Markets and operations

- The review period saw an improvement in the growth prospects of some developed economies with an associated rise in financial market prices. The relatively strong outlook for the United Kingdom also led to an increase in sterling short-term interest rates.
- Idiosyncratic risks in emerging market economies resulted in a bout of turbulence during the review period.
- In the February *Inflation Report* the Bank's Monetary Policy Committee (MPC) provided further guidance on the likely path of its policy once the unemployment threshold of 7% was reached. The MPC judged that there was scope for the UK economy to recover further before Bank Rate was raised and, even when Bank Rate did rise, it was expected to do so only gradually and to a level materially below its pre-crisis average of 5%.
- The year end saw some volatility in money markets internationally. This included sharp falls in UK overnight interest rates.

Overview

In February, the Bank of England Monetary Policy Committee (MPC) provided further guidance on its monetary policy once the unemployment threshold of 7% was reached. The MPC judged that there was scope for the UK economy to recover further before Bank Rate was raised and, even when Bank Rate did rise, it was expected to do so only gradually and to a level materially below its pre-crisis average of 5%. This followed the decision of the Federal Open Market Committee (FOMC) in December to begin to slow the pace of its asset purchases. The FOMC also stressed that it would hold the main policy rate near zero 'well past' the time when unemployment reached the 6.5% threshold set out in its forward guidance.

Reflecting a broad improvement in the prospects for the world recovery, there was a strengthening in financial market sentiment and a rise in a range of asset prices. In the United Kingdom short-term interest rates rose and sterling appreciated, with the sterling exchange rate index ending the review period around 1.9% higher than at its start.

While the economic outlook for some developed economies had picked up, a number of idiosyncratic risks in emerging markets came to the fore during January, leading to a rise in risk aversion and falls in international equity indices and US and UK sovereign bond yields. Concerns about slowing growth and the health of the shadow banking system in China also served to dampen confidence more widely. Some of these worries subsequently abated to a degree, but further volatility was introduced by the intensification of political tensions between Ukraine and Russia towards the end of the review period.

The year end also saw some volatility in a number of developed-economy money markets. Sharp falls in UK secured and unsecured overnight interest rates were associated with banks' reluctance to accept deposits over the year end, partly given the increased focus of investors on leverage and other aspects of banks' balance sheets in parallel to the introduction of new regulatory requirements. There was also volatility in euro-area short-term interest rates, which might have been related to banks' ongoing efforts to pay back borrowings from the European Central Bank's longer-term refinancing operations.

In discharging its responsibilities to ensure monetary stability and protect and enhance financial stability, 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.

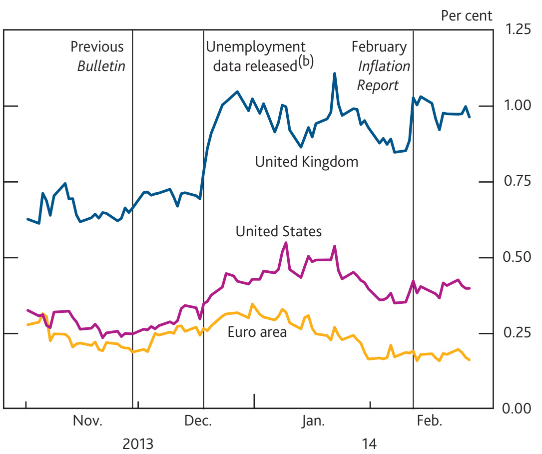
The first section of this article draws upon both data and the intelligence from contacts in order to describe and interpret recent developments in financial markets. The section contains two boxes, which discuss the short sterling interest rate futures market and the recent volatility in emerging markets respectively. The article goes on to describe the Bank's own operations within the Sterling Monetary Framework.

Financial markets

Monetary policy and interest rates

Sterling short-term interest rates rose in the first half of the review period. Contacts attributed this to an improved outlook for the UK economy. In particular, there was a larger-than-expected fall in the unemployment rate to 7.4% in the three months to October 2013 and then to 7.1% for the three months to November. The UK one-year overnight index swap (OIS) rate one year forward rose by around 25 basis points over the course of December, compared with increases of 12–15 basis points in the United States and euro area over the same period (**Chart 1**).

Chart 1 One-year OIS rates, one year ahead[a]



Sources: Bloomberg and Bank calculations.

(a) Forward rates derived from the Bank's OIS curves.
(b) Labour Force Survey data released on 18 December 2013 showed that the unemployment rate for the three months to October 2013 was 7.4%.

Around the same time, the Federal Open Market Committee (FOMC) announced a reduction — or 'tapering' — in the pace of its asset purchases from US$85 billion per month to US$75 billion per month. A further US$10 billion per month reduction was announced in January. Short-term OIS rates in the United States and United Kingdom rose following the announcement, which came slightly earlier than had been anticipated by most market participants.

In January, developed market short-term market interest rates fell slightly. This followed a renewed bout of turbulence in emerging markets driven by a number of idiosyncratic risks which began to affect market sentiment at around the same time (the box on page 81 discusses this episode in more detail). It may also have reflected slightly weaker economic data in both the United States and United Kingdom.

Throughout the review period, 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. With the publication of the February *Inflation Report*, the MPC noted that the unemployment rate was likely to reach the 7% threshold, which it set in August as part of its forward guidance, within the next few months. The MPC also provided further guidance on monetary policy as the UK economy recovered. The MPC judged that there was scope for the UK economy to recover further before Bank Rate was raised and, even when Bank Rate did rise, it was expected to do so only gradually and to a level materially below its pre-crisis average of 5%. The MPC also announced its intention to maintain the stock of assets purchased under its quantitative easing (QE) programme, including the reinvestment of cash flows associated with all maturing gilts held in the Asset Purchase Facility to at least until Bank Rate has been raised.

The one-year OIS rate one year forward rose initially on the publication of the February *Inflation Report*, by around 14 basis points. And there was a pickup in activity in the short sterling interest rate futures market (for further discussion of this market see the box on page 78). Contacts pointed to upward revisions to the MPC's assessment of the prospects for growth. Some market participants had also expected the MPC to update its forward guidance by, for example, reducing its unemployment threshold or by publishing a collective view of the most likely path of Bank Rate.

