

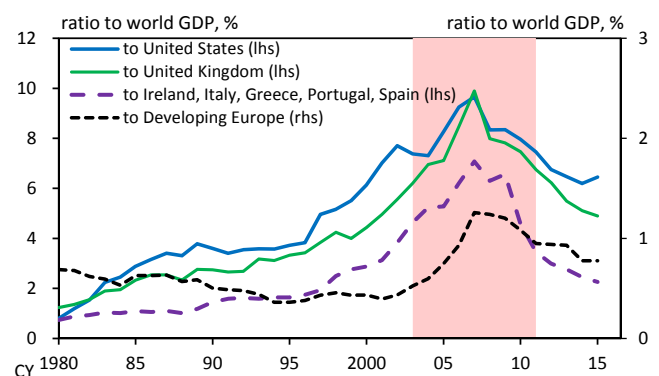
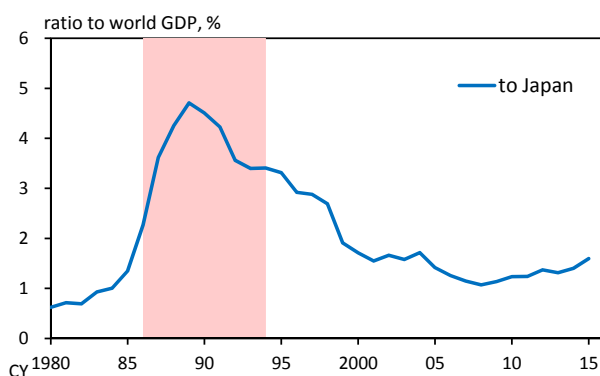
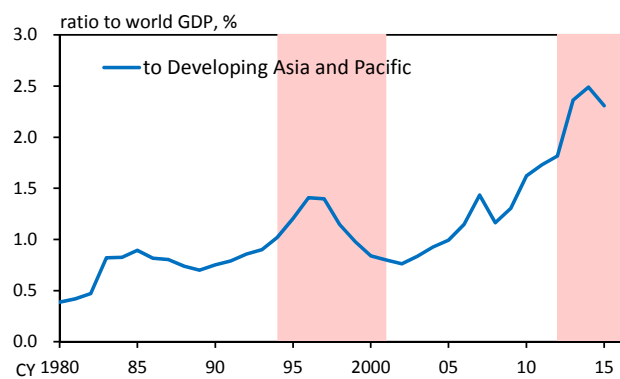
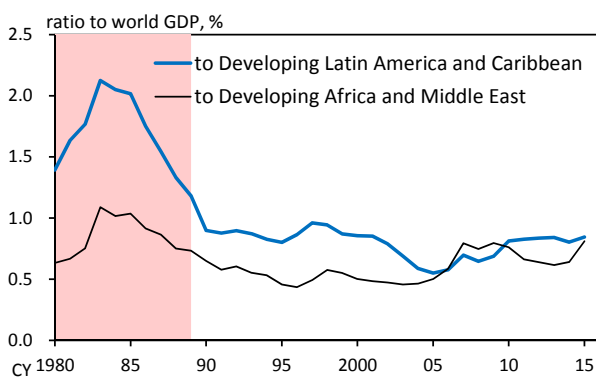
Monetary Policy Divergence and Global Financial Stability: From the Perspective of Demand and Supply of Safe Assets

January 20, 2017

*Speech at a Meeting Hosted by
the International Bankers Association of Japan*

Hiroshi Nakaso
Deputy Governor of the Bank of Japan

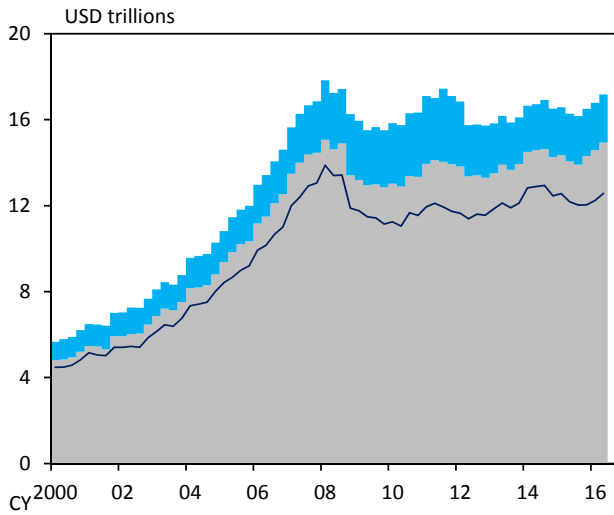
Chart 1 Cross-Border Claims of Banks in the World by Residence of Counterparty



Notes: 1. Latest data as at end-December 2015.
2. Shaded areas indicate major credit cycle phases.
Sources: BIS; IMF.

