The Money Market Liaison Group Sterling Money Market Survey

By Ben Westwood of the Bank's Sterling Markets Division.(1)

The Bank of England recently initiated a new survey of the sterling money market on behalf of the Money Market Liaison Group. This market — where short-term wholesale borrowing and lending in sterling takes place — plays a central role in the Bank's pursuit of its monetary and financial stability objectives. Participants include banks, other financial institutions and non-financial companies, who use the market to manage their liquidity, by investing over short periods and raising short-term funding. The survey supplements the Bank's long-standing gathering of market intelligence and will increase public understanding of the market. Over time, it is expected to help identify emerging structural trends in the market, helping policymakers assess the impact of their actions on the behaviour of market participants. This article introduces and presents the results of the inaugural survey launched in May 2011.

The sterling money market plays a central role in the Bank of England's pursuit of its monetary policy and financial stability goals.(2) The Bank operates in the sterling money market to implement the interest rate decisions of the Monetary Policy Committee (MPC). The Bank also uses its operations in the sterling money market to provide liquidity insurance to the banking sector with the aim of reducing the costs of disruptions to the liquidity and payment services supplied by banks. The market also plays a central role in enabling financial and non-financial companies to manage their liquidity positions.

To operate effectively in the sterling money market, participants, including the Bank, need to understand how the market functions. To this end, the Bank gathers regular market intelligence and analyses available data. But there is limited consistent, publicly available information about the size, structure, liquidity and efficiency of the market as a whole.

To fill this gap, the Money Market Liaison Group (MMLG) agreed to conduct a regular, six-monthly survey of commercial banks and building societies active in the sterling money market.(3) The aim of the MMLG Sterling Money Market Survey is to provide a source of both quantitative and qualitative data on market activity and functioning. The survey will be conducted in May and November of each year. The Bank will collect the data and publish it on behalf of the MMLG.

This article describes the Sterling Money Market Survey and presents the results of the inaugural May 2011 survey.(4) The first section describes the sterling money market and the objectives of the survey. The second section describes the design and coverage of the survey. The final section presents the results of the May 2011 survey.

Objectives of the survey

The importance of the sterling money market

The sterling money market is where short-term wholesale sterling borrowing and lending takes place. Transactions can be secured or unsecured and include deposits, loans, and the sale and purchase of tradable financial instruments such as commercial paper (CP) and certificates of deposit (CDs). The maturities of market transactions typically range from overnight to one year and these are the limits of the market as defined in this survey.

Banks and building societies active in the United Kingdom use the sterling money market to manage their sterling liquidity positions; lending cash surpluses or borrowing to make up cash shortages for short periods. They also use the market to raise short-term funding, for example, by issuing CDs. In addition, banks borrow and deposit cash in the money market on behalf of their clients. These may include other banks,

(1) The author would like to thank Matthew Sim for his help in producing this article.
(2) See *The Framework for the Bank of England's Operations in the Sterling Money Markets* — the 'Red Book', available at www.bankofengland.co.uk/markets/sterlingoperations/redbook.htm.
(3) The Money Market Liaison Group is a forum in which structural issues concerning the sterling money market are discussed. It comprises representatives from market participants, trade associations and the authorities and is chaired by the Bank of England. For further details see www.bankofengland.co.uk/markets/money/smmlg.htm.
(4) To inform the design of the May survey, the MMLG conducted a pilot survey in November 2010. A selection of results from the pilot survey was published in the 2011 Q1 *Quarterly Bulletin*, available at www.bankofengland.co.uk/publications/quarterlybulletin/qb1101.pdf.

non-bank financial companies, such as pension funds, and non-financials, such as manufacturers or retailers. Some non-bank financial companies and large non-financials also access the money market directly.

The Bank operates in the sterling money market in pursuit of its monetary and financial stability goals. First, in order to implement the MPC's monetary policy decision, the Bank operates in the market to influence overnight interest rates so that they are close to Bank Rate. In turn, these overnight interest rates influence longer-term money market interest rates, which act as a benchmark for deposit and loan rates in the wider economy. While the precise relationship between overnight and longer-term interest rates depends on a number of factors, the sterling money market acts as the initial stage of this monetary policy transmission mechanism.

