

# Recent economic and financial developments



# Markets and operations

- On 4 August, the Monetary Policy Committee announced a package of measures to support the economy including a cut in Bank Rate and expanded asset purchases. UK asset prices responded significantly to the announcement. Longer-term interest rates fell sharply, risky asset prices rose and sterling depreciated on a trade-weighted basis. UK short-term interest rates were less affected, given that a 25 basis points cut in Bank Rate was close to fully priced in. By the end of the review period, a further 7 basis points cut in rates was priced in by the end of the year.
- Expectations for more accommodative monetary policy from other major central banks also helped support risky asset prices. Major global equity indices were around 9%–16% higher and credit spreads narrowed over the review period. Volatility across most markets declined rapidly.

## Overview

The review period began with financial markets still digesting the United Kingdom's vote to leave the European Union. Between the referendum on 23 June and the start of the review period on 27 June, UK-focused equity prices fell sharply, sterling depreciated by around 7% on a trade-weighted basis, and risk-free interest rates fell across developed markets. But since then, expectations for a broadly more accommodative stance of monetary policy from major central banks helped to reverse some of these moves. Equities performed strongly, credit spreads decreased, and volatility fell to record lows. In the United Kingdom, interest rates fell across the curve and sterling was broadly unchanged over the review period as a whole.

In the United Kingdom, expectations had built for a package of monetary easing measures. And on 4 August, the Monetary Policy Committee (MPC) announced: (i) a 25 basis points cut in Bank Rate; (ii) a Term Funding Scheme to reinforce the pass-through of the cut in Bank Rate; (iii) purchases of up to £10 billion of sterling non-financial investment-grade corporate bonds; and (iv) a £60 billion increase in the stock of purchased UK government bonds. The MPC also noted that if incoming data proved broadly consistent with the August *Inflation Report* forecast, a majority of members expect to support a further cut in Bank Rate to its effective lower bound at one of the MPC's forthcoming meetings during the course of the year. The MPC judged this bound to be close to, but a little above, zero.

The announcement prompted significant moves in UK asset prices. On the day, short-term interest rates were relatively unchanged, but ten-year gilt yields fell 16 basis points, the sterling ERI depreciated by 1.3% and the FTSE All-Share rose by 1.5%. Since the announcement, issuance by UK private non-financial corporations in the sterling corporate bond market has picked up notably. And moves in credit spreads have increased the attractiveness of issuing in sterling relative to the larger euro and US dollar markets for some issuers.

Outside the United Kingdom, other major central banks' monetary policy was in focus over the review period. In the United States, expectations for an increase in the federal funds rate this year picked up over the review period. But market participants still expected the pace of tightening to be very gradual, which reportedly stemmed the appreciation of the dollar. In the euro area and Japan, further easing is expected this year — although there was little consensus among market participants over what form it might take.

Risky asset prices performed strongly over the review period as a whole. Major global equity indices were 9%–16% higher, funding costs fell across jurisdictions, and the closely watched VIX index of US equity implied volatility reached close to record lows. In part, this likely reflected the stance of monetary policy. Some contacts also linked these developments to a resurgence of so-called 'search for yield' behaviour, given the low-rate environment.

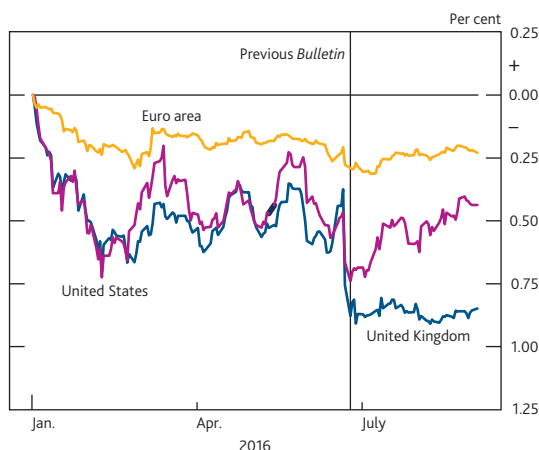
In discharging its responsibilities to maintain monetary and financial stability, the Bank gathers market intelligence from contacts across a range of financial markets. Regular dialogue with market contacts provides valuable insights into how markets function, and provides context for the formulation of policy, including the design and evaluation of the Bank's own market operations. The first section of this article reviews developments in financial markets between the cut-off date of the 2016 Q2 *Quarterly Bulletin* on the 27 June 2016 and 5 September 2016. The second section goes on to describe the Bank's own operations within the Sterling Monetary Framework.

### Monetary policy and interest rates

The review period began with financial markets still digesting the United Kingdom's vote to leave the European Union (EU). Short and long-term interest rates across major developed-economy government bond markets fell sharply in the days following the vote. Risky asset prices fell and the pound depreciated and market participants broadly anticipated further accommodative monetary policy actions from major central banks.

