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Bank of Japan

**Japan's Economy and Monetary Policy
in an Increasingly Integrated Asia**

Speech at the Penang Economic Conference in Malaysia

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I. Introduction

Good morning. It is a great honor to be here today at the Penang Economic Conference. Although I have often visited other places in Malaysia, this is my first time in Penang, so I am really looking forward to learning from you about this region. In my presentation today, I will focus on Japan's recent monetary policy as well as the implications for the rest of Asia. Some of you may know that the Bank of Japan introduced a new monetary policy called *Quantitative and qualitative monetary easing* (QQE) at the Monetary Policy Meeting held on April 3 and 4, 2013. So I would like to take this opportunity to speak to you about our policy to promote understanding of the situation of the Japanese economy.

II. The Features of Quantitative and Qualitative Monetary Easing (QQE) and the Transmission Mechanism

First of all, I would like to point out that Japan has suffered from a long-standing negative output gap and mild deflation over nearly the entire period since the second half of the 1990s. Some may find it difficult to understand why achieving even a degree of small inflation is such a challenging task. Japan is unique in the sense that such macroeconomic problems have not yet been overcome despite a series of accommodative monetary policy measures adopted previously. For this reason, in April the Bank introduced a new large-scale monetary policy framework, QQE, with the aim of achieving at the earliest possible time the 2 percent price stability target that had been adopted in January 2013 under the previous accommodative monetary policy regime, with a time horizon of about two years. Of course, a one-off achievement of the 2 percent target is not sufficient and the Bank intends to achieve the target stably in a favorable environment characterized by sustainable economic growth. Upon the introduction of QQE, the Bank made a commitment that it would continue with QQE as long as it is necessary to maintain the target in a stable manner. This is the so-called commitment to achieve the 2 percent target stably. I will now explain the essence of QQE by highlighting its three main characteristics and the transmission mechanism of monetary easing.

A. The Three Characteristics of QQE

The first characteristic of QQE is that the Bank designated the purchase of Japanese government bonds (JGBs) as the most important tool for achieving the 2 percent price stability target at the earliest possible time. Moreover, it was decided to extend the average remaining maturity of the Bank's JGB purchases from the original level of slightly under three years to about seven years (that is, six to eight years) by purchasing JGBs with

maturities of up to 40 years. The purpose is to exert further downward pressure on the entire yield curve. The yearly pace of increase in the amount outstanding of JGBs held by the Bank was set at about 50 trillion yen, and the increase will continue over two years, thereby doubling the amount outstanding from the end of 2012 to the end of 2014 (Chart 1). I believe that these changes constitute a considerable departure from previous practice both in terms of "quantity" (based on the size of the Bank's Asset Purchase Program) and "quality" (based on the maturity length).

The second characteristic of QQE is an increase in the purchase of two risk assets -- exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) -- since there is some room for further lowering of the levels of risk premia (that is, the expected excess returns demanded by investors relative to safe assets) and it is thought that the purchase of the two risk assets will have a large economic impact. Considering the market size and the risk volume borne by the Bank, the yearly purchase amount of ETFs and J-REITs was set at about 1 trillion yen and 30 billion yen, respectively. This would double the amount outstanding of ETFs held by the Bank from the end of 2012 to the end of 2014.

The third characteristic of QQE is an emphasis on the expectations of markets, firms, and households -- particularly medium- to long-term inflation expectations -- as one of the most important channels for achieving the 2 percent target. If firms and households expect inflation to rise in the medium to long term, this may positively affect the current levels of sales prices and wages. Moreover, as long as the pace of increase in inflation expectations exceeds that in long-term nominal interest rates, long-term interest rates in real terms will decline and thus support an accommodative monetary environment. Aiming to raise medium- to long-term inflation expectations, the Bank decided to change the main operating target for money market operations from the *uncollateralized overnight call rate* (that is, interest rates) to the *monetary base* (that is, "quantity"), with the aim of communicating to the public in a clear and intelligible manner. On this basis, it was decided that the monetary base should rise at an annual pace of about 60-70 trillion yen over two years; this would double the amount outstanding from 138 trillion yen at end-2012 to about 200 trillion yen at end-2013 and to 270 trillion yen at end-2014 (Chart 1). The last figure would account for nearly 60 percent of nominal GDP -- far above the levels of other advanced economies.

B. Transmission Mechanism for Achieving the 2 Percent Target under QQE

Regarding the transmission mechanism of monetary easing under QQE on economic activity, three channels have been considered. In terms of the first channel, the purchase of assets continues to exert downward pressure on long-term nominal interest rates and the risk premia of risk asset prices. This channel would contribute to increasing firms' and households' investment and consumption activities through (1) a decline in the funding costs of firms and households, (2) improvement in the balance sheets of firms and financial institutions, and (3) the wealth effect of households. In terms of the second channel, the continuation of JGB purchases by the Bank may encourage investors and financial institutions to shift some of their portfolios to risk assets as they adjust some of their asset management policies away from deflation-oriented strategies. This so-called portfolio rebalance effect may generate some risk money that could be allocated to viable, innovative emerging or growing firms, strengthening the growth potential of the Japanese economy. In terms of the third channel, increases in medium- to long-term inflation expectations are expected to lead to a decline in long-term interest rates in real terms. In addition, the anticipation of higher inflation may hasten firms' business investment and households' durable goods consumption as well as residential investment.

Through these three channels, an expansion of aggregate demand, an improvement in the output gap, and a rise in medium- to long-term inflation expectations are likely to take place, thereby raising the rate of actual price changes. Personally, I see the second channel, which would induce some degree of risk-taking, as essential to invigorate the Japanese economy. In the face of the deflation mindset that currently prevails, the opportunity cost of holding cash is so low that risk money is hardly generated, thereby restraining the allocation of funds to new business investment, research and development, or the promotion of entrepreneurs. This is one of the main reasons why the Bank decided to introduce QQE, hoping to affect investment strategies and corporate price-setting behavior that have been accustomed to deflation. Moreover, lowering long-term interest rates in real terms by raising inflation expectations is a new element of the Bank's monetary policy, and is important to raise aggregate demand. Indeed, while different indicators may show different results, interest rates in real terms appear likely to have declined in recent months (Chart 2).

III. Impact of QQE on Japan's Financial and Capital Markets and on Asia

Following the introduction of QQE in early April, volatility increased in Japan's financial and capital markets, particularly in the JGB market, followed by increased volatility in the

stock and foreign exchange markets. Here, I would like to talk about factors related to these movements, especially with regard to the JGB market (although some signs of stabilization have been observed more recently), in addition to the impact of QQE on Asia.

A. Developments in Japan's Financial and Capital Markets, and the Foreign Exchange Market

It is widely known that long-term interest rates can conceptually be decomposed into two components: (1) the risk premia (such as the term premium and the liquidity premium); and (2) the expected path of short-term interest rates. Based on this understanding, the Bank's JGB purchases are expected to generate downward pressure primarily on the risk premia and then on the expected path of short-term interest rates. Moreover, the Bank's commitment to achieve the 2 percent target stably is likely to enhance the downward pressure. Meanwhile, an improvement in the economic outlook, a gradual rise in medium- to long-term inflation expectations, and a rise in overseas long-term interest rates may lead to an increase in the expected path of short-term interest rates.

