The Funding for Lending Scheme

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The Bank of England and HM Treasury launched the Funding for Lending Scheme (FLS) in order to encourage lending to households and companies. The FLS offers funding to banks and building societies for an extended period. And it encourages them to supply more credit by making more and cheaper funding available if they lend more. Easier access to bank credit should boost consumption and investment by households and businesses. In turn, increased economic activity should raise incomes. Early signs have been encouraging, as funding costs for UK banks have fallen sharply. But it will be some time before the impact of the FLS on lending is clear. The Bank is monitoring a range of indicators in order to assess the direct and indirect impacts of the Scheme.

Introduction

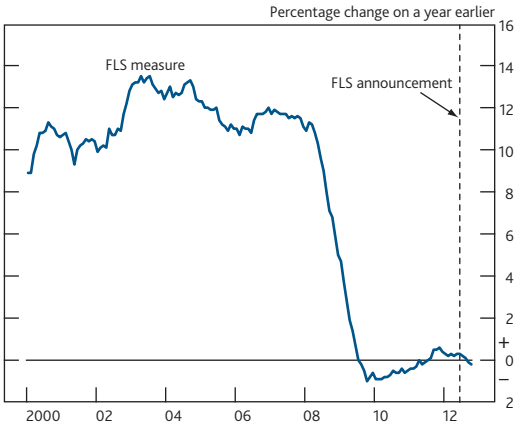
On 13 July 2012, the Bank of England and HM Treasury launched the Funding for Lending Scheme (FLS).[2] The FLS is designed to incentivise banks and building societies to boost their lending to UK households and private non-financial corporations (PNFCs) — the 'real economy'. It does this by providing funding to banks and building societies (hereafter 'banks')[3] for an extended period, at below market rates, with both the price and quantity of funding provided linked to their performance in lending to the UK real economy. This article explains how the FLS works and how it aims to provide additional stimulus to the economy. It is too early to see evidence of the Scheme's impact in full, and so evaluation of the success of the Scheme is left for a future publication.

Why was the FLS launched?

Since the start of the financial crisis, the Monetary Policy Committee (MPC) has provided substantial stimulus to the economy, first by cutting Bank Rate to 0.5% and then by purchasing £375 billion of assets as part of its programme known as quantitative easing (QE).[4] Despite this extremely accommodative stance of monetary policy, output has been broadly flat over the past two years. And prior to the announcement of the FLS, lending to UK households and PNFCs by banks had been broadly flat for over three years (**Chart 1**).

The weakness of bank lending reflects a range of factors, but one major determinant is the price that banks have to pay for funds. Over the twelve months to end-May 2012 — the period preceding the launch of the FLS — the intensification of the crisis in the euro area caused bank funding costs and, in turn, interest rates on loans, to increase (**Chart 2** shows an illustrative example). As changes in interest rates on loans typically follow changes in funding costs with a lag, a further tightening in credit conditions was in prospect.[5]

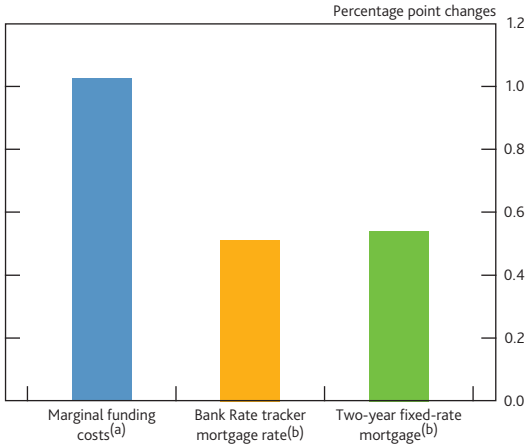
Chart 1 Lending to UK-resident households and businesses[a]



(a) Twelve-month rate of growth in the stock of lending. Lending to the UK-resident household sector and PNFCs. Non seasonally adjusted. See Appendix B for more details.

(1) The authors would like to thank Florence Hubert for her help in producing this article.
(2) The FLS was first announced by the Chancellor of the Exchequer and the Governor of the Bank of England on 14 June 2012. See King (2012). The Scheme opened for operation on 1 August 2012.
(3) The Scheme is open to all banks and building societies that sign up to the Bank's sterling facilities. Eligibility criteria for the Scheme are explained in Appendix A.
(4) Butt *et al* (2012) on pages 321–31 in this *Bulletin* describe what the money data can tell us about the impact of QE.
(5) For example, intelligence from the Bank of England's 2012 Q2 *Credit Conditions Survey* suggested that further increases in loan rates were expected prior to the announcement of the FLS.

Chart 2 Changes in indicators of bank funding costs and lending rates between 31 July 2011 and 31 May 2012



Source: FLS explanatory note, available at www.bankofengland.co.uk/markets/Documents/explanatory_notefls120713.pdf.

(a) The estimated marginal funding costs of extending variable-rate sterling-denominated loans. This is calculated as the sum of three-month Libor plus a weighted average of the five-year credit default swap (CDS) premia of the major UK lenders. Weights are based on banks' shares of new household secured lending. Marginal funding costs may vary across lenders.
(b) Rates for 75% loan to value mortgages.

High funding costs can result from uncertainty over the adequacy of bank capital, which is one reason why the Financial Policy Committee (FPC) has emphasised the need for banks to have sufficient capital. Given the heightened level of risk aversion associated with the intensification of the euro-area crisis, funding costs seemed likely to remain elevated and impair the flow of credit from banks to households and businesses for a considerable time. The FLS is a direct policy response to that threat to the UK economy posed by elevated bank funding costs. Funding costs are a key determinant of the interest rate banks charge on loans.(1) By reducing them, the FLS should lead to more and cheaper credit flowing into the economy than otherwise.

The next section explains the channels through which the FLS should boost the economy and how it complements the MPC's asset purchases. The third section explains in more detail how the FLS is designed to reduce banks' funding costs and increase their incentives to lend. The fourth section starts by considering some headwinds to lending and then discusses the factors that could determine the extent of the boost from the FLS relative to that counterfactual. The final section provides guidance on which indicators may show evidence of the FLS working at different stages of the transmission mechanism.

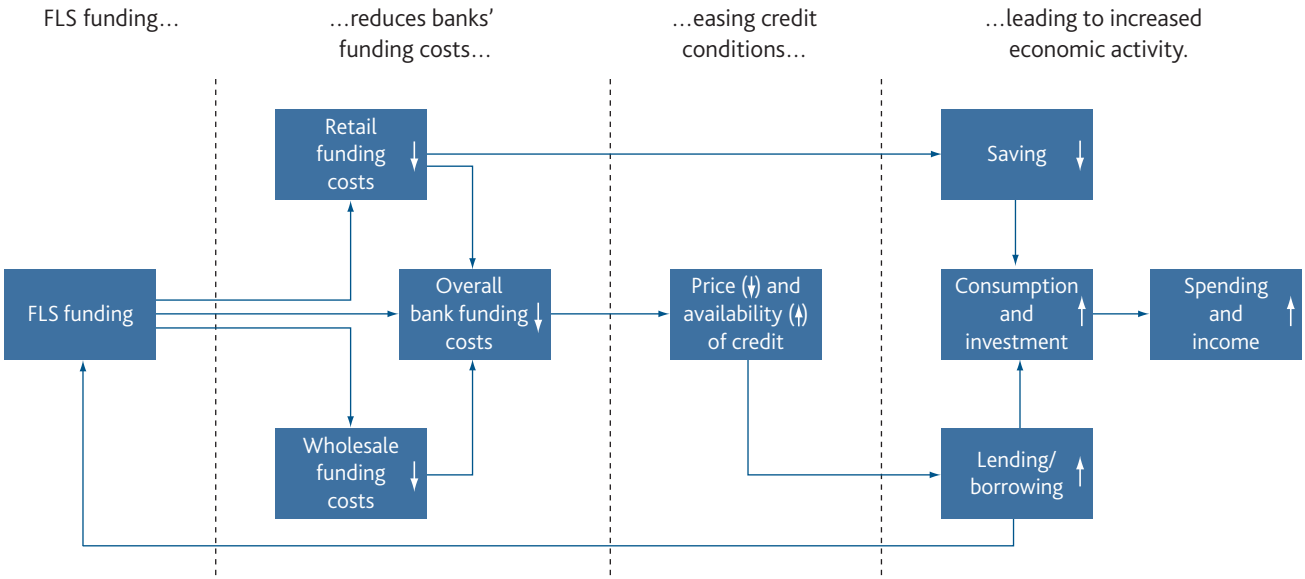
A box on page 311 explains how the incentive mechanisms embedded within the FLS work across different banks. Another box on pages 314–15 estimates the cost of funding via the FLS relative to other sources. Appendix A explains the mechanics of the operations of the FLS and Appendix B details the data and certification process used to allocate funding and set fees.