The rise in short-term interest rates dissipated over the following few weeks, however. Contacts thought the fallback in rates reflected weaker data and the impact of demand for safe-haven assets as a result of the increase in emerging market volatility. Some contacts also suggested that market participants had reappraised their expectations of the time at which Bank Rate was likely to rise in light of the MPC's updated guidance. Nonetheless, sterling forward OIS rates of most maturities rose between the Q4 *Bulletin* and the Q1 data cut-off (**Chart 2**).

The short sterling market

On the day of the February *Inflation Report* the short sterling market saw over two million transactions, the highest daily volume ever recorded. This box examines the mechanics of the short sterling market and explains how it can be useful in interpreting market activity.

The short sterling market

Short sterling is the colloquial name for the market in sterling London interbank offered rate (Libor) futures contracts. A futures contract is an instrument that allows a market participant to agree to exchange a financial asset at some future time at a fixed price. In the case of short sterling futures, a participant is agreeing the interest rate (the three-month sterling Libor rate) expiring at some point in the future.

Short sterling is an order-driven market, with an order book of bid and ask prices for each futures contract. Liquidity is provided by participants taking either side of a contract. Market makers operate only in the most illiquid contracts.

Futures contracts expire on international money market dates — the third Wednesday of March, June, September and December. There are 26 active short sterling contracts traded on the NYSE Liffe exchange, allowing participants to express views on the path of interest rates over the next five years.

The short sterling market is used by market participants wishing to express a view on the future path of interest rates, and by those wishing to hedge (or, protect themselves against losses that could result from) future changes to interest rates.

The breadth of participation makes short sterling the most liquid sterling interest rate derivative market. Almost all institutions and investors transacting in sterling markets (including banks, non-bank financials and non-financial firms) have an interest in hedging or speculating on the future path of Libor rates.

Short sterling contracts are structured as contracts for difference; that is, participants pay (or receive) the difference between the Libor rate agreed at the point of inception of their contract and the actual Libor rate on the date of expiry. In reality, few contracts are held to expiry: most participants will take out an offsetting position in order to close their trade and take profit (or limit losses) following market moves.

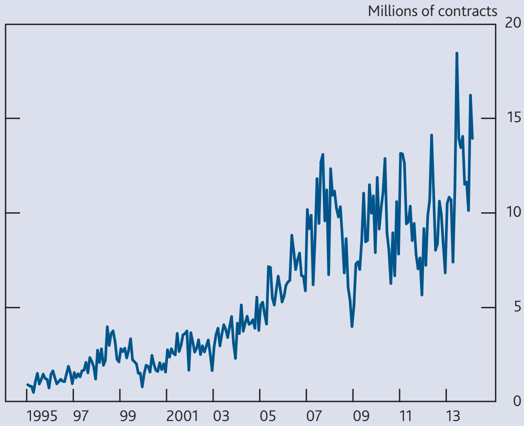
Unlike other interest rate derivatives markets, the short sterling futures also have options traded upon them, which allow market participants to express views on the uncertainty around the future path of short sterling interest rates.

Information from options prices is also used by the Bank to derive summary measures of the uncertainty that market participants attach to future interest rates, some of which are published on the Bank's website.(1)

Interpreting market activity

Chart A shows that the number of daily transactions in the short sterling market has been steadily increasing since 1995, although it has been more volatile since the start of the financial crisis. These volumes data can shed light on the key data and events to which market participants are paying greatest attention.

Chart A Short sterling volumes (monthly)



Source: NYSE Liffe.

Table 1 shows the dates on which the largest daily volumes were recorded in recent years. Bank of England publications and policymaker speeches account for half of these days. Three days saw the release of data that differed materially from market expectations. The remaining two days occurred in early June 2013 when concerns regarding the pace of normalisation in US monetary policy dominated trading in the short sterling market.

Table 1 Recent peaks in the number of contracts traded

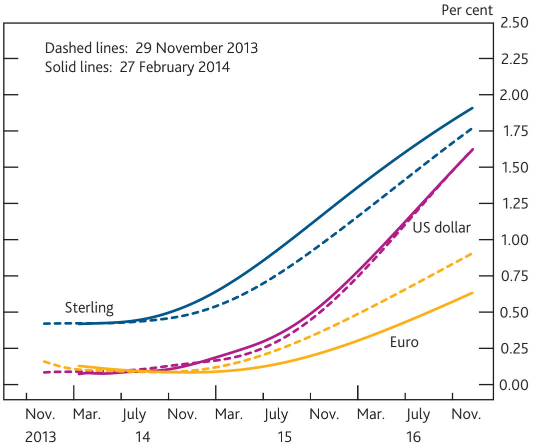
Rank	Date	Number of contracts	Event
1	12 Feb. 2014	2,043,884	February 2014 *Inflation Report*
2	22 Jan. 2014	1,985,457	ILO three-month unemployment rate (November 2013 data)
3	15 June 2012	1,774,039	Mansion House speech regarding further QE
4	24 Jan. 2014	1,735,895	Bank of England Governor's speech in Davos
5	11 June 2013	1,706,709	Concerns regarding US tapering
6	7 Aug. 2013	1,632,952	August 2013 *Inflation Report*
7	18 Dec. 2013	1,527,959	ILO three-month unemployment rate (October 2013 data)
8	25 Jan. 2011	1,491,967	First estimate of 2010 Q4 UK GDP
9	24 June 2013	1,484,442	Concerns regarding US tapering
10	13 Nov. 2013	1,470,628	November 2013 *Inflation Report*

Source: NYSE Liffe.

Sometimes, short sterling rates move on low volumes, however. For example, on 10 January 2014, weaker-than-expected US non-farm payrolls data led to an 11 basis point move in short sterling contracts two years ahead. But volumes were not particularly large on the day, with only 699,000 contracts traded.

(1) www.bankofengland.co.uk/statistics/Pages/impliedpdfs/default.aspx.