In the United Kingdom, market participants pointed to the Governor's speech on 30 June,<sup>(1)</sup> in which he noted that 'the economic outlook has deteriorated and some monetary policy easing will likely be required over the summer', as a key driver of asset price moves. Following these remarks, UK short-term interest rates fell further, with the front-end of the sterling overnight index swap (OIS) curve implying that a 25 basis points cut to Bank Rate was expected by the August Monetary Policy Committee (MPC) meeting. One-year OIS rates, one year forward fell by 10 basis points between 29 and 30 June (**Chart 1**). And UK government bond yields fell by 5–10 basis points, most notably at longer maturities, which market contacts attributed to increased expectations for an additional round of quantitative easing (QE) from the Bank.

**Chart 1** Cumulative change in one-year OIS rates, one year forward since January 2016<sup>(a)</sup>



Sources: Bloomberg and Bank calculations.

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

On 4 August, the MPC announced a package of measures to support the economy that comprised of (i) a 25 basis points cut in Bank Rate to 0.25%, (ii) a Term Funding Scheme (TFS) to reinforce the pass-through of the cut in Bank Rate, (iii) purchases of up to £10 billion of sterling non-financial investment-grade corporate bonds (see 'Corporate capital markets' section), and (iv) an increase in the stock of purchased UK government bonds, by £60 billion over six months, to £435 billion. In addition to these measures, the Financial Policy Committee also announced that central bank reserves would be excluded from the exposure measure in the current UK leverage ratio framework, in order to ensure that the leverage ratio does not act as a barrier to the effective implementation of policy measures that might lead to an increase in central bank reserves. For more information on the measures, please refer to the August 2016 *Inflation Report*.

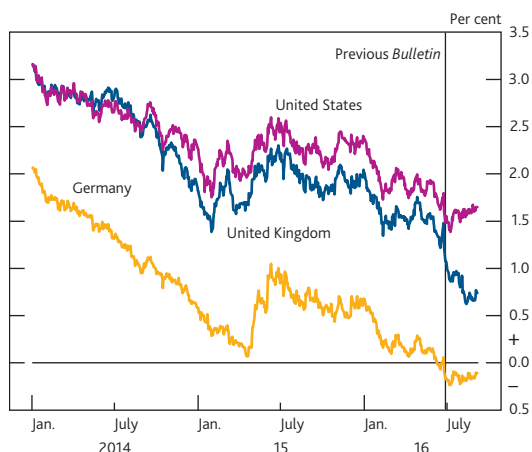
Ahead of the announcement, there was a high degree of conviction among market participants that Bank Rate would be cut by 25 basis points, but less consensus around any accompanying measures. This was reflected in the limited reaction at the very short end of the UK OIS curve on the day of the announcement. But rates fell further out the curve, as markets reacted to the communication that a majority of MPC members expected to support a further cut in Bank Rate if incoming data were broadly consistent with the Committee's forecast. By the end of the review period, a further 7 basis points cut in rates was priced in by the end of the year.

Long-term interest rates fell further following the announcement. The gilt forward curve fell by 5–20 basis points across maturities, with the largest falls in the five to fifteen-year sector. Part of the fall in forward rates likely reflected lower Bank Rate expectations as a result of both the MPC's guidance on further Bank Rate cuts and the signalling channel of asset purchases. But the fall may also have reflected a reduction in term premia. Long-term interest rates appeared to have stabilised by the end of the review period (**Chart 2**) — likely helped in part by some improvement in UK data.

Market-implied measures of UK inflation compensation increased at shorter horizons, but fell slightly at longer horizons over the review period. Towards the end of the review period, market-implied measures of longer-term inflation expectations had recovered part of their earlier falls. Market contacts noted that a key driver for the moves at shorter tenors had been the depreciation in sterling. At longer maturities, contacts attributed some of the moves to changes in hedging activities of liability-driven investors such as insurers and pension funds.

(1) See [www.bankofengland.co.uk/publications/Documents/speeches/2016/speech915.pdf](http://www.bankofengland.co.uk/publications/Documents/speeches/2016/speech915.pdf).

**Chart 2** Selected ten-year government bond yields<sup>(a)</sup>



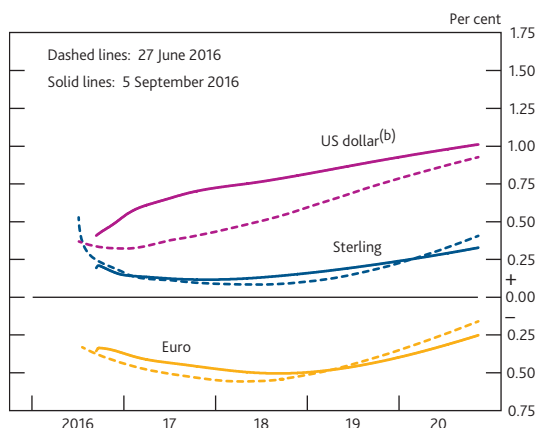
Sources: Bloomberg and Bank calculations.

(a) Yields to maturity derived from the Bank's government liability curves.

Internationally, developed market interest rates all moved lower at the start of the review period. But since then, there had been some divergence between UK and non-UK interest rates. Yields on US Treasuries and German bonds had increased relative to gilt yields, with market contacts attributing these moves to an increasing focus on domestic drivers of interest rates rather than spillovers from the United Kingdom's referendum and the subsequent monetary policy response.

