

# Markets and operations

This article reviews developments in financial markets between the 2013 Q1 *Quarterly Bulletin* and 24 May 2013, drawing on the qualitative intelligence gathered by the Bank in the course of meeting its objectives of monetary and financial stability. The article also sets out usage of the Bank's operations since the previous *Bulletin*.

In discharging its responsibilities to ensure monetary stability and protect and enhance the stability of the financial system, the Bank gathers information from contacts across a range of financial markets. Regular dialogue with market contacts provides valuable insights into how markets function, and provides context for the formulation of policy, including the design and evaluation of the Bank's own market operations. The Bank also conducts occasional surveys of market participants in order to gather additional information on certain markets.

## Financial markets

### Overview

Financial market sentiment continued to be heavily dependent on investors' expectations of central bank policy. The broad increase in risky asset prices across much of the review period was in part driven by the belief that monetary policy would remain accommodative in the medium term. That belief also contributed to further reductions in sovereign bond yields for countries in the euro-area periphery, despite uncertainty about the resolution of fiscal difficulties within the currency block.

Expectations of a continuation of loose monetary policy were confirmed to some extent by the actions of central banks. The Bank of Japan doubled the size of its asset purchase programme, leading to a sharp fall in the yen and a rise in the volatility of yields on Japanese government bonds (JGBs). The European Central Bank (ECB) also loosened policy, lowering its main policy rate by a further 25 basis points, to 0.5%. And the Federal Reserve indicated that it was prepared to increase the pace of its asset purchases.

But subsequent improvements in the outlook for the United States, and statements from the Federal Reserve Chairman regarding the possible timing of a slowing in the pace of monetary expansion by the central bank, led to rises in US Treasury yields and an appreciation of the dollar.

In the United Kingdom, Bank Rate and the stock of asset purchases were unchanged over the review period, while the Funding for Lending Scheme (FLS) was extended to allow

participants to borrow from the facility until January 2015 and to skew incentives toward lending to small and medium-sized enterprises (SMEs).<sup>(1)</sup> The Scheme was also expanded to include lending by participating banks to certain other non-bank providers of credit.

### Monetary policy and short-term interest rates

The Bank of England's Monetary Policy Committee (MPC) maintained Bank Rate at 0.5% and the stock of asset purchases financed by the issuance of central bank reserves at £375 billion. During the review period, the MPC reinvested the cash flows of £6.6 billion associated with the Asset Purchase Facility's (APF's) holdings of the maturing March 2013 gilt.

A Reuters poll conducted shortly after the review period indicated that the median of economists' expectations was for the MPC to increase the final stock of asset purchases to £400 billion. Bank Rate was expected to stay at 0.5% over the coming two years.

Sterling overnight interest rates remained slightly below Bank Rate during the review period (**Chart 1**). Contacts reported that this was due to a combination of factors: overnight lending of cash at rates below Bank Rate by non-bank institutions; reduced demand for overnight liquidity among UK banks; and a reluctance of banks to increase the size of their balance sheets to arbitrage the difference between the cost of borrowing from non-bank suppliers of overnight liquidity and Bank Rate.<sup>(2)</sup> Sterling forward overnight rates implied by overnight index swap (OIS) contracts were little changed over the review period (**Chart 2**).

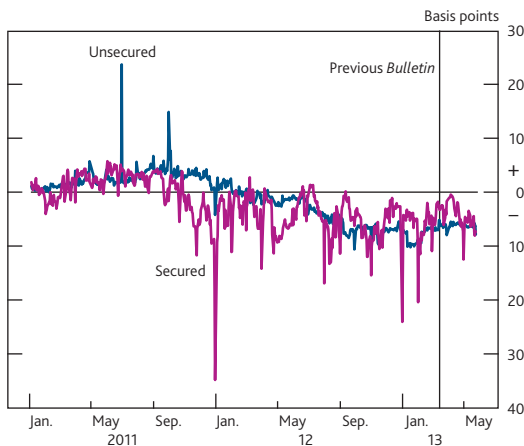
In the secured overnight market, turnover in overnight brokered gilt repo recorded by RONIA<sup>(3)</sup> fell to its lowest level since 2007 (**Chart 3**). Contacts suggested that this may have been because banks were trading repo bilaterally instead, as brokered trades are usually centrally cleared and so typically require larger haircuts than bilateral trades.

(1) For more detail, see the box on page 14 of the May 2013 *Inflation Report*.

(2) For a more detailed discussion see 'Markets and operations', *Bank of England Quarterly Bulletin*, Vol. 52, No. 4, pages 290–303.

(3) Repurchase overnight index average. For further details, see [www.wmba.org.uk](http://www.wmba.org.uk).

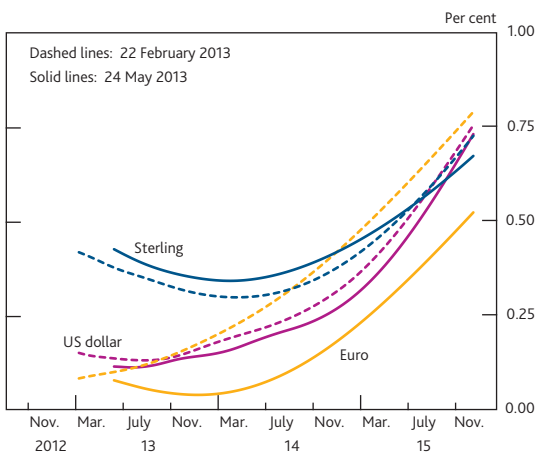
**Chart 1** Spread to Bank Rate of weighted average sterling overnight interest rates<sup>(a)</sup>



Sources: Wholesale Markets Brokers' Association and Bank calculations.

