BANK OF ENGLAND

Speech

Remarks given by

Chris Salmon, Executive Director for Banking Services and Chief Cashier

At the London Money Market Association Executive Committee Meeting

24 January 2013

I would like to thank Nick Constantine, Dan Gray, Mike Jones and Hannah Reynolds for their contributions.

Thank you for inviting me to the LMMA Executive Committee's first meeting in 2013. Today's meeting is the perfect venue to provide a progress report on some of the key changes which we have been promoting in the payment, settlement and clearing infrastructure for the unsecured and secured money markets.

As many LMMA members will remember, the infrastructure of the sterling markets was substantively modernised by a series of reforms implemented from the mid-1990s. Key elements of these reforms included the introduction of real-time gross settlement for high value cash payments, delivery versus payment for securities transactions and the development of a deep and liquid, centrally cleared, gilt repo market.

Those reforms created a fundamentally sound infrastructure for the core sterling money markets. And the benefits were seen in the recent financial crisis when the core payment systems worked well and did not act to amplify shocks. The value of this should not be under-estimated, not least given London's role as an international financial centre.

Nevertheless, developments in this type of infrastructure never reach an end point. A number of tail risks remain or have emerged and one of the lessons from the financial crisis has been that tail risks should not be neglected. The Bank has been working with market participants on a number of initiatives in this area and over the next year or so we should begin to reap the benefits of our efforts as those initiatives come to fruition.

Although the bulk of my remarks will focus on the sterling markets, transactions take place in many currencies in London, and I will also offer a couple of comments on the nascent offshore RMB market.

Payment Arrangements in the Unsecured Money Market

Starting first with the cash market, our focus has been on strengthening the operation of the core high-value payment system, CHAPS, by remedying a relative weakness and taking steps to preserve one of CHAPS' great assets.

In the past, membership of CHAPS was very limited. As a result, as recently as five years ago more than half of the value of all payments made by the CHAPS banks reflected transactions they undertook on behalf of their customers rather than on their own account. The sterling system has been unusual in this regard, reflecting the number of large international banks with a presence in the sterling markets that have made their payments through the traditional domestic clearers. In most other major currencies the clear majority of payments have been made by direct members on their own behalf.

Why does this matter? High-value payment systems settle in real time and on a gross basis. This removes the credit and liquidity risks which would otherwise be associated with the payment flows. But that risk reduction benefit only applies to payments made between direct members of the scheme: credit and liquidity risks will still exist between the clearing members and their customer banks. And because these payments had been predominant within CHAPS, the high-value sterling payments network has been associated with higher credit and liquidity risks than equivalent networks for other currencies.

In recent years the Bank has sought to fix this weakness by encouraging greater direct membership of CHAPS. We have done this by using our traditional approach of persuasion: explaining to the clearers and their large bank customers the case for those customers to become direct members. And we have used the statutory oversight regime, introduced in 2009, to encourage CHAPS to factor in the network of bilateral relationships outside of the core scheme when assessing and managing the risks in the system. As a result, CHAPS introduced new tiering rules in 2012 which create the presumption that banks with a large sterling presence will join CHAPS.

Our efforts are having an impact. As of end-2008 there were just 14 CHAPS banks. Since then, four banks have joined CHAPS and two others have formally committed themselves to join over the next year or so. A small number of other banks continue to deliberate their next steps. I hope they too conclude that membership is in their own interest, taking into account not only their own risk management but also the fact that they benefit from participating in a safer system. If all of the banks we have been in discussions with were to join the scheme, the number of direct members would have increased by around a half compared with 2008, and the proportion of indirect business routed through CHAPS would fall to around 30%.

In future, other banks may grow their sterling payments business to a point at which there is a presumptive case for them joining CHAPS. The new tiering rules will capture such developments. And if banks with lower total sterling transactions decide it is in their own interest to become direct members, then CHAPS has clear processes to facilitate that. Work is at an earlier stage on the similar tiering risks which may exist in relation to the membership of CREST, the securities settlement system, but assuming the progress we expect over the next year occurs, the Bank's concerns about tiering risks within CHAPS will have been materially reduced.