In the United States, short-term interest rates rebounded markedly from their post-referendum lows (**Chart 3**). One-year OIS rates, one year forward increased by 30 basis points over the review period. These moves were reportedly driven by a reassessment of Federal Open Market Committee (FOMC) policy expectations and an improvement in investor risk appetite. Although recent commentary on the low level of long-term neutral rates was thought to have depressed

**Chart 3** 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.

(b) Using 2 September data given US bank holiday on 5 September.

longer-term US interest rates, market contacts perceived FOMC communications over the review period as being supportive of a second increase in the federal funds rate before the end of the year. This was supported by a number of better-than-expected data releases over the period, including particularly strong US employment data in July.

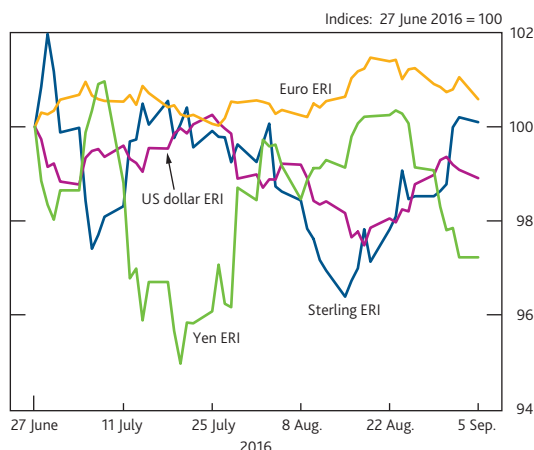
Euro-area interest rates were generally less volatile than their US and UK peers over the review period. Market expectations for additional easing tended to focus on an extension of the European Central Bank's (ECB's) asset purchase programmes, rather than a cut in the policy rate to more negative levels. As a result, short-term interest rates were little changed over the review period. Market contacts had expected the ECB to unveil further policy easing measures at some point this year, but there was little certainty around the timing and expectations for the September policy meeting had not been particularly high.

In July, the Bank of Japan (BoJ) opted only to increase its purchases of exchange-traded funds — rather than adjusting its negative interest rate policy or the pace of Japanese government bond purchases. Following that, market participants were said to be relatively uncertain as to the direction of policy at the BoJ's 21 September meeting. Since the July meeting, longer-term Japanese government bond yields rose sharply from record low levels. This was thought to have exerted some degree of upward pressure on global interest rates — in part by impacting perceived demand from Japanese investors for foreign bonds.

**Foreign exchange**

Monetary policy expectations appeared to have been a significant driver of exchange rates over the review period. On a trade-weighted basis, the yen and the dollar depreciated over the period, while the euro appreciated and sterling was broadly unchanged (**Chart 4**).

**Chart 4** Selected exchange rate indices

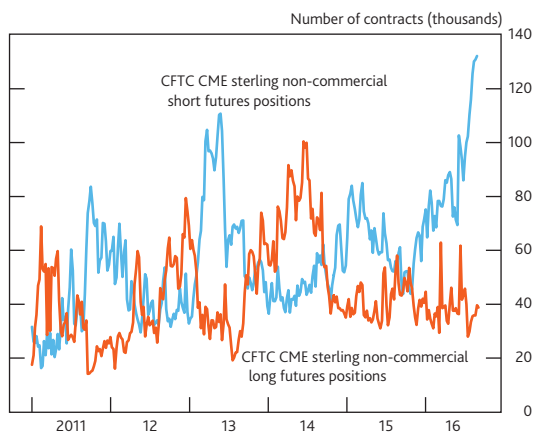


Sources: Bloomberg, ECB and Bank calculations.

After the sharp depreciation in sterling that followed the United Kingdom's vote to leave the EU, volatility in the currency subsided somewhat. Contacts attributed some of the further depreciation in August to the Bank's monetary policy easing measures. Sterling reached a six-year low on a trade-weighted basis in the weeks following the announcement. But since then the currency retraced part of the moves, closing the review period broadly unchanged.

By the end of the review period, forward-looking measures of implied volatility had decreased, and foreign exchange (FX) options pricing also pointed to a relatively even balance of upside and downside risks for the currency. However, speculative investors look to have remained more heavily positioned for the latter. Weekly positioning data for FX futures showed a continued increase in sterling short positions (**Chart 5**) despite some improvement in UK economic data towards the end of the review period.

**Chart 5** CFTC sterling non-commercial futures positions



Sources: Bloomberg and Commodity Trading Futures Commission (CFTC).

The US dollar provided something of a similar conundrum, depreciating 1% on a trade-weighted basis over the review period despite the increase in near-term expectations for a tightening of US monetary policy. Contacts attributed much of the move to a perceived shift in tone from FOMC members. Given the recent focus on long-run neutral rates, as well as global spillovers from tighter US monetary policy, market participants were thought to be placing more weight on the pace and end-point of tightening rather than the timing of the FOMC's next move. As such, the dollar was seen as less likely to undergo another sharp appreciation.

