

# Markets and operations

- Developed-economy government bond yields rose due to the growing view that the Federal Reserve would begin to reduce the size of, or ‘taper’, its monthly asset purchases following its September policy meeting. Strong economic data placed further upward pressure on market interest rates.
- The prospect of tapering by the Federal Reserve led to falls in risky asset prices. Emerging market economies were particularly affected.
- The Monetary Policy Committee announced its intention not to raise Bank Rate at least until the Labour Force Survey headline measure of the unemployment rate had fallen to a threshold of 7%, provided that such an approach remains consistent with its primary objective of price stability and does not endanger financial stability.
- Economists’ expectations of the timing of the first rise in Bank Rate shifted out following the statement on forward guidance, while measures derived from short-term interest rates were brought forward.

## Overview

Towards the end of the previous review period in May, comments by the Federal Reserve Chairman added to market speculation regarding a possible reduction in the size of monthly asset purchases by the central bank. US Treasury yields rose in response, as did interest rates internationally, including in the United Kingdom.

The increase in developed-economy government bond yields continued during the review period as improving economic data led market participants to revise up their expectations for growth. And market expectations coalesced on the view that the Federal Reserve would begin to reduce its asset purchases following its September policy meeting, putting more upwards pressure on long-term yields in advanced economies.

Meanwhile, there were falls in risky asset prices as investors sought to exit trades that had been placed on the view that risk-free rates would remain low for longer than now seemed likely. Many such positions had involved borrowing at low rates in developed economies and then investing the proceeds in higher-yielding assets. Emerging market economies with the greatest macroeconomic vulnerabilities were particularly affected.

Later in the review period, growing nervousness surrounding a possible escalation of the conflict in Syria was associated

with declines in developed market equity prices, while safe-haven flows put downward pressure on some developed-economy government bond yields.

Following its July policy meeting, the Monetary Policy Committee (MPC) commented that the rise in the path of Bank Rate implied by market rates was not warranted by developments in the domestic economy.<sup>(1)</sup> And, with the release of the *August Inflation Report*, the MPC adopted formal forward rate guidance, stating that it did not intend to increase Bank Rate until the unemployment rate had fallen to at least 7%, provided this remained consistent with the Committee’s primary objective of price stability and did not endanger financial stability.<sup>(2)</sup>

A Reuters poll conducted at the end of the period indicated that the median of economists’ expectations of the timing of the first rise in Bank Rate had shifted out six months following the MPC’s forward guidance announcement, to the end of 2015. In contrast, the market-implied future path of Bank Rate suggested that it was expected to reach 0.75% around the middle of 2015.

(1) Further details are available at [www.bankofengland.co.uk/publications/Pages/news/2013/007.aspx](http://www.bankofengland.co.uk/publications/Pages/news/2013/007.aspx).

(2) Further details are available at [www.bankofengland.co.uk/monetarypolicy/Pages/forwardguidance.aspx](http://www.bankofengland.co.uk/monetarypolicy/Pages/forwardguidance.aspx).

In discharging its responsibilities to ensure monetary stability and contribute to 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 reviews developments in financial markets between the 2013 Q2 *Quarterly Bulletin* and 30 August 2013, drawing on the qualitative intelligence gathered by the Bank in the course of meeting its objectives of monetary and financial stability. The second section of this article sets out usage of the Bank's operations since the previous *Bulletin*.

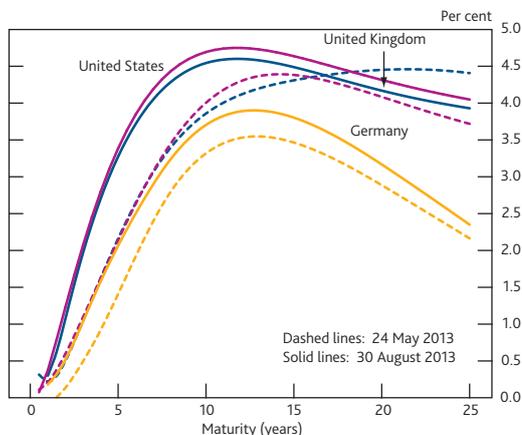
## Financial markets

### Monetary policy and interest rates

Towards the end of the previous review period, there was a marked and synchronous rise in developed market interest rates. This followed statements from the US Federal Reserve that it would moderate the pace of its asset purchases later this year, and end purchases next year, if data for the US economy evolved broadly as expected.<sup>(1)</sup> Market participants commonly refer to this reduction in asset purchases as 'tapering'.

UK, US and German forward government bond yields ended the review period higher (Chart 1), but remained low by historical standards. Contacts attributed some of this rise in interest rates to upward revisions to expected policy rates as well as greater uncertainty over their future path.