(a) The unsecured overnight interest rate is measured by the sterling overnight index average (SONIA). The secured overnight interest rate is measured by RONIA.

**Chart 2** Instantaneous forward interest rates derived from OIS contracts<sup>(a)</sup>



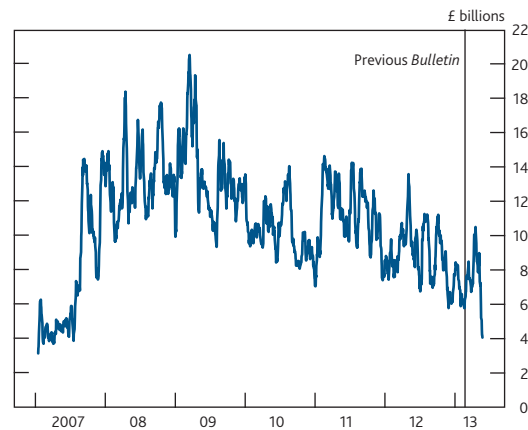
Sources: Bloomberg and Bank calculations.

(a) Instantaneous forward rates derived from the Bank's OIS curves.

Elsewhere, there was further loosening of monetary policy by a number of central banks. In April, the Bank of Japan announced a major monetary stimulus package designed to raise inflation to meet its 2% inflation target. The central pillars of the programme, known as 'quantitative and qualitative easing', involve a doubling of the monetary base, lengthening of the expected average maturity of JGB purchases from less than three years to around seven years, and an increase in its purchases of risky assets. Contacts thought that while markets had anticipated a significant change in monetary policy, the scale and scope of the changes was much larger than expected, with resulting volatility in JGB yields (see the box on page 160).<sup>(1)</sup>

The ECB cut its main refinancing rate by 25 basis points to 0.5%. According to contacts, by reducing the cost to banks of participating in the ECB's longer-term refinancing operations (LTROs), the cut in the main refinancing rate led market

**Chart 3** Turnover in brokered overnight gilt repo trades<sup>(a)</sup>



Source: Wholesale Markets Brokers' Association.

(a) Turnover is a ten working day average of activity recorded by RONIA.

participants to revise down their expectations for the pace of LTRO repayments, slowing the speed of withdrawal of central bank liquidity. Some contacts also started to place a greater weight on the likelihood that the ECB would cut its deposit rate below zero, although this was not their central expectation. Forward OIS rates ended the period around 25 basis points lower (Chart 2).

In the United States, the Federal Open Market Committee (FOMC) continued its policy of open-ended purchases of agency mortgage-backed securities and government bonds, at a rate of US\$40 billion and US\$45 billion per month, respectively. Early in the review period, contacts reported that some market participants were concerned about the possibility of a sudden rise in yields. But contacts also thought that investors generally did not expect the pace of tightening of US monetary policy to proceed more quickly than was priced into the yield curve. And a change to the text of the April minutes of the FOMC indicated that the Federal Reserve was prepared to increase the scale of asset purchases if necessary.

Later in the review period, strong US employment data caused renewed speculation among market participants about the prospect of withdrawal of policy stimulus by the Federal Reserve. The suggestion by the Federal Reserve Chairman that such a decision might be taken 'in the next few meetings', was taken to confirm this. But while some contacts report that they now expect the Federal Reserve to stop purchasing additional assets sooner than the middle of next year, they do not anticipate a rise in the federal funds target rate until 2015, consistent with forward OIS rates.

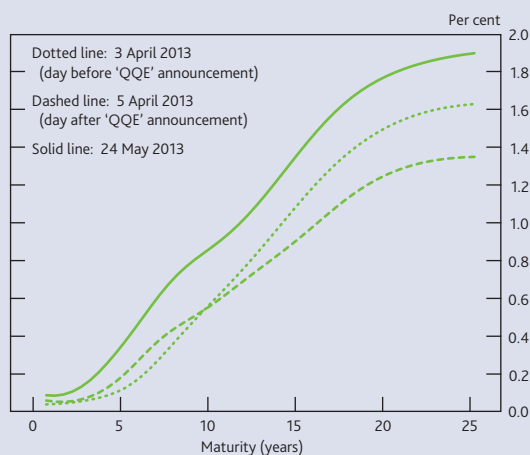
(1) See the box on page 10 of the May 2012 *Inflation Report* for discussion of changes in Japanese asset prices around the time of the announcement.

## Changes in Japanese bond yields following QQE

In April 2013, the Bank of Japan announced a programme of 'quantitative and qualitative easing' (QQE), involving a doubling of the monetary base, lengthening of the expected average maturity of Japanese government bond (JGB) purchases, and an increase in its purchases of risky assets.

Japanese government bond yields initially fell on the announcement. But this movement was later reversed, with yields ending the review period at levels above those prior to the announcement (**Chart A**). While this subsequent move in yields differs in direction to those seen following increases in the scale of quantitative easing by the Bank of England and Federal Reserve, it is consistent with the Bank of Japan's desire to raise nominal GDP growth and inflation expectations, following a period of extraordinarily low inflation.

**Chart A** Japanese nominal government bond spot yield curve<sup>(a)</sup>



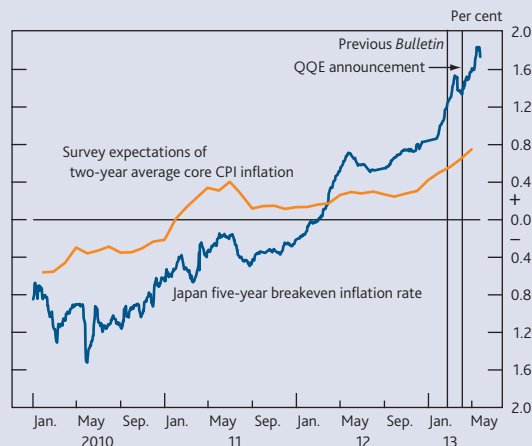
Sources: Bloomberg and Bank calculations.