### Corporate capital markets

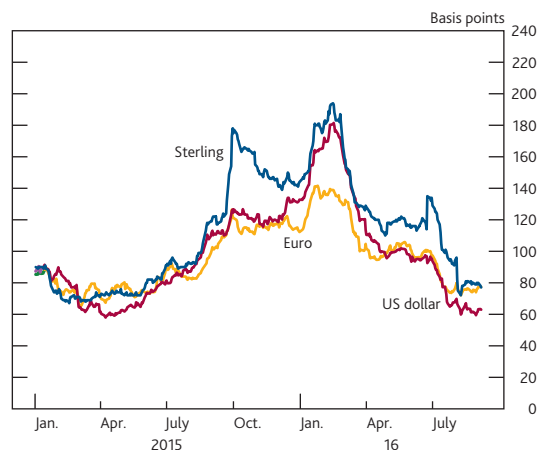
Risky asset prices rose over the course of the review period, driven in part by accommodative central bank policy. As in other markets, volatility declined. And a number of contacts noted a resurgence of so-called 'search for yield' behaviour among market participants in an environment of low interest rates.

Corporate credit spreads narrowed over the period, particularly for high-yield issuers — for whom spreads declined by 126 basis points, 141 basis points and 148 basis points in sterling, euros and US dollars respectively. Investment-grade spreads fell by 49 basis points, 33 basis points and 25 basis points in the same currencies.

Contacts attributed the relatively greater fall in sterling investment-grade spreads to the package of measures announced by the MPC in August, particularly the decision to purchase up to £10 billion of sterling non-financial investment-grade corporate bonds over the next 18 months. On the day of the announcement, sterling-denominated investment-grade non-financial corporate bond spreads fell by around 10 basis points, whereas the euro and US dollar-denominated equivalents were little changed. Contacts also noted strong inflows into sterling bond investment funds following the MPC announcement.

Despite a slight widening of the sterling cross-currency basis, the narrowing in credit spreads increased the relative attractiveness of issuing in the sterling corporate bond market (**Chart 6**). In August, UK private non-financial corporations (PNFCs) issued US\$3.7 billion of sterling-denominated debt, which compares to an average of US\$350 million for the month of August between 2003 and 2015. This increase in issuance brings 2016 issuance in line with the pace seen last year, although it still remains below previous years (**Chart 7**). Issuance of US dollar and euro-denominated corporate bonds slowed over the summer, but both markets reopened towards the end of the review period.

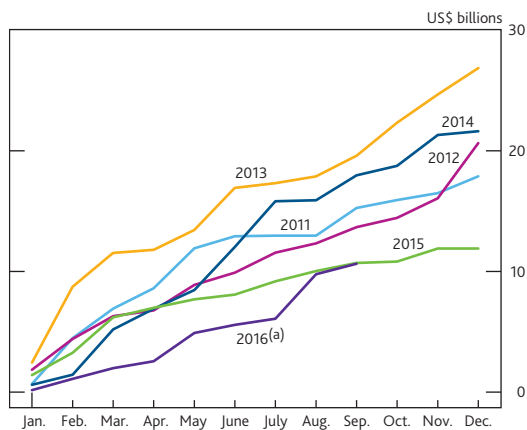
**Chart 6** Investment-grade PNFC three to five-year bond spreads (converted to sterling equivalent)<sup>(a)</sup>



Sources: Bank of America Merrill Lynch, Bloomberg and Bank calculations.

(a) Euro and US dollar spreads converted into spreads over six-month sterling Libor using an average of three and five-year cross-currency and Libor basis swap rates.

**Chart 7** Cumulative high-yield and investment-grade sterling corporate bond issuance by UK PNFCs<sup>(a)</sup>

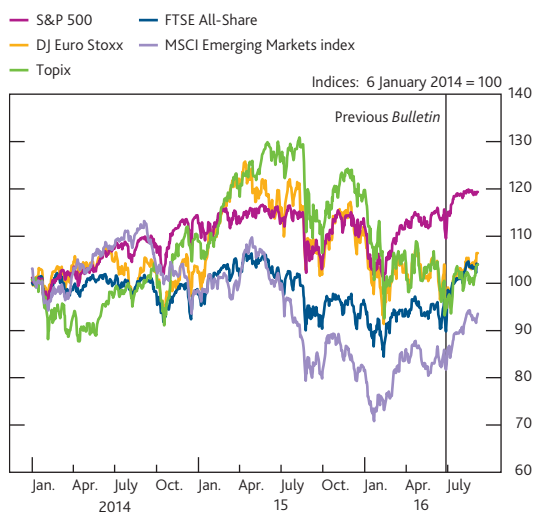


Sources: Dealogic and Bank calculations.

(a) Data to 5 September 2016.

Equity markets showed a similar degree of resilience over the review period, rebounding strongly from their post-referendum lows. Major global equity indices were up significantly, with the FTSE All-Share up 16% (**Chart 8**). Contacts pointed to a similar array of drivers for this strong performance, including the MPC's package of policy measures and the low level of global interest rates. On the day of the August *Inflation Report*, the FTSE All-Share rose 1.5%, while US and euro-area equities were unchanged and up 0.7% respectively.

