June 15, 2009

The Recent Use of Large-Scale Asset Purchases by Foreign Central Banks

David Bowman and Clara Vega

Summary

This note provides a brief summary of the recent use of large-scale asset purchases by central banks in the advanced foreign economies as well as the movements in market rates associated with these programs.

We discuss asset purchases by the Bank of England, Bank of Japan, European Central Bank, and Swiss National Bank. As shown in Table 1, the Bank of England and Bank of Japan have purchased both government and corporate debt, although focusing primarily on government debt. In contrast, the European Central Bank has focused on purchasing corporate debt instruments, and the Swiss National Bank has focused on intervening in the foreign exchange market and purchasing corporate debt instruments.

In general, there was an initial decline in the yields of the targeted assets following the announcement of each of these programs, and the impact on yields appeared to strengthen over the next several days following an announcement. However, in each case yields eventually rose and are now higher than at the time the purchases were announced. Although this might be interpreted as implying that the programs have had only temporary impacts on interest rates, there are good reasons to believe that other, independent forces, have driven interest rates higher. As shown in Figure 1, long-term interest rates have risen in most advanced foreign economies since March. The global rise in yields has likely been driven by several factors, including: an increased willingness to move out of safe assets such as government bonds and into riskier investments, the improvement in the global outlook, and concerns that rising fiscal deficits may lead to rising inflation. Accordingly, our sense is that the asset purchase programs have exerted some downward pressure on yields, although it is difficult to assess to what extent.

The Bank of England

There was little market reaction when the U.K. Treasury announced on January 19 that it would authorize the Bank of England to purchase up to £50 billion of a range of high-quality corporate assets on a sterilized basis, or when the Bank of England announced its initial plans to use this authority on February 5, perhaps because statements by Bank officials led some observers to believe that it might purchase substantially less than the full £50 billion.[1] However,

[1] In its February 6 press release the Bank of England stated that it would purchase investment-grade commercial paper but did not specify an amount to be purchased and it stated that it expected to purchase “modest” amounts of investment-grade corporate bonds. The release also stated that the Bank would consider whether the funds might also be used to purchase syndicated loans or asset-backed securities.

there was a noticeable impact on market interest rates on March 5, when the Bank of England announced plans to purchase up to £75 billion of U.K. gilts and corporate debt on an un-sterilized basis and stated that it would concentrate its purchases on medium- and longer-dated gilt purchases in the secondary market. This represented a fairly large purchase program given the size of the gilt market; £75 billion constitutes about 10 percent of the total amount of outstanding gilts.

As shown in Table 2, U.K. ten-year government bond yields declined about 30 basis points on the day of the March 5 announcement and fell further over the course of the following week. The Monetary Policy Committee also cut its policy rate by 50 basis points at the March 5 meeting, and it is possible that the decline in rates was due, at least in part, to the easing of monetary policy rather than the announcement concerning asset purchases. However, market commentary focused mainly on asset purchases. As shown in Table 2, two-year rates, which should be more directly affected by policy easing, fell considerably less than yields on the gilts directly targeted by the asset purchase plan and actually rose over the rest of the week.

Markets continued to be attuned to developments in the purchase program in the following months, though the response of interest rates to further announcements concerning the program may have diminished over time. Ten-year gilt yields increased 20 basis points on March 24 when, following a higher-than-expected U.K. CPI reading, Governor King created some uncertainty by suggesting that the BoE might purchase less than £75 billion. On May 7, the BOE increased its asset purchase program by £50 billion, to £125 billion (about 17 percent of the outstanding gilts as shown in Table 1). Ten-year gilt yields decreased 10 basis points immediately following the announcement, but this decline was insufficient to offset the rise that had occurred earlier in the day, and yields ended the day 7 basis points higher than at the beginning of the trading session. As of June 11, the Bank of England has purchased £86 billion of assets, mainly gilts, and it has stated that it expects to finish its purchases by the end of July.