How will the FLS boost the economy?

A stylised overview of how the FLS should boost the economy — the transmission mechanism — is summarised in **Figure 1**. In order to extend loans, banks need funding. Normally, funding primarily comes from households and businesses — referred to in this article as *retail funding* — or from market investors in the form of *wholesale funding*. The higher the interest rates banks need to pay on that funding, the higher are the interest rates on loans they make to households and businesses, such as mortgages, personal and business loans. The FLS offers banks a cheap source of funding.(2) And this

(1) For a full explanation of the factors influencing the price of new lending see Button, Pezzini and Rossiter (2010).
(2) The FLS actually offers Treasury bills (rather than money) in exchange for collateral. Appendix A discusses how the Treasury bills can then be used to obtain funding.

Figure 1 Transmission mechanism of the FLS



may bring about a fall in the cost of the other sources of bank funding, for example by reducing the need for participating banks to issue debt in public markets. Together, lower overall bank funding costs should allow banks to increase the availability of credit by cutting loan rates or easing other, non-price terms.

The resultant increase in lending should be associated with higher consumption and investment spending. And under the design of the FLS, more lending allows banks to access additional cheap funding from the Bank, which in turn encourages further lending. Lower deposit rates offered by banks could also encourage households in aggregate to increase their consumption. In the longer term, if tight credit conditions have been holding back productivity growth, then the FLS could increase the supply potential of the economy (see the November 2012 *Inflation Report*).

The FLS and QE

Both the FLS and the MPC's asset purchases are intended to provide stimulus to the economy. By affecting different parts of the economy, the two policies complement one another.

When the MPC undertakes expansionary monetary policy — whether through conventional or unconventional means — it typically does so in response to ***generalised*** weakness in aggregate demand that might lead to inflation being below the 2% target in the medium term. Since the onset of the financial crisis, the MPC has injected substantial stimulus into the economy both through cutting Bank Rate and undertaking QE.(1) But, at the time that the FLS was introduced, higher funding costs were judged to be one of a number of major headwinds likely to continue to weigh on demand (see the May 2012 *Inflation Report*).

The FLS is a direct and targeted response to a ***specific*** headwind, namely the elevated level of funding costs facing UK banks following the intensification of the euro-area crisis. Notwithstanding the progress many UK banks had made in replenishing capital, a combination of elevated risk aversion and uncertainty about the value of banks' existing assets led investors to demand additional compensation to lend to them. This level of bank funding costs when the Scheme was introduced was greater than would have been warranted by the fundamental riskiness of new lending to the UK real economy alone. And these elevated funding costs were being passed on to UK real economy borrowers, impairing the flow of credit from banks to households and businesses.

In general, QE works by *circumventing* the banking sector by increasing the quantity of money held by the non-bank private sector. The main transmission channels are through increasing asset prices and reducing the cost of capital market issuance. Higher asset prices typically represent an increase in wealth for their owners. And portfolio balancing towards riskier assets could, for example, reduce the interest rates on new corporate bond issuance. QE should therefore benefit the owners of assets, and businesses who can issue debt or equity in capital markets. Households and companies dependent on bank finance are also affected by QE. But this impact is mainly indirect, via the impact on demand and incomes.(2)

In contrast, the FLS aims to reduce borrowing costs by going directly *through* the banking sector. For this reason the immediate beneficiaries are likely to be those who are reliant on banks as a source of finance. The FLS and QE can therefore be regarded as complements. Together, they should reduce the cost of finance through both banks and capital markets, benefiting the economy at large.

How does the FLS affect funding costs and the incentives to lend?

As shown in **Figure 1**, the FLS boosts banks' incentives to lend by making both the amount and price of funding available to banks conditional on their lending to the UK real economy. The following subsections set out how the amount and price of funding available to banks vary with their lending, and the role that non-FLS sources of funding play in the transmission mechanism.

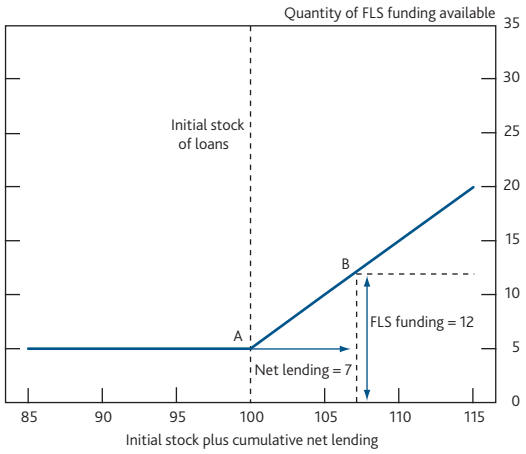
Quantity of funding available

The FLS offers a substantial amount of funding to banks. How the amount of FLS funding available varies with the amount a bank lends is shown in **Chart 3**. In order to create incentives for all banks to lend more than they otherwise would, the FLS offers an initial entitlement of discounted funding available to all banks, including those deleveraging, regardless of the evolution of their loan portfolios. At a minimum, each bank can borrow an initial amount of up to 5% of its stock of existing loans (as of June 2012) to the real economy (**Chart 3**).

There is no upper limit in the Scheme rules regarding the amount of funding that banks can access through the FLS, provided a participant has sufficient collateral. That is because banks are eligible to borrow additional funding equal to any positive **net** lending — new lending minus repayments — that they do during the 18 months from end-June 2012 to end-December 2013 (hereafter the 'reference period').(3) Netting off repayments is consistent with the objective of the FLS to boost the amount of credit to the UK real economy.(4) In other words, every pound of net lending to the real

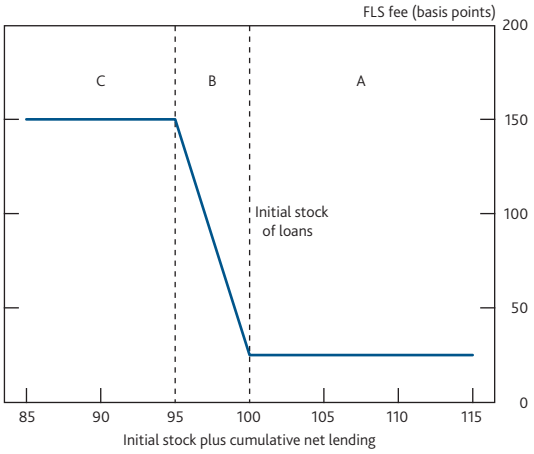
(1) See Benford *et al* (2009) for a full description of QE and its transmission mechanism.
(2) Insofar as banks' wholesale funding costs may fall as part of this process of portfolio rebalancing, there might be some reduction in the cost of bank credit. But this is not a key channel.
(3) For more details about how the funding is supplied to the banks see Appendix A.
(4) The net lending measure used excludes other actions that affect lending stocks, such as loan write-offs and sales and purchases of loans, as these leave unchanged the aggregate amount of credit provided to the economy. For more details on how the data is reported and certified see Appendix B.