If tiering was a weakness for CHAPS in the past, then cooperative payment behaviour by the direct members has been an asset. Payments behaviour is an issue for real time gross settlement systems because the amount of liquidity that a bank needs to make its payments through the day depends on the order in which it makes and receives payments. A bank which makes its payments after all others will need to dedicate less liquidity to support its payments activities than a bank which pays earlier than its peers. But if each bank attempted to be final payer a self-defeating uncooperative equilibrium would emerge with a bunching of payments towards the end of the working day. This would in turn increase operational risk: specifically the vulnerability to an outage at either a bank or the central infrastructure towards the end of the day.

There are prominent examples of high-value systems in which payments are habitually bunched towards the end of the day. CHAPS has avoided this outcome: to date a cooperative equilibrium has existed. A set of "throughput guidelines" states that, on average, half of the day's payments should be made by noon, and three quarters by 2.30pm. Historically, these guidelines have been met at the system level and most individual banks have been compliant; proof, if needed, that banks can behave responsibly and cooperatively if the incentives are appropriate.

But there is a risk that this situation will not persist. The renewed, and appropriate, focus on liquidity regulation means that banks will need to account for their intraday liquidity usage to their regulators, increasing the incentive for banks to make their payments late in the day. Over the past couple of years there has been a visible deterioration in throughput, and the noon scheme-wide target was consistently missed in the second half of last year, something which we have only rarely seen before. This gives prima facie evidence that banks are responding to their new incentives. In addition, our success in reducing tiering is resulting in a larger and more heterogeneous CHAPS membership. Any change like this has an effect on the payments profiles of the individual members and may potentially change the dynamics in what had previously been a fairly unchanging community.

Given these risks, we are pursuing a two-pronged strategy. First, the Bank will introduce a Liquidity Saving Mechanism (LSM) into CHAPS this spring. Without delving into the technical details, LSMs can reduce the amount of liquidity members will use during the day to make a given level of payments, by allowing those payments that are earmarked by CHAPS banks to be matched against incoming payments and settled simultaneously. By making CHAPS inherently more liquidity efficient we hope to reduce the incentive to economise on liquidity uncooperatively. Once LSMs are introduced, we will continue to work with the CHAPS banks to ensure their proper use.

Second, we are working with the CHAPS Scheme to reform the rules guiding throughput behaviour. According to the current framework, a bank is deemed to have met its throughput target so long as it had sufficient liquidity available to make any payments which were in fact made late. But these guidelines were designed before the boost to commercial bank reserves from quantitative easing and have become ineffectual in the current environment. We expect new rules which will focus only on the timing of payments to be agreed soon. Given that in some cases 'lateness' may be a natural artefact of a bank's business model, rather than a strategic choice, the new rules will work on the basis that banks must 'comply or explain' to the CHAPS Scheme, rather than anything more automatic. But crucially, the rules will require banks to account for their behaviour, something which the current version is failing to achieve.

As with the de-tiering initiative, our expectation is that our payments-timing work should be substantively completed by the end of this year. Both changes will benefit LMMA members by reducing credit, liquidity and operational risks associated with the settlement of their cash transactions. But in the main, these changes will take place in the background, affecting only the back-office teams of CHAPS settlement banks.

The Secured Money Market

Turning to the secured money market, our key objective has been to reform how the DBV (Delivery-By-Value) market works. DBV is a mechanism within the CREST system, which allows the system to automatically select and deliver securities with a specified aggregate value from one member's account to another's.[i] Since its introduction, DBV gilt repo has become the mainstay of the secured sterling market and is used by all the major participants. Around £250 billion is settled each day, with the bulk of transactions cleared through LCH as central counterparty.

Although the current LCH cleared DBV product - Repoclear Sterling GC (general collateral) - has facilitated a deep and liquid market, its key weakness is that any DBV transaction, whatever its underlying economic term, is implemented as if it were a series of overnight transactions. This results in a cycle of unwinding and re-inputting trades each day until the underlying transaction matures[ii]. Moreover, to avoid the situation where the borrower is short of cash in the period between the unwind and re-input of the transaction, the Bank of England may provide an intra-day loan of cash direct to its settlement bank.