**Chart 1** International government bond forward yield curves<sup>(a)</sup>



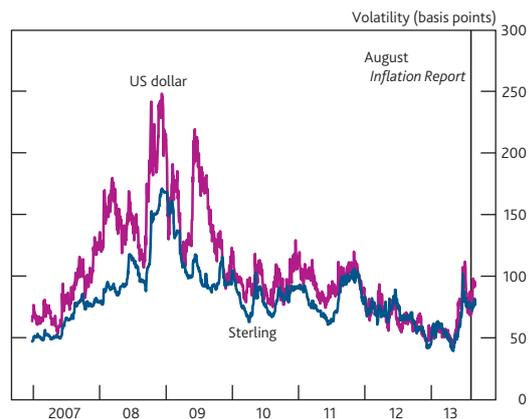
Sources: Bloomberg and Bank calculations.

(a) Nominal instantaneous forward interest rates derived from the Bank's government liability curves.

Measures of future interest rate uncertainty in the United States and United Kingdom rose over the review period. Although volatility remained low compared with 2009 levels

(Chart 2), it contributed to a reduction in liquidity across a range of markets. Contacts suggested that this was due to the large number of trades that had been placed on the expectation that the US policy rate would stay low for longer than was now judged likely by market participants. Many of these positions were being unwound at the same time, and the associated decline in liquidity was particularly pronounced in emerging markets (the box on page 260 discusses this in more detail).

**Chart 2** Uncertainty around US and UK interest rates<sup>(a)</sup>



Sources: Barclays and Bank calculations.

(a) Weighted average implied volatility of options maturing in one month's time, written on interest rate swaps with tenors of 2, 5, 10 and 30 years with weightings of 20%, 20%, 40% and 20% respectively.

Amid the generalised rise in volatility, the European Central Bank (ECB) took steps to quell expectations of any imminent rise in its main policy rate following its June meeting, and at subsequent meetings it stated that policy would remain low for an 'extended period'. But euro-area overnight interest rates continued to edge higher, which contacts attributed to the ongoing repayment by banks of funds borrowed under the ECB's longer-term refinancing operations — and the associated gradual decline in excess liquidity in the Eurosystem.

In contrast to other markets, volatility in Japanese government bond markets generally subsided relative to earlier in the year.<sup>(2)</sup> Contacts reported that liquidity began to improve as investors returned — albeit slowly — to trading more actively in the market.

There was, however, an episode of turbulence in the Chinese interbank money market in May, arising from a shortage of market liquidity. Contacts thought this was largely unrelated to changes in expectations for US monetary policy (the box on page 262 discusses this in more detail).

Throughout the review period the Monetary Policy Committee (MPC) maintained Bank Rate at 0.5% and the stock of asset

(1) For further details see

[www.federalreserve.gov/monetarypolicy/fomcminutes20130731.htm](http://www.federalreserve.gov/monetarypolicy/fomcminutes20130731.htm).

(2) For a discussion of the drivers of this volatility, see page 160 of the 2013 Q2 *Quarterly Bulletin*.

## Illiquidity during the period of recent market stress

Statements from the Federal Reserve Chairman in May and June regarding the timing of possible tapering of asset purchases contributed to a rise in yields of US, UK and euro-area government bonds. Contacts suggested that some market participants had underestimated the possibility of such a change in policy in the near term, leading to a concentration of investments — or ‘crowded trades’ — placed on the assumption that short-term government bond yields would remain low for a long time.

Many of these trades involved advanced-economy institutions borrowing in low interest rate currencies, such as the US dollar, and investing in higher-yielding assets, often cross-border — the so-called ‘carry trade’. But a rise in volatility in advanced-economy interest rates increased the risk associated with borrowing in US dollar and other ‘funding currencies’, prompting investors to exit these positions, either by selling their investments, or by taking offsetting positions in other instruments. As large numbers of investors rushed to unwind these positions simultaneously, there was a spike in volatility and a material reduction in liquidity across a range of markets, particularly those in emerging markets.

Some contacts had previously anticipated that there could be a reduction in liquidity in the event of stress in financial markets, because market makers — institutions which stand ready to either buy or sell a security in any given transaction in order to bridge gaps between the demand for, and supply of, that instrument — had scaled back their market-making activity since the start of the financial crisis. Such a reduction in market-making would mean less liquidity in the markets in which they operate.

purchases financed by the issuance of central bank reserves at £375 billion. But following its July meeting, the MPC stated that the large upward move in UK market interest rates had not been warranted by recent developments in the UK domestic economy. This led market participants to anticipate that the MPC would introduce some form of forward guidance to coincide with the publication of the August *Inflation Report*.

Alongside the August *Inflation Report*, the MPC announced that it intended not to raise Bank Rate at least until the Labour Force Survey headline measure of the unemployment rate had fallen to a threshold of 7%, provided that this remained consistent with the Committee’s primary objective of price stability and did not endanger financial stability. The MPC also stated that it stood ready to undertake further asset

Contacts had also expressed concerns in the past that the liquidity provided by some recently established market makers may fall sharply under stressed conditions.<sup>(1)</sup> For instance, if a large trade is executed, some automated market-making systems are programmed to withdraw their bid and offer prices, or transact only in limited size, on the assumption that a large trade indicates that another player in the market has more information than they do.