(a) Spot interest rates derived from the Bank's government liability curves.

Indeed, both market and survey-based measures of Japanese inflation expectations moved higher following the Bank of Japan's announcement (**Chart B**). That said, contacts report that Japanese inflation-linked markets are very illiquid, with the majority of transactions in recent years involving the repurchase of Japanese government debt by the Japanese Ministry of Finance. And the market for JGBs is dominated by a small number of large financial institutions, which implement changes in their asset allocation decisions only gradually. As a result, it is likely to take time for changes in inflation expectations to be fully reflected in market prices.

Along with a rise in the yield curve since the announcement of QQE, there has been an increase in the volatility of JGB yields. In part, that is because the frequency of JGB issuance limits the number of days on which purchases can occur (as in the case of

**Chart B** Japanese five-year breakeven inflation rate and survey expectations of core CPI inflation



Sources: Bloomberg and QUICK QSS Report.

the Bank of England and the Debt Management Office, the Bank of Japan seeks to avoid purchasing assets on the same days as issuance under the financing schedule of the Ministry of Finance). Combined with the large size of the monetary expansion, that means that asset purchases tend to be of sufficient scale that they can cause significant moves in JGB yields.

Contacts also note that the Bank of Japan does not announce the dates or other details of QQE operations in advance. As a result, JGB dealers may be unsure about their ability to sell inventories of bonds to the Bank of Japan. And that might make them less inclined than otherwise to hold JGBs, or lead them to charge a premium to other market participants for bearing that risk. That will have tended to lower market liquidity and contribute to volatility in JGB yields. In turn, reduced liquidity and higher volatility has reportedly led some other investors not to participate in the market.

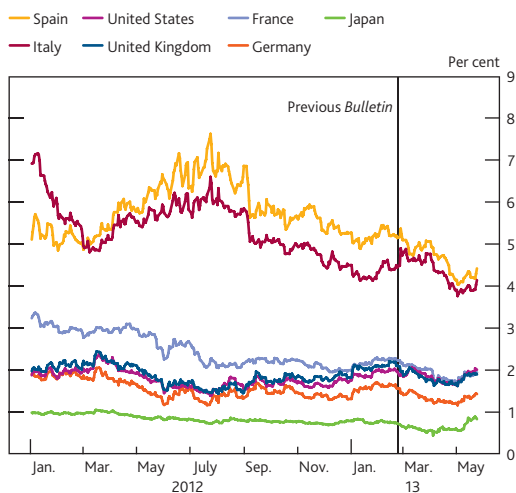
The rise in the volatility of JGB yields causes marked variation in the value of the JGB holdings of domestic banks. Since JGBs comprise around a quarter of the balance sheet of the sector as a whole, such variation in the value of banks' assets could have material implications for their capital buffers.

Following the initial announcement of QQE, the Bank of Japan announced several operational changes to lessen volatility, including an increase in the number of operations from six to eight per month, and the relaxation of rules on the timing of purchases, which allowed the Bank to purchase JGBs on issuance days, provided that the tenor of purchases differed from that of new bonds. Shortly after the data cut-off, the Bank of Japan announced further operational changes, including an increase in the number of operations to up to ten per month.

## Long-term interest rates

Major euro-area sovereign bond yields fell over the review period as a whole (**Chart 4**). Financial market sentiment had deteriorated following an inconclusive election result in Italy and the emergence of banking sector problems in Cyprus. And contacts perceived an increase in uncertainty among investors regarding the prospects for the resolution of fiscal difficulties within the euro area. Markets soon overcame their concerns, however, with contacts citing investors' belief that central banks would act to insulate financial markets from major downside risks to the economy.

**Chart 4** Selected ten-year government bond yields<sup>(a)</sup>



Source: Bloomberg.

(a) Yields to maturity on ten-year benchmark government bonds.

Contacts also noted that the substantial monetary stimulus announced by the Bank of Japan at the beginning of April had reduced borrowing costs for euro-area sovereigns. Yields had fallen as international investors took market positions in anticipation of a reallocation by Japanese investors away from domestic and into foreign assets, although as yet there was little sign of this shift.

Governments in the euro-area periphery continued to take advantage of improved conditions in sovereign debt markets, extending the maturity and size of some of their auctions. For example, Ireland and Portugal both issued ten-year bonds for the first time in over two years.

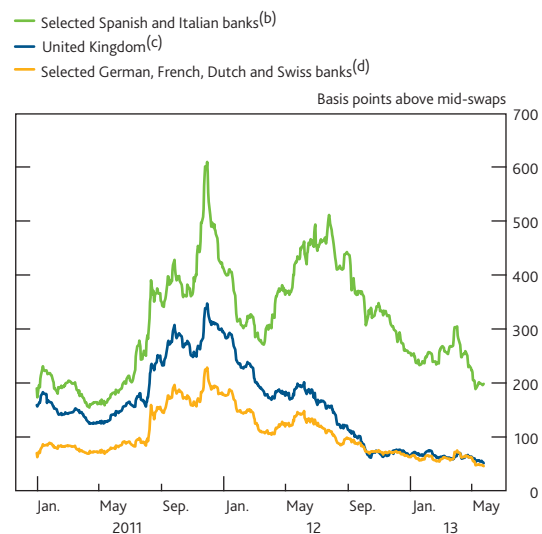
Yields on UK, US and German sovereign debt declined a little during the first half of the review period, reflecting increased demand for government bonds perceived to carry the least risk. But they subsequently rose, following positive surprises in economic data, including better-than-expected UK GDP data for 2013 Q1 and strong employment data in the United States. As for short-term interest rates, stronger US data and statements by FOMC members were taken by markets to increase the likelihood that the Federal Reserve would begin to 'taper' its asset purchases sooner than previously expected.