Chart 3 How the quantity of available FLS funding varies with lending[a]



(a) All numbers are indexed relative to the initial stock of loans = 100.

Chart 4 Fee charged on FLS funding[a]



(a) All numbers are indexed relative to the initial stock of loans = 100.

economy during the reference period increases the amount that a bank is able to borrow by a pound, provided they have sufficient collateral.

For example, a bank that had a stock of lending to the real economy of £100 billion (point A on **Chart 3**) at the end of June 2012 would initially be entitled to £5 billion of funding. If that bank then lent a further £7 billion during the reference period, it would move to point B on **Chart 3** and be able to borrow a further £7 billion of funding, so £12 billion in total. As any net lending brings with it the possibility of an equal amount of additional cheap funding, the FLS embodies strong incentives to expand the supply of credit.

Price of funding

All borrowing from the FLS is at the lowest available fee for banks that expand lending. But banks that contract their net lending stock must pay more. **Chart 4** shows how the fee paid on the entire amount of FLS funding varies with the amount of lending a bank undertakes.(1) Specifically:

- Banks that maintain or expand their lending over the reference period pay a fee of 25 basis points per year — zone A in **Chart 4**. That implies a sizable discount in comparison to the price of both retail deposits and wholesale funding — the most likely alternative sources of funds — at the time that the FLS was launched.(2)

- Banks that contract their stock of loans by less than 5% pay an additional 25 basis points for each single percentage point fall in net lending — zone B in **Chart 4**. That fee increases linearly up to a maximum of 150 basis points. For example, a bank that had an initial stock of £100 billion, which fell by £3 billion (that is, 3%) over the reference period, would pay a fee of 100 basis points on up to £5 billion of FLS funding.

- Banks that contract their stock of loans by more than 5% pay the maximum fee of 150 basis points — zone C in **Chart 4**. The -5% threshold was set based on expectations for lending at the time the Scheme was launched, to make it likely that most, if not all, of the major UK banks would not fall into zone C by the end of the reference period.

Indirect effects on other bank funding costs

In addition to the direct effects on bank funding costs from the price and quantity of FLS funding, this extra source of funding may bring about a fall in the cost of *other* sources of bank funding. Importantly, these effects will likely be felt across the entire financial sector, so funding costs could fall even for institutions, including non-banks, that are not participating in the FLS.

These falls might come about because the funding available to banks through the FLS means that they will have a lower requirement for other sources of funding than otherwise. This could drive down the cost of those other funding sources, such as issuing term debt in wholesale markets. This 'portfolio balance' effect is similar to that which forms part of the transmission mechanism of quantitative easing (see Joyce, Tong and Woods (2011)).

The impact on banks' other funding costs is an important part of the transmission mechanism of the FLS. This is because when deciding the prices for all of their new loans banks may factor in the costs of all of their new funding. The amounts of new ***gross*** loans and new funding raised will typically be large relative to ***net*** balance sheet changes over any given period.

(1) For more details about how the fee is charged see Appendix A.
(2) The fee is not the only cost of funding for banks using FLS. Most obviously a bank would need to pay approximately Bank Rate to convert the Treasury bills into cash. For more details on other costs and a comparison with other funding sources see the box on pages 314–15.

That is because a bank will receive loan repayments from customers, and so will need to make new gross loans even to achieve zero net lending. Similarly, as a bank's liabilities mature a bank would need to raise new funding to keep the overall size of its balance sheet constant. And the FLS entitlement for any bank (5% of its initial lending stock plus any new net lending) will probably be less than its overall funding requirement during FLS reference period.(1) So overall funding costs faced by banks will therefore depend on both the cost of FLS funding as well as the cost of other liabilities.

Of course, each bank is in a different starting position, with different strategic objectives. In particular, prior to the announcement of the FLS, some banks were planning to reduce their lending overall, because of their capital and liquidity positions, or because of European Union state aid conditions.(2) The box on page 311 explains in detail how the price and quantity aspects of the FLS combine to increase incentives to lend for banks in different positions.

What might determine the effectiveness of the FLS and how will we monitor it?

The FLS should lead to more, and cheaper, credit flowing into the economy than otherwise. But the cost of funding through the FLS is only one of the factors determining the supply of credit to the real economy. Other supply factors — such as the response of other bank funding costs and the need for some banks to repair their balance sheets — will also affect the volume of loans extended, as will credit demand. This section first considers what the outlook for lending might have been without the FLS. It then moves on to what might determine the effectiveness of FLS and how this could be monitored.

Other factors affecting lending

A major challenge in assessing the impact of the FLS is that it is difficult to know what the likely evolution of credit conditions would have been in the absence of the Scheme — 'the counterfactual'. And it is possible that a range of unexpected developments will affect credit conditions over the 18-month FLS lending period. So it will be difficult to quantify the extent to which data reflect the realisation of the expected counterfactual, the impact of the FLS, or other factors.

The flow of lending is determined by the interaction of credit supply and credit demand. Since the onset of the 2008/09 recession, UK companies and households have collectively spent much less, relative to their incomes, than before. This has been associated with lower demand for credit as well as weaker supply. The uncertain economic outlook is likely to continue to inhibit demand for credit over the FLS lending period.

Prior to the announcement of the FLS, the outlook for the supply of credit was also weak. The rise in bank funding costs over the previous twelve months was judged likely to continue to impart upward pressure on new loan rates and cause credit conditions to tighten further. Lending to the UK real economy, which had been broadly flat for over three years, was projected to be more likely to decline than increase over the following 18 months.

Other factors may also inhibit credit supply. For example, banks may be unwilling to lend because they need to address weaknesses related to their business models or 'legacy' balance sheets that require them to strengthen their capital and liquidity positions. In the run-up to the financial crisis, the lending rate on some loans may have been too low given the risks taken, or the capital allocated to those loans may have been too low to absorb the potential losses from future borrower defaults. Perceptions of widespread forbearance(3) by banks on such loans, together with concerns that provisioning levels may be too low, may have contributed to doubts about the valuation of assets on banks' balance sheets. This could help explain some banks' low market capitalisation relative to the book value of their assets. Banks with the lowest market-based measures of capital have tended to be those with lower loan growth.(4)

The FLS should lower the price and increase the quantity of lending *relative to the counterfactual* that reflects all of these factors. So, for example, as interest rates on loans had been expected to increase, the FLS may have had the initial effect of preventing these rises, rather than causing immediate reductions in loan rates.

Over the period of the Scheme, both retail and wholesale funding costs will also be affected by a number of new developments, including other policy measures. For example, the announcement of the European Central Bank's (ECB's) Outright Monetary Transactions (OMTs) is likely to have increased investors' willingness to hold bank debt by alleviating some of the tail risks facing the European banking system. And bank funding costs have fallen across Europe since that announcement.

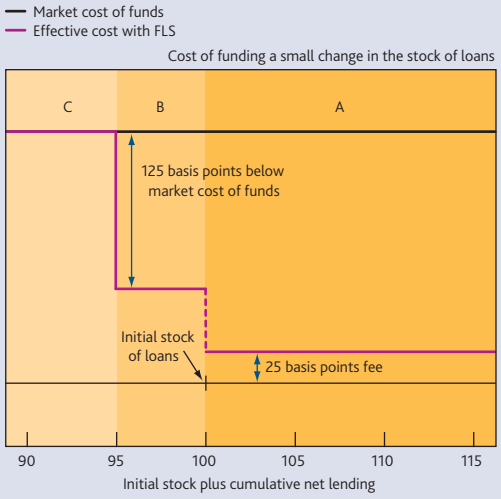
There have also been policy recommendations by the FPC, as well as some announcements from the Financial Services Authority (FSA). In November 2012, the FPC recommended that the FSA takes action to ensure that the capital of UK banks and building societies reflects a proper valuation of

(1) In addition, banks might be keen to continue to issue debt to the market in order to maintain their investor bases, not least because of the need to replace FLS funding in the future.
(2) See Fisher (2012) for more discussion.
(3) Forbearance occurs when banks temporarily provide borrowers with flexibility to meet their obligations during periods of distress. If provisioned for prudently, forbearance can be positive for financial stability and economic activity. For more information see pages 25–29 of the November 2012 *Financial Stability Report*.
(4) See Chart 2.19 on page 26 of the November 2012 *Financial Stability Report*.