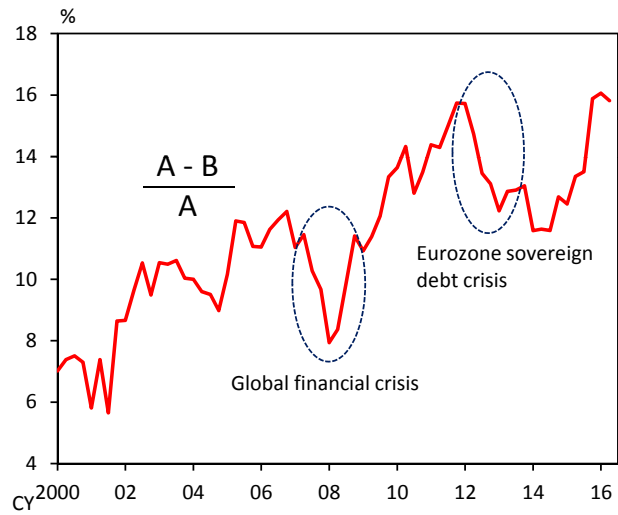
Chart 2 USD-Denominated Foreign Positions of Banks

U.S. and non-U.S. banks' USD-denominated foreign claims



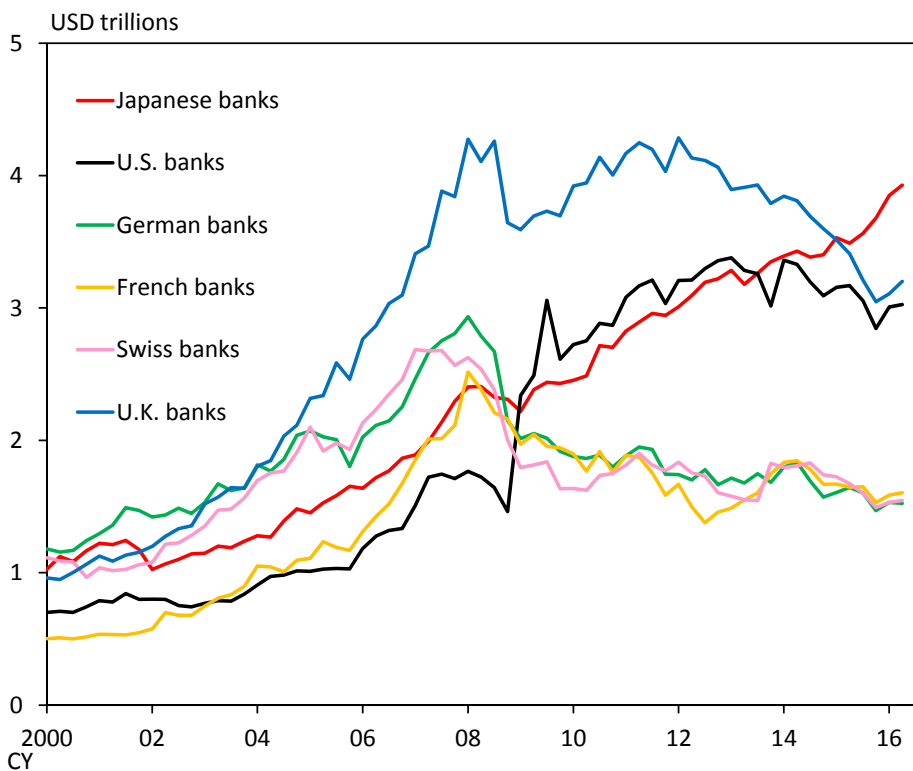
- U.S. banks' USD-denominated foreign claims
- Non-U.S. banks' USD-denominated foreign claims (A)
- Non-U.S. banks' USD-denominated foreign liabilities (B)

Non-U.S. banks' cross-currency funding ratio



Notes: 1. Latest data as at end-June 2016.
 2. "Non-U.S. banks' USD-denominated foreign claims" and "Non-U.S. banks' USD-denominated foreign liabilities" are calculated as USD-denominated foreign claims and liabilities of all reporting countries after excluding those of U.S. banks, respectively.
 3. "Non-U.S. banks' cross-currency funding ratio" is calculated as "Non-U.S. banks' USD-denominated foreign claims" less "Non-U.S. banks' USD-denominated foreign liabilities," divided by "Non-U.S. banks' USD-denominated foreign claims."
 Source: BIS.