Second, developments in the sterling money market can have implications for the stability of the financial system as a whole. During the financial crisis, concerns among money market participants about credit and liquidity risk led to some banks experiencing liquidity shortages, impairing their ability to provide liquidity and payment services to the wider economy. Some of the Bank's operations in the sterling money market are designed to provide banks with a liquidity backstop through which they can access liquidity directly from the Bank of England.

The evolution of the framework that governs the Bank's operations in the sterling money market — the sterling monetary framework — has benefited from the Bank's access to information about the market, both from market intelligence and existing data sources (see the box on page 249 for a description of existing sources of data on the market).(1)

Objectives for the new survey

The aim of the Sterling Money Market Survey is to increase understanding of the market by providing a source of quantitative and qualitative data on market activity and functioning. The survey is designed to quantify the size of the market and identify key instruments within it. The survey also provides information on market participants' use of the market and may help to identify factors that could impede the efficient functioning of the market.

The data will be collected on a consistent basis at regular intervals, so over time, the survey will aid the identification of structural trends in the sterling money market. These could include changes in the relative importance of secured versus unsecured transactions, changes in the types of collateral against which transactions are secured, and changes in the term over which transactions are taking place. Such trends could reflect developments in market infrastructure and the consequences of regulatory changes or changes in the way the Bank conducts its operations in the sterling money market.

Survey coverage

Survey sample

Thirty three commercial banks, building societies and investment banks were chosen to take part in the May 2011 survey.(2) The selection was based on information about the scale of these institutions' involvement in the sterling money market, combined with market intelligence on which banks were most active in the market. Certain banks less active in the market will therefore fall outside the survey sample.

Content

For the purposes of the survey, market transactions are defined as having a maturity of no longer than one year. Participants are asked to exclude any retail business, along with any non-sterling and intragroup trades.

Both central government, via the Debt Management Office (DMO), and local authorities use the sterling money market to manage their liquidity. Money market transactions with individual local authorities, classified as non-financials, are included in the survey, but respondents are asked to exclude transactions with the DMO. The survey also excludes transactions with the Bank of England, such that Bank and central government activity should not directly impact the survey results.(3)(4)

The survey comprises both quantitative and qualitative questions. The quantitative questions ask survey participants to record the value, volume, type and maturity of sterling money market activity conducted in their own name over the month-long survey period, on a daily-average basis. The qualitative questions are designed to ascertain how well market participants perceive markets to be functioning and how market liquidity and efficiency is evolving. Participants are asked about different aspects of the functioning of the sterling money market relative to six months earlier. They are also asked to rate the current state of market conditions in the secured and unsecured money market.

Results from the May 2011 survey

The results of the MMLG Sterling Money Market Survey are indicative of market activity and functioning, reflecting survey participants' responses. As such, the results do not necessarily reflect the Bank's views on the functioning of the sterling

(1) For more details on the sterling monetary framework, including the conditions under which commercial banks can access liquidity directly from the Bank of England, see www.bankofengland.co.uk/markets/sterlingoperations/redbook.htm.
(2) Although non-bank financial companies and non-financial companies are important money market participants, market intelligence suggests that their transactions are largely with or via banks. Those flows should therefore be captured in the survey returns of the participating banks.
(3) For more details on the DMO's money market activity, see www.dmo.gov.uk.
(4) It may be the case that survey respondents are unable to identify the ultimate counterparty when using an automated trading system to transact via a central counterparty in the secured market. So to the extent that DMO activity in the secured market is conducted using an automated trading system and settled via a central counterparty, survey respondents may not be able to exclude it.

Existing data sources

There is a range of publicly available price and quantity data for different segments of the sterling money market. For example, the Wholesale Markets Brokers' Association (WMBA) publishes data on the value of secured and unsecured overnight transactions conducted via their members and the interest rates at which these transactions take place.[1] In addition to these transactions-based data, quoted interest rates are available for a variety of maturities. A number of surveys provide additional data on aspects of secured lending and borrowing activity. For example, twice a year, the International Capital Market Association surveys the outstanding value of repurchase (repo) agreements in Europe, a proportion of which are denominated in sterling.[2][3]

The Bank of England already collects some data containing information on banks' sterling money market activity, via the monthly balance sheet data UK-resident banks are required to supply, as well as via a long-standing repo and securities lending (RSL) survey, conducted by the Bank on a quarterly basis. Neither data set is directly comparable with the quantitative data from the Sterling Money Market Survey. For example, the balance sheet data provide a record of amounts of transactions outstanding rather than flows, as in the Sterling Money Market Survey, and do not explicitly separate money market activity from other borrowing and lending conducted by banks. The RSL survey asks respondents to record all repo transactions including those which are intragroup, whereas in the Sterling Money Market Survey, respondents are asked not to record such transactions. Nevertheless, under reasonable assumptions to enable comparison across data sets, these existing sources are broadly corroborative of the results from the May 2011 Sterling Money Market Survey.