Developments in long-term interest rates since the introduction of QQE reflect such downward pressure as well as upward pressure (Chart 3). My view is that three main factors have been at play. First, the U.S. economy has maintained moderate economic and employment growth with a relatively solid recovery trend in the housing market, notwithstanding the tightening of fiscal policy since the start of 2013. This indicates that the macroeconomic fundamentals have been strengthening. In May and June 2013, Federal Reserve Board Chairman Ben Bernanke indicated the possibility of tapering the monthly 85 billion U.S. dollar bond purchase program by late this year as long as the Federal Reserve observes continued, sustainable improvement. Some presidents of regional Federal Reserve Banks have suggested the same possibility. While these remarks are thought to have raised the awareness of many market participants about the direction of the Federal Reserve's monetary policy toward the exit, the fact that economic data are mixed has led to divergent views on the timing of the tapering process. This seems to have contributed to amplifying the volatility of U.S. long-term interest rates, stock prices, and the exchange rate of the dollar, thereby affecting the government bond, stock, and foreign exchange markets in Japan and other economies (charts 4 and 5).

The second factor at play is that the market environment has been gradually changing in Japan. In the past, long-term interest rates and volatility remained at low levels. However,

since the introduction of QQE, some market participants have promptly adopted new investment strategies by taking into account the possibility of future inflation, while others have taken a wait-and-see attitude, and these divergent strategies and attitudes appear to be reflected on the movements of long-term interest rates. Meanwhile, the transaction volume of JGBs has not declined significantly, except during early April. Nor have bid-ask spreads been particularly high in light of historical levels. At the same time, however, it has been pointed out that fewer market makers are standing behind their bid and ask quotes, and so the execution of large-scale transactions at the same (preferred) prices as before has become difficult. In other words, transaction costs have increased and the price-discovery function has weakened somewhat. Moreover, an indicator of market liquidity -- defined as the ratio of the daily price range to the transaction volume -- has reached relatively high levels (Chart 6).

The third factor at play, which is related to the second factor, arises from the fact that market participants have significantly different views on the impact of QQE in terms of the degree to which it will affect long-term interest rates, and the speed. Some believe that yields will rise relatively quickly, while others expect a gradual increase. This divergence may have contributed to the volatility of the yields. On this issue, the Bank remains committed to achieving the 2 percent target at the earliest possible time, with a time horizon of about two years. And indeed, in the Bank's *Outlook for Economic Activity and Prices*, released on April 26, 2013, the median of the forecasts by the Bank's Policy Board members -- which is regarded as the Bank's view -- indicates that an inflation rate of 1.9 percent is projected for fiscal 2015. To add to this, I place great importance on the Bank's commitment to achieve the 2 percent target stably, and believe that it is crucial to make steady progress toward achieving this target.

As for the outlook for long-term interest rates, even during a phase of intensified upward pressure, the continuation of the large-scale asset purchases is likely to maintain downward pressure, and this downward pressure may even strengthen with the cumulative growth of the amount purchased -- in addition to the commitment to achieve the 2 percent target stably. These developments, together with a gradual rise in medium- to long-term inflation expectations, are likely to be reflected in long-term interest rates, which would eventually stabilize at levels consistent with the 2 percent price stability target. The Bank will continue to closely monitor developments in financial markets, including the bond market, under the flexible operational framework for JGB purchases and the fixed-rate funds-supplying

operations, and through discussions with market participants. The Bank expects that both short- and long-term interest rates will move on a stable path on the whole.

B. Impacts on Other Financial Markets and Bank Lending

While volatility in the JGB and stock markets increased temporarily, issuance conditions in the CP and corporate bond markets have not changed. Since April, issuance rates on CP have generally remained at low levels, and previously higher rates on the CP of some firms with less favorable business performance have recently declined. In addition, issuance of corporate bonds has steadily increased and their spreads have remained flat at low levels on the whole. Lending by financial institutions has increased moderately, and the amount outstanding of bank lending grew at a relatively high rate of 2.1 percent year on year both in April and in May. Some long-term fixed interest rates, such as fixed-rate mortgage and long-term prime lending rates, have risen somewhat lately. However, the amounts of mortgages and loans to the corporate sector have been growing and it appears that an adverse impact on economic activity has so far been avoided.

C. Impact on Financial and Capital Markets in Asia

Concerns have been raised in emerging economies that the highly accommodative monetary policy stance by the Federal Reserve and the Bank may lead to volatile capital flows and unstable foreign exchange rate movements. In particular, some financial and capital markets in Asia are relatively small and in the process of development, so that a massive scale of capital inflows from abroad cannot be easily and effectively absorbed and increases the risk of credit booms and asset bubbles. This holds especially when the nature of capital inflows is short term and sensitive to various shocks, since such shocks could cause a sudden reversal of capital flows and subsequently a domestic financial crisis following the bursting of a bubble. It has also been pointed out that some Asian bond markets have seen a sharp increase in foreign currency-denominated bonds issued offshore since 2012 (largely in U.S. dollars, but also in euros and yen), with the pace accelerating further in the first half of 2013. The issues consist largely of investment-grade bonds, but also include high-yield, low-rated bonds whose issuance has been growing reflecting a decline in issuance rates and spreads. High-yield bonds largely originated from the United States and Europe, but have recently become more widespread in some Asian countries. In addition, some Asian countries face rapidly increasing real estate prices, a sign of overheating in asset markets. For these Asian economies, there may be a risk associated with a sudden reversal of capital flows and a resultant shortage of liquidity.

With regard to the Bank's QQE, however, the impact on Asian economies and financial and capital markets appears thus far to be limited. A look at the activity of large Japanese financial institutions shows that cross-border claims in Asia have grown since around 2010 and continue to rise steadily. This increase has not contributed to an overheating in regional economies, since exposures by financial institutions from other Asian economies (such as Hong Kong and Singapore) have expanded even further and the increase in cross-border claims by Japanese financial institutions has partially offset a curtailment of cross-border claims by the euro area banks (Chart 7). Most of the loans extended to Asia by Japanese financial institutions have been made in U.S. dollars, and these dollar funds often originate from headquarters in Japan. Some Japanese financial institutions plan to extend credit denominated in local currencies as they increase and diversify the sources of local currency funding for both Japanese and non-Japanese customers operating in Asia.

As for the balance of portfolio investment, Japan currently records a net inflow. The movement of outward portfolio investment has continued to indicate a net inflow (or the amount of disposal exceeding that of acquisition) since the beginning of 2013, mostly because outward bond investment shifted from a net outflow (net acquisition) to a net inflow (net disposal), as seen in Chart 8. Japanese investors traditionally tend to concentrate their bond investment in the United States and Europe, with a limited amount allocated to Asia (Chart 9). Outward bond investment has recently turned from a net acquisition to a substantial net disposal, and a similar pattern has been observed in the case of outward stock investment, albeit to a lesser extent. Some point out that a shift to a net inflow in outward bond investment reflects (1) activity to maintain a stable degree of foreign exposure by some Japanese investors (so that an increase in foreign assets valued in yen as a result of the yen's depreciation has induced a cut in their investment positions); (2) low returns on investment in European and U.S. bonds relative to domestic bond investment after taking into account the cost of foreign exchange hedging (Chart 10); and (3) low returns on the yen carry trade relative to historical trends. On the other hand, individual investors appear to be investing in securities originating in North America and some Asian countries, largely by utilizing investment trusts.