How the FLS affects incentives for different banks

The major UK lenders each had different balance sheets and lending plans at the start of the Scheme. The incentives contained within the FLS are designed to have a positive effect across all banks. This box considers how both the price and quantity aspects of the FLS operate for banks that are expanding their lending, and banks that are deleveraging. Although the 'all-in' costs of funds described in the box on pages 314–15 matter, this box abstracts from those for simplicity. **Chart A** shows an illustrative example of the effective cost of funding a small change in net lending.

Chart A The effective cost of funding a small change in the stock of loans for different levels of net lending[a][b]



(a) Initial stock indexed to 100. Illustrative example, not to scale. The chart is drawn assuming a market cost of funds such that even a bank deleveraging 5% or more will find it cheapest to borrow their full entitlement from the FLS. The chart would vary given different assumptions about the market cost of funds. In particular it is not the case that the effective marginal cost of funding is always lower in zone A than zone B.
(b) The funding costs shown in this chart do not take account of the 'all-in' costs of funds discussed in the box on pages 314–15.

Case 1: for a bank expanding its lending

For a bank expanding its lending, the quantity aspect of the Scheme means that any expansion in net lending can be funded through the FLS. Therefore, for these banks, the *marginal source of funds* is the FLS, at a fee of 25 basis points (zone A in **Chart A**). The ability to access additional funds with new net lending therefore creates an incentive to expand lending further.

Case 2: for a bank deleveraging

For a bank shrinking its loan book, or deleveraging, the *quantity aspect* of the Scheme does not affect incentives to lend, as a bank's entitlement of FLS funding remains at 5% of its initial lending stock. If FLS funding is cheaper than the market cost of funding, it will be cheapest for a bank to take the full 5%, whatever the plans for net lending. The **marginal** source of funding for a bank considering whether to delever by less than planned is therefore retail or wholesale funding at the market rate (to the extent that the FLS puts downward pressure on the cost of other liabilities, as discussed earlier, this market rate will fall).

An important incentive to delever by less comes from the *price aspect* of the Scheme. This means that for net lending between -5% to 0% (zone B in **Chart A**) over the 18-month reference period, the less a bank delevers, the less they pay on their entire initial 5% entitlement. Specifically, the fee falls by 25 basis points per 1 percentage point of extra lending. In contrast to a bank expanding its lending (zone A in **Chart A**), for a bank that has negative net lending (zone B in **Chart A**), it is difficult to anticipate what the marginal funding cost is in absolute terms. But we can infer the marginal cost *relative to the prevailing market rate* (zone B in **Chart A**).

To see this, consider a bank which had an initial stock of £100 billion, and was planning gross lending of £3 billion less than expected repayments, reducing its stock to £97 billion. Such a bank would be entitled to £5 billion in FLS funding, reducing its reliance on market funding for the £97 billion stock of loans to £92 billion. At that point, increasing net lending by £1 billion (going from £97 billion to £98 billion) involves paying for £1 billion of funding at the market rate. But it also brings about a reduction in the cost of funds on the *entire £5 billion* from the FLS from 100 basis points to 75 basis points (see **Chart 4** in main text). So for every £1 billion of funding taken at the market rate, the price on the £5 billion of FLS funding — five times as much — falls by 25 basis points. Therefore the effective *marginal* cost of £1 billion of funding for lending between £95 billion and £100 billion is **125 basis points below the market rate**. The variation of the fee paid on the initial entitlement — the price aspect — therefore creates an incentive to deleverage less than otherwise would be the case. But for a bank deleveraging substantially (zone C in **Chart A**), the fee charged is flat at 150 basis points. The price aspect of the Scheme does not affect incentives to lend for banks in this zone.

their assets, a realistic assessment of future conduct costs and prudent calculation of risk weights. Where such action revealed that capital buffers needed to be strengthened to absorb losses and sustain credit availability in the event of stress, it said that the FSA should ensure that firms either raise capital or take steps to restructure their businesses and balance sheets in ways that do not hinder lending to the real economy.

The FSA had previously announced some additional measures, following the September 2012 FPC meeting, to ensure that the microprudential framework does not counteract an appropriate provision of lending.(1) For example, the FSA would make adjustments to the microprudential requirements to aim to ensure that no bank would be required to allocate additional capital to net new lending to households and companies.

As a result of building up their regulatory liquid asset buffers over the past two years, some banks held liquid assets well in excess of that indicated by the FSA's guidance. In June 2012, the FPC recommended that the FSA made clearer to banks that they were free to use their liquid asset buffers in the event of a liquidity stress. The FSA's subsequent actions reduced the incentives for banks to hold excessively large liquid asset buffers. Liquid assets held by the six largest UK banks have since fallen by £31 billion.(2) The funding used to support those liquid assets could be used to boost lending to the real economy. Alternatively, liquid assets sold to buy back expensive debt could boost profits and thus internal capital generation to support resilience and future lending.

The effectiveness of the FLS

The FLS should boost lending relative to the counterfactual discussed above. The rest of this section discusses some of the factors that might influence the form and size of that impetus. It also describes how Bank staff and the MPC will be able to monitor its impact.

From the FLS to bank funding costs

The FLS directly provides banks with a means by which they can fund at a discount relative to comparable market rates at the time it was introduced. The effectiveness of the FLS will partly depend on the extent of that discount relative to what those market rates would have been in its absence. As discussed above, this counterfactual path for market rates may change over time. For example, if there is positive news for the euro area, say, that leads to lower bank funding costs, then the *marginal* impact of the FLS is likely to be smaller, even though credit conditions would probably be easier. In an extreme case, bank funding costs could fall to the point where no bank would want to draw from the FLS. Although the FLS would then have no impact, this scenario would be very positive for lending relative to the situation prior to the introduction of the FLS, which would be a good outcome.

The FLS fee will depend on net lending. But comparing that fee by itself to indicators of other bank funding costs is likely to give a misleading steer on the relative cost of using the FLS. The true cost of any type of funding for a bank — the 'all-in cost' — takes into account a range of possible indirect costs involved with obtaining and making use of that type of funding, as well as the direct cost. The box on pages 314–15 attempts to quantify the extent of the discount on FLS funding by providing illustrative estimates of funding costs for the FLS and other sources of bank funding.

As previously discussed, the impact of the FLS on the price of other bank liabilities — both retail and wholesale funding — is an important determinant of its impact on overall bank funding costs. Movements in retail funding costs should be captured in the Bank's published series for first 'quoted' (advertised) and then 'effective' (paid) deposit interest rates. And there is a range of indicators of the cost of funding through various wholesale instruments, such as CDS premia and observed spreads on bank debt issued and traded in secondary markets. Monitoring these data could provide some indication of how the FLS has affected bank funding costs. Additionally, any falls in retail deposit rates — which represent the opportunity cost of consumption — could reflect the FLS having increased households' incentives to consume. Deposit rates also reflect the return on saving, and so, for some households, reduced interest income might lead them to reduce their consumption.