## Bank funding markets

The Bank and HM Treasury announced a one-year extension to the FLS on 24 April 2013. This will allow participants in the Scheme to borrow until January 2015, and provides incentives to increase lending to SMEs. The FLS will also be expanded to cover lending by participating banking groups to certain non-bank providers of credit to the real economy. Contacts' reactions were positive, with many noting it would also provide a welcome 'backstop', should funding conditions deteriorate.

Despite strong demand from investors, public term unsecured debt issuance by UK banks remained subdued during the review period. The lack of primary issuance continued to make it difficult to gauge the price at which UK banks would be able to issue new debt. But secondary market spreads suggest that UK bank wholesale funding costs continued to show modest declines (**Chart 5**). Secured market issuance was limited during the review period, but West Bromwich Building Society issued the first significant public UK residential mortgage-backed security of 2013.

**Chart 5** Indicative senior unsecured bank bond spreads<sup>(a)</sup>



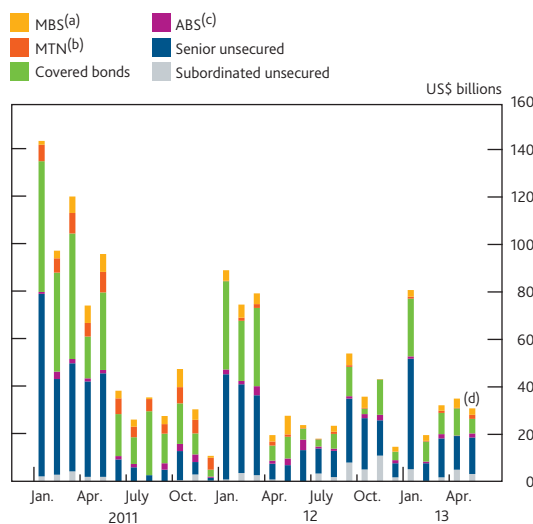
Sources: Bloomberg, Markit Group Limited and Bank calculations.

- (a) Constant-maturity unweighted average of secondary market spreads to mid-swaps of banks' five-year senior unsecured bonds, where available. Where a five-year bond is unavailable, a proxy has been constructed based on the nearest maturity of bond available for a given institution and the historical relationship of that bond with the corresponding five-year bond.
- (b) Peripheral European banks: BBVA, Intesa, Santander and UniCredit.
- (c) UK banks: Barclays, HSBC, Lloyds Banking Group, Nationwide, Royal Bank of Scotland and Santander UK.
- (d) Core European banks: BNP Paribas, Crédit Agricole, Credit Suisse, Deutsche Bank, ING, Rabobank, Société Générale and UBS.

During the first half of the review period there was a rise in wholesale funding costs for some lenders in the euro-area periphery (**Chart 5**). Contacts suggested that this was due to a perception that the approach to the resolution of banking difficulties in Cyprus had made it more probable that future bank bailouts would involve a greater share of losses being borne by creditors than had previously been thought. Since then, however, spreads have fallen back to below levels seen prior to the resolution of Cypriot banking problems.

European term funding markets were fairly subdued during the review period (**Chart 6**). But issuance by European and US banks of short-dated floating-rate notes (FRNs) had picked up. On the supply side, contacts pointed to appetite among issuers to use two to three-year funding, rather than relatively more expensive longer-term debt. Also, some banks had become less inclined to expand their balance sheets in order to enter swap arrangements associated with converting long-term borrowing — typically at a fixed rate — into a floating-rate liability. Among investors, there was demand for FRNs from money market funds and bank treasuries seeking to improve returns.

**Chart 6** Term issuance by European lenders in public markets

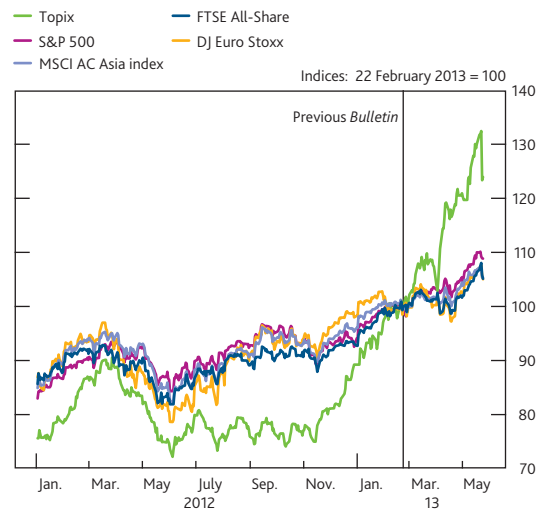


## Corporate capital markets

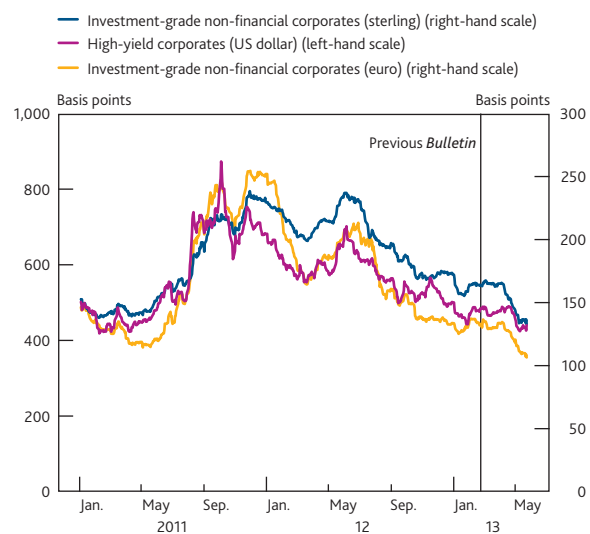
Major international equity indices rose over the review period (**Chart 7**), and both the FTSE 250 and the S&P 500 reached all-time nominal highs. Moves since the start of the year appeared to have been driven by a combination of a decline in the risk premium required by investors to hold risky assets, as well as some improvement in expectations for earnings. The Topix rose sharply following the announcement of QQE by the Bank of Japan, but fell back somewhat in the final days of the review period.