The Bank also obtains information about conditions in, and the functioning of, the sterling money market through its own operations. For example, the Bank's indexed long-term repo operations, in which the Bank offers to lend central bank reserves against either of two different collateral sets, were designed partly with a view to obtain a signal from participants about liquidity conditions based on bidding behaviour in the operations.[4] The Bank complements this information by talking directly to its counterparties and through its market intelligence programme more generally.

(1) See 2011 Q2 *Quarterly Bulletin*, pages 97–98, for a description of relevant WMBA data, available at www.bankofengland.co.uk/publications/quarterlybulletin/qb1102.pdf.
(2) Repo is a specific type of secured transaction in which the borrower agrees to sell securities and repurchase them in the future.
(3) The European Central Bank has been conducting a survey of euro money market turnover since 2000, the content of which is similar to the MMLG Sterling Money Market Survey. For details see www.ecb.int/stats/money/mmss/html/index.en.html.
(4) See the box on the Bank's indexed long-term repo operations on pages 93–94 of the 2011 Q2 *Quarterly Bulletin*, available at www.bankofengland.co.uk/publications/quarterlybulletin/qb1102.pdf.

money market. The lack of consistent pre-existing data limits the extent to which the survey results can be verified. It is difficult to be certain about the coverage of the survey sample, although market intelligence indicates that gaps in the sample should be relatively small. And it is important to recognise that activity and conditions in the market can and do vary from month to month, with the survey representing a snapshot in a single month.

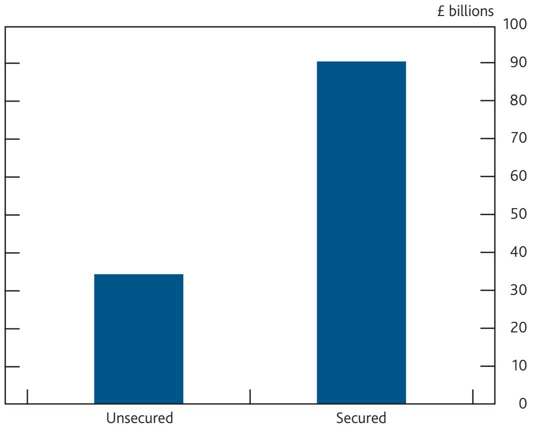
Quantitative results

The overall size of the sterling money market

Participants reported average daily transactions worth more than £125 billion during May 2011, with the average reported loan or deposit worth around £30 million.[1] To give a comparable indication of scale, that total is equivalent to around 10% of the size of the London foreign exchange market turnover recorded in the April 2011 Foreign Exchange Joint Standing Committee survey.

During May, the value of secured sterling money market transactions was roughly two and a half times greater than unsecured transactions (**Chart 1**). In aggregate, banks reported that they were net borrowers from the non-bank sector in this market. And reported activity was concentrated at shorter maturities.

Chart 1 Reported daily average flows in the sterling money market



Key instruments and segments of the market

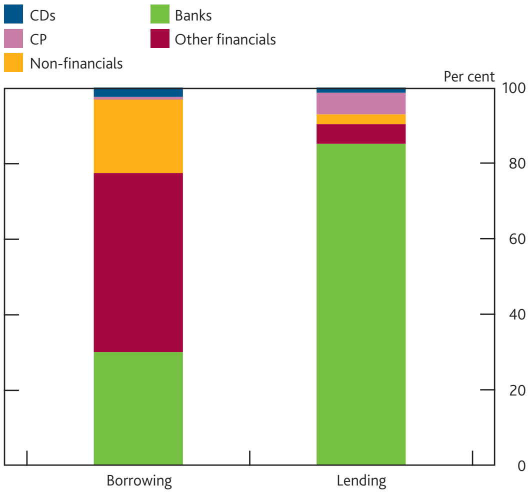
This section of the article discusses the quantitative results from the May 2011 survey in more detail, starting by looking at the key counterparties, instruments and transaction types in

(1) These figures are adjusted to take account of estimated double counting. Double counting occurs because respondents are asked to record both borrowing and lending, so where survey participants transact with each other, the same transaction will appear as lending in one participant's return and as borrowing in another participant's return.

the unsecured and the secured segments of the market. It goes on to examine what the results reveal about the maturity of money market transactions, before describing the types of collateral used in the secured market.