Despite being alert to the risk of a possible reduction in liquidity under stressed conditions, the magnitude and breadth of the fall was larger than had been anticipated by many market participants. Additional factors were thought to have contributed to the decline in liquidity. Facing impaired liquidity conditions, some investors sought to reduce their exposure to the least liquid assets by selling less illiquid securities in other, more liquid, markets. This caused the initial sell-off to become increasingly broad-based.

Contacts also pointed to the liquidity demands of leveraged hedge funds and exchange-traded funds, some of which exited trading positions particularly quickly. And market moves were thought to have been amplified by some dealers who were reported to have responded to the initial thinning in liquidity by hedging their exposures with greater speed, and in greater size, than many had anticipated.

Later in the review period, contacts reported that there had been a second phase of selling of emerging market assets. On this occasion, a more central role was thought to have been played by investors that have a particular focus on those markets. Contacts suggested that these investors were discriminating between different emerging markets, with continuing capital outflows tending to be associated with countries that have a weak external position.

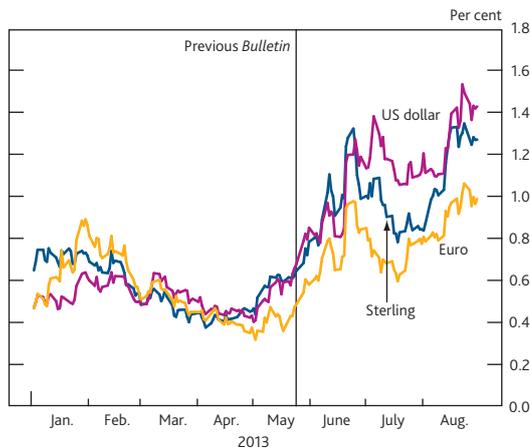
(1) See also Bank of England *Financial Stability Report*, June 2013 (Section 2.2).

purchases while the unemployment rate remained above 7% if it judged that additional monetary stimulus was warranted. A Reuters poll conducted at the end of the review period indicated that the median of economists’ expectations was for the MPC to maintain its final stock of asset purchases at £375 billion.

After a run of strong data on economic output, market interest rates increased during the latter part of the review period, particularly between the two and five-year maturities, with the UK one-year forward rate in two years’ time ending the review period around 60 basis points higher than at the start (**Chart 3**).

As a result, by the end of the review period, Bank Rate — as proxied by forward overnight index swap (OIS) rates — was

**Chart 3** One-year OIS rate two years forward for selected countries<sup>(a)</sup>

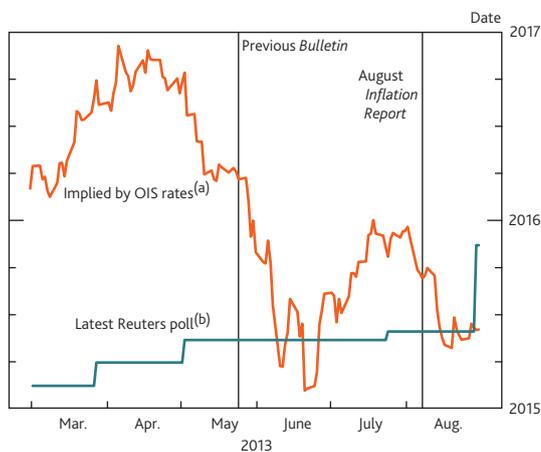


Sources: Bloomberg and Bank calculations.

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

expected to reach 0.75% in 2015 Q2 compared to late 2016 Q1 at the start of the review period (**Chart 4**). But, in contrast to market-implied rates, following the introduction of forward rate guidance by the MPC, the median expectation of economists shifted out by six months, with the timing of the first rate rise placed at around the end of 2015 (**Chart 4**).

**Chart 4** Indicators of when Bank Rate is expected to have risen



Sources: Bloomberg, Reuters and Bank calculations.

(a) Series is calculated as the first date at which instantaneous forward OIS rates equal or exceed 0.75%.

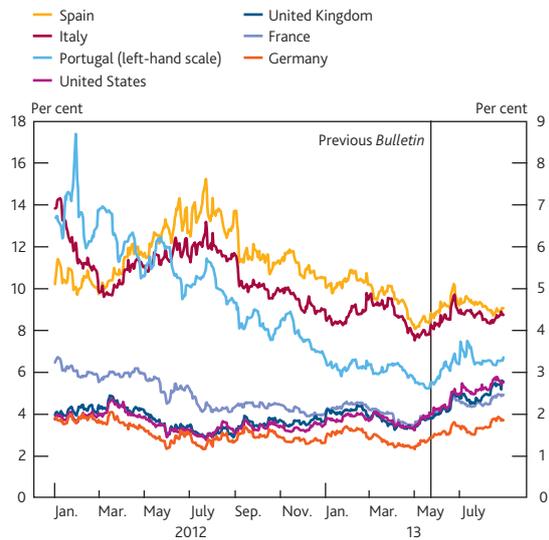
(b) Reuters poll shows the median of economists' expectations of the first rise in Bank Rate. This is based on a survey of economists' responses to the question: 'When do you expect the Bank of England to change rates next?'.