**Chart 8** International equity indices<sup>(a)(b)</sup>



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.

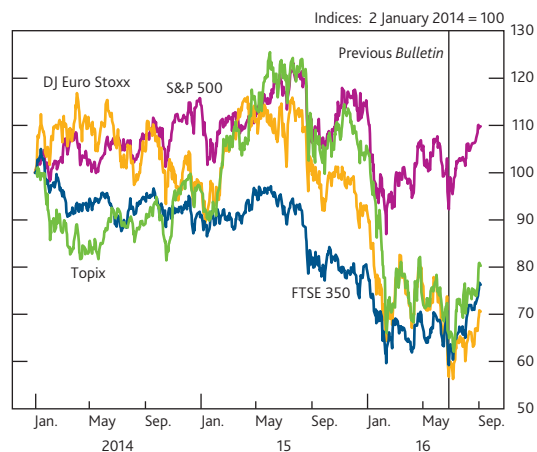
The month of August was also particularly notable for US equities, with the S&P 500 exhibiting the lowest level of 30-day realised volatility since 1994. Option-implied volatilities for the index remained similarly depressed, with

the VIX continuing to skirt around its record lows. Contacts attributed these developments to a variety of factors. Accommodative monetary policy was thought to have contributed to lower volatility across a range of asset classes. And, specific to the equity market, record selling of VIX futures by speculative investors is likely to have further reinforced this effect.

### Bank funding markets

Bank equities in developed markets recovered over the review period, having fallen sharply around the EU referendum. The United Kingdom's FTSE 350 bank index increased by 29%, outperforming US (+19%), European (+24%), and Japanese (+22%) banks (**Chart 9**). Contacts attributed this in part to supportive communications around the availability of liquidity in response to the referendum result, as well as the broader drivers of the recovery in risky asset prices discussed above.

**Chart 9** Bank equity components of major developed equity indices<sup>(a)</sup>



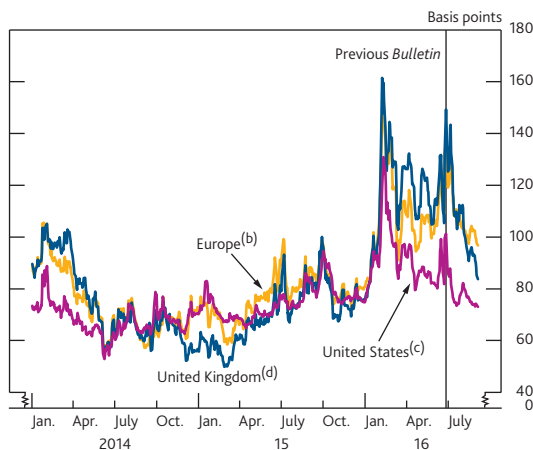
Sources: Bloomberg and Bank calculations.

(a) The Topix series is indexed to 6 January 2016 due to additional bank holidays.

European bank equity prices fell slightly on the results of the European Banking Authority stress tests on 29 July, despite seemingly few surprises among the results. Uncertainty around the appropriate pricing of non-performing loans weighed heavily on some individual bank equities over the review period.

Despite the strong overall performance of bank equities, contacts continued to cite concerns over the future profitability of UK banks following the referendum result, including uncertainty around access to EU countries' markets and possible reductions in net interest margins. While the former may persist for some time, the announcement of the TFS may have alleviated some concerns over the latter.

Senior unsecured bank bond spreads narrowed over the review period, in line with credit spreads more broadly. Bank credit

**Chart 10** Indicative five-year senior bank CDS premia<sup>(a)</sup>

Sources: Bloomberg and Bank calculations.

- (a) Unweighted average of five-year senior CDS premia.  
 (b) Average of Banco Santander, BNP Paribas, Crédit Agricole, Credit Suisse, Deutsche Bank, ING, Natixis, Nordea Bank, Société Générale, UBS and UniCredit euro-denominated CDS premia.  
 (c) Average of Bank of America, Citi, Goldman Sachs, JPMorgan Chase & Co., Morgan Stanley and Wells Fargo US dollar-denominated CDS premia.  
 (d) Average of Barclays, HSBC, Lloyds Bank, Royal Bank of Scotland and Standard Chartered euro-denominated CDS premia.

default swap (CDS) premia also fell (**Chart 10**). Contacts again attributed part of these moves to 'search for yield' behaviour. UK bank five-year senior CDS premia fell by 66 basis points, while those of their US and euro-area peers decreased by 28 basis points and 40 basis points respectively. Contacts attribute some of this outperformance to fewer rating agency downgrades of UK banks than had been expected following the outcome of the referendum.

The announcement of the TFS also appeared to have reduced UK banks' cost of funding. UK bank senior CDS premia fell 28 basis points following on from the August MPC announcement, compared to 8–9 basis points falls in euro-area and US bank spreads. Additionally, the MPC's announcement of corporate bond purchases is likely to have had some effect on bank debt — as despite the fact that it would be ineligible for purchases, it nonetheless represents a substitute for non-financial corporate debt for some investors.