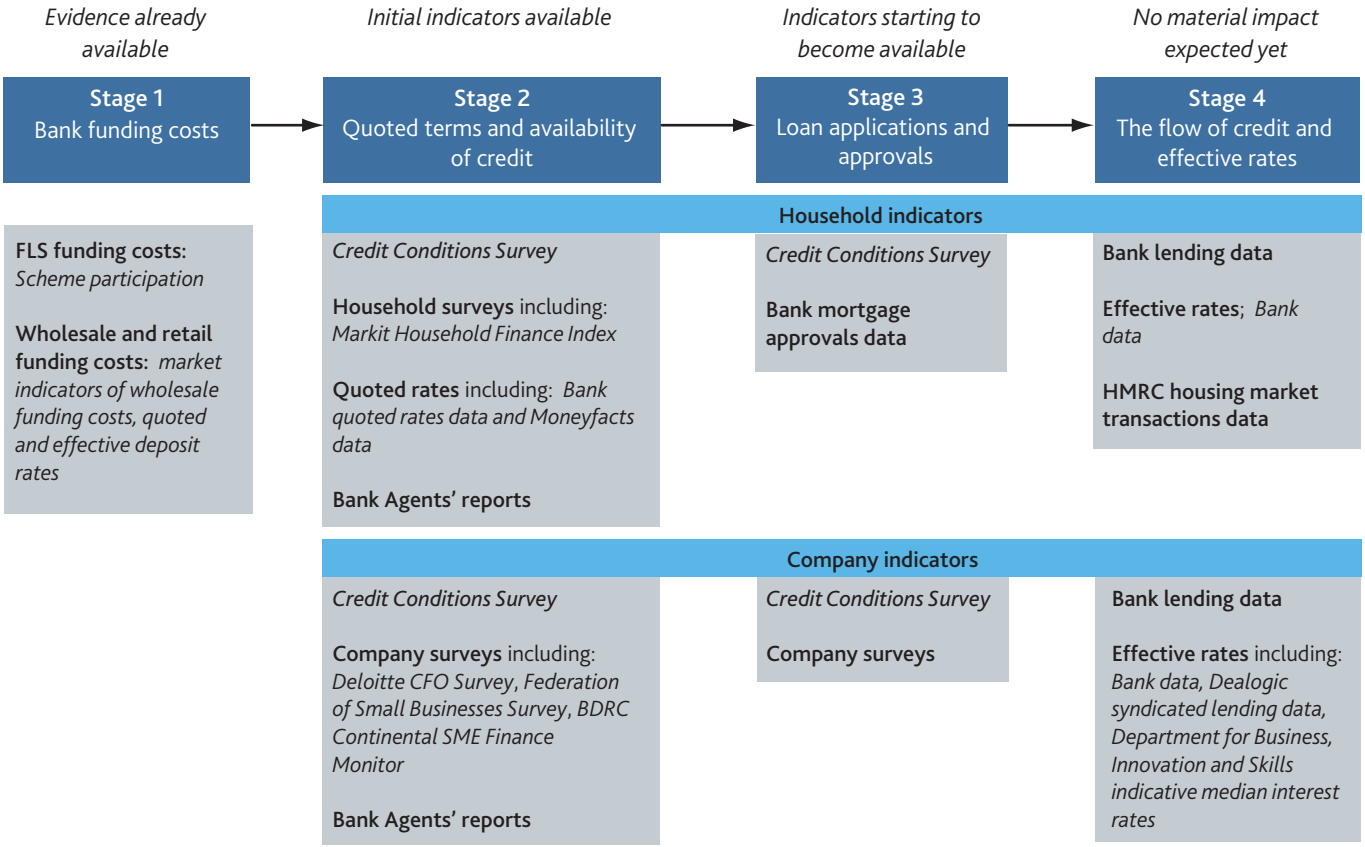
From bank funding costs to credit supply

Taken together, the extent of falls across all types of banks' funding costs will be an important factor influencing the price and availability of credit. Falls in funding costs that a bank experiences can be passed through to the interest rates it charges on loans. But the responsiveness of loan rates to the cost of funding is uncertain. Loan rates might respond more if large numbers of lenders participate in the FLS. But if legacy balance sheet weaknesses constrain some banks' ability to extend new credit then loan rates might respond less.

Rather than reduce loan rates by a uniform amount, banks might aim to maximise their profits by reducing the rates on some types of loans by more and others by less. For example, a bank may wish to target new borrowers to maximise the boost to net lending (and hence the banks' benefit from the Scheme). This means that movements in 'average' rates may not always be a sufficient description of the market. The Scheme will be more powerful if the products on which loan rates are cut the most account for significant volumes of lending.

(1) See www.fsa.gov.uk/library/communication/statements/2012/fpc.shtml.
(2) See also Chart 4.1 on page 49 of the November 2012 *Financial Stability Report*.

Figure 2 Stylised FLS transmission and selected indicators[a]



Source: Bank of England *Inflation Report*, November 2012.

(a) The listed indicators are a selection of the full range of indicators at each stage. Although it varies, the typical lag between a mortgage approval and transaction is two to four months. And it is probable that the lag from Stage 1 to Stage 4 will take longer for certain types of corporate lending.

Lenders may also choose to increase credit availability by loosening other, non-interest terms associated with loans. For example, banks may cut fees or loosen credit scoring criteria, or introduce new products. So the loosening of credit conditions resulting from the FLS may partly take place through the relaxation of these other terms of lending, rather than simply through the interest rate charged. Such 'non-price terms' of loans are more difficult to observe than interest rates. But surveys of both lenders and borrowers, including the *Credit Conditions Survey*, and intelligence from the Bank's network of Agents are able to provide some information.

From credit supply to the flow of credit

Increases in the supply of credit should result in increased volumes of lending to both households and companies. The extent depends on the responsiveness — or price elasticity — of loan demand to changes in the cost of credit. If borrowers desire a lot more credit as its price falls — that is, credit demand is 'price elastic' — then an increase in credit supply will cause a large increase in lending volumes. If, on the other hand, borrowers do not desire much more credit following a fall in its price — demand is less 'price elastic' — then lending will not increase by much. The elasticity of loan demand may vary over time, between households and companies, and for different types of loans to both households and companies.

Increases in lending quantities will first be reflected in the number of loan applications and approvals. Information on these is available from surveys. Once loan transactions take place, and drawdowns occur, they will be captured in lending quantities data published by the Bank, including the new measure of lending to households and businesses based on the FLS definition (see Appendix B for more details).

Evidence on the impact of the FLS so far

In addition to estimating the counterfactual, evaluating the impact of the FLS requires an understanding of the lags in the transmission mechanism of the Scheme. As discussed above, and in the November 2012 *Inflation Report*, a range of indicators — including advertised loan and deposit rates, lending volumes, and surveys of credit conditions — are likely to shed light on the FLS's effectiveness. But there are lags in the transmission, as summarised in **Figure 2**. And so it will be some time before its effects are seen in some data. For example, the FLS may lead to a reduction in mortgage rates. But there is typically a lag of two to four months between the mortgage agreement and the loan actually being drawn down. Given these lags on the household side, it seems unlikely that the FLS will materially affect mortgage lending volumes before early 2013, with the peak impact some time after that. And it

Comparing funding costs across various sources

When comparing funding costs across different sources of funding, including the FLS, it is important to consider all costs associated with raising funding via a particular instrument. This box outlines some of the costs associated with raising funding via wholesale instruments, and attempts to compare these to the FLS. Such calculations are highly uncertain and depend on the circumstances of each individual bank, but these estimates indicate that the FLS was around 200 basis points cheaper than other sources of wholesale funding at the time the FLS was announced. Given subsequent falls in market funding costs the FLS is now around 100 basis points cheaper.

For banks that are deleveraging and hence subject to a higher FLS fee, or banks that factor overcollateralisation costs into their funding cost calculations (see below), the relative attractiveness of the FLS would be reduced. But it is likely that for most banks the FLS provides an attractive source of funding. This is supported by anecdotal evidence from participants, including around planned usage of the FLS.