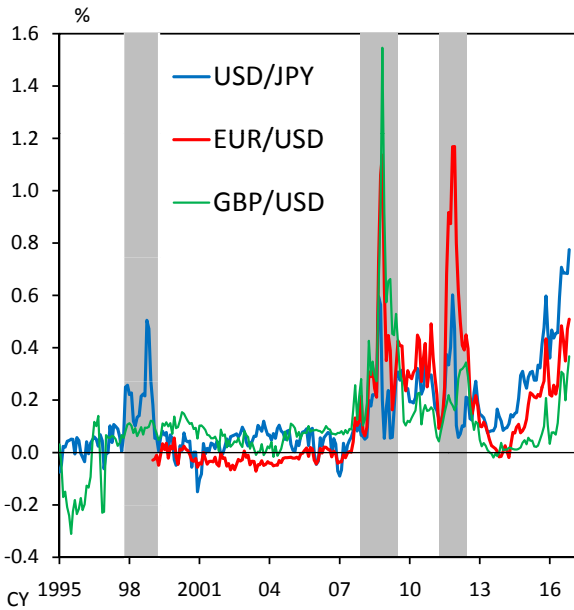
Chart 3 Foreign Claims by Bank Nationality



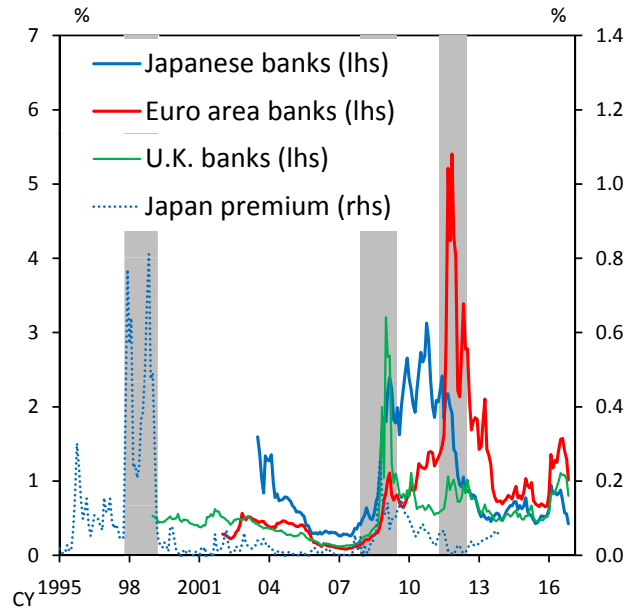
Notes: 1. Latest data as at end-June 2016.
 2. Euro area claims for German and French banks are excluded.
 Source: BIS.

Chart 4 FX Swap Implied USD Funding Rates and Banks' Creditworthiness

FX swap implied USD funding rates (Deviation from USD LIBOR)



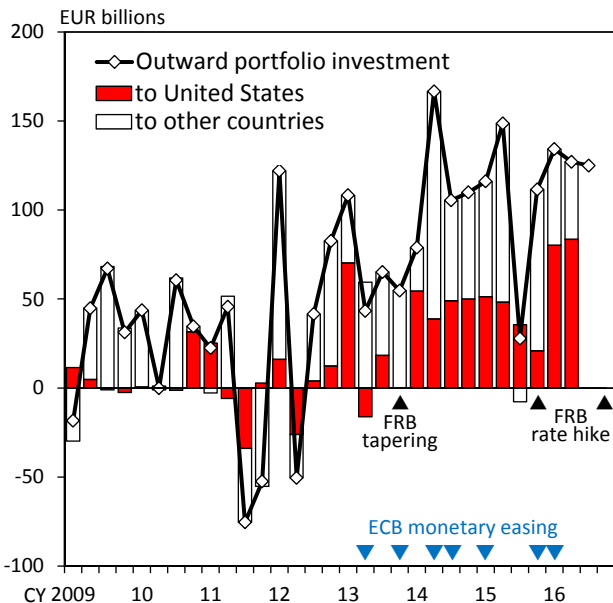
Non-U.S. banks' default probability (Expected Default Frequency)