Chart 2 Instantaneous forward interest rates derived from OIS contracts[(a)]

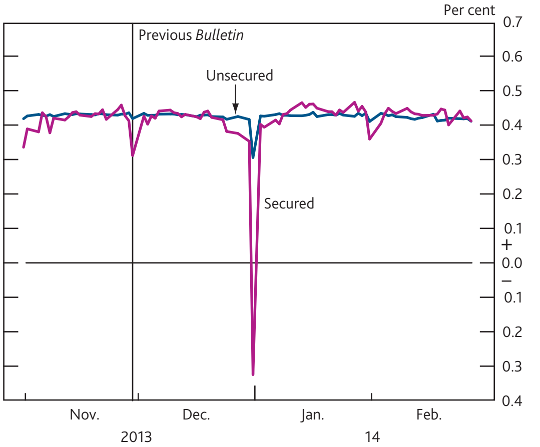


Sources: Bloomberg and Bank calculations.

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

The end of 2013 saw some volatility in sterling overnight interest rates, and the secured overnight interest rate fell materially below its recent average (**Chart 3**). While such volatility around the year end has been seen in previous years, these movements were particularly large. Contacts suggested that this largely reflected the increased focus of investors and rating agencies on particular aspects of banks' balance sheets, such as leverage and liquidity, in parallel with the introduction of regulatory requirements related to such metrics.

Chart 3 Weighted average sterling overnight interest rates[(a)]

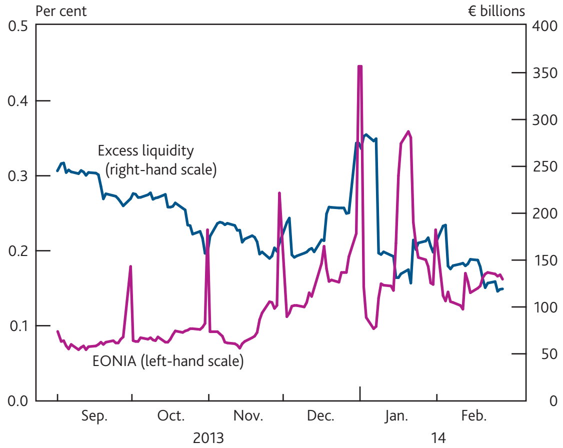


Sources: Bloomberg and Bank calculations.

(a) The unsecured overnight interest rate is measured by the sterling overnight index average (SONIA). The secured overnight interest rate is measured by the repurchase overnight index average (RONIA). Both indices are provided by the Wholesale Markets Brokers' Association. For further details, see www.wmba.org.uk.

By contrast, euro-area short-term interest rates rose around the year end (**Chart 4**). Contacts suggested that this was because banks had sought to increase the liquidity of their assets over year end while also reducing their reliance on term funding provided via the European Central Bank's (ECB's) longer-term refinancing operations. The resulting increase in demand for short-term liquidity put upward pressure on euro money market rates. It also led to greater borrowing in the ECB's main refinancing operation, temporarily reversing the gradual decline in excess liquidity that has continued since mid-2012. Money market conditions appeared to stabilise after year end.

Chart 4 Weighted average euro interbank unsecured overnight interest rate (EONIA) and excess liquidity in the Eurosystem[(a)(b)]



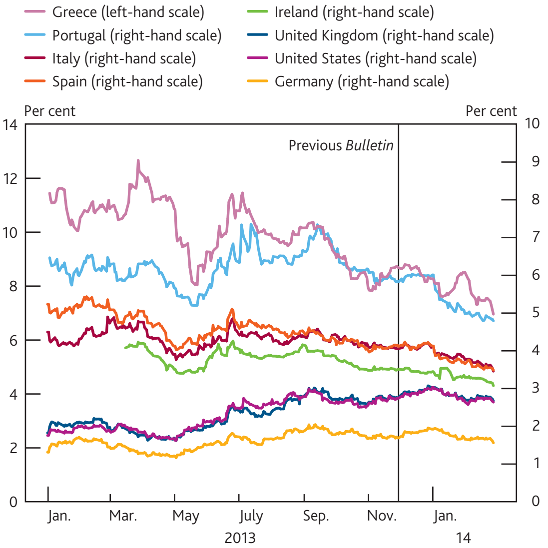
Source: Bloomberg.

(a) Excess liquidity is defined as the total amount of reserves held in Eurosystem current accounts and the deposit facility, minus average reserves requirements and use of the marginal lending facility.
(b) EONIA is the weighted average of overnight unsecured lending transactions in the interbank market undertaken in the European Union and European Free Trade Association (EFTA) countries.

US and UK ten-year sovereign bond yields continued to comove closely (**Chart 5**). Long-run inflation expectations in the United Kingdom implied by inflation-linked gilts fell during January so that nominal gilt yields decreased by more than real gilt yields over the review period. The spread between German sovereign bonds and those of the United States and United Kingdom continued to widen, meanwhile, which contacts attributed to continued relative weakness of the economic outlook for the euro area versus other developed economies.

At the same time, euro-area periphery government bond yields fell and their spreads to equivalent-maturity German bonds compressed. Contacts attributed this to a reduction in the risks associated with the outlook for these economies and a return of foreign investors to those markets. In December, Ireland exited its Economic Adjustment Programme, which its government had arranged with the European Union,

Chart 5 Selected ten-year government bond yields



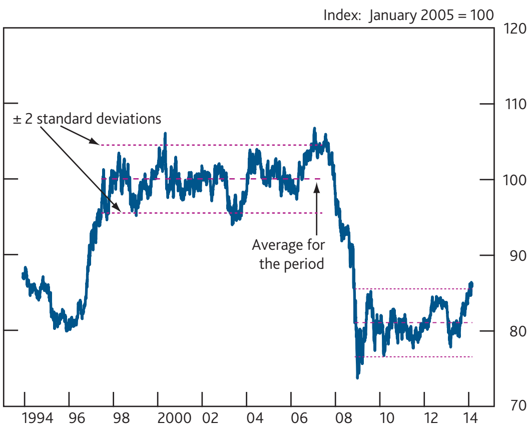
Source: Bloomberg.

International Monetary Fund and ECB in 2010. The issuance of its ten-year bond in January attracted significant demand.