Instead, there has been a large increase in "inward portfolio investment" to Japan from abroad, including Asia, indicating a net inflow (Chart 11). In particular, active investment in Japanese stocks is observed among foreign investors. Foreign investors shifted to net sellers

(net disposal) in late May 2013 partly due to a plunge in stock prices. Since then, there have been somewhat volatile movements. Many of these investors base their investment on not only specific stocks but also economic growth strategies formulated by Prime Minister Shinzo Abe's administration and the implementation of these strategies.

Although the above observations do not necessarily suggest active cross-border outward portfolio investment, the Bank will continue to closely monitor the spillover effects of Japan's monetary policy to cross-border movements of capital flows into the region. I personally believe that it would be beneficial for Asia if some of the abundant liquidity accumulated in Japan (partly as a result of growing deposits and savings and partly due to accommodative monetary policy) could be utilized to achieve a sustainable growth path in the region with high growth momentum -- while enabling Japanese investors to diversify their asset allocation. It would be a positive development if such funds originating from Japan contributed to further deepening of financial and capital markets in the region. Some economies in the region also face challenges of an inadequate infrastructure and a shortage of long-term capital. An increase in the circulation of funds used for productive purposes within the region could generate a "win-win" situation in Asia as a whole, including Japan.

D. Regional Financial Cooperation Initiatives in Asia

Underlying the expansion in capital inflows to emerging countries including those in Asia are both pull factors (that is, higher growth and yields) and push factors (that is, low interest rates and low growth in advanced countries, as well as investors' pursuit of higher profits). With the latter factors in mind, economies have introduced a range of country-specific measures including macro-prudential regulations to respond to sudden capital inflows and outflows in emerging economies. Thus far, there is no consensus on appropriate approaches to deal with such volatile capital flows. However, from a long-term perspective, it is important for Asia to develop stronger domestic financial and capital markets (denominated in local currencies), especially markets for long-term capital funding.

In this sense, the long-standing initiatives by governments and central banks to foster local currency-denominated bond markets -- such as the Asian Bond Markets Initiative (ABMI) and the Asian Bond Fund (ABF) -- are highly significant. The amount outstanding of local currency bonds in Asia has exceeded 7 trillion U.S. dollars, more than six times the level of ten years ago. The bond markets are now a valuable source of funding, for not only the public sector but also the private sector, which I view as favorable developments. To reduce

the vulnerability of local bond markets, however, it is crucial to improve transparency of the markets and foster domestic institutional investors. In addition, it makes sense for Asian economies to actively utilize their own savings for domestic productive purposes, provided that many of them enjoy surpluses in current account balances.

From the viewpoint of monitoring capital flow movements and improving crisis prevention and management capacity in the region, I would like to stress the importance of the Chiang Mai Initiative (CMI), later renamed the Chiang Mai Initiative Multilateralization (CMIM). The CMI was established in 2000 as a framework for crisis prevention and management among the Association of Southeast Asian Nations Plus Three (ASEAN+3) countries. In early May 2013, the meeting of the Finance Ministers and Central Bank Governors of ASEAN+3 reached a consensus to transform the ASEAN+3 Macroeconomic Research Office (AMRO) -- an independent regional surveillance unit supporting the CMIM -- into an international organization. Considering that the AMRO conducts monitoring to see whether financial and economic conditions in Asia have accumulated imbalances, its promotion to an international organization can be regarded as an important decision ensuring its independence. Moreover, it was agreed in May 2013 to amend the CMIM Agreement to reflect the following measures agreed in May 2012: doubling the size of the CMIM from 120 billion to 240 billion U.S. dollars, introducing a crisis prevention facility of the Precautionary Line, and minimizing the IMF-linked portion from 80 percent to 70 percent (and further to 60 percent in 2014). I hope that these regional cooperation efforts will prevent the occurrence of financial crises or foster the capacity to manage crises effectively if they occur.

E. Impact on Trade Relations with Asia

Finally, I would like to offer some remarks on the impact of QQE on Japan's trade relations with the rest of Asia. There are positive aspects of QQE on Asian economies, since economic recovery in Japan is likely to encourage imports from the region, contributing to an expansion of regional aggregate demand. On the other hand, some have expressed concern about possible side effects of QQE, in that a further depreciation of the yen may intensify competition between firms in Japan and those elsewhere in Asia. However, it is also important to bear in mind that a further depreciation of the yen may help to strengthen the competitiveness of Asian products by inducing a decline in the prices of intermediate goods imported from Japan to the region. Therefore, grasping the impact of QQE on trade relations with Asia is not all that simple.

This reflects a formation of supply chain production networks across Asia involving Japan and many other economies. This means that the trade relations between Japan and the rest of Asia are highly integrated and complex. This is evident from the fact that Japanese firms have steadily increased their ratios of overseas production to total production as a result of large outward foreign direct investment. Consequently, the amount of sales by foreign subsidiaries of Japanese firms has already exceeded that of exports (charts 12 and 13). Based on these observations, we could say that Japan's economic recovery and stable economic growth generally have a positive impact on the rest of Asia.