Long-term UK interest rates also increased over the review period, reflecting both the rise in short rates and the comovement between US rates and those in other developed markets. The ten-year UK spot rate ended the review period around 80 basis points higher than at the start.

Government bond yields in the euro area were also higher on the quarter (**Chart 5**). But there had been little sign of any

spillover to euro-area periphery countries from either worries surrounding political instability in Portugal — and associated concerns about the ability of the government to meet the conditions required for future IMF programme disbursements — or volatility in emerging economies related to US tapering expectations.

**Chart 5** Selected ten-year government bond yields<sup>(a)</sup>



Source: Bloomberg.

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

## Foreign exchange

The prospect of US tapering led to some volatility in the major currency pairs at the beginning of the review period, with the US dollar, in particular, appreciating between the end of May and mid-June. But by the end of the period, both the sterling and dollar effective exchange rate indices (ERIs) were broadly in line with their levels at the start of the review period, while there was a slight appreciation of the euro.

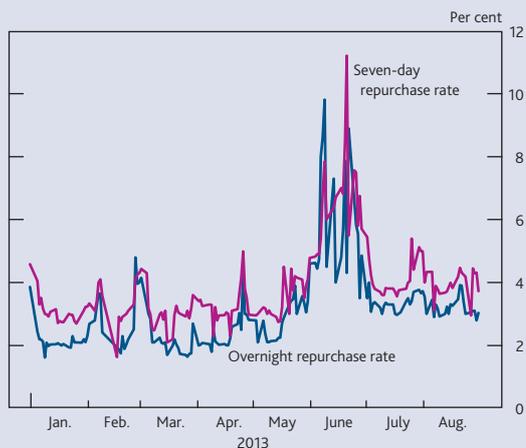
There was a fairly sharp sell-off in emerging market currencies, however, as participants unwound trades funded by borrowing at low rates in developed economies, to invest in emerging market assets (**Chart 6**). The result was a marked depreciation of a number of developing-country currencies against those of their primary trading partners, even as the major currency pairs, such as the US dollar versus sterling, and US dollar versus the euro, remained fairly stable.

Despite developments in the rest of the world, volatility of the Japanese yen subsided somewhat over the review period, after its sizable depreciation earlier in the year. Contacts thought that the lack of further major policy statements from the Bank of Japan and the greater focus on US monetary policy and emerging market vulnerabilities had diverted attention away from the currency. Towards the end of the period, however, the yen appreciated on safe-haven flows out of emerging markets.

## Chinese interbank market liquidity

Chinese money market lending rates began to drift higher from around the end of May, before rising sharply to record levels in the middle of June (Chart A). The rise in rates was particularly acute at shorter maturities, with overnight rates briefly moving above seven-day rates. Contacts reported at the time that short rates were responding to a shortage of liquidity in the Chinese interbank market.

Chart A Chinese interbank borrowing rates



Source: Reuters.

The central bank can adjust the amount of liquidity in the interbank market in its open market operations, either by selling renminbi-denominated assets to withdraw money from the sector, or by purchasing renminbi assets to inject money. The rise in short rates in the Chinese interbank market followed smaller-than-usual open market operations by the People's Bank of China (PBoC) from around April. That will have tended to reduce the liquidity available on the interbank market, other things being equal.

Targeted liquidity provision by the PBoC from 21 June was associated with an easing in money market conditions, however, with the seven-day repurchase rate ending the day at 5.5%, down from 11.2% the day before. Liquidity conditions continued to ease during the following week. And PBoC Governor Zhou stated that the authorities remained committed to maintaining liquidity in the interbank market.

### Influences on liquidity

A number of factors influence levels of liquidity in the Chinese interbank market. In particular, contacts report that bank demand for liquidity is typically higher than usual each June, coinciding with the regular assessment of lenders' loan to deposit (LTD) ratios by the CBRC, the Chinese regulator. According to contacts, it is common practice for Chinese lenders to transfer customer deposits from off balance sheet

vehicles called wealth management products (WMPs), back onto their balance sheets, in order to raise LTD ratios. Customer deposit funding of the WMP is then replaced by borrowing from the interbank market, causing an increase in demand for liquidity by the banking sector as a whole. Other seasonal factors included an increase in the liquidity needs of corporates ahead of a corporate tax payment deadline in July, and a long public bank holiday.