Meanwhile, corporate bond spreads edged lower still (**Chart 8**), as strong demand from investors more than offset record issuance of new debt. In the US high-yield corporate bond market, new issuance in 2013 was greater than that over the same period in 2012 — itself the strongest year on record. Year-to-date issuance in the European high-yield market had already exceeded that for the whole of 2012, although volumes remained lower than in the United States.

**Chart 7** International equity indices<sup>(a)(b)</sup>



**Chart 8** International corporate bond option-adjusted spreads



A number of contacts expressed the view that some asset prices were becoming disconnected from underlying economic fundamentals, but that while policy remained accommodative these trends were expected to continue. Growing speculation about the future path of US monetary policy had introduced a more cautious mood, however, and there was a pause in the rally of asset prices in some markets towards the end of the review period. That was particularly evident in Japanese equity prices, which fell sharply (**Chart 7**).

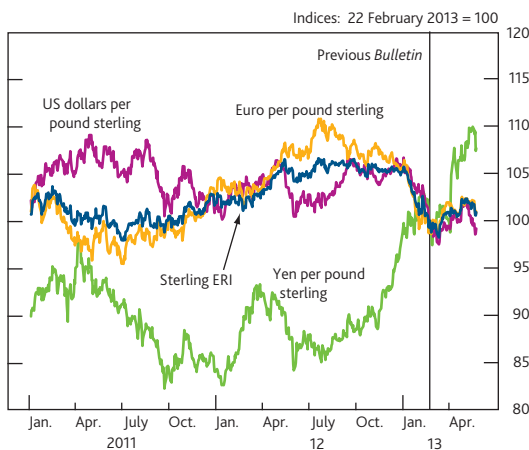
US issuance of collateralised loan obligations (CLOs) slowed in April, having grown rapidly earlier in the year. Contacts attributed the decline in the pace of issuance to the introduction of a capital surcharge on banks' CLO holdings by the Federal Deposit Insurance Corporation, which came into

effect on 1 April. A significant compression in lending margins was also reported to have made it difficult for arrangers of CLOs to engineer the returns typically expected of such instruments, tempering investor appetite. In Europe, CLO issuance continued to show signs of increasing, with the launch of the fourth European CLO in 2013, taking total issuance to US\$2 billion. But this remained a long way from the level of issuance at the peak of the market in 2006, and contacts reported that prospective changes by the European Banking Authority to rules on CLO origination would constrain the market from growing to pre-crisis levels.

### Foreign exchange

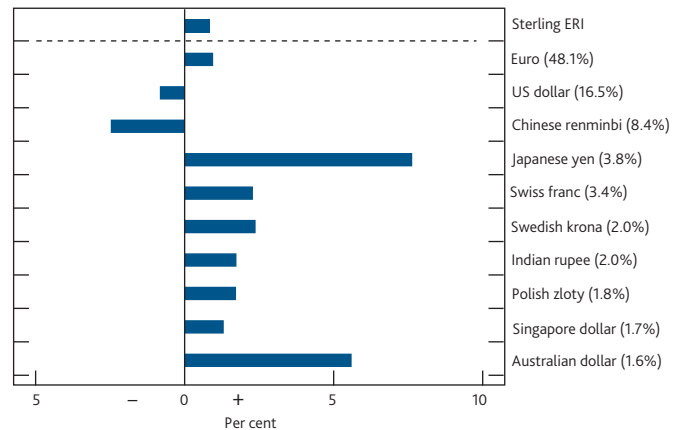
The sterling exchange rate index (ERI) remained at around the same level as it had been over the past few years (Chart 9). Changes in sterling exchange rates were relatively small, with the pound appreciating by 0.6% on a trade-weighted basis during the review period (Chart 10). The currency was down slightly against the dollar, reflecting the relatively robust improvement in US economic data compared with that of the United Kingdom, and growing expectations that the Federal Reserve might soon begin to slow the pace of monetary expansion. In contrast, and in common with a broad basket of currencies, sterling appreciated against the yen, following policy loosening by the Bank of Japan.

Chart 9 Sterling ERI and bilateral exchange rates



Sources: Bloomberg and Bank calculations.

Chart 10 Changes in sterling ERI and selected bilateral exchange rates since previous *Bulletin*<sup>(a)</sup>



Sources: Thomson Reuters Datastream and Bank calculations.

(a) Numbers in parentheses indicate the trade weight of each bilateral exchange rate in the sterling ERI.

## Operations

### Operations within the Sterling Monetary Framework and other market operations

This section describes the Bank's operations within the Sterling Monetary Framework over the review period, and other market operations. The level of central bank reserves is determined by (i) the stock of reserves injected via the Asset Purchase Facility (APF); (ii) the level of reserves supplied by indexed long-term repo (ILTR) operations and the Extended Collateral Term Repo (ECTR) Facility; and (iii) the net impact of other sterling ('autonomous factor') flows across the Bank's balance sheet.

### Operational Standing Facilities

Since 5 March 2009, the rate paid on the Operational Standing Deposit Facility has been zero, while all reserves account balances have been remunerated at Bank Rate. Reflecting this, average use of the deposit facility was £0 million in each of the February, March and April maintenance periods. Average use of the lending facility was also £0 million.