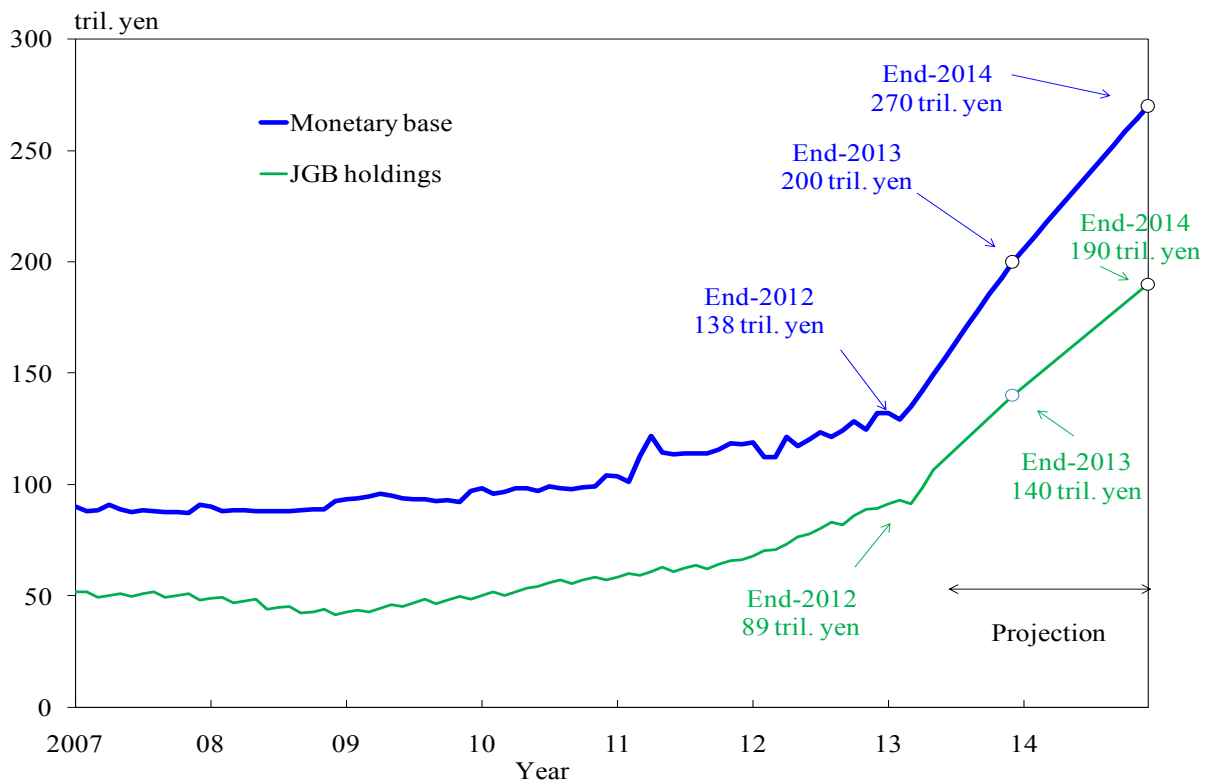
IV. Concluding Remarks

The Bank has been conducting aggressive monetary easing since early April 2013, to overcome long-standing mild deflation and reinvigorate the economy. For its part, the government has implemented expansionary economic policy and unveiled economic growth strategies. I believe that Japan can contribute to development in Asia through its financial and trade activities as an Asian country. Moreover, Japan's experience at the forefront of rapid population aging has the potential to contribute to the region as well, since some other economies will soon face similar aging issues. To this end, the Bank will do its utmost to revitalize Japan's economy and achieve sustainable economic growth. The Bank will do its best to achieve the 2 percent price stability target. Your understanding of the Bank's monetary policy is therefore greatly appreciated.

Thank you for your attention.

Chart 1

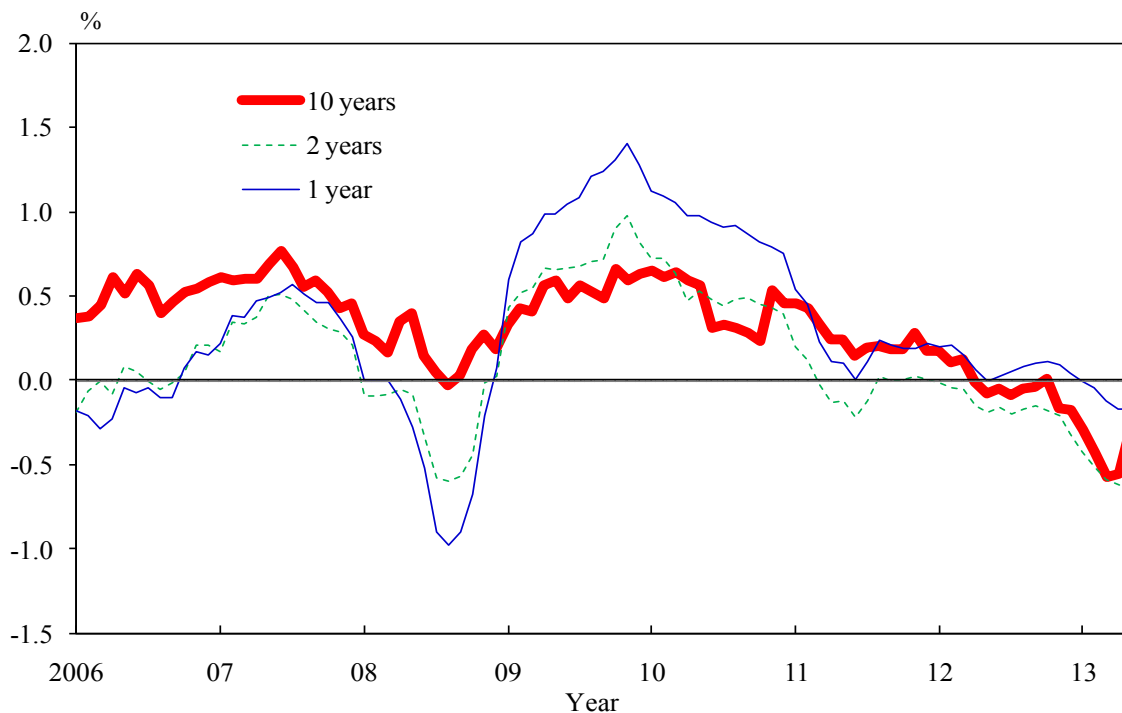
Expansion in the Monetary Base and JGB Purchases



Source: Bank of Japan.

Chart 2

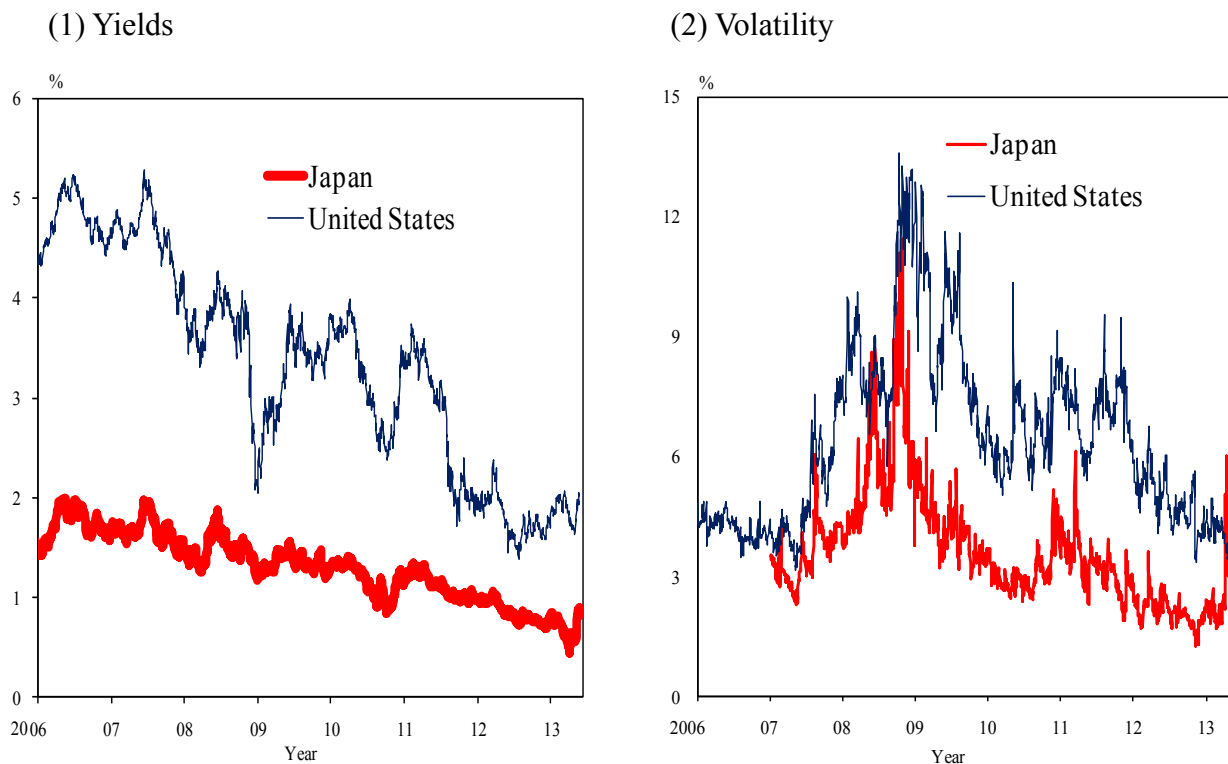
Long-Term Interest Rates in Real Terms



Note: Long-term interest rates in real terms = JGB interest rates - inflation expectations in the QUICK survey.