Changes in foreign exchange flows can also lead to variations in the degree of liquidity in the Chinese interbank market. When Chinese corporations receive foreign exchange — either through trade or non trade-related capital flows — it is converted into renminbi with commercial banks, leading to an increase in the supply of renminbi in the domestic economy, other things being equal. Conversely, outflows of foreign exchange will cause the domestic money supply to fall.

Related to this, contacts noted that a few months prior to the episode, the Chinese authorities announced a crackdown on illicit capital flows into China via the practice of overinvoicing for exports to Hong Kong. This would tend to reduce the subsequent flow of foreign currency into the banking system. And the available data suggest that there was a net outflow of foreign exchange from the banking system in June, indicating a net outflow of renminbi liquidity (Chart B).

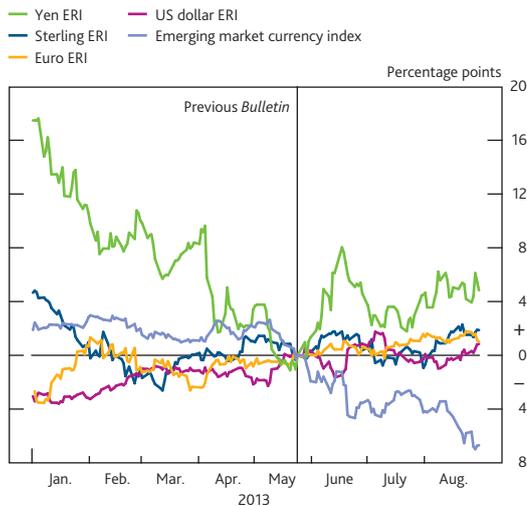
Chart B People's Bank of China open market operations<sup>(a)</sup> and Chinese financial institutions' purchases of foreign currency<sup>(b)</sup>



Sources: Bloomberg, CEIC and Bank calculations.

(a) Cumulative operations since 2008.

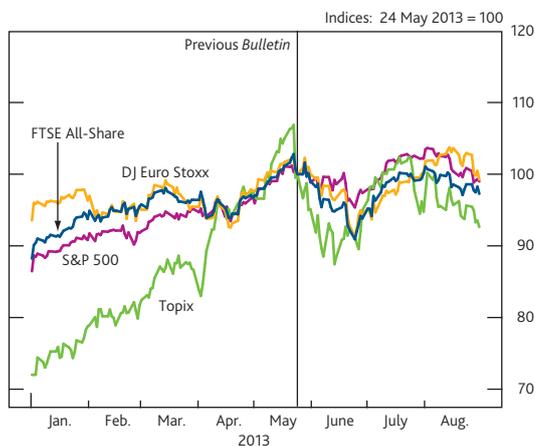
(b) Latest observation is for July 2013. Net monthly purchases of foreign exchange.

**Chart 6** Changes in selected exchange rate indices since January 2013

Sources: Bloomberg, European Central Bank, JPMorgan Chase & Co. and Bank calculations.

### Corporate capital markets

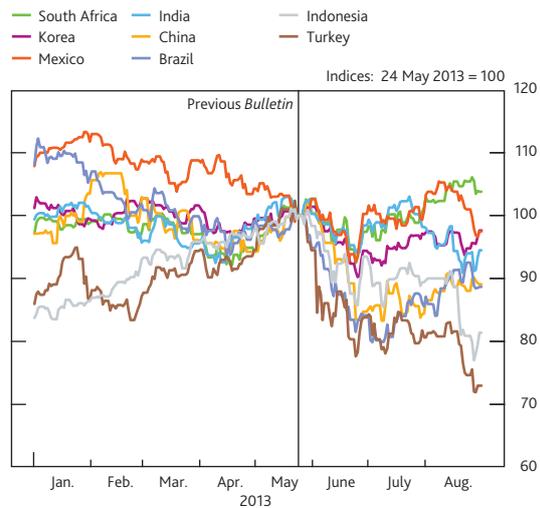
Major international equity indices, including the FTSE All-Share, ended the review period a little lower, reflecting rising risk-free rates and worries about the possible escalation of the conflict in Syria (**Chart 7**). In the United States, the S&P 500 briefly reached an all-time nominal high in August before falling back.

**Chart 7** International equity indices

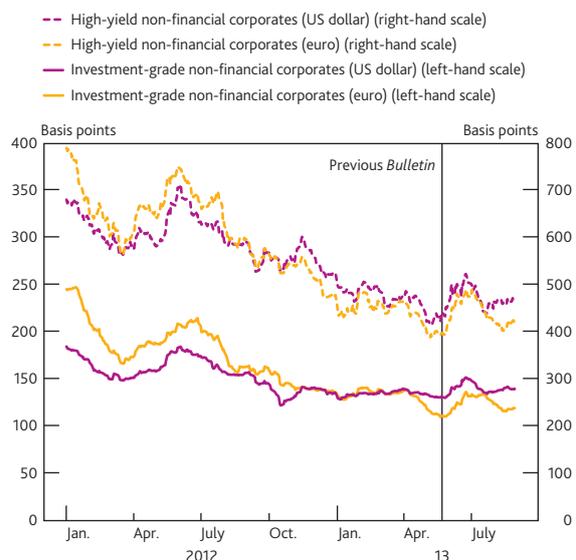
Sources: Bloomberg and Bank calculations.