### Indexed long-term repo open market operations

The Bank conducts ILTR operations as part of its provision of liquidity insurance to the banking system. These typically occur once each calendar month. Participants are able to borrow against two different sets of collateral: one set corresponds with securities eligible in the Bank's short-term repo operations ('narrow collateral'); the other set contains a broader class of high-quality debt securities that, in the Bank's judgement, trade in liquid markets ('wider collateral').

During the review period, the Bank offered £5 billion via three-month ILTR operations on both 12 March and 9 April 2013, and £2.5 billion via a six-month operation on 14 May (Table A).

**Table A** Indexed long-term repo operations

	Total	Collateral set summary	
		Narrow	Wider
<b>12 March 2013 (three-month maturity)</b>			
On offer (£ millions)	5,000		
Total bids received (£ millions) <sup>(a)</sup>	10	0	10
Amount allocated (£ millions)	10	0	10
Cover	0.00	0.00	0.00
Clearing spread above Bank Rate (basis points)		n.a.	5
Stop-out spread (basis points) <sup>(b)</sup>	n.a.		
<b>9 April 2013 (three-month maturity)</b>			
On offer (£ millions)	5,000		
Total bids received (£ millions) <sup>(a)</sup>	5	0	5
Amount allocated (£ millions)	5	0	5
Cover	0.00	n.a.	5
Clearing spread above Bank Rate (basis points)		n.a.	5
Stop-out spread (basis points) <sup>(b)</sup>	n.a.		
<b>14 May 2013 (six-month maturity)</b>			
On offer (£ millions)	2,500		
Total bids received (£ millions) <sup>(a)</sup>	50	0	50
Amount allocated (£ millions)	50	0	50
Cover	0.02	0.00	0.02
Clearing spread above Bank Rate (basis points)		n.a.	15
Stop-out spread (basis points) <sup>(b)</sup>	n.a.		

(a) Due to the treatment of paired bids, the sum of bids received by collateral set may not equal total bids received.

(b) Difference between clearing spreads for wider and narrow collateral.

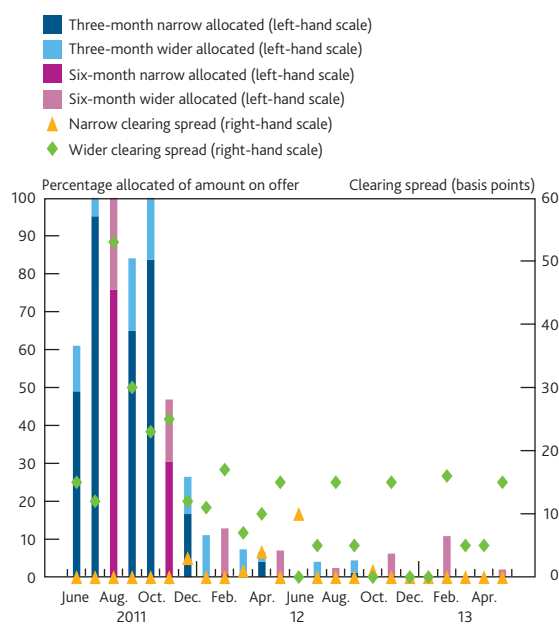
Usage remained limited and cover ratios continued to be at very low levels, in line with recent quarters. Short-term secured market interest rates remained below Bank Rate — the minimum bid rate in the ILTR operations — making repo markets a potentially cheaper source of liquidity. And the stock of outstanding APF gilt purchases financed by the creation of central bank reserves continued to provide a high level of liquidity in the banking system, reducing the need for counterparties to use the ILTR operations to meet their short-term liquidity needs (**Chart 11**).

### Extended Collateral Term Repo Facility

The ECTR Facility is a contingent liquidity facility, designed to mitigate risks to financial stability arising from a market-wide shortage of short-term sterling liquidity.<sup>(1)</sup> The Bank reviews demand for use of the Facility on a monthly basis, in consultation with ECTR eligible institutions.<sup>(2)</sup> Should the Bank determine that there is sufficient demand, it will hold an auction, normally on the third Wednesday of the month. Auctions will be pre-announced by the Bank on the preceding business day at 4 pm. In the three months to 24 May 2013, the Bank did not conduct any ECTR auctions.

### Discount Window Facility

The Discount Window Facility (DWF) provides liquidity insurance to the banking system by allowing eligible banks to borrow gilts against a wide range of collateral. The average daily amount outstanding in the DWF between 1 October 2012

**Chart 11** ILTR reserves allocation and clearing spreads

and 31 December 2012, lent with a maturity of 30 days or less, was £0 million, unchanged from the same period a year earlier.

### Other operations

#### Funding for Lending Scheme

The Funding for Lending Scheme (FLS) was launched by the Bank and the Government on 13 July 2012. The FLS is designed to incentivise banks and building societies to boost their lending to UK households and non-financial companies, by providing term funding at low rates. The quantity each participant can borrow in the FLS, and the price it pays on its borrowing, is linked to its performance in lending to the UK real economy. The initial drawdown period for the FLS opened on 1 August 2012 and will run until 31 January 2014.

The Bank and HM Treasury announced an extension to the FLS on 24 April 2013. This will allow participants to borrow from the FLS until January 2015, with incentives to boost lending skewed towards SMEs. Participants' borrowing allowances will also be expanded to include lending by participating banking groups to certain non-bank providers of credit to the UK real economy. The extended drawdown period will run from 3 February 2014 to 30 January 2015, following the initial drawdown period.<sup>(3)</sup>

Feedback from market participants regarding the extension of the FLS has been positive. The Bank expects that a significant number of eligible banks and building societies will sign up to the extension.

(1) Further details are available at [www.bankofengland.co.uk/markets/Pages/money/ectr/index.aspx](http://www.bankofengland.co.uk/markets/Pages/money/ectr/index.aspx).