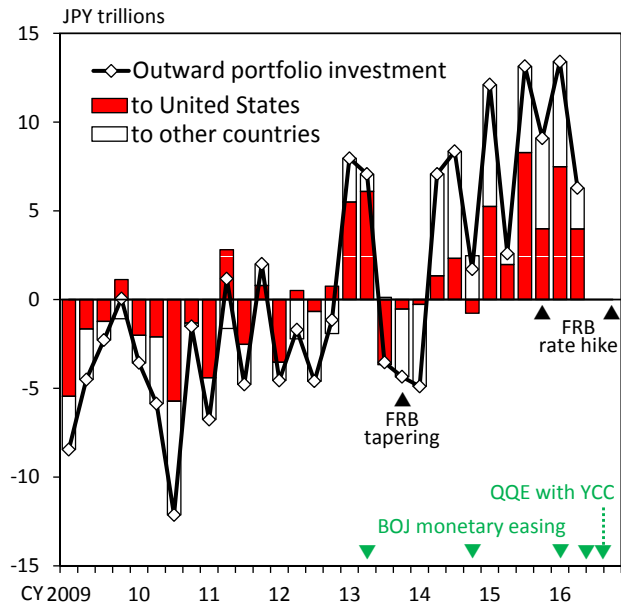
Notes: 1. Latest data as at November 2016.
 2. The shaded areas correspond to Japan's financial crisis (November 1997 through March 1999), the global financial crisis (December 2007 through June 2009), and the Eurozone sovereign debt crisis (May 2011 through June 2012).
 3. Non-U.S. banks' default probability is the average of the EDF (Expected Default Frequency) of G-SIBs that are headquartered in each jurisdiction. "Japan Premium" is calculated as 3-month USD TIBOR less 3-month USD LIBOR.
 Sources: Bloomberg; Moody's; BOJ.

Chart 5 Outward Portfolio Investment (Euro Area and Japan)

Euro area



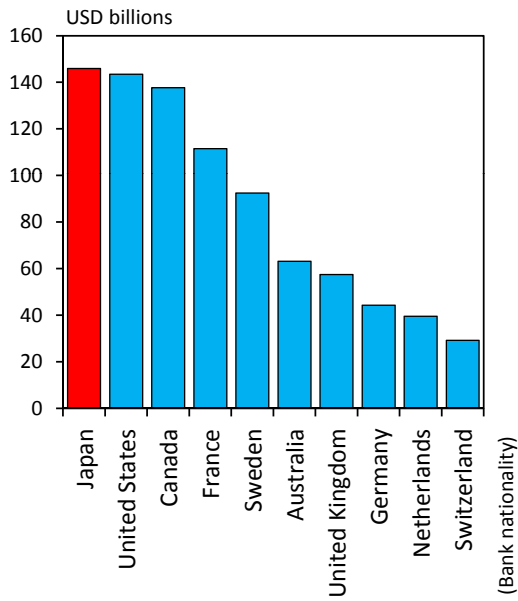
Japan



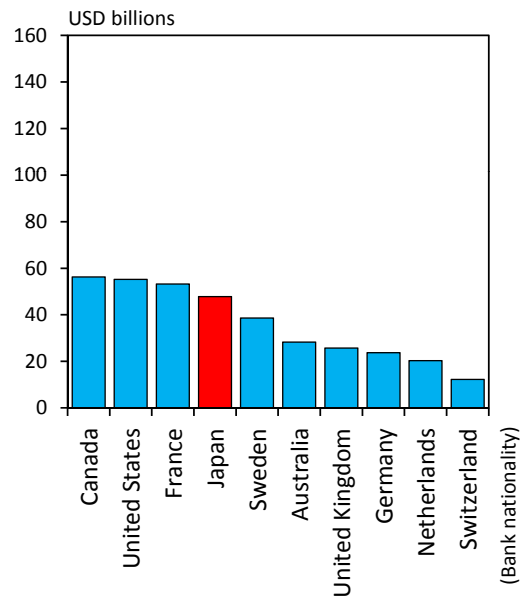
Notes: 1. Latest data for euro area as at end-September 2016, data for Japan as at end-June 2016.
 2. In each chart, ▲/▼ indicates the timing and direction of monetary policy changes since 2013.
 Sources: ECB; Ministry of Finance; BOJ.