Foreign exchange

The sterling exchange rate index (ERI) appreciated by 1.9% over the review period. Sterling has been trading within a reasonably narrow range since the middle of 2008 (**Chart 6**). But the recent appreciation of the pound has taken it above the upper limit of that range. Contacts attributed much of the recent strength of sterling to improvements in the economic outlook for the United Kingdom relative to other advanced economies.

Chart 6 Sterling exchange rate index[(a)]

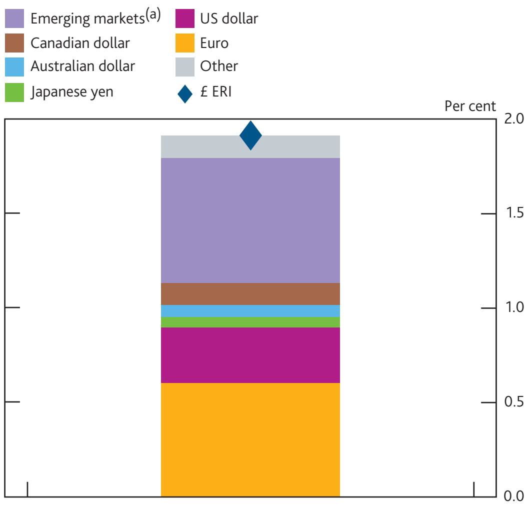


Sources: Bloomberg and Bank calculations.

(a) Dashed lines show period averages. Two standard deviation bands are given by dotted lines around the average. The first period covers 3 July 1997 to 4 July 2007. The second period covers 4 December 2008 to 27 February 2014.

Along with improving prospects for growth, the appreciation of sterling was thought to reflect a rise in demand for safe-haven assets during the pickup in volatility associated with emerging markets in January (see the box on page 81 for further discussion), and, later, rising political tensions in Ukraine. As shown in **Chart 7**, emerging market currencies contributed over a third of the rise in sterling's ERI during the review period, despite having a combined weight in the index of 17.5%. Contacts also reported that the sale of the US telecommunications company Verizon by its British parent Vodafone had temporarily supported the pound versus the dollar.

Chart 7 Contribution to change in sterling ERI since 29 November 2013 by currency



Sources: Bloomberg and Bank calculations.

(a) The emerging market currencies in the narrow sterling ERI are: Chinese renminbi, Czech koruna, Indian rupee, Polish zloty, Russian rouble, South African rand and Turkish lira.

Some commentators suggested that there was a risk of sterling depreciation due to the United Kingdom's sizable current account deficit. The views of contacts on this were mixed. Some believed that market participants typically do not enter speculative trades on the basis of developed-economy current account positions, while others thought that markets had begun to look at such data more closely.

Towards the end of the review period, and following a prolonged period of appreciation, the People's Bank of China lowered its reference rate for the renminbi against the US dollar (**Chart 8**). The move spurred a large decline in the renminbi and caught investors by surprise. Commentators suggested that the Chinese central bank action had effectively introduced more 'two-way risk' into the currency, and might perhaps presage a widening of the daily trading band (the renminbi is allowed to move ±1% around the reference rate on any given day).

Corporate capital markets

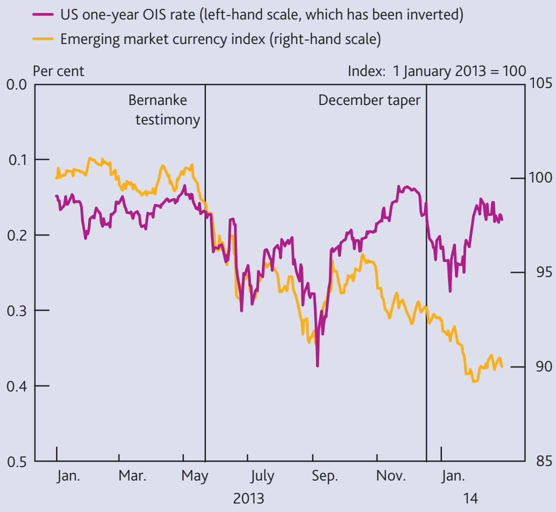
Developed market equity indices rose slightly over the review period as a whole, with much of that increase occurring following the December FOMC meeting (**Chart 9**). Despite the slightly earlier-than-expected decision by the FOMC to taper, contacts thought that investor demand for risky assets

Recent episodes of turbulence in emerging financial markets

During the summer of 2013, following the testimony of the then US Federal Reserve Chairman Ben Bernanke, concerns about the pace of exit from current monetary policy settings in the United States sparked a sell-off across a range of emerging financial markets. Even some markets perceived to have strong fundamentals were affected, in part, because they were used to 'proxy hedge' exposures in other, less liquid markets. Markets later stabilised, however, and investors began to discriminate to a greater degree between different emerging markets on the basis of economic fundamentals.

Against that backdrop, the eventual decision by the Federal Reserve to reduce the pace of its asset purchases in December passed with relatively little reaction in most emerging financial markets. Indeed, the high correlation between movements in emerging market currencies and US short-term interest rates observed during the middle of 2013 was notably absent towards the end of the year and in 2014 (**Chart A**).

Chart A Emerging market foreign exchange index and US short-term OIS rates



Sources: Bloomberg, JPMorgan Chase and Co. and Bank calculations.

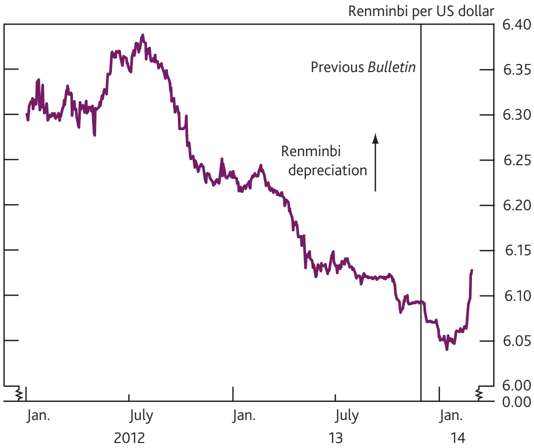
January saw a renewed bout of volatility in emerging markets, however. Contacts suggested this was sparked by a range of coincident but idiosyncratic vulnerabilities. These developments were felt particularly strongly in foreign exchange markets, with further depreciation of certain emerging market currencies (**Chart A**). Despite the view expressed by many contacts that the underlying risks were not related to a common factor, the period still saw some of the same 'proxy hedging' activity as was observed the previous summer.