Direct costs

The direct cost of raising funding is the interest the bank must pay for that funding — for wholesale debt instruments, this is the coupon the issuing bank pays on the bonds. This represents the price the issuer must pay to compensate investors for, among other things, the credit risk of the issuer (that is, the risk that the issuer may not repay and the investors will lose their money). An indicator of the direct cost of raising funding via a particular debt instrument is given by the price at which such bonds are trading in the secondary market. In addition to the costs implied by these secondary market prices, in order to attract investors an issuer would typically have to pay a small 'new issue premium' to issue more debt to the market.

Indirect costs

There are various indirect costs associated with issuing debt instruments. These include the fees paid to the banks that arrange and underwrite the issuance, fees paid to register the bonds with the listing authority, and fees paid to ratings agencies to rate the debt. There are also legal costs associated with structuring a transaction and preparing the legal documentation setting out the terms and conditions of the bonds.

For covered bonds and residential mortgage-backed securities (RMBS) another indirect cost is the cost of the 'in-built' swaps that are typically required to convert the cash flows on the underlying receivables to more closely match the coupons payable on the bonds. For example, a typical pool of mortgages backing an RMBS will contain a mixture of fixed-rate and floating-rate mortgages, whereas RMBS typically pay just a floating-rate coupon. To mitigate the interest rate risk arising from this mismatch, the issuer will enter into an interest rate swap to convert the mortgage receipts into the floating-rate payments required on the bonds. Similarly, if the bonds are issued in a different currency to the underlying receivables, the issuer will enter into a cross-currency swap to address this mismatch. The cost of these swaps can be a significant component of the 'all-in' cost of raising funding via these sources.

FLS comparison

The headline cost for borrowing Treasury bills under the FLS is 25 basis points for banks that are not deleveraging. Compared to issuance of wholesale debt instruments, there are fewer types of indirect costs associated with the FLS. For example, there are no arranging, underwriting or listing fees. There are some legal costs, for example around the eligibility checking of loan collateral, but the largest indirect cost is likely to be the cost of converting the Treasury bills borrowed under the FLS into cash for lending.

One way a bank might do this is to use the Treasury bills as collateral to borrow cash in the market (a 'repo' transaction). Another option is for a bank to substitute the Treasury bills for reserves in its liquid asset buffer. In both cases, the cost of converting the Treasury bills into cash should be close to the expected path of Bank Rate over the life of the drawing.(1) Adding this cost to the headline cost for a non-deleveraging bank takes the approximate total cost of raising cash funding via the FLS to around 75 basis points.

It is difficult to compare the effective funding costs across different instruments given the range of factors involved, and differences in the funding costs faced by different banks. But **Table 1** provides some indicative estimates of these costs for different funding sources, including the FLS, averaging across UK banks. Based on these estimates, at the time the FLS was announced on 14 June 2012 it would have been around 200 basis points cheaper than using other sources of secured wholesale funding, such as RMBS or covered bonds. Given the recent substantial falls in UK bank wholesale funding costs(2) — which have been driven, in part, by the FLS itself — as at 26 November 2012 the FLS was likely to be around 100 basis points cheaper.

Overcollateralisation costs

The estimates of funding costs in **Table 1** do not include any consideration of collateral usage. Secured funding instruments need to be 'overcollateralised' — that is, more collateral must be provided than the quantity of funding secured on that collateral (analogous to mortgages requiring a loan to value ratio of less than 100%). This means that secured funding

Table 1 Indicative funding costs for major UK banks, excluding overcollateralisation costs

Basis points

Funding source	Direct costs[a]		Indirect costs[b]	Estimated total funding cost	
	14 June 2012	26 Nov. 2012		14 June 2012	26 Nov. 2012
Senior unsecured bonds	345	190	0	345	190
Covered bonds	240	140	30	270	170
RMBS	245	150	30	275	180
FLS	25	25	50	75	75

Sources: Bloomberg, Bank calculations and discussions with market participants.

(a) For senior unsecured bonds, covered bonds and RMBS the direct cost is an indicative estimate of the average cost of raising sterling funding at a maturity of around four years for major UK banks. For the FLS, the direct cost is assumed to be the 25 basis points FLS fee for a non-deleveraging bank.
(b) The indirect costs for senior unsecured bonds are assumed to be negligible in relation to the direct costs. The indirect costs for covered bonds and RMBS are indicative estimates based on discussions with market participants. The indirect costs for the FLS are assumed to be driven by the cost of converting FLS Treasury bills into cash, estimated at around 50 basis points based on the recent level of the four-year SONIA swap rate.

sources cannot be used to fund all of a bank's assets. And a desire to use collateral efficiently might also restrict a bank's willingness or ability to use its assets for secured funding.

Hence there may be an opportunity cost of using collateral, particularly if a bank has limited availability of collateral suitable for secured funding. Some — but not all — issuers take account of this when considering the cost associated with secured funding, including for the purpose of calculating the 'transfer price' that they internally charge different business units to fund their activities. An approach taken by some banks is to assume that the portion of collateral that is not funded by the secured funding is effectively funded by senior unsecured debt, which would increase the cost an issuer ascribes to using the secured funding source. For example, suppose a bank issues £100 of covered bonds at a price of 100 basis points, backed by a pool of £150 of mortgages. Ignoring other costs, if the bank assumes the £50 of overcollateralisation is effectively funded by senior unsecured debt at a cost of 200 basis points, say, the bank might consider the all-in cost of funding the pool of mortgages via covered bonds to be the weighted average of these costs, at 133 basis points.

The effective all-in costs of the secured funding sources (RMBS, covered bonds and the FLS) can therefore be higher than indicated in **Table 1**. The extent to which they might be higher depends, among other things, on the amount of overcollateralisation required for each source of funding. The haircuts applied to collateral in the FLS are likely to be at least as large as the haircuts applied to similar assets in market transactions, given the importance attached by the Bank to ensuring that its balance sheet is protected against loss in all but the most severely stressed of circumstances.[3] In some cases, this might make the FLS less attractive relative to other sources than the numbers in **Table 1** suggest. But that effect may be limited by the broad range of collateral accepted in the FLS, which includes some assets that may not be readily usable as collateral in market transactions and whose use as collateral therefore might not involve any opportunity cost. And even after any adjustment for overcollateralisation costs, the FLS is likely still to be an attractive source of funding for most banks.

(1) In the first case, this is because lending against Treasury bills is very low risk and so the rate for doing so should be close to the expected 'risk-free' rate. In the second case, the cost is the interest the bank foregoes on the reserves (that is, Bank Rate) that have been substituted for Treasury bills, on which FLS participants receive no interest.
(2) See the 'Markets and operations' article on pages 290–303 of this *Bulletin* for more information.
(3) See Fisher (2011) for more details on the Bank's policy on collateral.

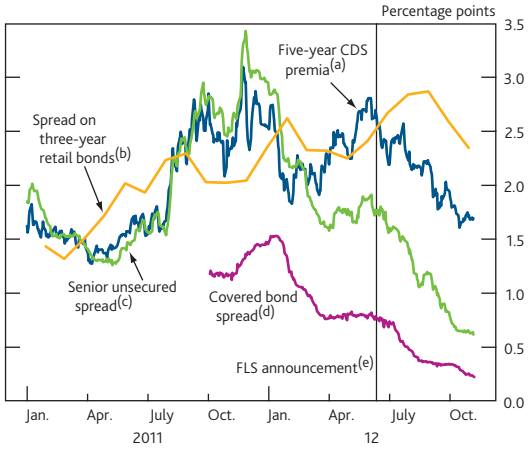
is probable that it will take longer for the effects from the FLS to feed through to certain types of corporate lending because many corporate loans are tailored to the customer, and so are less standardised than mortgage loans.