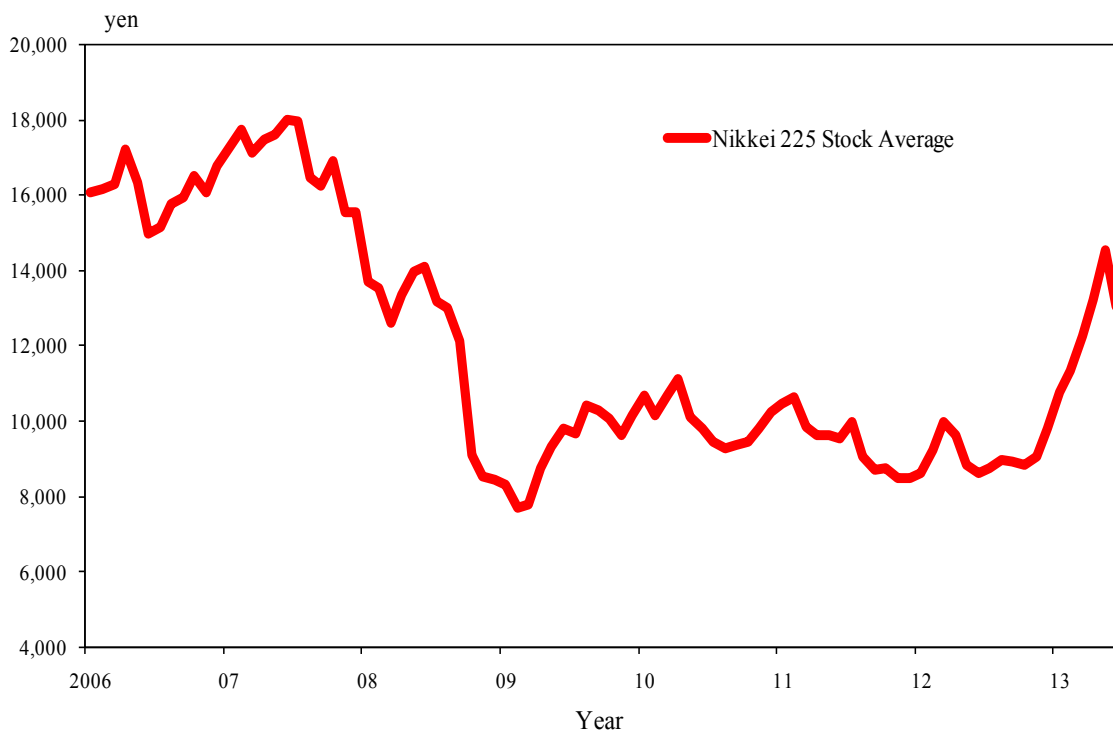
Sources: QUICK; Bloomberg.

Yields and Volatility of Government Bonds



Sources: Bloomberg; Bank of Japan.

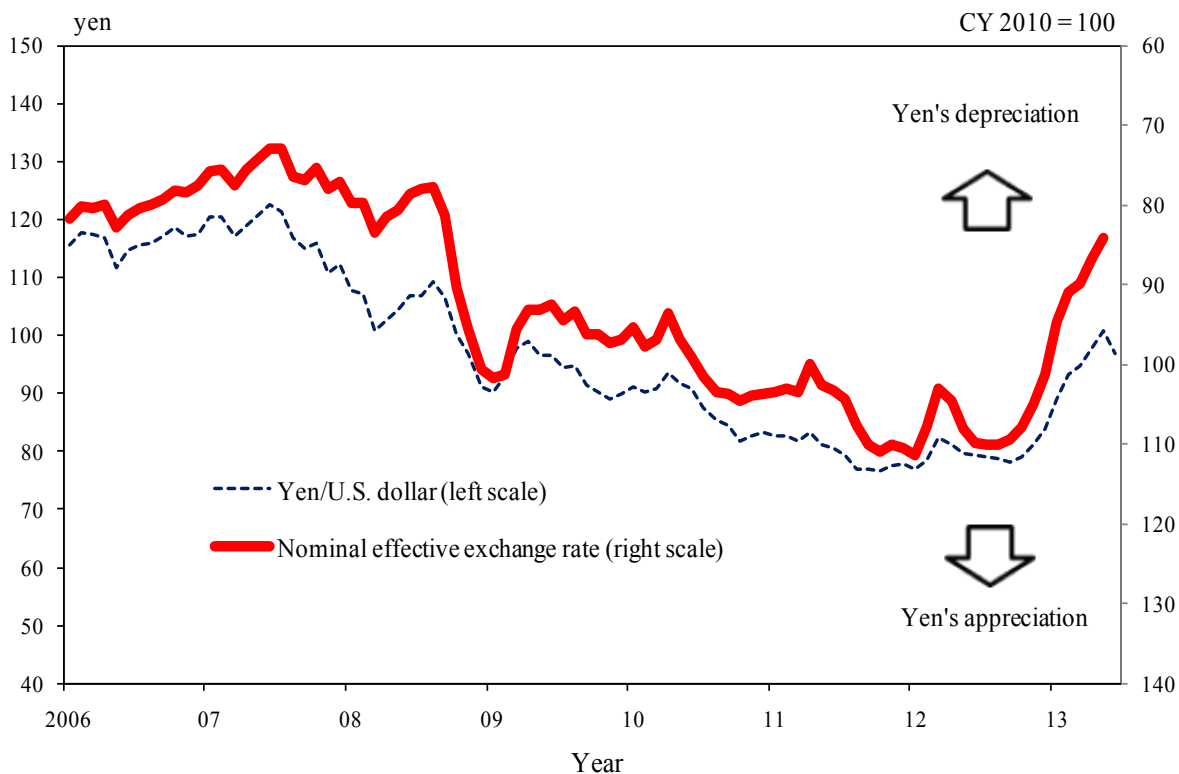
Stock Prices



Source: Bloomberg.