UK banks' bond issuance was relatively subdued over the first half of the review period, in line with financial results blackout periods and the typical summer lull in issuance. Activity picked up in August following the end of the blackout periods and the announcement of the MPC's policy package.

## Operations

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

This section provides an update of the Bank's operations within the Sterling Monetary Framework (SMF) over the review period, as well as its other market operations. Collectively, these operations help implement the Bank's

monetary policy stance and provide liquidity insurance to institutions when deemed necessary.

On 4 August, the MPC announced a package of measures designed to provide additional support to growth and to achieve a sustainable return of inflation to the target.<sup>(1)</sup> This package comprised: a 25 basis point cut in Bank Rate to 0.25%; a new TFS to reinforce the pass-through of the cut in Bank Rate;<sup>(2)</sup> the purchase of up to £10 billion of UK corporate bonds over an 18-month period;<sup>(3)</sup> and an expansion of the asset purchase scheme for UK government bonds of £60 billion, taking the total stock of these asset purchases to £435 billion.<sup>(4)</sup> The last three elements will be undertaken via the Asset Purchase Facility (APF) and financed by the issuance of central bank reserves.

The aggregate level of central bank reserves is monitored by the Bank, as it affects monetary conditions in the UK economy. The level of central bank reserves is affected by (i) the stock of assets purchased, and TFS advances made, via the APF; (ii) the level of reserves supplied by operations under the SMF; and (iii) the net impact of other sterling flows across the Bank's balance sheet. Over the review period, aggregate reserves increased to around £323 billion driven by drawings in the additional Indexed Long-Term Repo (ILTR) operations held around the EU referendum and the expansion of the asset purchase scheme for UK government bonds.

### SMF operations

#### 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, there is little incentive for reserves account holders to use the deposit facility. Reflecting this, the average use of the deposit facility was £0 million in the three months to 14 July 2016.<sup>(5)</sup>

The rate charged on the Operational Standing Lending Facility remained at 25 basis points above Bank Rate. However, given the large aggregate supply of reserves, there was no demand from market participants to use the lending facility. The average use of the lending facility was also £0 million over the quarter to 14 July 2016.

#### Indexed Long-Term Repo operations

The Bank conducts regular IILTR operations as part of its provision of liquidity insurance to banks, building societies and

(1) For more details, see [www.bankofengland.co.uk/publications/minutes/Documents/mpc/pdf/2016/aug.pdf](http://www.bankofengland.co.uk/publications/minutes/Documents/mpc/pdf/2016/aug.pdf).

(2) For more details, see [www.bankofengland.co.uk/markets/Documents/marketnotice160804apftfs.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice160804apftfs.pdf).

(3) For more details, see [www.bankofengland.co.uk/markets/Documents/marketnotice160804apfcbps.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice160804apfcbps.pdf).

(4) For more details, see [www.bankofengland.co.uk/markets/Documents/marketnotice160804apfgilt.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice160804apfgilt.pdf).

(5) Operational Standing Facility usage data are released with a lag.

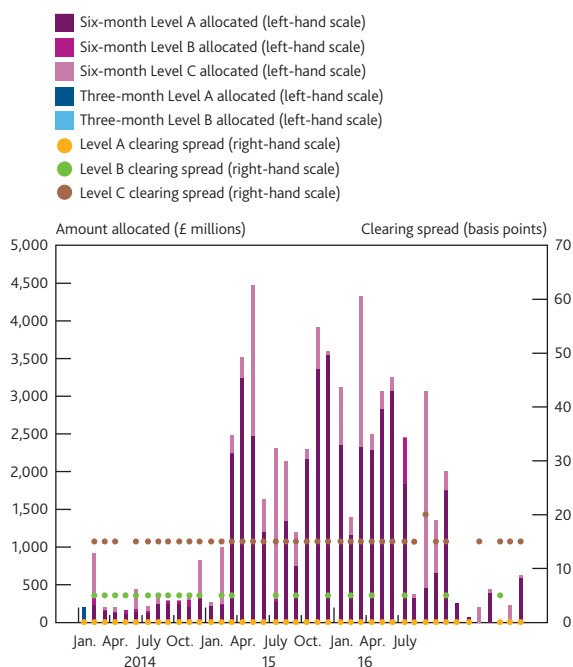
**Table A** Indexed Long-Term Repo operations<sup>(a)</sup>