As shown in the top panel of Figure 2, by the end of May ten-year gilt yields had risen above their levels at the beginning of March. As noted in the introduction, the increase in long-term interest rates since March has been a global phenomenon, and the rise in gilt yields over this period should not necessarily be interpreted as implying that the effects of the asset purchases were temporary. In the case of the United Kingdom, the improved economic outlook has led investors to expect tighter monetary conditions, which is one possible factor behind the rise in long-term gilt yields. Between March 4 and June 12, expectations for the Bank of England's policy rate one year from now have increased about 100 basis points. Rising fiscal deficits may have also led to an increase in long-term rates. In April the U.K. Debt Management Office forecasted that it would have to issue a record £220 billion in debt for the current fiscal year, roughly £80 billion more than the previous year, nearly matching the amount of gilts that the Bank of England has purchased so far. Long-term gilt yields rose about 15 basis points following the announcement of the debt forecast.

The Bank of Japan

At its December 18-19, 2008, monetary policy meeting, the Bank of Japan cut its policy rate to 10 basis points from 30 basis points and announced an increase in the monthly amount of outright purchases of long-term JGBs from ¥ 1.2 trillion to ¥ 1.4 trillion per month.[2] In addition to the increase in size of its purchases, the Bank of Japan expanded the set of government bonds it would purchase to include inflation-linked securities, floating-rate notes, and 30-year bonds. Market participants noted that while no one of the individual policy changes announced on December 19 was surprising, the combination of measures was more aggressive than had been expected. Nonetheless, Japanese ten-year government bond yields declined only 4 basis points following the announcement.

On March 18, 2009, the Bank of Japan announced that it would increase its regular purchases of JGBs to ¥1.8 trillion a month. The increase in purchases was about twice as large as many participants had expected. There was virtually no detectable market reaction to this announcement.

The price reaction to Bank of Japan announcements regarding the outright purchase of long-term JGBs has been very small compared with the reactions to announcements of the FOMC and Bank of England. This is likely due to several factors. Most importantly, the scale of purchases is small; cumulating the ¥600 billion increase in JGBs purchased per month over the course of a year, these additional purchases represent only about 1 percent of outstanding JGBs. In addition, the Bank of Japan announcements were partly anticipated by market participants, which would also lessen the impact of the announcement on market rates.

The Bank of Japan has also announced plans to purchase some forms of corporate debt and equity. On January 23, the Bank indicated that it would purchase ¥3 trillion yen in commercial paper and that it was considering purchasing short-term corporate bonds. The Bank of Japan later confirmed a plan to purchase up to ¥1 trillion in short-term corporate debt on February 19. Rates on commercial paper dropped sharply following the January 23 announcement, but rates on short-term corporate debt instruments were little affected by either the January 23 or February 19 announcements. The Bank of Japan's announcement on February 3 that it would resume purchasing stocks held by financial firms also had little impact, as it was thought unlikely that firms would be willing to incur capital losses by selling their equity holdings at then low market prices

[2] The Bank of Japan's purchases of long-term JGBs were part of its already existing Rinban buyback operations, which were originally established in March 2001 when it began its Quantitative Easing Policy. Under the Quantitative Easing Policy, the Bank of Japan cut its policy rate to zero and changed its operating target to the level of outstanding current account balances held by financial institutions, promising to maintain this policy until core CPI stopped falling on a year-on-year basis, and also announced that it would purchase of ¥400 billion per month of long-term government bonds. On the day the policy was announced, Japanese ten-year government bond yields fell 9 basis points. In August 2001, the Bank of Japan raised its outright purchases of long-term government bonds to ¥ 600 billion per month, and in October 2002 it raised the amount again to ¥ 1.2 trillion per month. The Bank of Japan ended its Quantitative Easing Policy in March 2006, allowing bank reserves to drain off, but continued its monthly purchases of long-term JGBs. The Bank of Japan's holdings of Japanese long-term government bonds peaked in August 2004 at ¥ 67 trillion and currently stand at ¥ 46.1 trillion.

The European Central Bank

On May 7, the European Central Bank (ECB) lowered the main refinancing rate by 25 basis points, as expected, and announced that it would buy up to €60 billion of euro-denominated covered bonds (about 6 percent of the total size of the market, as shown in Table 1).[3] The purchase of covered bonds was not expected by the market and as shown in Table 4, although rates on covered bonds did not immediately decline, they did decline 19 basis points over the following week and spreads between yields on covered bonds and comparable government bonds fell 13 basis points. Details of the purchases were specified following the ECB's June 4 policy meeting, stating that it would buy AA-rated bonds from this July through June 2010 in both primary and secondary markets, focusing on maturities between 3 and 10 years. These details had been broadly anticipated by markets, and there was little reaction in covered bond rates, although spreads between covered and government bond yields did decline.