Some emerging market equity indices also fell as real money investors allocated a smaller proportion of new capital to developing economies. Contacts reported that, in light of financial market volatility last summer, many investors had since bought emerging market equities with only limited conviction in the trade, and so were quick to sell those positions when volatility resurfaced in January. Broad emerging market equities remain down, with the MSCI emerging market equity index around 5.4% lower than at the start of the review period.

Although, on the whole, investors continued to differentiate between countries, concerns about a slowdown in China and risks associated with shadow banking there were thought to have contributed to downward pressure on emerging market assets in general. Contacts thought that the possibility of a hard landing in China would continue to weigh on the economic outlook internationally, although they remained confident of policymakers' ability to respond.

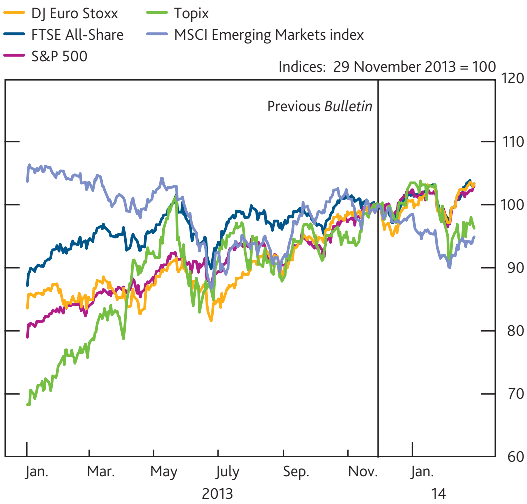
Volatility declined in February for a brief period, but many contacts felt that, despite attractive prices in some emerging market assets following the January sell-off, further adjustment was required. Following the data cut-off, intensification of political tension between Ukraine and Russia led to a sharp depreciation of both the Ukrainian hryvnia and the Russian rouble. The Russian central bank raised its main policy rate by 1.5 percentage points, citing financial stability concerns, and reportedly intervened in foreign exchange markets to try to avoid further currency depreciation. So far, contagion to other markets has been limited. But contacts expected political risk to remain a key concern for investors this year, and pointed to the large number of imminent elections in the emerging world.

Chart 8 US dollar versus renminbi



Source: Bloomberg.

Chart 9 International equity indices(a)(b)



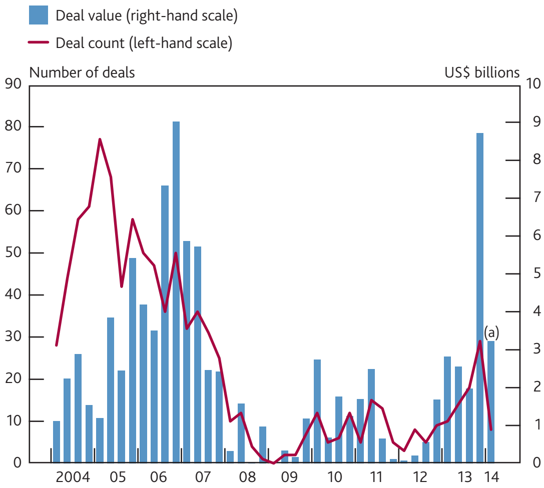
Sources: Bloomberg and Bank calculations.

(a) Indices are quoted in domestic currency terms, except for the MSCI Emerging Markets index, which is quoted in US dollar terms.
(b) The MSCI Emerging Markets index is a free-float weighted index that monitors the performance of stocks in global emerging markets.

had been boosted by FOMC communication which stressed that rates would remain near zero until 'well past' the 6.5% unemployment threshold was reached. In addition, the decision to reduce the pace of asset purchases was taken by some as a signal that the Federal Reserve had become more confident in the resilience of the US recovery. International equity indices then fell in late January following market concerns about the fragility of a number of emerging market economies (for further discussion see the box on page 81). Developed market equity indices have recovered since, and are slightly higher over the review period as a whole.

There was a significant pickup in the overall value of initial public offerings (IPOs) over the course of 2013. The total value of IPOs by firms based in the United Kingdom was US$16 billion in 2013, only slightly below the US$16.4 billion seen in 2007. That said, a significant portion of this was concentrated in a few large deals and the total number of

Chart 10 Total value and number of initial public offerings by UK firms



Source: Dealogic.

(a) Data up to 27 February 2014.

UK IPOs remained below the average observed in the years running up to the financial crisis (**Chart 10**). Also, ongoing share buybacks meant that, overall, net equity issuance remained negative.

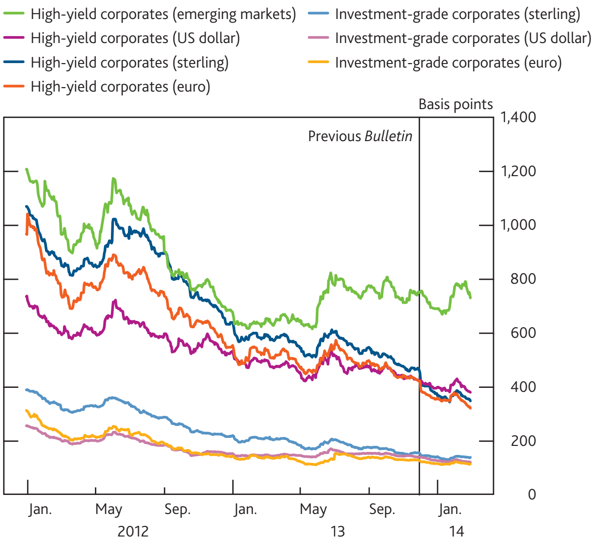
Contacts attributed the increase in the number of UK IPOs over the past year to a rise in equity valuations and reduced volatility in developed-economy equity markets. Private equity owners of corporates had also become more confident in IPOs as a means of exiting investments. And there had been large inflows into equity funds, which asset managers had to deploy. Contacts expected the IPO market to continue to perform strongly — conditional on general financial market conditions remaining conducive to corporate flotations — and pointed to a large number of deals 'in the pipeline'.