Chart 6 Prime MMF Holdings of Bank Related Securities

As at end-June 2016



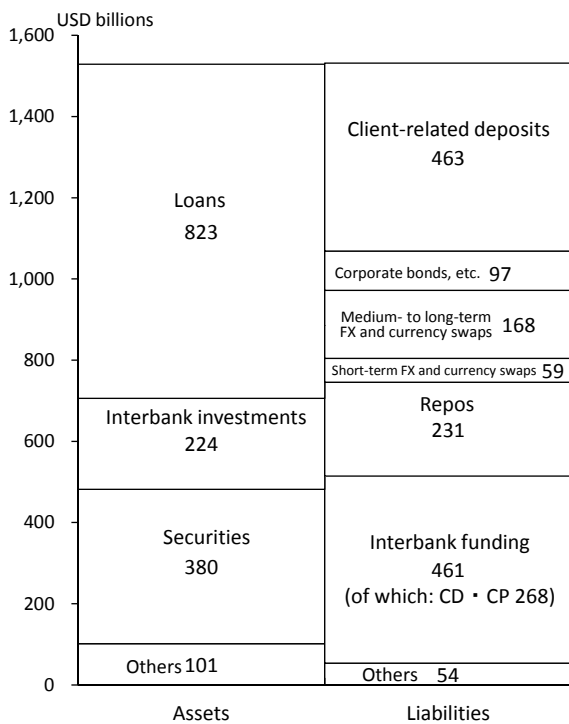
As at end-October 2016



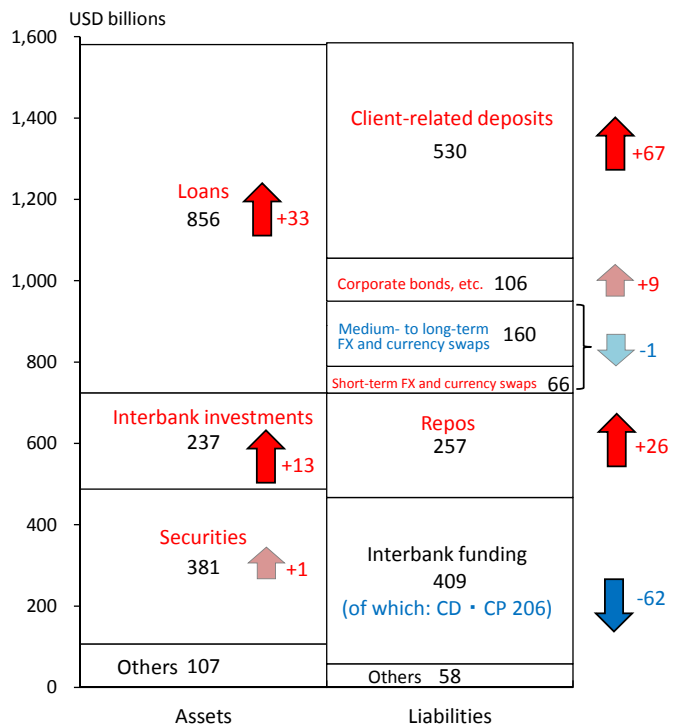
Note: Prime MMF holdings of bank related securities are aggregated by country based on the location of banks' global headquarters. "Australia" includes New Zealand. Source: SEC.