In contrast, there was a marked decline in some emerging market equity indices due to capital outflows following talk of tapering in the United States (**Chart 8**). Contacts also expressed concerns about the prospects for economic growth in China, although Chinese equities rose toward the end of the review period as macroeconomic indicators pointed to an improving outlook for activity.

Corporate bond spreads in developed economies were fairly stable during the review period (**Chart 9**). Nevertheless, a combination of earnings blackout periods ahead of

**Chart 8** Emerging market equity indices

Sources: Bloomberg and Bank calculations.

**Chart 9** International non-financial corporate bond option-adjusted spreads<sup>(a)</sup>

Source: Barclays indices.

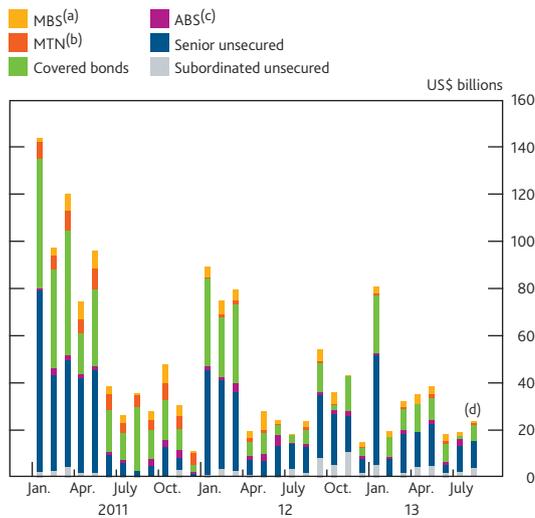
(a) Investment-grade non-financial corporate indices for US dollar and euro are constructed from a market-value weighted average of industrial and utility sub-indices.

quarter-end, the large amount of issuance undertaken earlier in the year, the onset of the quiet summer period, and the increase in volatility that began in May, all contributed to a slowing in the pace of issuance of corporate debt in the United States and Europe.

### Bank funding markets

According to contacts, market volatility in June led to a rise in new issue premia for bank debt, resulting in the postponement of some issuance by European and US banks. European issuance of term funding remained subdued over the review period (**Chart 10**). Contacts emphasised that UK banks' funding needs remained relatively low, however, given increased deposit funding and relatively modest lending plans. Contacts also noted the availability of alternative sources of borrowing such as the Funding for Lending Scheme.

**Chart 10** Term issuance by European banks in public markets



Sources: Dealogic and Bank calculations.

- (a) Commercial and residential mortgage-backed securities.  
 (b) Medium-term notes.  
 (c) Asset-backed securities.  
 (d) Data up to 30 August 2013.

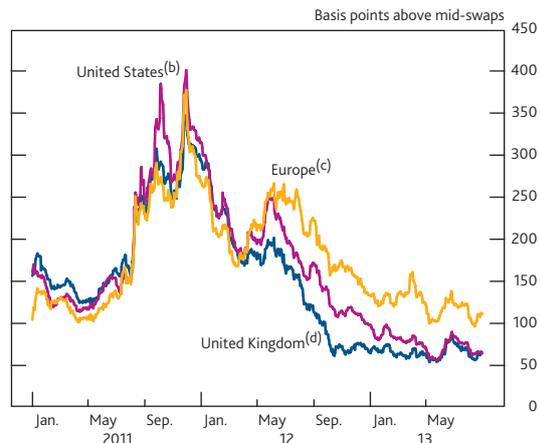
In contrast, primary issuance of both senior and subordinated instruments by US banks was relatively strong towards the end of August. Contacts thought the pickup represented an attempt by issuers to make up for lost ground in June, as well as to front-run the usual seasonal flurry of issuance in early autumn — and in case of any surprise to market expectations regarding US monetary policy, and possible knock-on effects for volatility.

In the secondary market, contacts reported some deterioration of liquidity in June and there was a temporary pickup in spreads on bank bonds (**Chart 11**). That said, strong institutional investor demand for bank debt had tended to limit the extent to which bank borrowing costs picked up during the recent period of volatility.

On the regulatory front, there were a number of significant announcements relating to banks' capital requirements and how the banks planned to meet them.<sup>(1)</sup> The Basel Committee on Banking Supervision published a consultation paper on different options for the calibration of a future leverage ratio. And in the United Kingdom, the Prudential Regulation Authority announced they had established plans with the major UK banks to achieve a 7% risk-weighted common equity ratio and a 3% core equity leverage ratio by the first half of 2014.<sup>(2)</sup>

The major UK banks committed to achieving these requirements either through retained earnings, asset disposals or balance sheet restructuring, or via the issuance of additional equity, rather than by cutting lending to the UK real economy. Meanwhile, a number of banks in other European jurisdictions, including Germany, Austria and Greece, raised significant amounts of capital via rights issues.