In corporate bond markets, advanced-economy investment grade and high-yield credit spreads continued to fall (**Chart 11**). Spreads increased slightly in January following concerns around conditions in emerging market economies, but quickly fell back, suggesting that there was little perceived spillover to corporate credit risk in developed markets.

Bond issuance by UK private non-financial corporations since the start of the year was broadly in line with the same period in 2013 (**Chart 12**). Contacts reported continued robust investor demand for new issuance, with most deals significantly oversubscribed and attracting only a very small premium compared with bonds trading in secondary markets. The review period also saw significant demand for bonds issued by firms based in the euro-area periphery economies.

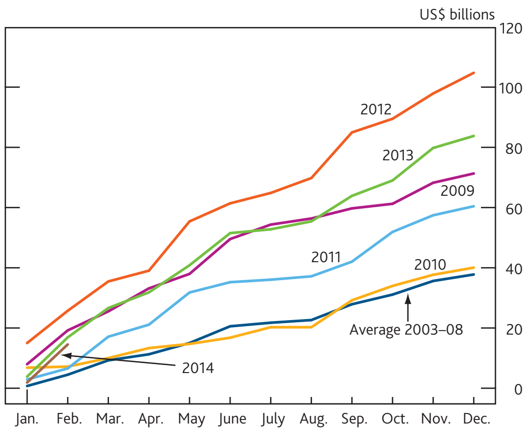
After a period of very strong issuance during much of 2013, issuance of collateralised loan obligations (CLOs) slowed in the United States following the publication of the Volcker Rule in December. Contacts thought that the regulation had left

Chart 11 International corporate bond option-adjusted spreads



Sources: BofA Merrill Lynch Global Research and Bank calculations.

Chart 12 Cumulative gross bond issuance by UK private non-financial corporations[(a)]



Sources: Dealogic and Bank calculations.

(a) Data up to 27 February 2014.

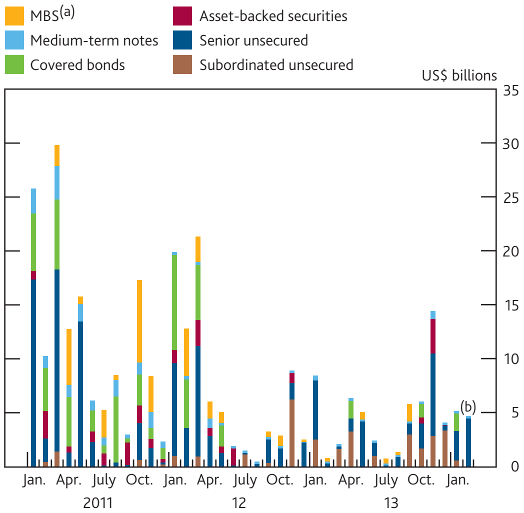
investors uncertain about whether US banks were allowed to invest in CLOs that contain assets besides loans, such as bonds and structured products. Market participants awaited clarification on the wording of the ruling.

Meanwhile, issuance of loans with few financial covenants, or 'cov-lite', continued apace in the United States. Total issuance of cov-lite loans was US$381 billion in 2013, more than four times higher than the US$84 billion issued in 2012. Contacts reported that loose terms on loans had become increasingly common in US markets amid strong demand for floating-rate corporate credit. To date, there has been little cov-lite loan issuance in Europe, with some European borrowers looking to raise finance directly from US investors. Contacts expected a pickup in European cov-lite this year, and several borrowers were thought to be in negotiations with syndicates of lenders.

Bank funding markets

Term debt issuance by UK banks had picked up a little towards the end of last year, but was relatively weak during the current review period (**Chart 13**). Banks had drawn down a significant amount under the Bank of England Funding for Lending Scheme, however, taking £18.8 billion in the four months ending 31 January 2014. Contacts thought that UK bank funding needs remained relatively low, in the context of lenders' ongoing efforts to reduce leverage.

Chart 13 Term issuance by UK lenders in public markets



Sources: Dealogic and Bank calculations.

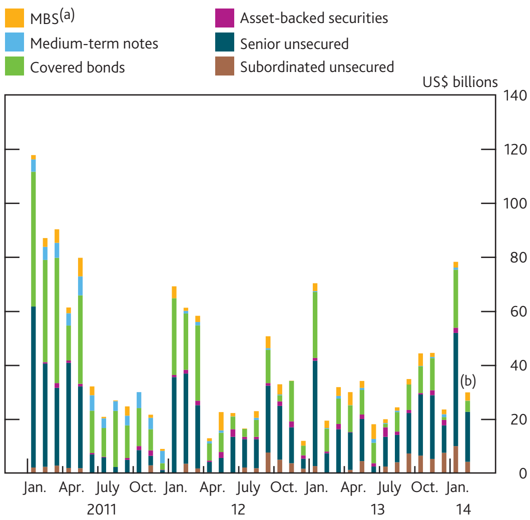
(a) Commercial and residential mortgage-backed securities.
(b) Data up to 27 February 2014.

In contrast, following the typical seasonal pattern, there was a flurry of issuance by European lenders at the start of the year (**Chart 14**). Contacts noted that strong investor appetite allowed a number of euro-area periphery banks to issue unsecured debt, at long tenors, with deals tending to be oversubscribed and priced very competitively.

There was also further bank issuance of contingent convertible capital instruments during the review period. Contacts reported that the investor base for these relatively new instruments continued to broaden, pointing to the attractive yields that they offered. It was suggested, however, that some investors might find it difficult to price the implicit optionality in these instruments.