	Total	Collateral set summary		
		Level A	Level B	Level C
<b>28 June 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	6,330	460	0	5,870
Amount allocated (£ millions)	3,072	460	0	2,612
Clearing spread (basis points)		0	n.a.	20
<b>5 July 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	1,350	655	0	695
Amount allocated (£ millions)	1,350	655	0	695
Clearing spread (basis points)		0	n.a.	15
<b>12 July 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	2,005	1,750	5	250
Amount allocated (£ millions)	2,005	1,750	5	250
Clearing spread (basis points)		0	5	15
<b>19 July 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	250	250	0	0
Amount allocated (£ millions)	250	250	0	0
Clearing spread (basis points)		0	n.a.	n.a.
<b>26 July 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	75	75	0	0
Amount allocated (£ millions)	75	75	0	0
Clearing spread (basis points)		0	n.a.	n.a.
<b>2 August 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	200	0	0	200
Amount allocated (£ millions)	200	0	0	200
Clearing spread (basis points)		n.a.	n.a.	15
<b>9 August 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	444	389	10	45
Amount allocated (£ millions)	444	389	10	45
Clearing spread (basis points)		0	5	15
<b>16 August 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	225	5	0	220
Amount allocated (£ millions)	225	5	0	220
Clearing spread (basis points)		0	n.a.	15
<b>23 August 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	630	600	0	30
Amount allocated (£ millions)	630	600	0	30
Clearing spread (basis points)		0	n.a.	15
<b>30 August 2016 (six-month maturity)</b>				
Minimum on offer (£ millions)	5,000			
Total bids received (£ millions)	0	0	0	0
Amount allocated (£ millions)	0	0	0	0
Clearing spread (basis points)		n.a.	n.a.	n.a.

(a) The minimum amount on offer is the size of the operation that the Bank is willing to allocate, in aggregate, across all collateral sets at the minimum clearing spreads.

broker-dealers. On 30 June, the Bank announced that it would continue to run weekly ILTR operations until the end of September 2016, following the additional weekly operations run as a precautionary measure around the date of the referendum.<sup>(1)</sup> During the review period, the Bank offered a minimum of £5 billion via six-month repos in each of its ILTR operations (**Table A**).

Participation in, and usage of, ILTR operations has been higher than during the same period last year, reflecting usage of the additional ILTR operations. Nonetheless, the total amount allocated in each operation remained well below the minimum £5 billion on offer (**Chart 11**). Although the Bank received total bids of £6.3 billion in its ILTR operation on 28 June 2016 (**Table A**), less than £5 billion was allocated because the bids received were not at sufficiently high spreads to increase the total amount of liquidity provided by the operation.<sup>(2)</sup> Usage of the ILTR continued to provide a source of term repo liquidity for some participants, while some also used the additional ILTRs for precautionary measures around the EU referendum. Over the review period, a total of £4.5 billion of ILTRs matured and £8.3 billion of new ILTRs were allocated, resulting in a net increase of central bank reserves of around £3.8 billion.

**Chart 11** ILTR reserves allocation and clearing spreads<sup>(a)</sup>

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

(1) For more details, see [www.bankofengland.co.uk/markets/Documents/marketnotice160630.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice160630.pdf).

(2) For more details, see [www.bankofengland.co.uk/markets/Documents/money/iltrshortguide.pdf](http://www.bankofengland.co.uk/markets/Documents/money/iltrshortguide.pdf).



### Contingent Term Repo Facility

The Contingent Term Repo Facility (CTRF) is a contingent liquidity facility that the Bank can activate in response to actual or prospective market-wide stress of an exceptional nature. The Bank reserves the right to activate the facility as it deems appropriate. In light of market conditions throughout the review period, the Bank judged that CTRF auctions were not required.

### Discount Window Facility

The Discount Window Facility (DWF) is a bilateral on-demand facility provided to institutions experiencing a firm-specific or market-wide liquidity 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 Bank publishes quarterly data of DWF usage with a lag. The average daily amount outstanding in the DWF in the three months to 31 March 2015 was £0 million.

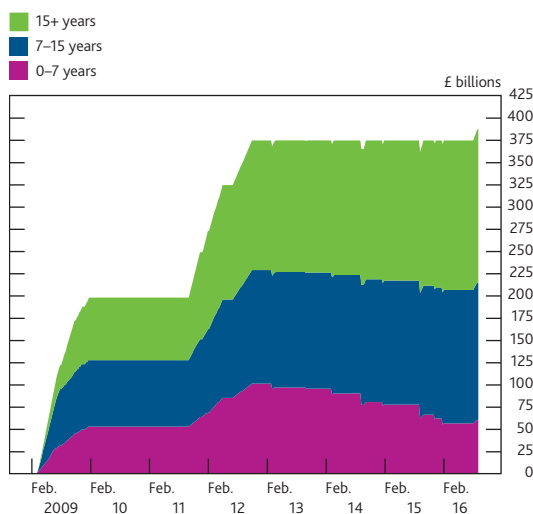
### APF operations

#### Gilt purchases

On 4 August 2016, the MPC announced an expansion of the asset purchase scheme for UK government bonds of £60 billion, taking the total stock of asset purchases to £435 billion.

Over the review period, the total stock of gilts outstanding in the APF, measured as proceeds paid to sellers, increased by £13 billion to £388 billion. The stock of gilts comprised of £60.3 billion (an increase of £3.5 billion) of purchases in the 3–7 years residual maturity range, £154.7 billion (an increase of £4.7 billion) in the 7–15 years residual maturity range and £172.7 billion (an increase of £4.6 billion) with a residual maturity of 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.