As with the other purchase programs discussed in this note, yields on covered bonds have since moved higher and are now above the levels that prevailed at the time the ECB's program was announced. However, as shown in the top panel of Figure 3, spreads between covered bond yields and yields on comparable government bonds have not moved higher and remain below the levels that prevailed before the ECB's announcements. .

The Swiss National Bank

On March 12, the Swiss National Bank (SNB) lowered its target range for three-month Libor as was widely expected, but surprised market participants by announcing that it would purchase private sector domestic bonds and foreign currencies. Although many market participants had anticipated some discussion of unconventional policy measures at the meeting, the vast majority of investors did not anticipate an immediate implementation of such policies. The SNB further surprised market participants by selling Swiss francs against euros just moments after its policies were announced. The SNB did not specify any desired level for the exchange rate between the franc and euro, but market participants reportedly viewed an exchange rate of 1.6 francs per euro as a rough target.

The SNB did not specify the amount or nature of its planned purchases of corporate debt; however, a board member of the Swiss National Bank later stated that the SNB was making daily purchases of corporate debt, including covered bonds. Based on the publicly available balance sheet of the SNB, market participants estimate that the SNB has purchased about 1.9 billion swiss francs of covered bonds as of April (about 4 percent of the covered bond market). As shown in Table 5, rates on three-year Swiss covered bonds declined 13 basis points in the week following the March 12 announcement.

---

[3] Covered bonds are debt securities with recourse to a pool of assets that secures or "covers" the bond if the originator becomes insolvent. These bonds are typically assigned very high credit ratings. In the press conference following the decision, ECB President Trichet stressed that these purchases would be sterilized and should not be considered to be quantitative easing. The ECB took several other steps at the meeting, including narrowing the corridor around the main refinancing rate (the ECB's policy target), extending until end-2010 its expanded list of eligible collateral for its refinancing operations, and announcing it would conduct 12-month liquidity operations at fixed rates with full allotment.

The SNB's purchases of euros appeared to be particularly effective. Estimates of the intervention size vary greatly, but most dealers suggest that the SNB purchased between €1 and €2.25 billion on March 12. The Swiss franc depreciated 3.25 percent against the euro following the SNB's actions, and the franc remained down against the euro for the next month.[4]

[4] In an action that was not publicly announced, the SNB again purchased euros on May 15. Market participants quickly became aware of the action. The franc depreciated 1.6 percent against the euro in response, but reversed the move the following day.

Table 1. Asset Purchase Programs

	ECB	BoE	BoJ	SNB
Program	€60 billion of covered bonds	£125 billion of gilts and corporate debt	Increased JGB purchases by ¥600 billion per month*	Corporate debt and foreign currency
Program as percent of total size of the market**	6%	17%	1%	Unknown
Amount Spent (as of June 11, 2009)	None	£86 billion†	¥ 2.5 trillion	Unknown‡

* The Bank of Japan has also announced programs to purchase ¥3 trillion in commercial paper, ¥1 trillion in corporate debt, and up to ¥1 trillion in equities held by financial firms.
** €60 billion is about 6 percent of the euro-area jumbo covered bond market, £125 billion is about 17 percent of the gilt market, and ¥600 billion accumulated over a year is about 1 percent of the domestic Japanese government debt market.
† The Bank of England has currently spent £83 billion on gilts and £3 billion on corporate debt instruments.
‡ Based on the publicly available balance sheet of the SNB, market participants estimate that the SNB has purchased about 1.9 billion swiss francs of covered bonds as of April (about 4 percent of the covered bond market)

Table 2. Bank of England Announcements

Date	Announcement	Change in Ten-Year Gilt Yields*		Change in Two-Year Gilt Yields*	
		One-Day	One-Week	One-Day	One-Week
3/5/2009	The Bank of England announced a plan to purchase up to £75 billion in assets, concentrating on medium- and longer-dated gilts, and reduced its policy rate 50 basis points.	-28	-69	-6	11
3/24/2009	Governor King indicated that the BoE might purchase less than £75 billion in assets.	20	3	-6	-13
5/7/2009	The Bank of England announced an increase in its planned asset purchases to £125 billion	7	-13	2	-14

*Changes in yields are in basis points and are calculated using the closing rate the day before the announcement and the closing rate the day of or the week after the announcement.