The survey results show that in May 2011 banks borrowed more than they lent in the unsecured market. The majority of banks' borrowing in this market was in the form of deposits from non-bank financial companies and non-financials (**Chart 2**). In contrast, the majority of banks' unsecured lending in this market tended to be to other banks. These results are consistent with market intelligence.

Chart 2 Unsecured activity split by instrument, destination of lending or source of borrowing[(a)(b)]



(a) Purchases of sterling CP issued by other financials and corporates are not included.
(b) CP and CD issuance are not split by type of purchaser because these instruments may be traded, making the identity of the 'lender' difficult to verify.

Sales or purchases of CDs and sterling CP accounted for a fairly small proportion of reported unsecured flows (**Chart 2**). These transactions were typically for longer maturities than cash deposits and unsecured loans. Market intelligence suggests that the US dollar and euro-denominated CP markets are likely to represent a more important source of funding for banks included in the survey.

Around half of secured borrowing reported by banks in the May 2011 survey was conducted via a central counterparty (CCP) (**Chart 3**).[(1)] A further 40% was conducted bilaterally. A minority of deals were transacted via a tri-party arrangement.[(2)] CCP transactions accounted for over 60% of secured bank lending, with bilateral lending making up the majority of the remainder. Market contacts attributed the popularity of conducting secured lending via a CCP to banks' aversion to the credit risk exposure inherent in bilateral transactions, and to the convenience associated with transacting via a CCP.

Survey responses suggest that interbank lending and borrowing accounted for more than half of secured money market transactions in May 2011, with the bulk of this interbank activity taking place via a CCP.

Chart 3 Secured flows by transaction type

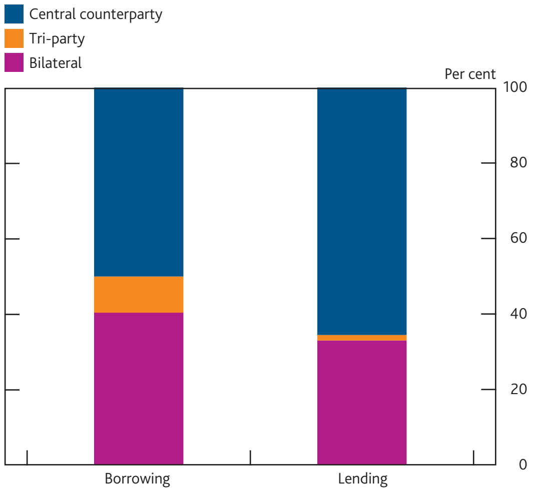
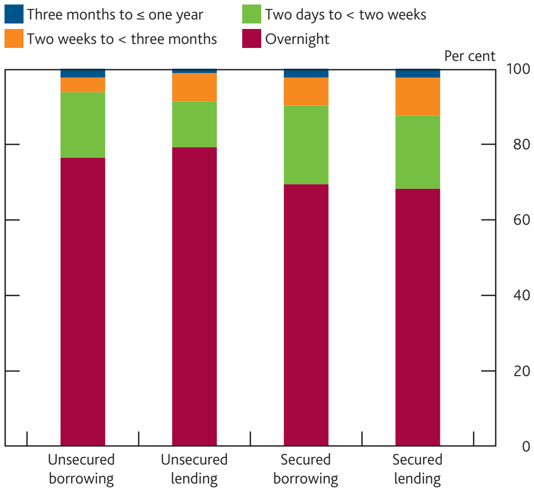


Chart 4 Maturity of transactions



The majority of money market transactions reported in the survey were overnight (**Chart 4**). In part, this reflected the number of overnight transactions rolled over each day.[(3)] But market participants also conducted a significant amount of business at longer maturities. For example, were the maturity distribution of flows recorded in the May 2011 survey to be replicated each month, around half of banks' outstanding money market transactions, by value, would have maturities longer than two weeks, with roughly 10% longer than three months.