Chart 7 Japanese Major Banks' Foreign Currency Denominated Balance Sheet

As at end-March 2016



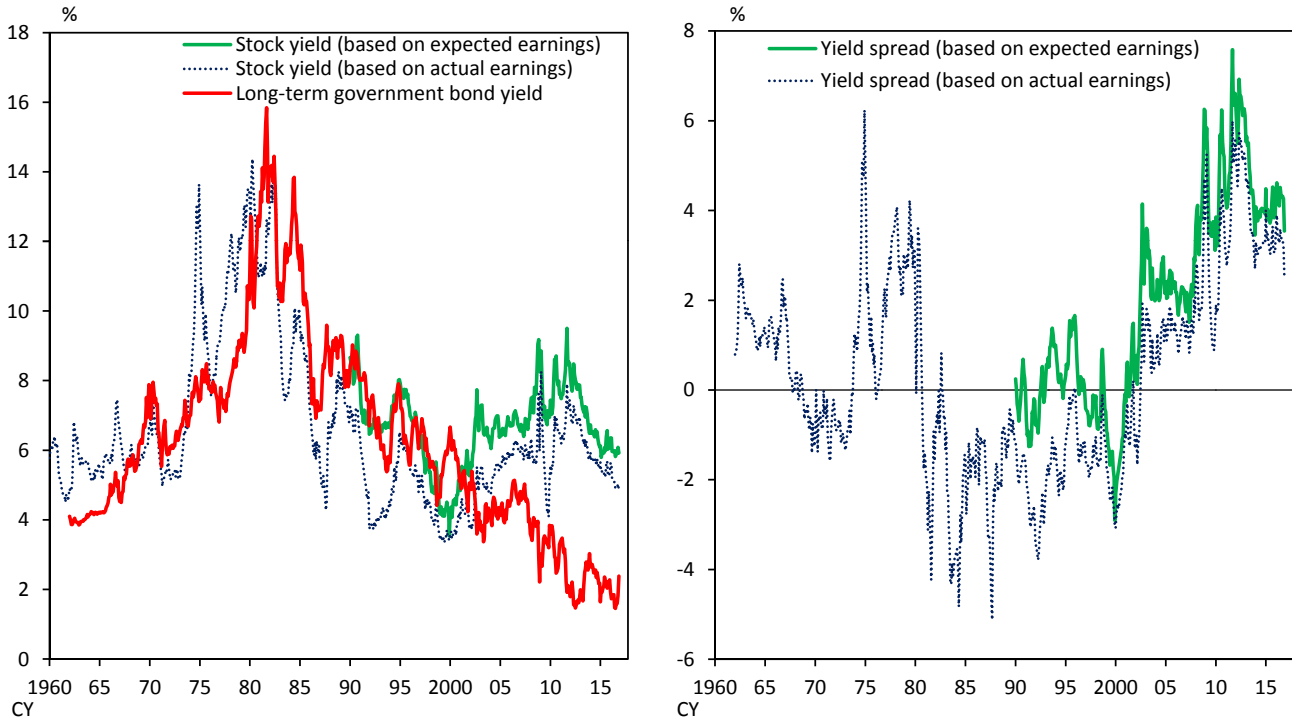
As at end-October 2016



Note: The charts include major banks classified as internationally active banks. Source: BOJ.

Chart 8

U.S. Yield Spreads

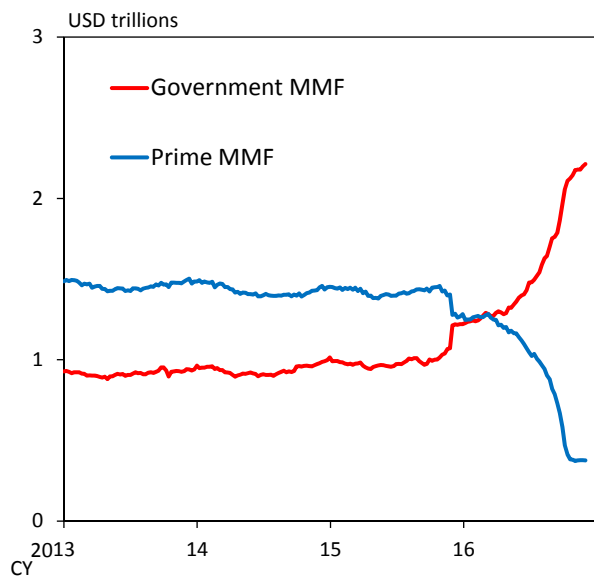


Notes: 1. Latest data as at end-November 2016.
 2. Stock yield = EPS / stock price. "Stock yield (based on expected earnings)" is calculated using EPS (forward twelve months), "Stock yield (based on actual earnings)" is calculated using EPS (trailing twelve months). Yield spread = Stock yield - Long-term government bond yield.
 3. S&P 500 for stock price; U.S. 10-year government bond for long-term government bond yield.
 Source: Bloomberg.