Table 3. Bank of Japan Announcements

Date	Announcement	Change in Ten-Year JGB Yields*		Change in Two-Year JGB Yields*	
		One-Day	One-Week	One-Day	One-Week
12/19/2008	The Bank of Japan increased its outright purchases of long-term JGBs from t¥ 1.2 trillion o ¥ 1.4 trillion per month and cut its policy rate by 20 basis points	-4	-6	-3	-5
3/18/2009	The Bank of Japan increased its outright purchases of long-term JGBs to ¥ 1.8 trillion per month	0	-2	0	0

* Changes in yields are in basis points and are calculated using the closing rate the day before the announcement and the closing rate the day of or the week after the announcement.

Table 4. ECB Announcements

Date	Announcement	Change in Three-Year Covered Bond Yields*		Change in Spreads over Government Yields*	
		One-Day	One-Week	One-Day	One-Week
5/7/2009	The ECB announced that it would buy up to €60 billion of euro-denominated covered bonds and lowered the main refinancing rate by 25 basis points.	7	-19	1	-13
6/4/2009	The ECB specified details of its covered bond purchases.	2	23	-10	-7

* Changes in yields and spreads are in basis points and are calculated using the closing rates the day before the announcement and the closing rates the day of or the week after the announcement.

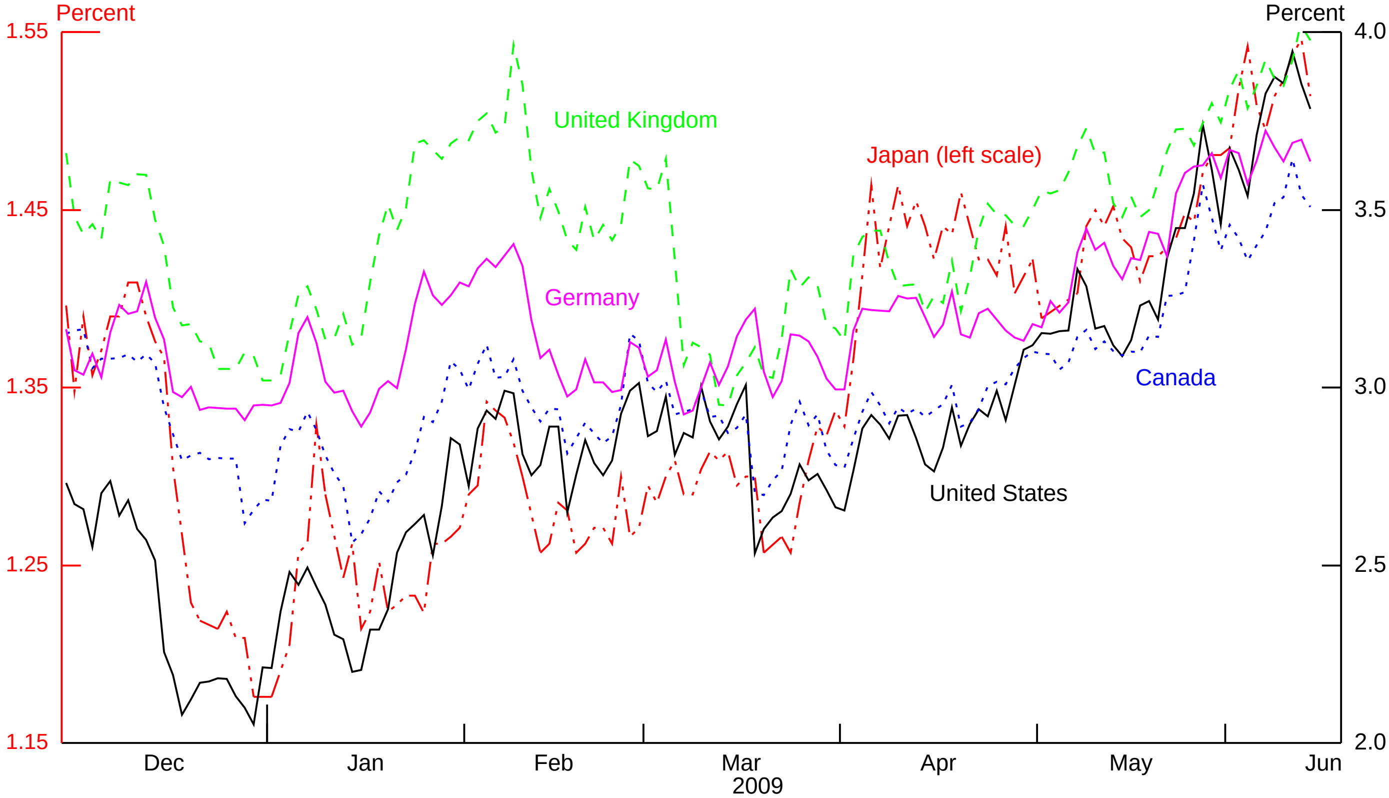
Table 5. Swiss National Bank Announcements