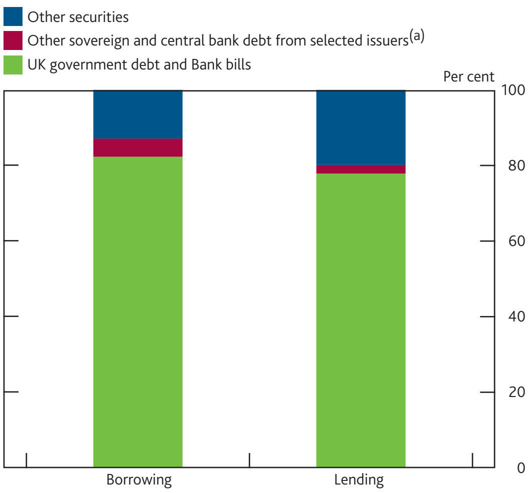
(1) In a CCP transaction, the CCP transacts with both the borrower and the lender, mitigating the credit risk.
(2) In a tri-party arrangement, a third party acts as agent, holding associated collateral in a custodian capacity.
(3) Survey participants are instructed to record each transaction that is rolled over as a new trade.

Reported secured transactions had longer maturities on average than unsecured ones, although the difference was not large. The weighted average maturity of recorded activity in the unsecured market was around eight days, while the weighted average maturity of transactions on the secured side was roughly ten days.(1)

Contacts reported that new FSA liquidity regulations were reducing the incentive for banks to borrow at short maturities.(2) Market participants also reported that the regulations created incentives for banks to transact on a secured rather than unsecured basis. This is because banks are required to hold fewer liquid assets to cover secured borrowing, and because, by lending secured cash, they obtain assets which may be used to form part of their liquid asset buffer.

It was reported that secured money market transactions predominantly involved high-quality, liquid collateral; more than three quarters of the collateral used consisted of gilts, UK government Treasury bills and Bank debt (**Chart 5**).

Chart 5 Secured flows split by collateral type



(a) Includes sterling, euro, US dollar and Canadian dollar denominated securities issued by the governments and central banks of Canada, France, Germany, the Netherlands and the United States.

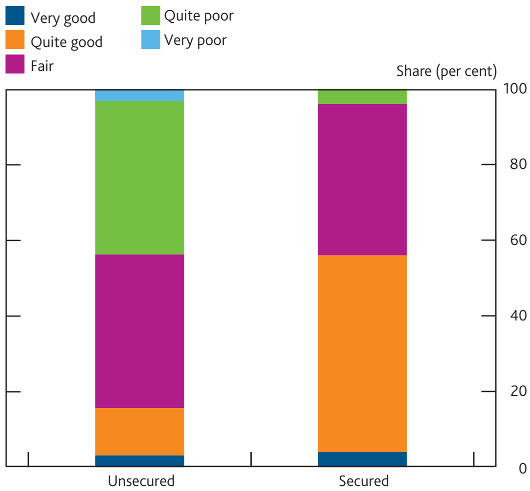
Market contacts reported that there had been an increase in secured wholesale market borrowing using other forms of collateral over the past year, such as debt issued by major international institutions and highly rated asset-backed securities. According to contacts, this increase may have been associated with the repayment of UK government Treasury bills issued under the Bank's Special Liquidity Scheme, whereby banks had been able to borrow Treasury bills using temporarily illiquid high-quality assets as collateral.

Qualitative survey questions

The qualitative section of the May 2011 survey contained questions on different aspects of the functioning of the sterling money market at the end of May 2011 relative to the situation six months earlier.

Respondents were asked for their view on how well the secured and unsecured market was functioning overall, by giving a score from 1 to 5 (with 5 indicating that the market was functioning very well) (**Chart 6**). The mean score for the secured market was 3.6, indicating that overall, survey participants considered that the secured sterling money market was functioning fairly well. Survey respondents were less positive about the functioning of the unsecured market, where the mean score was 2.7. Contacts suggested that a combination of increased risk aversion and the new FSA liquidity rules could be deterring some unsecured market participation. The suspension of reserves averaging at the Bank of England since March 2009 has meant that those banks with reserves accounts, on average, have less incentive to borrow and lend in the unsecured money market to manage their liquidity. They can instead allow their reserves account balances at the Bank of England to increase or run down.(3)