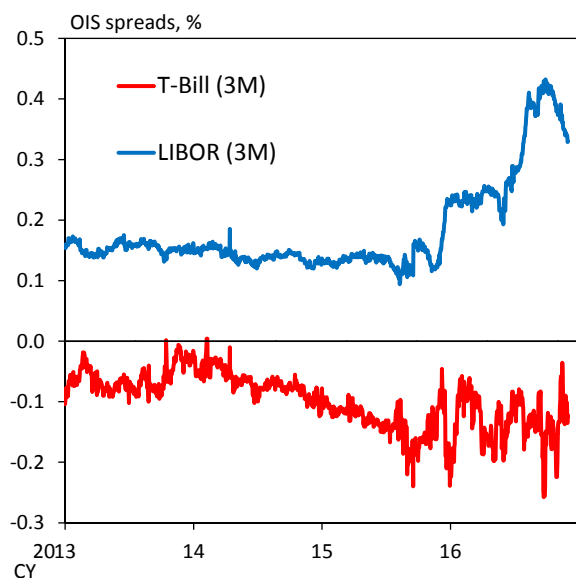
Chart 9

The Impact of U.S. MMF Reform

MMF assets



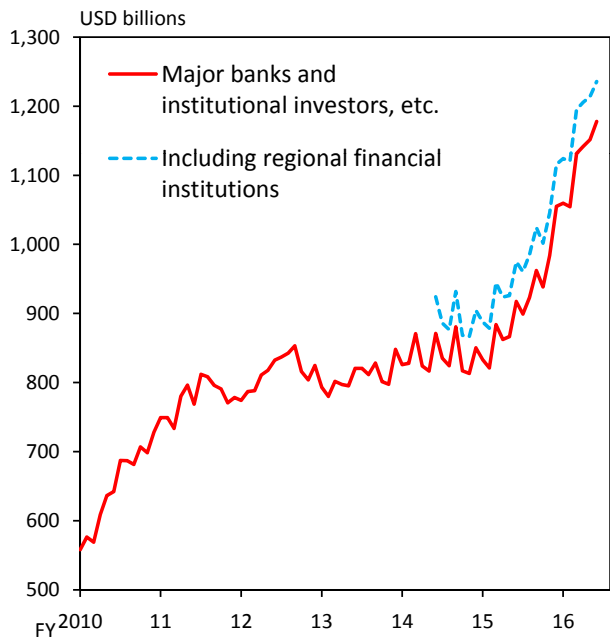
U.S. short-term rates



Note: Latest data as at end-November 2016.
 Source: Bloomberg.

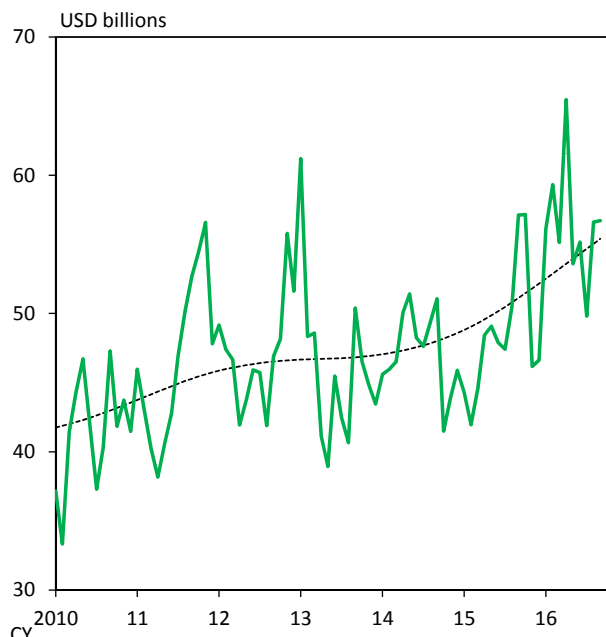
Chart 10 Amount of Foreign Currency Funding and FX Swap Transaction Volume

Amount of foreign currency funding via FX swaps and currency swaps by Japanese financial institutions



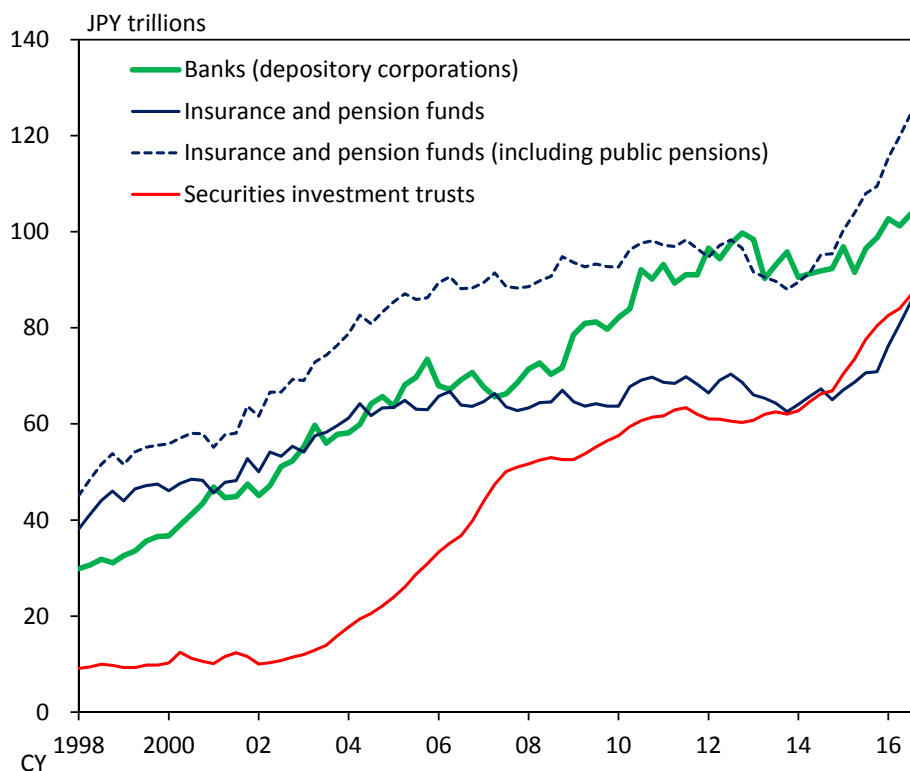
Notes: 1. Estimates by the BOJ. Latest data as at end-September 2016.
 2. "Major banks and institutional investors, etc." includes major banks, depository institutions with a particular focus on market investment, and life insurance companies.
 Sources: Bloomberg; The Life Insurance Association of Japan; Published accounts of each company; BOJ.