In the secondary market, UK banks' senior unsecured bond spreads remained broadly flat over the period (**Chart 15**). The wedge between credit default swap (CDS) premia — CDS contracts provide insurance against default on a bond — and bond spreads was also largely unchanged over the review period, after steady declines from around the middle of 2013. According to contacts, the difference between the two, or CDS-cash 'basis', had been falling in large part because of increased confidence among investors and growing willingness

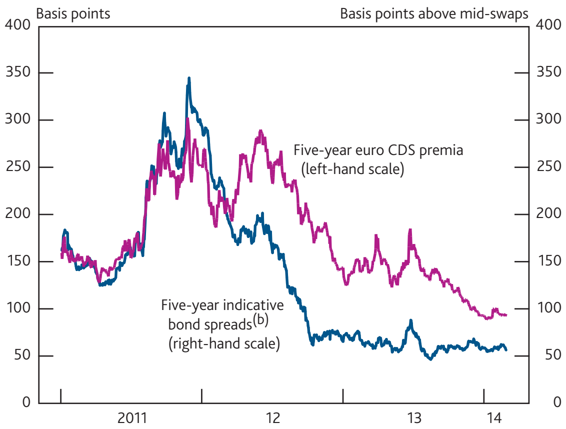
Chart 14 Term issuance by European (excluding UK) lenders in public markets



Sources: Dealogic and Bank calculations.

(a) Commercial and residential mortgage-backed securities.
(b) Data up to 27 February 2014.

Chart 15 Indicative senior unsecured bond spreads and CDS premia for UK banks(a)



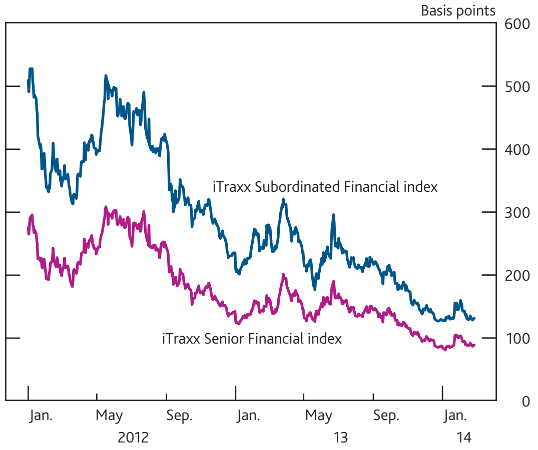
Sources: Bloomberg, Markit Group Limited and Bank calculations.

(a) Average of Barclays, HSBC, Lloyds Banking Group, Nationwide, Royal Bank of Scotland and Santander UK.
(b) 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 institutions' five-year bond. If no bond is available for a given institution, a proxy has been constructed based on the ratio of credit default swaps between that institution and the issuer of the corresponding five-year bond.

to bear risk, leading to an increase in the supply of protection and a decline in CDS premia.

Contacts also noted strong downward pressure on CDS premia referenced to subordinated bank debt. This segment of the market has been particularly affected by uncertainty about whether CDS contracts would pay out if governments forced bondholders to bear losses in the event of a bank failure, following some recent test cases. This uncertainty regarding what constitutes such a 'bail-in' credit event has reduced the amount that investors are willing to pay for protection against default. As a result, there has been a marked decline in

Chart 16 CDS premia for European financial entities(a)



Source: Bloomberg.

(a) The iTraxx indices comprise equally weighted euro-denominated five-year credit default swaps on investment-grade European entities.

subordinated CDS premia, compared with those for CDS contracts referencing senior bonds (**Chart 16**). Contacts expected this uncertainty to be eliminated soon, with the introduction of changes to the standardised documentation by the International Swaps and Derivatives Association.

Operations

Operations within the Sterling Monetary Framework and other market operations

This section describes the Bank's operations within the Sterling Monetary Framework (SMF) 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 operations under the SMF; 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. As a consequence, average use of the deposit facility was £0 million in each of the November, December and January maintenance periods. Average use of the lending facility was also £0 million.

Indexed long-term repo open market operations

The Bank conducts indexed long-term repo (ILTR) operations as part of its provision of liquidity insurance to the banking system. These typically occur once every calendar month. On 16 January, the Bank launched new ILTR auctions designed to provide more liquidity at cheaper rates, longer maturities and against a wider range of collateral than previously available. In addition, the amount of liquidity available will rise automatically if there is greater demand.[1] The first ILTR operation under the revised format took place on 11 February.

During the review period, the Bank offered £5 billion via three-month ILTR operations on both 10 December 2013 and 7 January 2014, and a minimum of £5 billion via the first of the revised ILTR auctions at a six-month maturity on 11 February 2014 (**Table A**).

Table A Indexed long-term repo operations

	Total	Collateral set summary		
		Set A	Set B	Set C
10 December 2013 (three-month maturity)				
On offer (£ millions)	5,000			
Total bids received (£ millions)	55	55	0	n.a.
Amount allocated (£ millions)	55	55	0	n.a.
Cover	0.01	0.01	0.00	n.a.
Clearing spread above Bank Rate (basis points)		0	n.a.	n.a.
Stop-out spread (basis points)[a]	n.a.			
7 January 2014 (three-month maturity)				
On offer (£ millions)	5,000			
Total bids received (£ millions)	200	200	0	n.a.
Amount allocated (£ millions)	200	200	0	n.a.
Cover	0.04	0.04	0.00	n.a.
Clearing spread above Bank Rate (basis points)		0	n.a.	n.a.
Stop-out spread (basis points)[a]	n.a.			
11 February 2014 (six-month maturity)				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	910	240	110	560
Amount allocated (£ millions)	910	240	110	560
Clearing spread above Bank Rate (basis points)		0	5	15

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

Over the quarter, and in line with recent quarters, the aggregate level of reserves supplied by the Bank through QE remained in excess of the level that would otherwise be demanded by market participants. Usage of the facility therefore remained limited, though the launch of the revised operations prompted some additional interest (**Chart 17**).