Chart 6 Respondents' views on overall market functioning

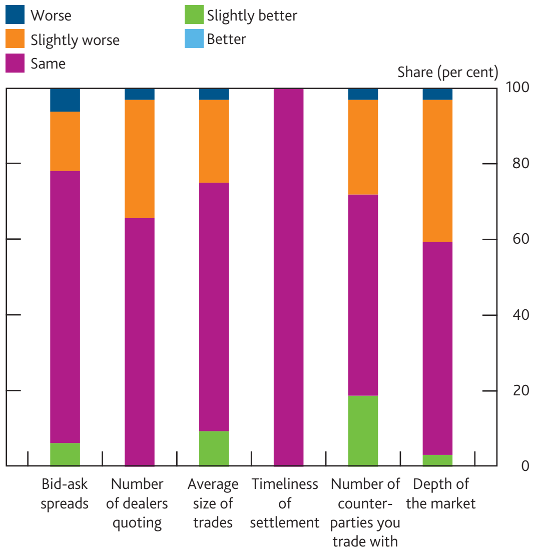


In the unsecured market, the balance of responses indicated that more participants had experienced a worsening in market functioning and liquidity conditions over the previous six months than had witnessed an improvement. The number of dealers quoting prices and the depth of the market were the two measures suggesting the greatest signs of deterioration in conditions (**Chart 7**).

Indicators of change in market functioning were slightly more positive in the secured market (**Chart 8**). More respondents reported that bid-ask spreads had narrowed than reported that they had widened. And, on balance, more respondents

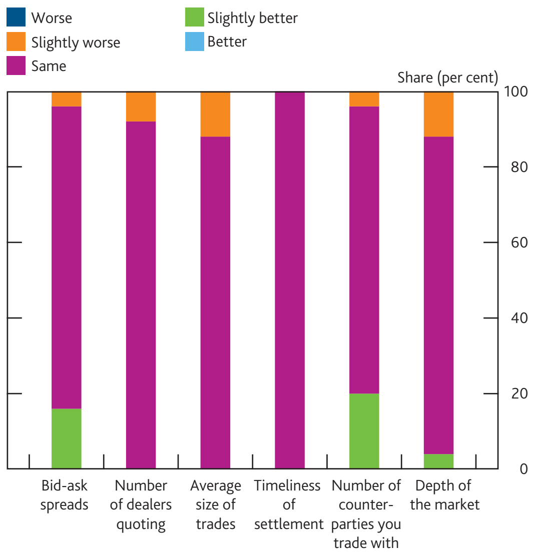
(1) These figures are estimates based on the mid-points of the maturity buckets into which survey respondents allocated transactions. The calculations are based on values rather than volumes.
(2) See 'Strengthening liquidity standards', FSA PS09/16, available at www.fsa.gov.uk/pubs/policy/ps09_16.pdf.
(3) See *The Framework for the Bank of England's Operations in the Sterling Money Markets* — the 'Red Book', available at www.bankofengland.co.uk/markets/sterlingoperations/redbook.htm.

Chart 7 Indicators of change in unsecured market functioning relative to six months earlier[a]



(a) For bid-ask spreads: Better (Worse) = Tighter (Wider). For number of dealers quoting: Better (Worse) = Higher (Lower). For average size of trades: Better (Worse) = Larger (Smaller).

Chart 8 Indicators of change in secured market functioning relative to six months earlier[a]



(a) See footnote (a) to **Chart 7**.

reported that the number of counterparties they traded with had increased. This improvement in the secured market relative to conditions in the unsecured market may reflect increased sensitivity to risk among market participants related to euro-area concerns.

Conclusion

The MMLG Sterling Money Market Survey increases transparency about activity in, and the functioning of, this important financial market. It complements the Bank's existing knowledge of the market, but also helps to inform financial market participants, other policymaking bodies and the wider public.

Key quantitative results from the May 2011 survey are that reported activity in the sterling money market was greater in the secured market than the unsecured market, and that daily activity was concentrated at short maturities. Banks were reported to be net borrowers from non-bank financials and non-financials. The main qualitative finding was that survey participants perceived that the secured market was functioning better than the unsecured market.

The survey is currently in its infancy, but over time it should help identify structural trends, sparking further investigation of important features of money market activity, and helping policymakers identify the impact of their actions on the behaviour of market participants.