**Chart 11** 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 institutions' five-year bond.  
 (b) Average of Bank of America, Citi, Goldman Sachs, JPMorgan Chase & Co., Morgan Stanley and Wells Fargo.  
 (c) Average of Banco Santander, BBVA, BNP Paribas, Crédit Agricole, Credit Suisse, Deutsche Bank, ING, Intesa, Société Générale, UBS and UniCredit.  
 (d) Average of Barclays, HSBC, Lloyds Banking Group, Nationwide, Royal Bank of Scotland and Santander UK.

Some institutions also undertook transactions to swap liabilities that were no longer considered eligible as capital instruments under new regulations for equity capital. And there were further issues of contingent convertible instruments, with more reported to be in the pipeline.

## 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 (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 May, June and July maintenance periods. Average use of the lending facility was also £0 million.

(1) For a primer on the key concepts related to banks' financial resources and how these can mitigate various risks, see 'Bank capital and liquidity' on pages 201–15 of this edition of the *Bulletin*.

(2) For details see [www.bankofengland.co.uk/publications/Pages/news/2013/081.aspx](http://www.bankofengland.co.uk/publications/Pages/news/2013/081.aspx).

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

	Total	Collateral set summary	
		Narrow	Wider
<b>11 June 2013 (three-month maturity)</b>			
On offer (£ millions)	5,000		
Total bids received (£ millions) <sup>(a)</sup>	0	0	0
Amount allocated (£ millions)	0	0	0
Cover	0.00	0.00	0.00
Clearing spread above Bank Rate (basis points)		n.a.	n.a.
Stop-out spread (basis points) <sup>(b)</sup>	n.a.		
<b>9 July 2013 (three-month maturity)</b>			
On offer (£ millions)	5,000		
Total bids received (£ millions) <sup>(a)</sup>	60	40	20
Amount allocated (£ millions)	60	40	20
Cover	0.01	0.01	0.00
Clearing spread above Bank Rate (basis points)		0	5
Stop-out spread (basis points) <sup>(b)</sup>	5		
<b>13 August 2013 (six-month maturity)</b>			
On offer (£ millions)	2,500		
Total bids received (£ millions) <sup>(a)</sup>	70	0	70
Amount allocated (£ millions)	70	0	70
Cover	0.03	0.00	0.03
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.

### Indexed long-term repo open market operations

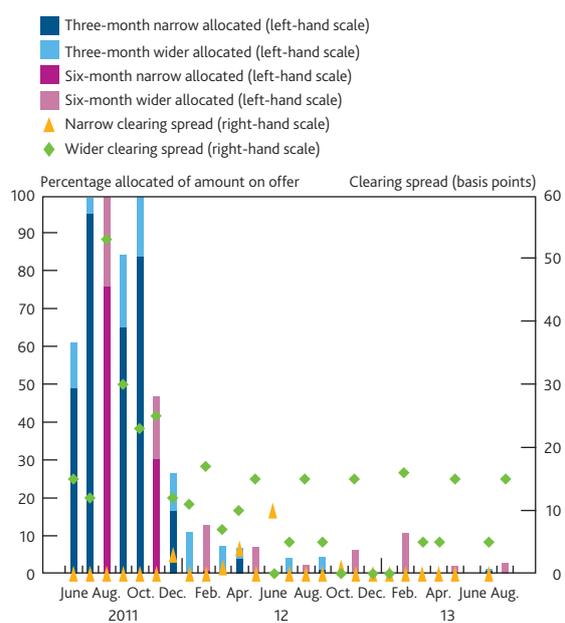
The Bank conducts ILTR operations as part of its provision of liquidity insurance to the banking system. These typically occur once every calendar month. Participants are able to borrow against two different sets of collateral: one set corresponds with securities eligible in the Bank's short-term repo 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 11 June and 9 July, and £2.5 billion via a six-month operation on 13 August (Table A).

Over the quarter, short-term secured market interest rates remained below Bank Rate — the minimum bid rate in the ILTR operations — making the ILTR facility a relatively more expensive source of liquidity. Reflecting this, usage of the facility remained limited over the period, in line with recent quarters (Chart 12).

### Extended Collateral Term Repo Facility

The Extended Collateral Term Repo (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

**Chart 12** ILTR reserves allocation and clearing spreads

with ECTR eligible institutions.<sup>(2)</sup> In the three months to 30 August 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 January 2013 and 31 March 2013, lent with a maturity of 30 days or less, was £0 million. The Bank also announced that the average daily amount outstanding in the DWF between 1 January 2012 and 31 March 2012, lent with a maturity of more than 30 days, was £0 million.