This is clearly a complicated way of lending term. My understanding is that DBV works like this because at the time of its introduction, in 1986, the gilt lending market was restricted to short term stock borrowing transactions. The design of original DBV balanced the needs of the lender to be collateralised overnight and those of the borrower - generally a Gilt-Edged Market Maker - to control its inventory for settlement during the day. But it is difficult to imagine that anyone would choose today to design the DBV market to work the way it does. Moreover it introduces operational and liquidity risks into the secured market.

While the operational risk arises from the need to unwind and re-input term transactions, liquidity risk is increased by the need to deal with intraday flows equivalent to the entire value of outstanding DBVs each day. In the event that a counterparty or LCH or CREST failed during the working day or suffered a catastrophic operational outage, the repos that had been unwound because of the current DBV process would greatly amplify the subsequent money market disruption. This point has come out clearly in the various market-wide exercises that the Bank has coordinated to understand how a non-standard closure of CREST system could be best managed. These increased risks manifest themselves for all the market players: for the settlement banks, for their clients and for the Bank; each of which would find themselves with an unexpected and quite possibly unattractive overnight position if the DBV process broke down intra-day.

These are classic tail risks: they are unlikely to materialise but it would be very costly if they did. And what is more, they are unnecessary risks. There is no technological reason why the collateral management cycle of DBV transactions cannot match the term of the underlying transaction. Under this alternative form of DBV – term DBV – collateral would be posted just once, at the start of loan, and returned when it expires, without the daily cycle of unwinds and re-inputs, reducing the related operational and liquidity risk. And if the borrower subsequently wished to use one of the bonds it has pledged for another purpose, it would be able to substitute alternative securities from the same DBV basket to secure its loan.

As such, for several years the Bank has believed that the market would be well served if the term transactions currently conducted on an overnight DBV basis moved to a term DBV basis. It would eradicate the unnecessary liquidity and operational risks I have described, with few additional downsides, providing a clear financial stability benefit.

The case in principle for changing market practices is now widely accepted. As LMMA members will be aware, Euroclear developed a Term DBV product in 2011, which conforms to the basic description I have just provided. LCH has indicated that it would be willing to develop another Repoclear product to allow term DBV transactions to be centrally cleared and has consulted with its membership about the design of a new product. And, perhaps most importantly, last November the LMMA endorsed the adoption of term DBV, subject to some technical changes to Euroclear's current offering.

But it has also become apparent that in practice term DBV will not become a reality without further marketwide coordination. This is because the benefits of the change – a less risky secured money market – are dispersed across the market, while the costs and risks associated with moving from one market standard to another accrue to individual players. In the case of EUI and LCH these costs include the actual cost of developing a new technology, before its future use was assured. And once the infrastructure were in place, market participants – GEMMS, fund managers – would be concerned about the risk of committing their resources to a less liquid market than the existing overnight DBV market. As a result no individual player – be it infrastructure provider or market participant – has an incentive to champion the change while everyone has a reason to hesitate.

To help overcome this collective action problem the Money Market Liaison Group, chaired by my colleague Andrew Hauser, agreed in principle in December to establish a Term DBV steering committee. Its overarching objective will be to facilitate the adoption of a centrally-cleared term DBV instrument as the default method for gilt repo transactions. The steering committee has now been formed. It will be chaired by Ian Fox, from Lloyds, with Toby Davies from the Bank acting as deputy chair and I am delighted that the Chair of the LMMA, Ian Mair, has agreed to join the working group. If it is to fulfil its mandate the committee will have to address three main areas. First, it will need to ensure that development groups at EUI and LCH remain joined up so that they develop a mutually consistent product that meets the need of market participants. Second, the group will need to propose to the Securities Lending and Repo Committee suitable amendments to the Gilt Repo Code, to reflect desired market practice in the new market to deal with conventions for failed trades and the like. Third, it will need to ensure that there is speedy adoption of the new product, once it has become eligible for central clearing. Championing and coordinating market adoption will be one of the key tasks of the Committee. The key here will be to minimise the period in which liquidity is spread and diluted across the Overnight and Term DBV markets. This will require individual market participants to cooperate when developing their migration plans.