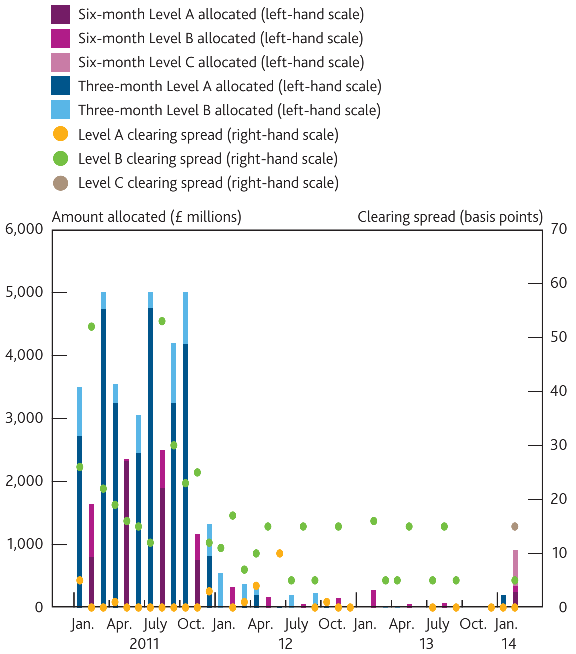
Contingent Term Repo Facility

As all collateral previously accepted in the Extended Collateral Term Repo (ECTR) Facility is now accepted in the ILTR, the ECTR has been renamed as the Contingent Term Repo Facility. The CTRF is a contingent liquidity facility, designed to mitigate risks to financial stability arising from a market-wide shortage of short-term sterling liquidity.[2] The Bank judged that in light of market conditions, CTRF auctions were not required in the review period.

Discount Window Facility

The bilateral on-demand Discount Window Facility (DWF) is aimed at banks experiencing a firm-specific or market-wide shock. It allows participants to borrow highly liquid assets in return for less liquid collateral in potentially large size and for a variable term. The average daily amount outstanding in the DWF between 1 July 2013 and 30 September 2013, lent with a maturity of 30 days or less, was £0 million.

Chart 17 ILTR reserves allocation and clearing spreads[a]



(a) Where there has not been any allocation to a collateral set, no clearing spread is marked.

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 ran until 31 January 2014.

The Bank and HM Treasury announced an extension to the FLS on 24 April 2013, which allowed participants to borrow from the FLS until January 2015. The extended drawdown period will run from 3 February 2014 to 30 January 2015, following the initial drawdown period.[3]

On 28 November 2013, the Bank and HM Treasury announced changes to the terms of the FLS to refocus the incentives in the Scheme towards supporting small business lending in 2014.[4]

(1) Further details are available at www.bankofengland.co.uk/markets/Documents/marketnotice140116.pdf.
(2) Further details are available at www.bankofengland.co.uk/markets/Pages/money/ctrf/default.aspx.
(3) Further details are available at www.bankofengland.co.uk/markets/Documents/marketnotice130424.pdf.
(4) Further details are available at www.bankofengland.co.uk/markets/Documents/marketnotice131128.pdf.

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. In the final four months of the first part of the Scheme ending 31 January 2014, 31 participants made drawdowns of £18.8 billion. This took outstanding aggregate drawings under the first part of the Scheme to £41.9 billion, with 41 participants making at least one drawing.(1)

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. Since 12 October 2011 the Bank has also offered US dollar tenders with a maturity of 84 days.

On 24 January 2014, the Bank, in co-ordination with other central banks, announced that in view of the improvement in US dollar funding conditions and the low demand for US dollar liquidity-providing operations, the current US dollar repo operations would be phased out. Monthly 84-day operations will cease on 30 April 2014, and the timetable for seven-day operations will continue through to 30 July 2014. The network of bilateral central bank liquidity swap arrangements provides a framework for the reintroduction of US liquidity operations if warranted by market conditions.(2) 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 (CRDs). 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 £4.8 billion of gilts and £0.4 billion of other debt securities.

Asset purchases

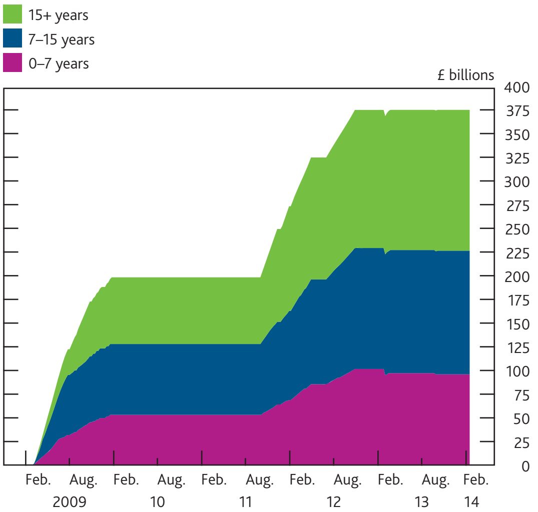
As of 31 January 2014, outstanding asset purchases financed by the issuance of central bank reserves under the APF were £375 billion, in terms of the amount paid to sellers. There were no asset purchases, sales or maturities over the review period.

Gilts

Alongside the publication of the *Inflation Report* on 12 February 2014, the MPC announced that it intends to maintain the stock of purchased assets, including reinvesting the cash flows associated with all maturing gilts held in the APF, at least until Bank Rate has been raised from its current level of 0.5%.(3)

The total stock of gilts outstanding, in terms of the amount paid to sellers, was £375 billion; of which £95.9 billion of purchases were made in the 3–7 years residual maturity range, £130.5 billion in the 7–15 years residual maturity range and £148.6 billion with a residual maturity of greater than 15 years (**Chart 18**).

Chart 18 Cumulative gilt purchases by maturity(a)(b)



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

Gilt lending facility(4)

The Bank continued to offer to lend some of its gilt holdings via the Debt Management Office in return for other UK government collateral. In the three months to 31 December 2013, a daily average of £225 million of gilts was lent as part of the gilt lending facility. Average daily lending in the previous quarter was £274 million.

Corporate bonds

There were no purchases of corporate bonds during the review period and future purchase or sale operations will be dependent on market demand, which the Bank will keep under review in consultation with its counterparties in the Corporate Bond Scheme.(5) The Scheme currently holds no bonds.

(1) Further details are available at www.bankofengland.co.uk/markets/Pages/FLS/data.aspx.
(2) Further details are available at www.bankofengland.co.uk/markets/Documents/marketnotice140124.pdf.
(3) Further details are available at www.bankofengland.co.uk/publications/Documents/inflationreport/2014/ir14febo.pdf.
(4) For more details on the gilt lending facility see the box 'Gilt lending facility' on page 253 of the *Bank of England Quarterly Bulletin*, Vol. 50, No. 4.
(5) More information can be found in the Market Notice at www.bankofengland.co.uk/markets/Documents/marketnotice130627.pdf.

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.(1) The facility remained open during the review period but no purchases were made.

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