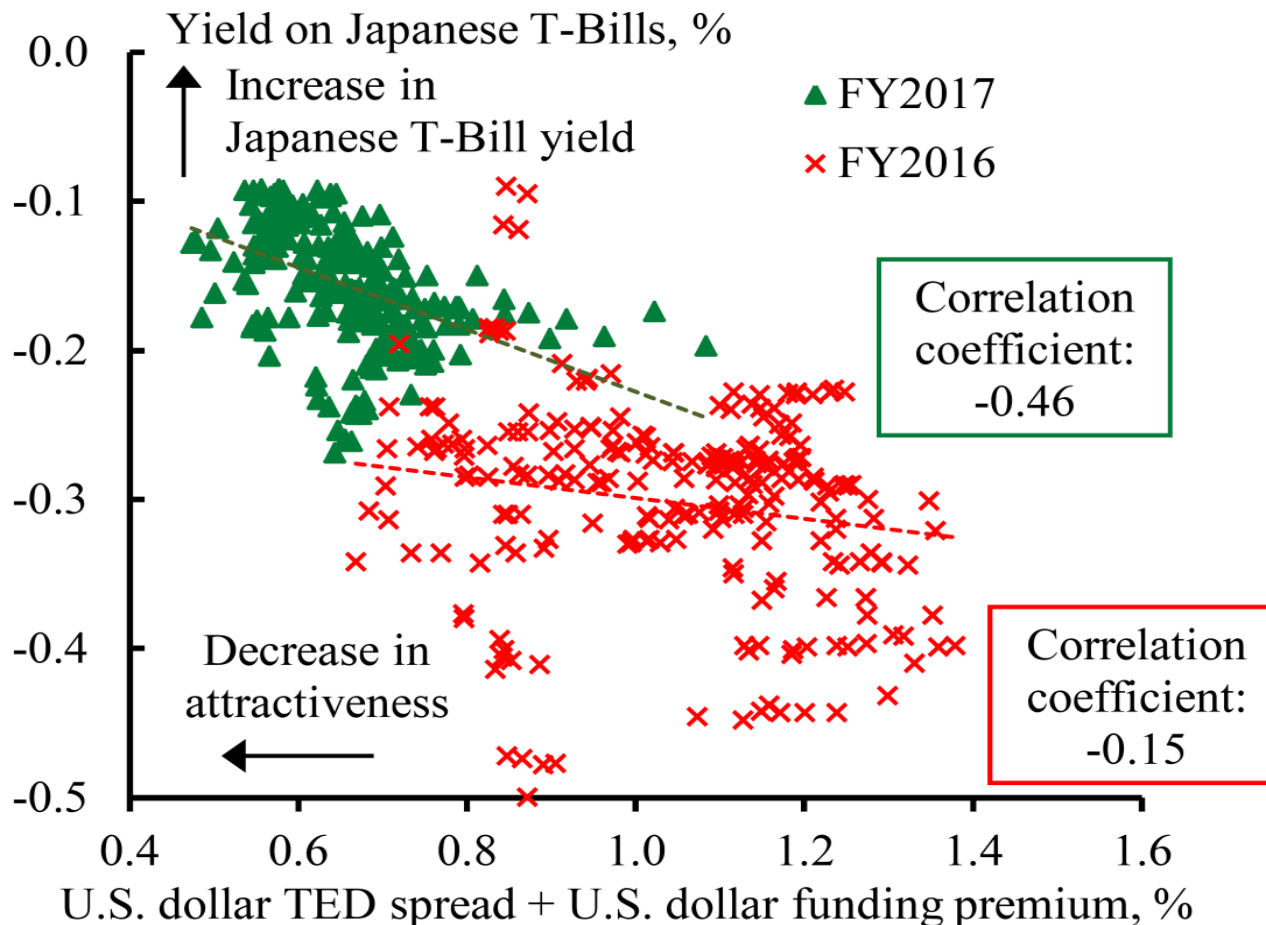


Note: Latest data are as of end-August 2018.

Source: Ministry of Finance, Bank of Japan

III-3. Provision of Safe Assets (4)

- Attractiveness of T-Bills and Changes in Yield -



Note: 3-month yields.
Source: Bank of Japan

IV. Closing

- ✓ Even under unconventional monetary policies (abundant reserves, negative rates), money markets can stay active with appropriate framework alignment (i.e. Three-tier System)
- ✓ Money markets formulate short-term interest rates as monetary policy intends
- ✓ Money markets serve as an important bridge to the yield curve
- ✓ Money markets link globally via the USD funding market