In its APF gilt operation on 9 August the Bank offered to buy £1,170 million of gilts and received offers of £1,118 million, resulting in a cover ratio of 0.96. Following the uncovered operation, the Bank announced that it would incorporate the £52 million shortfall within the second half of its current six-month purchase programme, details of which would be announced on 3 November 2016.

### Gilt lending facility

The Bank continued to offer to lend gilts held in the APF via the Debt Management Office (DMO) in return for other UK government collateral. In the three months to 30 June 2016, the daily average value of gilts lent, as part of the gilt lending facility, was £131 million. The average daily lending in the previous quarter was higher at £202 million.

### Term Funding Scheme

The Term Funding Scheme (TFS) is designed to reinforce the transmission of Bank Rate cuts to those interest rates faced by households and businesses by providing term funding to banks at rates close to Bank Rate. The TFS is a monetary policy tool of the MPC and will be operated as part of the APF.

The Bank began accepting applications to join the TFS on 22 August 2016. During the drawdown period, which runs from 19 September 2016 to 28 February 2018, participants will be able to borrow reserves for four years in exchange for eligible collateral. The quantity and price of funding available from the TFS will be based on the amount of eligible lending undertaken by a participant's TFS group. Participants in the TFS will be permitted to repay TFS drawings in order to redraw in the TFS, subject to having sufficient borrowing allowance in the TFS.

### Corporate Bond Purchase Scheme

The Corporate Bond Purchase Scheme (CBPS) is designed to impart monetary stimulus by: lowering the yields on corporate bonds, thereby reducing the cost of borrowing for companies; triggering portfolio rebalancing; and stimulating new issuance of corporate bonds.

Purchases of sterling corporate bonds, financed by the creation of central bank reserves, will be undertaken via the APF.

The Bank will look to purchase, via the CBPS, a portfolio of up to £10 billion of sterling non-financial investment-grade bonds representative of issuance by firms making a material contribution to the UK economy, in order to impart broad economic stimulus.

After the end of the review period, the Bank announced further details of the operating parameters and eligibility criteria of the CBPS, including how it would assess whether a company makes a material contribution to the UK economy,

and how it would achieve a balanced portfolio.<sup>(1)</sup> The Bank will participate in the secondary market by holding reverse auction operations three times a week. Should it be deemed necessary, the Bank also reserves the right to modify the structure of its purchase operations or to carry out secondary market purchases via other methods, such as bilateral purchases. The MPC will keep under review the case for participating in the primary market.

The CBPS will start to undertake purchases from 27 September 2016 and will operate for an initial period of 18 months.

### Corporate Bond Secondary Market Scheme and Secured Commercial Paper Facility

As well as being used for monetary policy purposes, the APF has the ability to purchase private sector assets to help improve liquidity in credit markets that are not functioning normally. In the past, the APF has used several mechanisms to facilitate these purchases including the Corporate Bond Secondary Market Scheme and the Secured Commercial Paper Facility. By providing backstop demand for such assets, these initiatives had a beneficial impact on market function. And, consistent with their intended catalytic effect, as conditions improved their usage declined materially. Neither facility has been used since 2013. Given this lack of demand, and bearing in mind the APF will be purchasing corporate bonds for monetary policy purposes through the CBPS, the Bank formally closed these schemes on 4 August.

### Other operations

#### Funding for Lending Scheme

The Funding for Lending Scheme (FLS) was launched by the Bank and HM Treasury on 13 July 2012. The initial drawdown period for the FLS ran from 1 August 2012 until 31 January 2014. The drawdown period for the FLS extension opened on 3 February 2014 and will run until 31 January 2018, following

the extension beyond January 2016 announced on 30 November 2015.<sup>(2)</sup> The quantity current participants can borrow in the FLS is linked to their lending to the UK real economy from 2013 Q2 to 2015 Q4, with the incentives skewed towards supporting lending to small and medium-sized businesses. On 1 August 2016, participants' borrowing allowance were reduced by 25% and will be reduced by the same amount every six months thereafter, phasing the scheme out gradually by 31 January 2018.

### US dollar repo operations

On 23 April 2014, in co-ordination with other central banks and in view of the improvement in US dollar funding conditions, the Bank ceased the monthly 84-day US dollar liquidity-providing operations. The seven-day US dollar operations will continue until further notice. The network of bilateral central bank liquidity swap arrangements provides a framework for the reintroduction of further US liquidity operations if warranted by market conditions. There was no use of the Bank's US dollar facilities throughout the review period.

### 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. At the end of the review period the portfolio included around £5.8 billion of gilts and £0.1 billion of other debt securities.

(1) For more details, see [www.bankofengland.co.uk/markets/Documents/marketnotice160912apfcbps.pdf](http://www.bankofengland.co.uk/markets/Documents/marketnotice160912apfcbps.pdf).

(2) For more details, see [www.bankofengland.co.uk/publications/Pages/news/2015/096.aspx](http://www.bankofengland.co.uk/publications/Pages/news/2015/096.aspx).