Date	Announcement	Change in Three-Year Covered Bond Yields*		Change in Spreads over Government Yields*	
		One-Day	One-Week	One-Day	One-Week
03/12/2009	The Swiss National Bank announced that it would begin purchasing corporate debt and foreign currency, immediately intervening to purchase euros, and cut its target for three-month Libor rates.	-5	-13	0	-5

* Changes in yields and spreads are in basis points and are calculated using the closing rates the day before the announcement and the closing rates the day of or the week after the announcement.

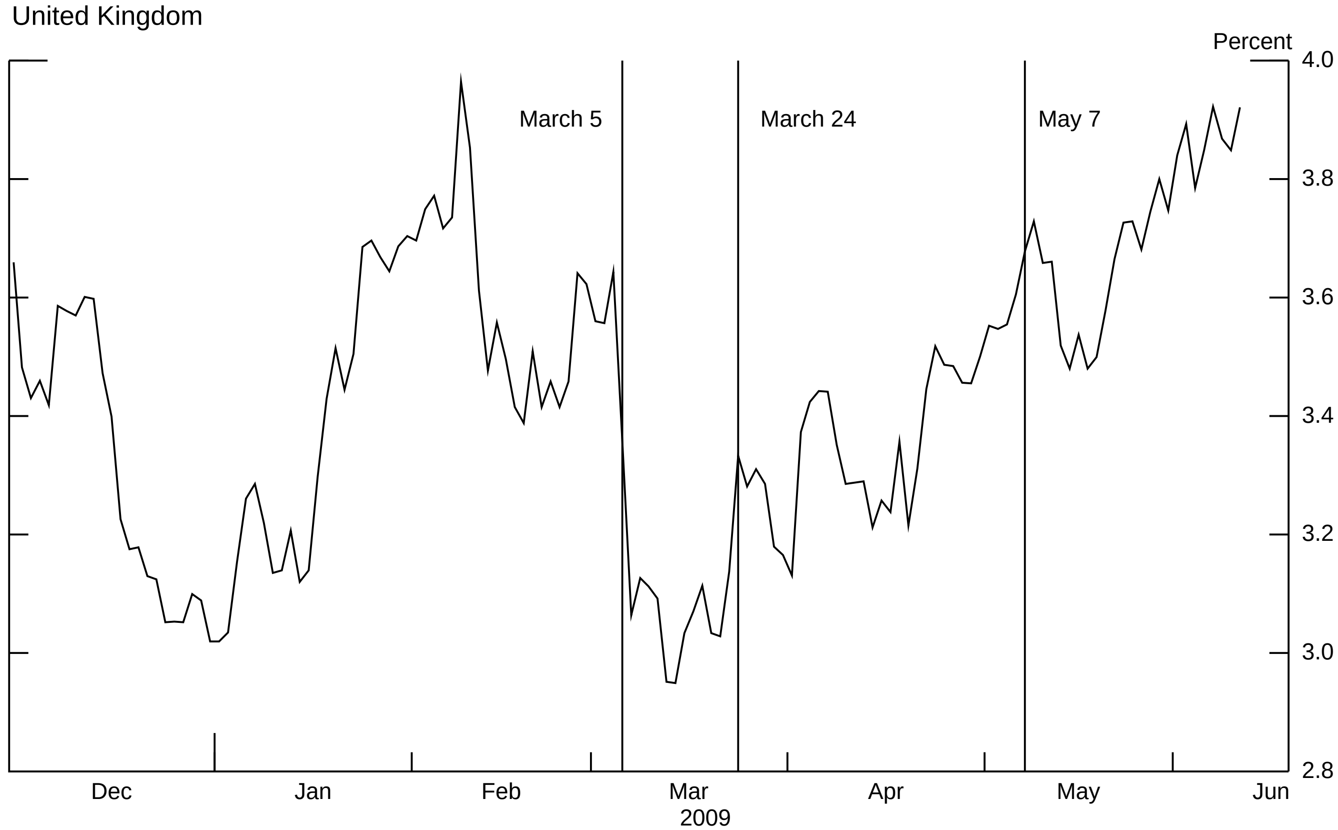
06-12-09

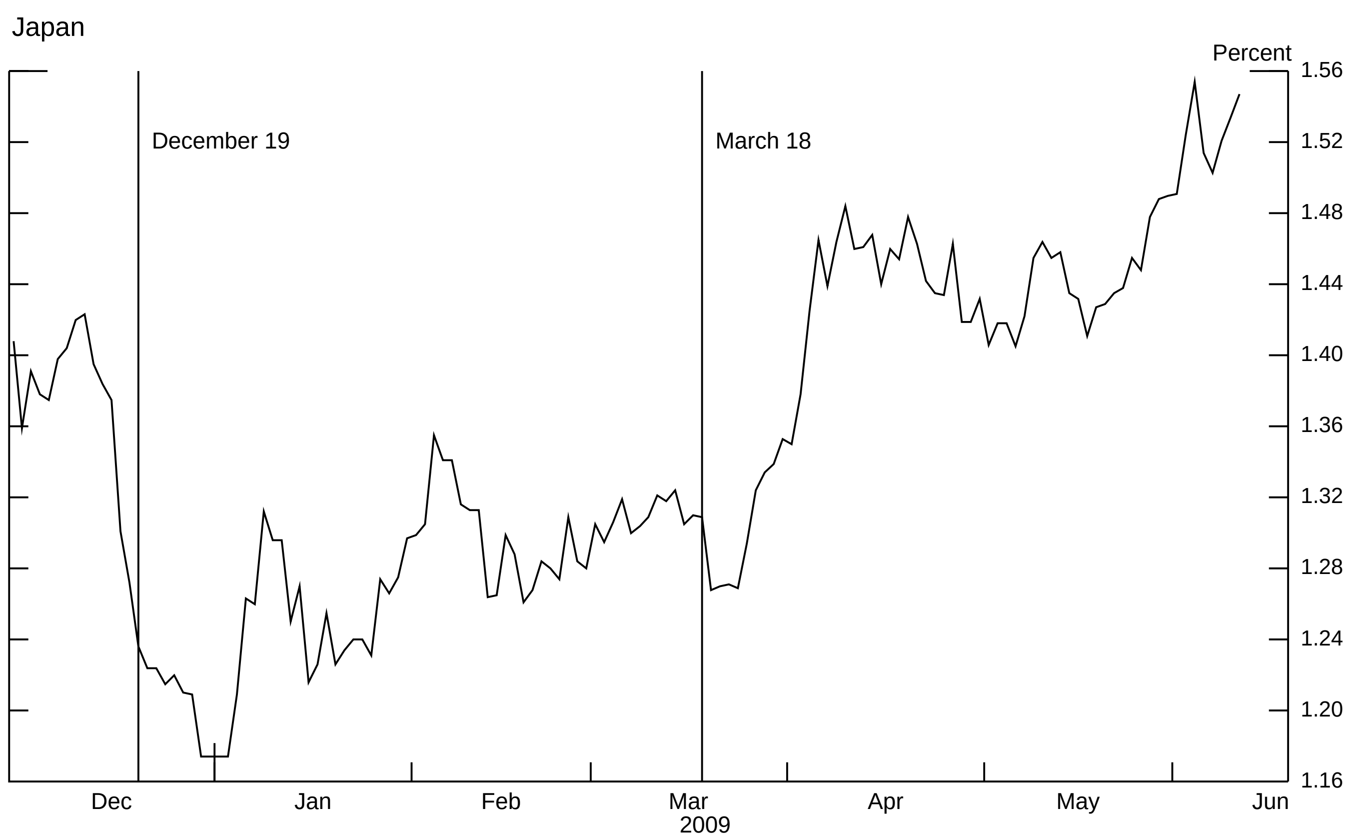
Figure 1. Ten-Year Government Bond Yields



06-12-09

Figure 2. Ten-Year Government Bond Yields





06-12-09

Figure 3. Three-Year Covered Bond Yields and Spreads over Government Bonds