The rest of this section discusses some of the evidence on the transmission of the FLS so far. It suggests that the Scheme appears to have contributed to lower bank funding costs. There are early indications that it has begun to flow through into credit conditions, including falls in loan rates. The next stage might be a gradual pickup in mortgage approvals, although data on these can be volatile from month to month.

Participation in the Scheme is widespread. Thirty-five banking groups, comprising just over 80% of the stock of FLS eligible loans, had signed up by 3 December 2012. That translates into an initial entitlement of around £68 billion of funding. It was too early for the Scheme to affect net lending in 2012 Q3. And total real economy net lending was close to zero in that quarter. There was net lending of £7.6 billion, however, by those participating groups with positive net lending. That means that the total borrowing allowance increased to around £76 billion as of 3 December 2012, which demonstrates the incentives built into the Scheme. The borrowing allowance will continue to increase by one pound for every pound of additional net lending by banks expanding their loan books. By the end of September 2012, eight weeks into the Scheme, just over £4 billion in funding had been drawn from the FLS, and more has been drawn since.

As documented in the November 2012 *Inflation Report* and the minutes of the November MPC meeting, indicative measures of UK banks' longer-term funding spreads — both retail and wholesale — have fallen sharply since the announcement of the FLS (**Chart 5**). This is evidence of Stage 1 in **Figure 2**. In addition, shorter-term bank unsecured funding rates, including Libor, have also declined in recent months. These falls probably reflect, among other factors, both the impact of the FLS and other policy measures such as the ECB's announcement of its OMTs and the Bank of England's

Chart 5 UK banks' indicative longer-term funding spreads



Sources: Bank of England, Bloomberg, Markit Group Limited and Bank calculations.

(a) The data show an unweighted average of the five year CDS premia for the major UK lenders, which provides an indicator of the spread on long-term wholesale bonds.
(b) Sterling only. Spread over the relevant swap rate. The three-year retail bond rate is a weighted average of rates from banks and building societies within the Bank of England's normal quoted rate sample with products meeting the specific criteria (see www.bankofengland.co.uk/statistics/Pages/iadb/notesiadb/household_int.aspx).
(c) The data show an unweighted average of the spread between euro-denominated senior unsecured bonds and equivalent-maturity swap rates for a selected bond issued by each of the major UK lenders. The selected bonds have residual maturities of between two and six years.
(d) The data show an unweighted average of the spread between euro-denominated covered bonds and equivalent-maturity swap rates for a selected bond issued by each of the major UK lenders. The selected bonds have residual maturities of between three and seven years.
(e) The Lord Mayor's Banquet for Bankers and Merchants of the City of London at the Mansion House.

activation of the Extended Collateral Term Repo Facility.(1)(2) And the FLS will continue to provide a cushion against future fluctuations in market funding costs, for example if investor concerns about euro-area strains were to intensify again.

There is also evidence suggesting that the reduction in bank funding costs is beginning to feed through to the quoted terms and availability of credit (Stage 2 in **Figure 2**). Lenders reported in the 2012 Q3 *Credit Conditions Survey* that mortgage availability had increased markedly over the quarter. And lenders expected to increase availability further, and reduce spreads, in Q4. In general, quoted mortgage rates are no longer increasing(3) and for some products — for example fixed-rate mortgages — have begun to fall.(4) For companies, there is less concrete evidence of an easing in corporate conditions. A number of lenders have announced reductions in the cost of credit for companies, particularly smaller ones. These have taken the form of reductions in interest rates and fees, and the introduction of cash-back schemes on certain products.

Improved availability of credit should lead to greater loan approvals (Stage 3 in **Figure 2**), including in the Bank's mortgage approvals data. There is less information on corporate loan approvals. But in the November 2012 *Agents' summary of business conditions*, some lenders had recently begun to make offers of loans to smaller businesses at lower interest rates, although most companies' awareness of such improvements remained low. It will take some time for increased approvals to become transacted loans, so the FLS is unlikely to affect materially the flow of net lending (Stage 4 in **Figure 2**) until early 2013, and the lags are likely to be greater for certain types of corporate lending.

Conclusion

The Funding for Lending Scheme was introduced to counter the elevated level of bank funding costs prior to its announcement. The FLS offers banks a cheaper source of funding for an extended period. Cheap funding should feed into lower interest rates on loans to households and companies. Moreover, the Scheme encourages banks to increase lending by allowing them to borrow more funding at more attractive rates, the more they lend. An important part of the transmission mechanism of the FLS is the response of other bank funding costs. This reduction in the cost of bank finance should complement the reductions in the cost of capital market issuance caused by the MPC's asset purchases. Easier credit conditions should cause consumption and investment to increase, boosting economic activity.

But the cost of funds accessed through the FLS is likely to be just one of many influences on credit conditions over the next few years. And other factors such as balance sheet constraints facing banks, global macroeconomic developments, and credit demand, will also influence the effectiveness of the FLS.

The Bank will be monitoring a range of indicators in order to assess the impact of the FLS. But the difficulty of knowing the counterfactual — a challenge common to most policy evaluation — makes that task difficult. And there are likely to be sizable and variable lags in the transmission mechanism, meaning that evidence of the FLS's impact will only show in the data over time. There will therefore be considerable uncertainty in gauging the size of the boost to the economy delivered by the FLS. Nonetheless, early indicators suggest that the transmission mechanism of the FLS is working as expected so far.

(1) For more information on the Extended Collateral Term Repo Facility, see www.bankofengland.co.uk/markets/Pages/money/ectr/index.aspx.
(2) As discussed in the 'Markets and operations' article on pages 290–303 of this *Bulletin*.
(3) They had been rising since the middle of 2011 and had been expected to rise further prior to the announcement of the Scheme.
(4) See page 16 and Chart 1.11 in the November 2012 *Inflation Report*.

Appendix A
The operation of the FLS

This appendix outlines how the FLS operates in practice.(1)

Eligibility to participate

Institutions eligible to participate are banks and building societies that are signed up to the Bank's Discount Window Facility (DWF). All deposit-taking institutions are eligible to apply to join the DWF.

The FLS has been designed to support the UK economy, not the banks. Nevertheless, the Bank had to build the FLS on the existing structure of the Sterling Monetary Framework (SMF), and so eligibility is restricted to deposit-taking institutions. This ensures that the Bank has effective operational links with counterparties in both banking transactions and collateral positioning. It also ensures that the Bank can rely on the procedures and safeguards provided by the existing statutory data reporting requirements for banks and building societies in collecting the lending data on which FLS access is based. See Appendix B for more details.

To the extent that the FLS is successful at reducing funding costs and improving the economic outlook in general, even non-participants should benefit indirectly from the Scheme.

FLS transactions

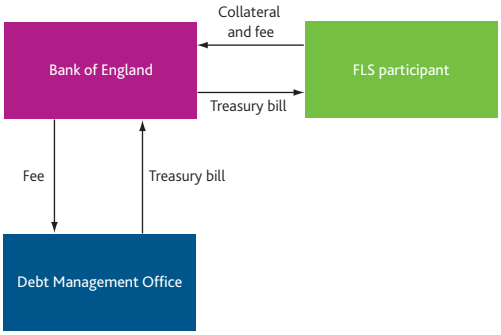
Under the FLS, participants can borrow UK Treasury bills in exchange for eligible collateral. Technically, FLS transactions are structured as collateralised stock lending transactions. Drawdowns under the FLS may be undertaken on each business day during the 18-month drawdown window running from 1 August 2012 to 31 January 2014 by contacting the Bank's Sterling Markets Desk. The term of borrowing is four years from the date of drawdown, but participants may repay their drawings, in part or in full, at any time.

Treasury bills

FLS participants might use the Treasury bills obtained from the Scheme to raise cash in a number of ways. One option is to use the Treasury bills as collateral to borrow cash on a secured basis in the market. Alternatively, counterparties may use the Treasury bills as collateral to borrow cash in the Bank's open market operations. Another option is for participants to retain the Treasury bills and substitute them for reserves in their liquid asset buffer.