Transaction volume in the FX swap market (USD/JPY) via Tokyo FX market brokers



Notes: 1. Latest data as at September 2016.
 2. Average transaction volume for each business day (includes outright forwards).
 3. Trends are calculated using the two-sided HP filter.
 Source: BOJ.

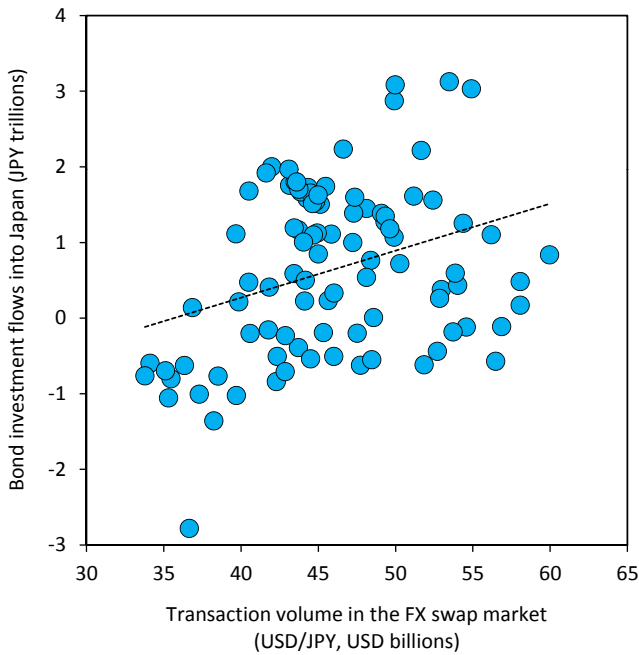
Chart 11 Japanese Financial Institutions' Outward Investments in Foreign Securities



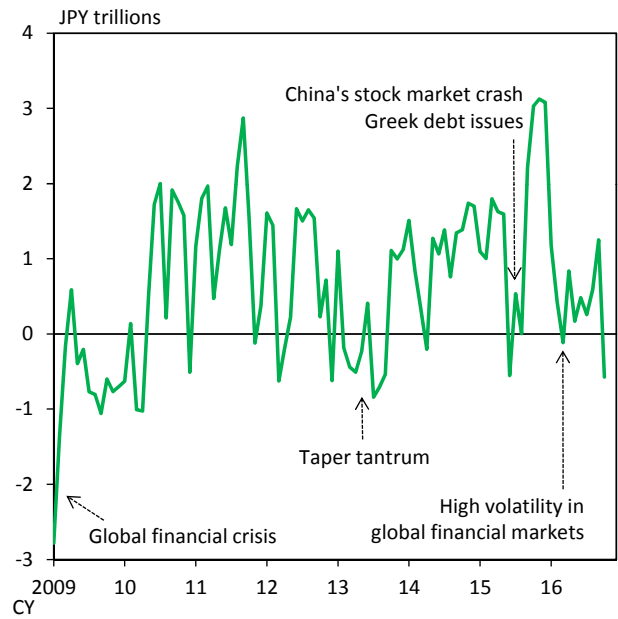
Notes: 1. Latest data as at end-September 2016.
 2. The amounts are calculated by adding the flow during each period to the stock as at end-December 1997, to adjust for the impact of exchange rate fluctuations.
 Source: BOJ.

Chart 12 Transaction Volume in the FX Swap Market and Bond Investment Flows

Scatter plot (CY2009 - CY2016)



Bond investment flows into Japan



Notes: 1. Latest data as at October 2016.
 2. Figures are 3-month backward moving averages.
 3. The transaction volume in the FX swap market (USD/JPY) is the average (via Tokyo FX market brokers) for each business day and includes outright forwards.
 Sources: Ministry of Finance; BOJ.

Chart 13 Global Liquidity Amplification Mechanism through the FX Swap Market