(2) Further details are available at [www.bankofengland.co.uk/markets/Documents/marketnotice121120.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice121120.pdf).

(3) Further details of the extension to the FLS are available at [www.bankofengland.co.uk/markets/Documents/marketnotice130424.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice130424.pdf).

**Table B** Asset Purchase Facility transactions by type (£ millions)

Week ending <sup>(a)</sup>	Secured commercial paper	Gilts	Corporate bond		Total <sup>(b)</sup>
			Purchases	Sales	
28 February 2013 <sup>(c)(d)</sup>	0	374,949		23	374,972
7 March 2013	0	0	0	0	0
14 March 2013	0	3,300	0	8	3,292
21 March 2013	0	2,200	0	3	2,197
28 March 2013	0	1,140	0	3	1,137
4 April 2013	0	0	0	0	0
11 April 2013	0	0	0	0	0
18 April 2013	0	0	0	6	-6
25 April 2013	0	0	0	0	0
2 May 2013	0	0	0	0	0
9 May 2013	0	0	0	0	0
16 May 2013	0	0	0	0	0
23 May 2013	0	0	0	0	0
30 May 2013	0	0	0	0	0
Total financed by a deposit from the DMO <sup>(d)(e)</sup>	–	–		–	0
Total financed by central bank reserves <sup>(d)(e)</sup>	–	374,984		2	374,986
Total asset purchases <sup>(d)(e)</sup>	–	374,984		2	374,986

(a) Week-ended amounts are for purchases in terms of the proceeds paid to counterparties, and for sales in terms of the value at which the Bank initially purchased the securities. All amounts are on a trade-day basis, rounded to the nearest million. Data are aggregated for purchases from the Friday to the following Thursday.

(b) Weekly values may not sum to totals due to rounding.

(c) Measured as amount outstanding as at 28 February 2013.

(d) In terms of proceeds paid to counterparties less redemptions at initial purchase price on a settled basis.

(e) Data may not sum due to assets maturing over the period and/or due to rounding.

The Bank publishes quarterly data showing, for each group participating in the FLS, the amount borrowed from the Bank, the net quarterly flows of lending to UK households and firms, and the stock of loans as at 30 June 2012. On 3 June 2013 the Bank published data showing that a total of 40 groups had signed up to the FLS, and a total of £16.5 billion had been drawn under the FLS as at 31 March 2013.<sup>(1)</sup>

### US dollar repo operations

Since 11 May 2010, in co-ordination with other central banks, the Bank has offered weekly fixed-rate tenders with a seven-day maturity to offer US dollar liquidity, and will continue to do so until further notice. Since 12 October 2011, the Bank has also offered US dollar tenders with a maturity of 84 days. This arrangement is currently scheduled to end on 1 February 2014, following an extension to these temporary arrangements on 13 December 2012. There was no use of the Bank's US dollar facilities during the review period.

### Bank of England balance sheet: capital portfolio

The Bank holds an investment portfolio that is approximately the same size as its capital and reserves (net of equity holdings, for example in the Bank for International Settlements, and the Bank's physical assets) and aggregate cash ratio deposits. The portfolio consists of sterling-denominated securities. Securities purchased by the Bank for this portfolio are normally held to maturity, though sales may be made from time to time, reflecting, for example, risk or liquidity management needs or changes in investment

policy. The portfolio currently includes around £3.5 billion of gilts and £0.4 billion of other debt securities. Over the review period, gilt purchases were made in accordance with the quarterly announcements on 2 January and 2 April 2013. See the box on page 167 for details.

### Asset purchases<sup>(2)(3)</sup>

As of 24 May 2013, outstanding asset purchases financed by the issuance of central bank reserves under the APF were £375 billion, in terms of the amount paid to sellers. On 9 May, the MPC voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at £375 billion. **Table B** summarises asset purchases by type of asset.

### Gilts

On 7 February, the MPC voted to reinvest the cash flows of £6.6 billion associated with the redemption of the APF's holdings of the March 2013 gilt. This reinvestment was completed over six reverse auction operations between 11 March and 25 March 2013.<sup>(4)</sup>

(1) For further details see [www.bankofengland.co.uk/markets/Pages/FLS/data.aspx](http://www.bankofengland.co.uk/markets/Pages/FLS/data.aspx).

(2) For further discussion on asset purchases see the *Asset Purchase Facility Quarterly Report* available at [www.bankofengland.co.uk/publications/Pages/other/markets/apf/quarterlyreport.aspx](http://www.bankofengland.co.uk/publications/Pages/other/markets/apf/quarterlyreport.aspx).

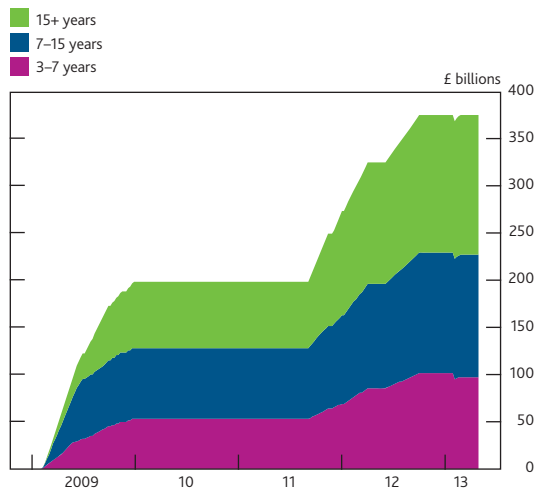
(3) Unless otherwise stated the cut-off date for data is 24 May 2013.

(4) Details of individual operations are available at [www.bankofengland.co.uk/markets/Pages/apf/gilts/results.aspx](http://www.bankofengland.co.uk/markets/Pages/apf/gilts/results.aspx).