The Bank, as MMLG chair; EUI; LCH and the LMMA published a joint press notice today committing themselves to work through the steering committee to facilitate the adoption of Term DBV. One of the group's first tasks will be to signal a presumptive date for the start of migration to term DBV. Today's press notice suggests somewhere between late 2013 and early 2014 as the target; the steering group will need to validate whether this is realistic.

Hopefully, this joint commitment by all the key parties in the sterling money market, along with the establishment of the steering committee, will overcome the collective action problem, paving the way for the orderly adoption of term DBV. In contrast to the CHAPS reforms I described earlier, that will require front and back-office cooperation across the LMMA membership. But when the migration has been completed, the resilience of one of London's core funding markets will be materially enhanced.

Offshore RMB Market

Much of the activity I have described probably falls into the category of 'noteworthy but not newsworthy'. By contrast, the development of the nascent offshore RMB market has been newsworthy over the past year.

The proposition that London could become a major centre for RMB denominated activity, just as it is for dollar and euro business, carries much force. The Bank would welcome the development of the offshore RMB market just as it would any other legitimate market innovation, and we would not want to inhibit that outcome inadvertently through gaps in our operational framework. After all, a stable financial system should create the conditions in which economic activity can flourish. This is why the Bank has engaged with the City of London initiative on London as a centre for renminbi business since its formation.

Ultimately, the growth of the market will depend on the success of market participants in matching incipient demand and supply for RMB denominated products – just as the original eurodollar market grew by satisfying a latent private sector demand for dollar assets in this time zone. That said, there is a perception that market confidence would be boosted if the Bank and the PBOC agreed a swap line. The rationale for a swap would be to reduce the tail risk of lost market liquidity, which is basically the same rationale underpinning the swaps agreed between the network of G-7 central banks and Switzerland. It may therefore be helpful to remove any residual uncertainty about our attitude: the Bank is ready in principle to agree a swap line with the PBOC, assuming a mutually agreeable format can be identified.

One of the key lessons from the financial crisis is that seemingly remote tail risks can materialise, destabilising markets and institutions, undermining financial stability. The UK is in the fortunate position that the set of reforms initiated in the mid-1990s have left a strong infrastructure for the core unsecured and secured sterling money markets. But even these basically sound markets have weaknesses which give rise to tail risks. In recent years the Bank has been working with market participants to correct these weaknesses. There are good grounds for thinking that they will be substantively addressed over the next twelve months or so. But for that to occur, particularly in relation to the reforms to operation of the DBV technology which underpins the gilt repo market, you, the market participants, will also need to do your share to bring about market-enhancing change.

[i] DBV is used for a variety of purposes, and provides an important mechanism for lending sterling secured against gilt collateral. When used in this way, CREST will select securities from a specified standard basket: for instance the UBG category where the securities selected can only be either unstripped gilts, treasury bills and Bank of England bills or a combination thereof. The lender can be confident that adequate security will be posted while the borrower is freed from the need to identify specific bonds to collateralise the transaction. This process of automatic selection and substitution greatly facilitates the smooth operation of the secured lending market.

[ii] This is best explained by a worked example. A five-day secured DBV loan between two banks will be implemented within the CREST system as-if it were a series of overnight transactions. That means when the loan is initiated CREST transfers a basket of gilts to the cash lending bank with cash moving in the opposite direction. However, the next morning the transaction is unwound with the gilts being returned to the borrower and the cash to lender, only for the trade to re-input towards the end of the working day. So rather than comprising of two sets of movements: a initial transfer of securities for cash on day one and a reversal a week later; a five day secured DBV loan comprises of ten such movements. Moreover, to avoid the situation where the borrower is short of cash in the period between the unwind and re-input of the transaction, the Bank of England may provide an intra-day loan of cash either direct to the borrower or its settlement bank, often secured against the securities which have been pledged to back the underlying transaction, introducing a further set of transactions between the settlement bank and ourselves.