Chart 5

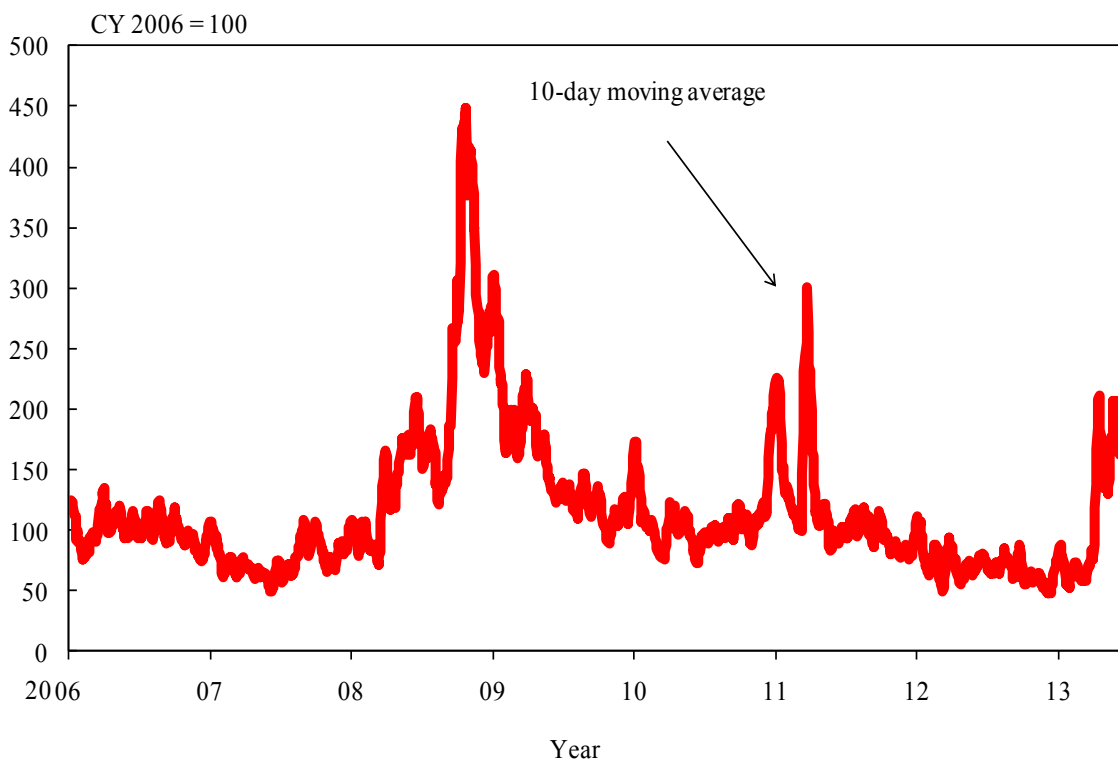
Exchange Rates



Source: Bloomberg.

Chart 6

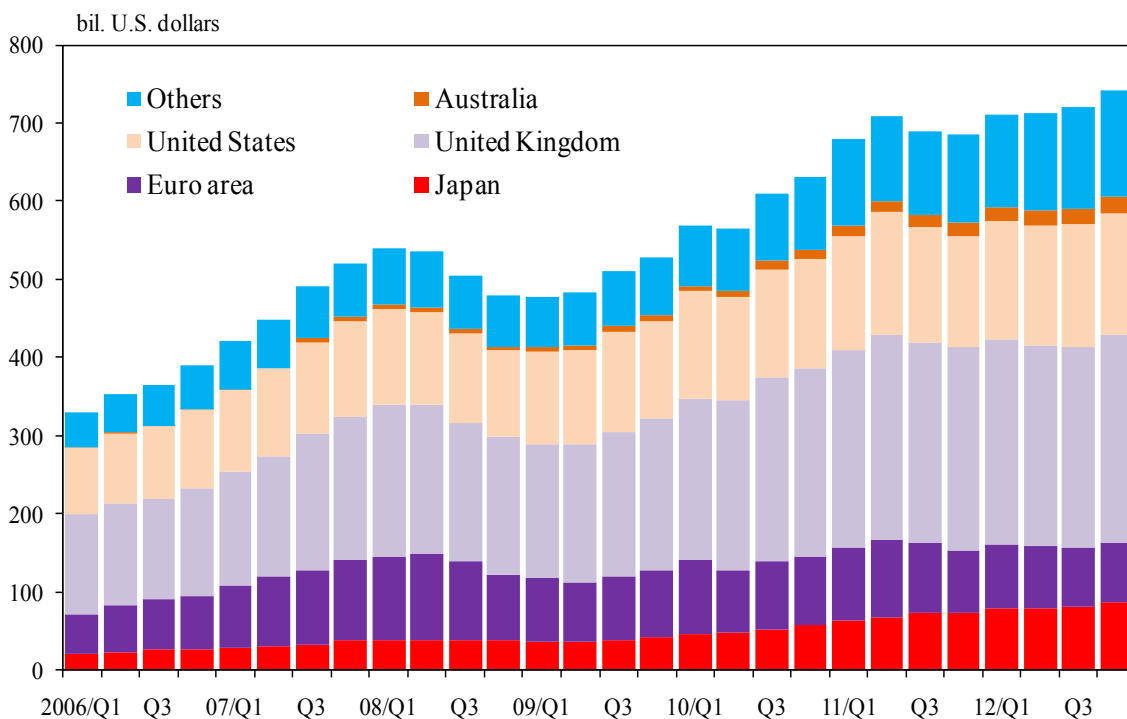
Liquidity Ratio in the JGB Futures Market



Note: Liquidity ratio = intraday high-low spread / trading volume.

Sources: QUICK; Bloomberg.

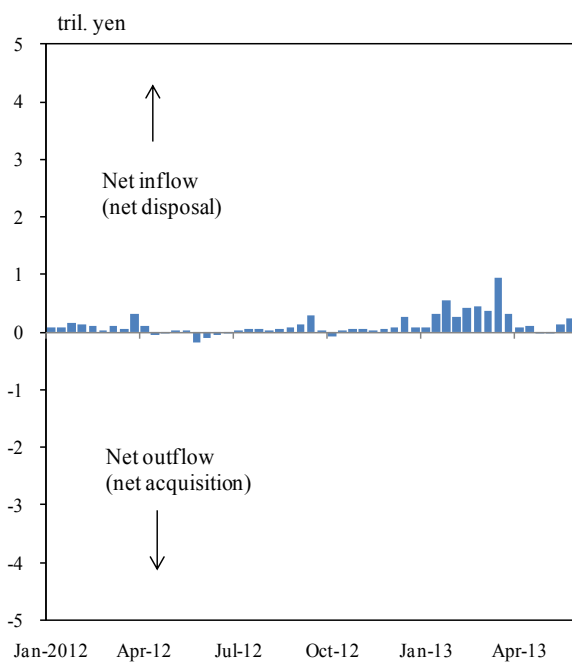
Cross-Border Claims in the Asia-Pacific Region



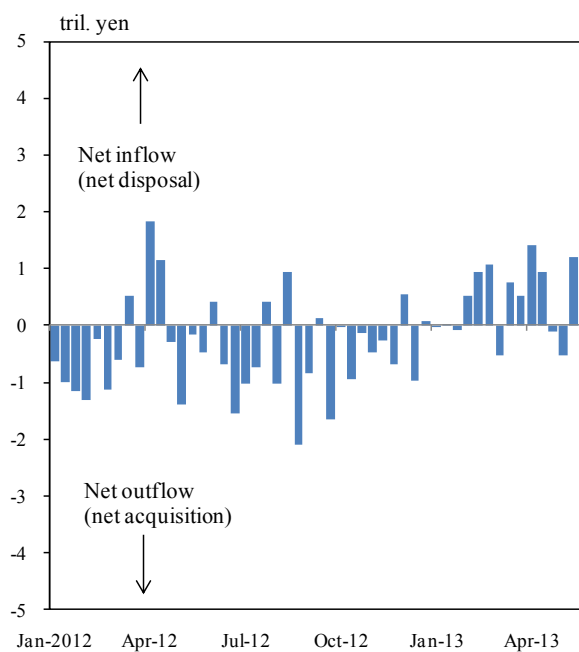
Source: Bank for International Settlements.