The Treasury bills used in the FLS are issued by the Debt Management Office (DMO) specifically for the Scheme. They are liabilities of the National Loan Fund and held by the DMO as retained assets on the Debt Management Account. The Bank borrows the Treasury bills from the DMO under an uncollateralised stock lending agreement (**Figure A1**), and pays the DMO a fee to cover administrative costs.

Figure A1 FLS transaction structure



The Treasury bills have a maturity of nine months. The Treasury bills therefore need to be 'rolled' during the life of an FLS transaction, whereby the participant returns the maturing Treasury bills to the Bank in a window between 10 and 20 days prior to maturity. The Bank returns these Treasury bills to the DMO in exchange for new Treasury bills, which the Bank in turn gives to the participant on the same day.

The structure of FLS transactions and the operational processes around the Treasury bills are very similar to those in the Special Liquidity Scheme,(2) and so many of the Bank's counterparties are already familiar with these processes.

As stock lending transactions, FLS transactions do not appear directly on the Bank's balance sheet, although the Bank publishes quarterly details of the quantity of Treasury bills borrowed under the FLS.(3)

Eligible collateral

A broad range of collateral is eligible for use in the FLS, so that, as far as possible, the availability of collateral does not constrain banks' ability to use the FLS. Therefore eligible collateral in the FLS comprises all collateral that is eligible in the DWF. This includes portfolios of loans, various forms of asset-backed securities and covered bonds, and sovereign and central bank debt.(4) Eligible collateral must be pre-positioned with the Bank in advance of a drawing, so that the Bank is able to analyse the collateral and determine its value.

There is no mechanical link between new loans made by participants and the collateral that can be provided to the Bank. Participants can apply to use newly generated loans as collateral in the FLS if they wish, but equally participants can use any eligible assets already on their balance sheet. The sole purpose of taking collateral in the FLS is to protect the Bank from the risk of loss in the event that a participant defaults.

(1) For more details of how the FLS operates, see www.bankofengland.co.uk/markets/Pages/FLS/documentation.aspx.
(2) For more details on the Special Liquidity Scheme, see www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qb120105.pdf.
(3) For more details on the data published on the FLS, see www.bankofengland.co.uk/markets/Pages/FLS/data.aspx.
(4) For more details on collateral eligibility, see www.bankofengland.co.uk/markets/Pages/money/eligiblecollateral.aspx.

The haircuts that apply to collateral in the FLS are the same as those that apply to collateral taken in the Bank's SMF operations, and are designed to protect the Bank's balance sheet against losses in all but the most severely stressed of circumstances.(1)

Borrowing allowance and fee

The quantity and price of funding available from the FLS is linked to participants' performance in lending to the UK non-financial economy, as discussed earlier.

The fee charged applies on drawings up to the FLS Group's borrowing allowance. If, on any day, an FLS Group's outstanding drawings exceed its borrowing allowance (for example, if an FLS Group's borrowing allowance has fallen following a reduction in lending, but the FLS Group has drawn up to the maximum amount of a previous higher borrowing allowance), no further drawings will be permitted until the borrowing allowance has increased above the aggregate drawing amount. Any such 'excess' drawings will not be clawed back, but the fee on the excess portion will be 150 basis points per annum.

During the drawdown window and up to 31 March 2014 participants pay a flat fee of 25 basis points per annum, quarterly in arrears. Once the drawdown window has closed and the final fee has been determined, any fee above the 25 basis points already paid is then charged as a lump sum. From then onwards, each participant pays its final fee on its outstanding drawings, quarterly in arrears, until they are repaid.

(1) For details on the Bank's approach to collateral risk management, see www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qb100201.pdf.

Appendix B
Lending data reporting and certification

A key aspect of the operations of the FLS is the certification of the lending data. It is important that the data, on which the borrowing allowance is based, are in all material aspects accurate and complete. This section provides details on the FLS definition of lending and the certification procedure.

As indicated earlier, the quantity and price of funding available via the FLS will be based on the quantity of sterling loans made by a participant's FLS Group to UK-resident households and private non-financial corporations (PNFCs). The borrowing allowance for each FLS Group thus depends on their 'base stock' plus any positive cumulative net lending to the real economy during the reference period. The data that determine the base stock and net lending are provided and certified by the FLS Group via Form FL.(1)

The Bank requires a 'Form FL Certificate' (front sheet of Form FL) to confirm that the data provided in Form FL are accurate and complete. Each Form FL certificate must be signed by a banking group board member, such as the finance director or chief operating officer. Each entity in an FLS Group may choose to either certify individually, or alternatively, one entity may certify on behalf of the FLS Group. One reason for this pragmatic approach to certification is to accommodate different banking group structures across reporting institutions. While data certification may be done at the level of the FLS Group, the lending data are provided by each entity separately.

The FLS lending measure covers sterling loans to UK-resident households and PNFCs and is in the form of drawn loans. Participants' holdings of securities, commercial paper, bills and acceptances are not included. In aggregate, across the entire reporting population, the annual rate of growth in the stock of lending, using the FLS lending measure, is broadly similar to existing measures of lending such as M4 lending to households and PNFCs. More details on the comparison between the FLS lending measure and M4 lending are provided in Table 2 in the box on pages 7–9 in the October 2012 *Trends in Lending*.

The exact instruments used in the FLS definition of lending to the household sector and PNFCs — for example, loans and advances secured on dwellings and overdrafts — are provided on pages 1–2 of the *Form FL Guidelines* document.(2) They correspond closely with the instruments and definitions used in existing measures of lending published by the Bank which are derived from the Bank's statistical returns (Forms BE, BT, MM and MQ). This allows for the certified data on Form FL to be reviewed. The broad alignment of the FLS lending definition to existing definitions of lending means that the compilation of Form FL for participants is not cumbersome as the data and definitions are already being used in the compilation of the statistical returns. In addition, classification and definitional guidelines for Bank of England statistical returns are available on the Bank's website making the related FLS definition of lending more transparent and accessible.

The FLS Group consists of all monetary financial institutions (that is, banks and building societies) and specialist mortgage lenders within a Group that are required to report statistical lending data to the Bank. Net lending profiles of individual entities within the FLS Group can be different over the period of the Scheme — it is the net lending across the entire FLS Group that will determine the additional borrowing allowance and fee.

Participants are required to submit Form FL at least quarterly and, subject to the Bank's agreement, may choose to submit more frequently. The data provided in Form FL include the amount of relevant loans outstanding at the end of the previous calendar quarter (for example, 30 September 2012 for 2012 Q4 reporting) and at the end of the latest calendar quarter (for example, 31 December 2012) and net lending in the calendar quarter (for example 1 October to 31 December 2012). The lending data to be reported for the first certification (for 'base stock' as at 30 June 2012) and the process for the last certification (for data as at 31 December 2013) are different. More details are provided in Section 4.4 of the FLS Operating Procedures.(3)

The Bank is publishing quarterly data for each Group participating in the FLS. This includes the amount borrowed from the Bank, the net quarterly flows of lending to UK households and businesses, and the stock of loans as at 30 June 2012.(4)

(1) Form FL is available at www.bankofengland.co.uk/markets/documents/flsformfl_2.xlsx.
(2) The *Form FL Guidelines* document is available at www.bankofengland.co.uk/markets/documents/flsformflguidelines.pdf.
(3) See www.bankofengland.co.uk/markets/documents/flsopprocedures.pdf. More generally, Section 4 in this document provides information on the data reporting and certification process.
(4) FLS data are available at www.bankofengland.co.uk/markets/Pages/FLS/data.aspx. The publication timetable is available at www.bankofengland.co.uk/markets/documents/FLSpubdates.pdf.

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