### 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 via the FLS, and the price it pays on its borrowing, is linked to its performance in lending to the UK real economy.<sup>(3)</sup> 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, which will allow participants to borrow from the FLS until January 2015. The extended drawdown period

(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) For more details on the economics of the FLS, see Churm, R, Leake, J, Radia, A, Srinivasan, S and Whisker, R (2012), 'The Funding for Lending Scheme', *Bank of England Quarterly Bulletin*, Vol. 52, No. 4, pages 306–20.

will run from 3 February 2014 to 30 January 2015, following the initial drawdown period.<sup>(1)</sup>

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 2 September 2013, the Bank published data showing that in the quarter ending 30 June 2013, 18 participants made FLS drawdowns of £2.0 billion, while one participant repaid £0.9 billion. This took the total amount of outstanding drawings under the Scheme to £17.6 billion, with 28 groups now benefiting from funding acquired under the Scheme.<sup>(2)</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. And since 12 October 2011, the Bank has also offered US dollar tenders with a maturity of 84 days. 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 Bank's programme for taking CRDs is reviewed every five years. The most recent review recommended that the CRDs be increased, with that recommendation approved by Parliament on 21 May 2013, to take effect on 3 June. On 31 May 2013, the Bank announced its plans to invest the proceeds of these additional CRDs.<sup>(3)</sup>

Subsequently, the Bank made additional investments in accordance with the announcement, purchasing a total of £1.27 billion worth of gilts over the period. Following these purchases, the portfolio currently includes around £4.7 billion of gilts and £0.4 billion of other debt securities.

### Asset purchases

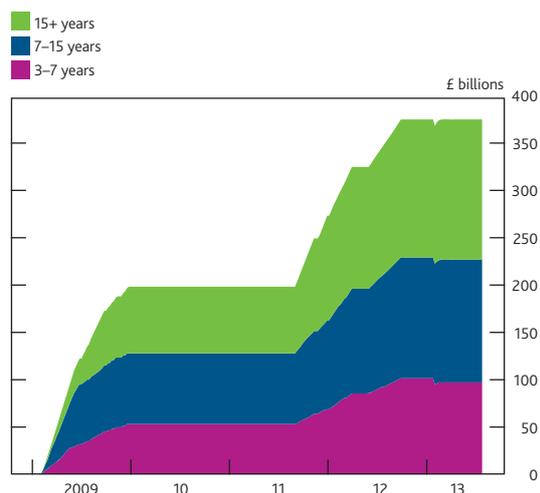
As of 30 August 2013, outstanding asset purchases financed by the issuance of central bank reserves under the APF were £375 billion, in terms of the amount paid to sellers. On 1 August, the MPC voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at £375 billion. There were no asset purchases over the period.

### Gilts

Alongside the publication of the *August Inflation Report* on 7 August, the MPC announced that it would maintain the stock of outstanding asset purchases by reinvesting the cash flows associated with all maturing gilts held in the APF. This reinvestment would continue while the Labour Force Survey unemployment rate remains above a 7% threshold, subject to the three knockout conditions outlined in the forward guidance document, published together with the *August Inflation Report*.<sup>(4)</sup>

The total stock of gilts outstanding, in terms of the amount paid to sellers, was £375 billion; of which £97.1 billion of purchases were made in the 3–7 year residual maturity range, £129.9 billion in the 7–15 year residual maturity range and £147.9 billion with a residual maturity of greater than 15 years (**Chart 13**).

**Chart 13** 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>(5)</sup>

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 30 June 2013, a daily average of £462 million of gilts was lent as part of the gilt lending facility. Average daily lending in the previous quarter was £287 million.

(1) 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).

(2) Further details are available at [www.bankofengland.co.uk/markets/Pages/FLS/data.aspx](http://www.bankofengland.co.uk/markets/Pages/FLS/data.aspx).

(3) For more information, see the Market Notice at [www.bankofengland.co.uk/markets/documents/marketnotice130531.pdf](http://www.bankofengland.co.uk/markets/documents/marketnotice130531.pdf).

(4) For more information on the forward guidance threshold and the three knockouts, see [www.bankofengland.co.uk/publications/Documents/inflationreport/2013/ir13augforwardguidance.pdf](http://www.bankofengland.co.uk/publications/Documents/inflationreport/2013/ir13augforwardguidance.pdf).

(5) 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.

### Corporate bonds

There were no purchases of corporate bonds during the review period. The last corporate bonds held in the APF scheme that were eligible for sale were sold in 2013 Q2. Holdings of corporate bonds, which were ineligible for sale during the last review period due to having less than one year to maturity, have since matured. Future operations will be dependent on market demand. The Bank will review that in consultation with its counterparties in the APF Corporate Bond Secondary Market Scheme.<sup>(1)</sup>

### 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>(2)</sup> The facility remained open during the review period but no purchases were made.

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(1) More information can be found in the Market Notice at [www.bankofengland.co.uk/markets/Documents/marketnotice130627.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice130627.pdf).

(2) 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).