Outward Portfolio Investment

(1) Stocks



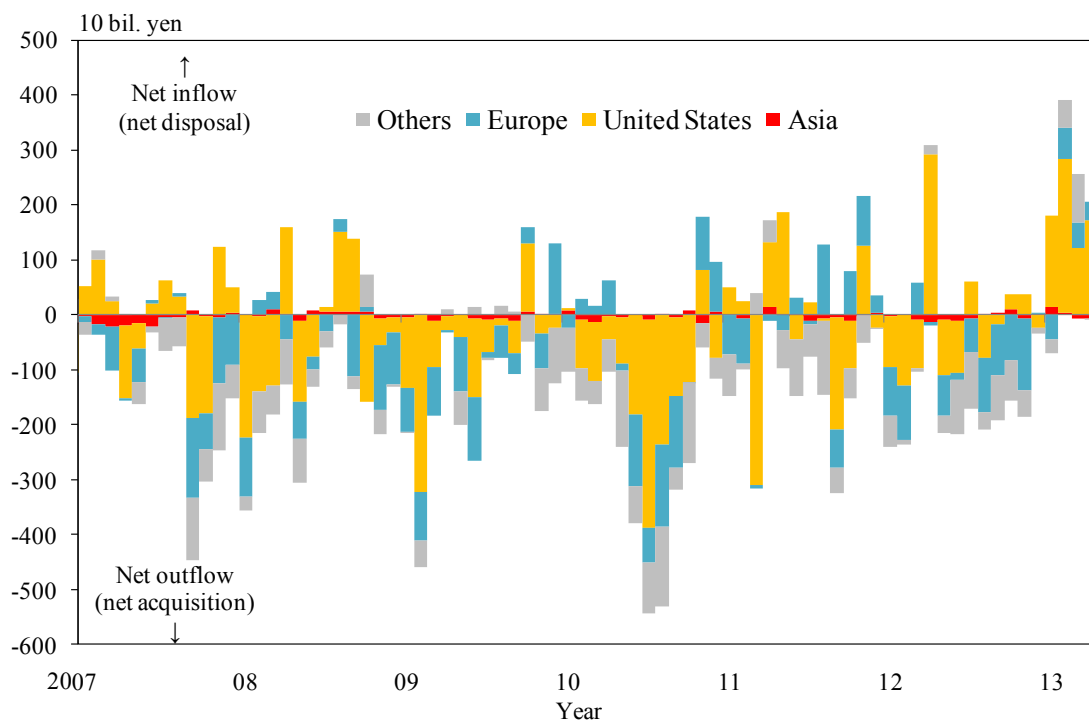
(2) Bonds



Source: Ministry of Finance.

Chart 9

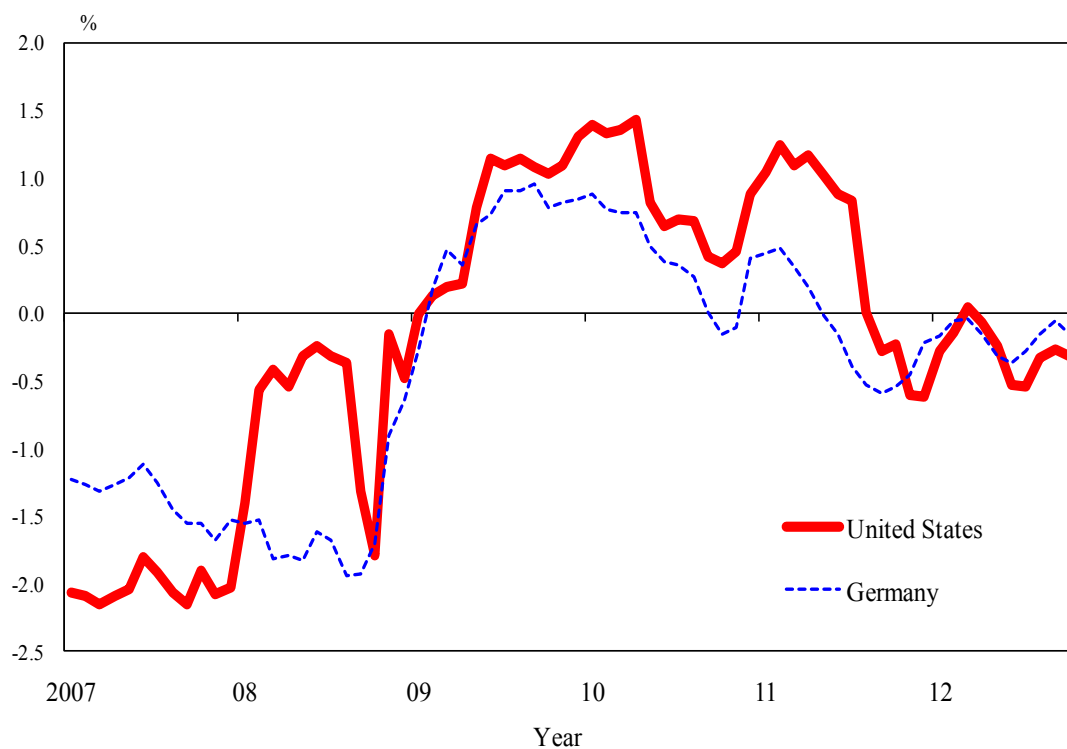
Japan's Outward Portfolio Investment



Source: Ministry of Finance.

Chart 10

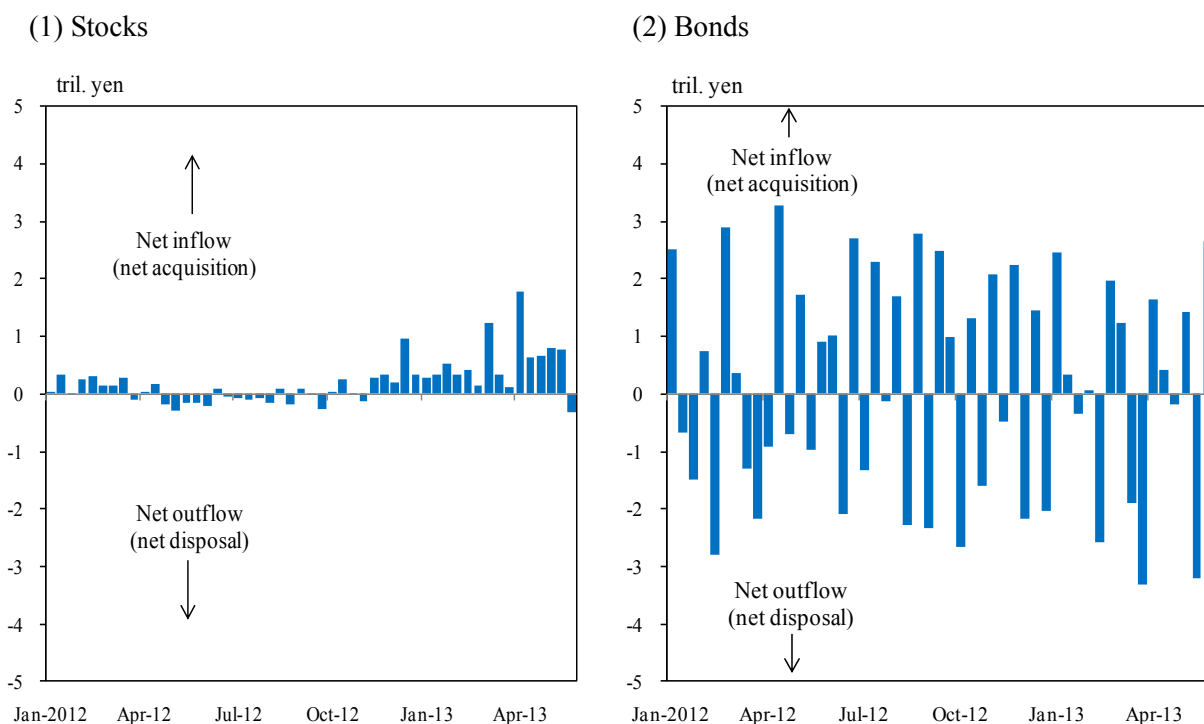
Excess Returns on Net Foreign Bond Investment by Life Insurance Firms