The total amount of gilts purchased since the start of the asset purchase programme in March 2009, in terms of the amount paid to sellers, was £375.0 billion, of which £97.1 billion of purchases were in the 3–7 year residual maturity range, £129.9 billion in the 7–15 year residual maturity range and £149.9 billion with a residual maturity greater than 15 years (Chart 12).

Chart 12 Cumulative gilt purchases by maturity<sup>(a)(b)</sup>



(a) Proceeds paid to counterparties on a settled basis.  
(b) Residual maturity as at the date of purchase.

### Gilt lending facility<sup>(1)</sup>

The Bank continued to offer to lend some of its gilt holdings via the Debt Management Office (DMO) in return for other UK government collateral. In the three months to 31 March 2013, a daily average of £287 million of gilts was lent as part of the gilt lending facility. Average daily lending in the previous quarter was £283 million.

### Corporate bonds

The Bank continued to offer to purchase and sell corporate bonds via the Corporate Bond Secondary Market Scheme, with purchases financed by the issue of Treasury bills and the DMO's cash management operations, in line with the arrangements announced on 29 January 2009.<sup>(2)</sup>

There were no purchases of corporate bonds during the review period. Sales of £20 million reduced the Bank's holdings of eligible corporate bonds to zero. The remaining £2 million of holdings have residual maturity of less than twelve months so will be allowed to mature. The Bank therefore placed sale operations on hold from 19 April 2013, with the intention of restarting them in the event of further purchases being made.

### Secured commercial paper facility

The Bank continued to offer to purchase secured commercial paper (SCP) backed by underlying assets that are short term and provide credit to companies or consumers that support economic activity in the United Kingdom.<sup>(3)</sup> The facility remained open during the review period but no purchases were made.

(1) For more details on the gilt lending facility see the box 'Gilt lending facility' in the *Bank of England Quarterly Bulletin*, Vol. 50, No. 4, page 253.

(2) The APF was initially authorised to purchase private sector assets financed by Treasury bills and the DMO's cash management operations. Its remit was extended to enable the Facility to be used as a monetary policy tool on 3 March 2009. All purchases of assets between 6 March 2009 and 4 February 2010 were financed by central bank reserves. All purchases of private sector assets since 4 February 2010 have been financed by the issuance of Treasury bills and the DMO's cash management operations. All purchases of gilts since 10 October 2011 have been financed by central bank reserves. The Chancellor's letter is available at [www.hm-treasury.gov.uk/d/chx\\_letter\\_050712.pdf](http://www.hm-treasury.gov.uk/d/chx_letter_050712.pdf).

(3) The SCP facility is described in more detail in the Market Notice available at [www.bankofengland.co.uk/markets/Documents/marketnotice120801.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice120801.pdf).

## Management of the Bank's sterling bond portfolio

The Bank of England Act 1998 requires eligible banks and building societies to hold a percentage of their eligible liabilities, above a minimum threshold, as non interest bearing deposits with the Bank. These are known as cash ratio deposits (CRDs). The Bank then invests CRDs in interest-yielding assets. The income generated by the CRD scheme is used by the Bank to fund its policy functions (though the Prudential Regulation Authority is funded separately).

The bulk of CRDs and the Bank's free capital and reserves are invested in a portfolio of sterling bonds. Holdings of gilt securities are currently £3.4 billion and holdings of other supranational sterling bonds were £0.4 billion as of 24 May 2013. Purchases related to the CRD scheme do not involve any increase in central bank reserves in the system, and are wholly unrelated to the exercise of monetary policy and the Asset Purchase Facility.

The Bank normally invests CRDs via regular trades with its gilt open market operations counterparties. Purchases are usually relatively small. This is because eligible liabilities do not vary much, so operations are largely driven by the need to invest maturing bonds and coupons inflows. The Bank announces a schedule for these purchases on a quarterly basis, publishing details of the amounts of the securities it will purchase on the first working day of each quarter of the Bank's financial year (September, December, March and June). Securities are typically acquired on a buy-and-hold basis in normal circumstances, though sales may be made from time to time, reflecting, for example, risk or liquidity management needs or changes in investment policy.

There is a requirement that the CRD scheme be reviewed every five years. The most recent review, conducted in early 2013, recommended that the ratio under the scheme be increased to 0.18%, from 0.11%. This change was approved by Parliament on 21 May 2013, and came into force on 3 June 2013.<sup>(1)</sup>

The Government's decision to increase the CRD ratio was driven by two primary considerations. First, the change reflects the increased responsibilities of the Bank, including its role in the Special Resolution Regime, the introduction of new operational facilities and the associated management of risk and collateral, and the creation of the Financial Policy Committee. Second, it takes into account the impact of the current low level of gilt yields on the income generated by the scheme.

The changes set out in the 2013 review of the CRD scheme resulted in an increase in deposits of £1.53 billion. When

taking into account other flows, the Bank will need to invest up to an additional £1.6 billion in gilts during June 2013. As a result of the large amount to be invested, the Bank has decided to invest these additional deposits via a series of four reverse auctions. Under these auctions, the Bank will buy gilts across a 3–22 year range, with a view to match the broad maturity profile of the Government's existing gilts in issuance. The format of these auctions is similar to that used for gilt purchases conducted between January 2008 and March 2009.

These auctions are one-off operations and the Bank will revert to its regular approach to investing CRDs once they have been completed.

(1) For more information, see (1) The Cash Ratio Deposits (Value Bands and Ratio) Order 2013 (SI 2013/1189) made on 21 May 2013 and the related (2) The Bank of England (Call Notice) (Benchmark Rate of Interest) Order 2013 (SI 2013/721) made on 26 March 2013.