Note: Excess returns on net foreign bond investment = returns for bonds calculated as FX hedged 10-year bond - 20-year JGB yields.

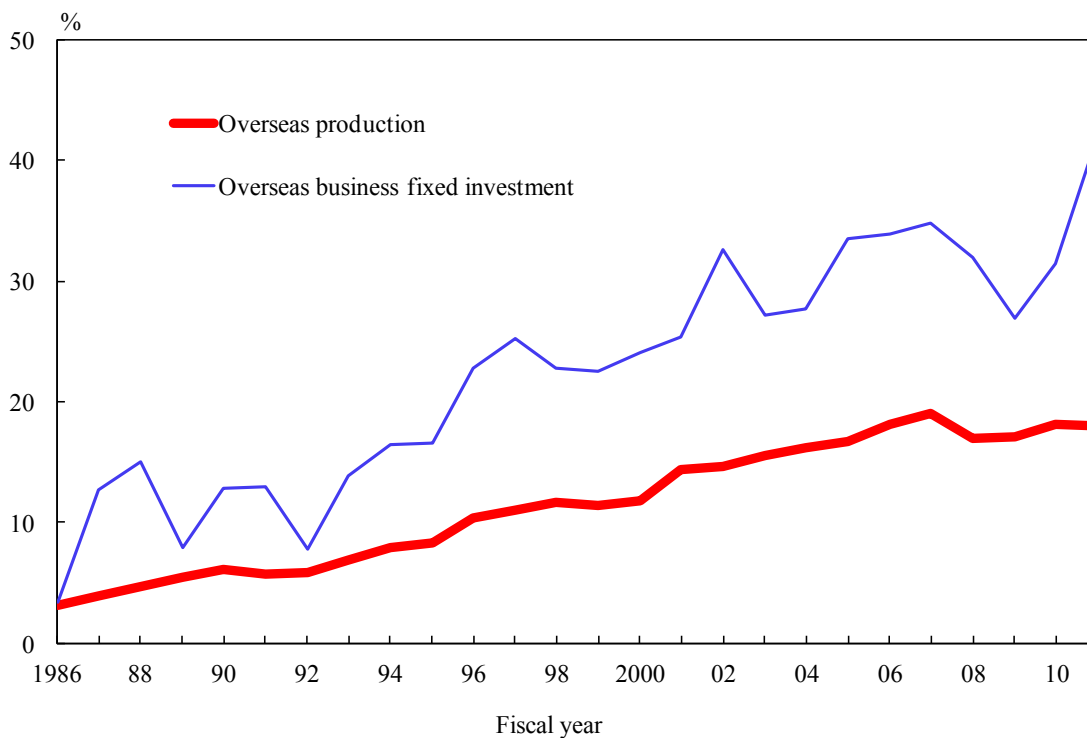
Sources: Bloomberg; Ministry of Finance.

Inward Portfolio Investment



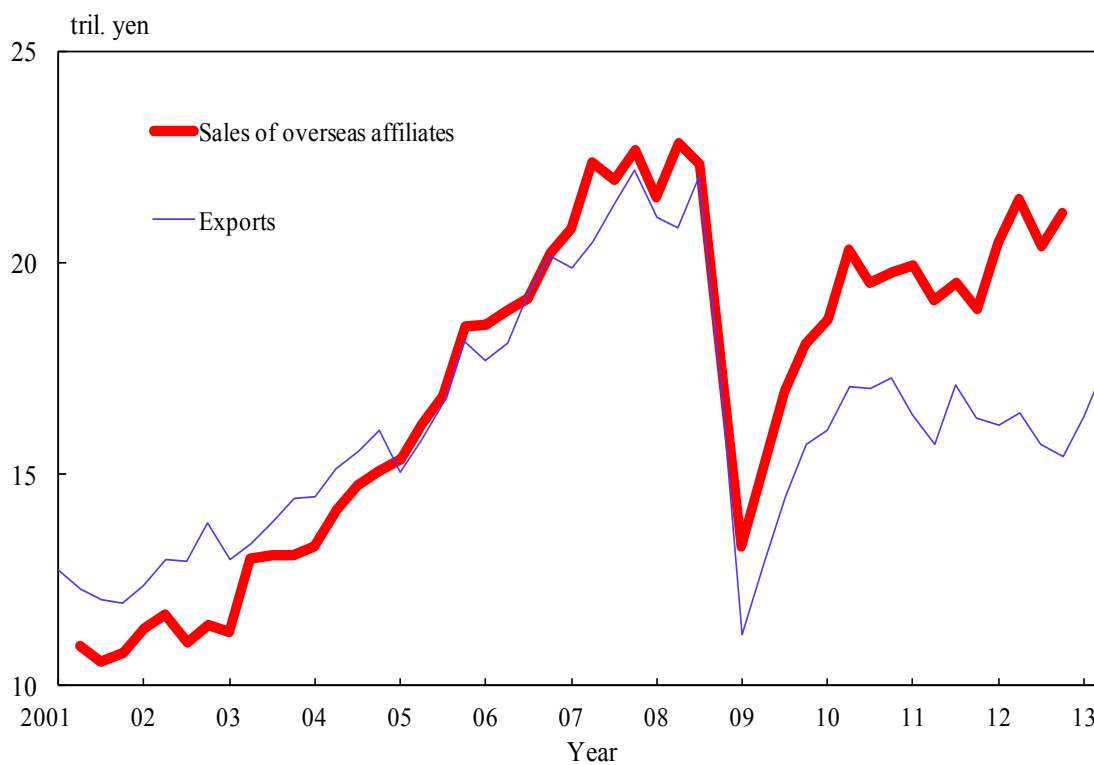
Source: Ministry of Finance.

Ratio of Overseas Production and Business Fixed Investment



Sources: Ministry of Economy, Trade and Industry; Ministry of Finance; Development Bank of Japan.

Sales of Overseas Affiliates and Exports



Sources: Ministry of Economy, Trade and Industry; Ministry of Finance.