The Bank of England's supervision of financial market infrastructures — Annual Report

March 2014

BANK OF ENGLAND

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To cover the period 26 March 2013 to 17 March 2014.

Presented to Parliament by a representative of HM Treasury in accordance with the requirements of the Banking Act 2009 and the Financial Services and Markets Act 2000.

17 March 2014

Executive summary

The Bank assumed new responsibilities for the supervision of central counterparties (CCPs) and securities settlement systems in April 2013. These responsibilities sit alongside those for the oversight of recognised payment systems that the Bank has held since 2009. The Bank described how it intended to supervise these financial market infrastructures (FMIs) in *The Bank of England's approach to the supervision of financial market infrastructures*, published in April 2013.(1) This report sets out how the Bank has exercised its responsibilities over the past year,(2) and is part of the Bank's commitment to transparency and accountability.

Key points

- UK CCPs have made a number of improvements to their risk management arrangements, including the introduction of new and enhanced margin models. Further improvements are in train, partly in response to European legislation.

- UK retail payment systems Bacs and FPS have developed plans to eliminate settlement risk through participants prefunding their payments with cash held at the Bank of England. Implementation is expected by the end of 2014.

- All UK FMIs have worked on completing recovery plans, to help ensure their critical services can be continued in the event of severe financial shocks. In particular, all UK CCPs have introduced arrangements to allocate clearing member default losses that exceed their pre-funded resources, consistent with new UK recognition requirements that came into force in 2014.

- The Bank has been working, together with other UK authorities, towards meeting the recommendation of the Financial Policy Committee (FPC) to assess, test and improve the resilience of core parts of the UK financial sector to cyber attack.

Chapter 1 of this report outlines the Bank's role in the supervision of FMIs and its statutory obligations and international commitments. Chapter 2 sets out how the Bank has worked to meet its financial stability objective, through FMI supervision, over the past year. Chapter 3 summarises the risks that the Bank intends to focus on in the coming year and describes some of the developments expected to impact FMIs and the Bank's supervision of them in the near future.

(1) www.bankofengland.co.uk/financialstability/Documents/fmi/fmisupervision.pdf.
(2) In accordance with the requirements of the Banking Act 2009 and the Financial Services and Markets Act 2000.

Contents

Chapter 1: The Bank of England's role in the supervision of financial market infrastructures

1.1 The Bank of England's approach to supervision and the purpose of this report

The Bank has an objective to protect and enhance the stability of the United Kingdom's financial system.(1) Since financial markets may rely on continuity of the services that financial market infrastructures (FMIs) provide, supervision of FMIs is important in achieving this objective. The Bank's role as supervisor is to ensure that the United Kingdom's financial infrastructure is managed consistently with the public interest, maintaining and enhancing financial stability and reducing systemic risk.

The Bank has statutory responsibilities and accompanying enforcement powers in respect of payment systems, securities settlement systems and central counterparties (CCPs), as described in more detail in Section 1.2 and *The Bank of England's approach to the supervision of financial market infrastructures*.(2)

There are requirements in the Banking Act 2009 and the Financial Services and Markets Act 2000 (FSMA) for the Bank to provide a report to HM Treasury,(3) demonstrating how the Bank has met its financial stability objective through its supervision of recognised payment systems and recognised clearing houses (RCHs) respectively. This report must then be laid before Parliament.

This is the first such Annual Report since the Bank assumed responsibility for securities settlement systems and CCPs in April 2013. It replaces the Bank's previously published *Payment Systems Oversight Report* (*PSOR*). The Bank is committed to being transparent and accountable in its performance of its responsibilities and use of its powers, and the publication of this Annual Report is intended to help achieve this accountability in respect of supervision and oversight of FMIs.

1.2 The Bank's statutory obligations and international commitments

The Bank's supervision of FMIs is shaped by different pieces of legislation. These are principally:

- Part 5 of the Banking Act 2009, which established the oversight regime for interbank payment systems;
- FSMA, which set out responsibilities and powers in respect of the supervision of RCHs; and
- the Uncertificated Securities Regulations 2001, to which operators of securities settlement systems are subject.(4)

The activities of CCPs in the United Kingdom are subject to regulation by the Bank under EU law, namely the European Regulation on OTC derivatives, central counterparties and trade repositories of 4 July 2012, commonly known as the European Market Infrastructure Regulation (EMIR). The EMIR authorisation process is described in more detail in Box 4 of this report. The Central Securities Depositories Regulation (CSDR) will establish common EU laws for central securities depositories. The Bank is a member of the Task Force helping the European Securities and Markets Authority (ESMA) and the European Banking Authority (EBA) to develop the technical standards that will provide detail on how CSDR rules will be implemented.

As part of the Bank's supervisory approach, supervised FMIs are assessed against international standards, as set out in the *Principles for Financial Market Infrastructures* (*PFMIs*)(5) published by CPSS-IOSCO in April 2012. The Bank expects FMIs to perform a self-assessment against these standards as an input into the Bank's own assessment. Since both EMIR and the CSDR draw on the *PFMIs* for much of their content, there is overlap between these international standards and EU regulations for CCPs and securities settlement systems. For recognised payment systems, the Bank has adopted the *PFMIs* without amendment as the minimum principles on which systems are judged.

(1) www.bankofengland.co.uk/about/Pages/corepurposes/default.aspx.
(2) www.bankofengland.co.uk/financialstability/Documents/fmi/fmisupervision.pdf.
(3) Both Acts were amended by the Financial Services Act 2012.
(4) The Bank is also subject to, and has responsibilities under, other pieces of legislation. Please see the glossary for details and Section 2.1.2 for information on legislation relating to resolution.
(5) The *PFMIs* update and consolidate international standards for payment systems, central securities depositories, securities settlement systems and CCPs as well as establishing new standards for trade repositories. They also update the responsibilities of the authorities that supervise and/or oversee FMIs.

1.3 FMIs subject to the Bank's supervision

FMIs supervised by the Bank are listed in **Table A** below.(1)

Table A FMIs supervised by the Bank and the key supervisory legislation they are subject to

Payment systems which are systemically important may be recognised by HM Treasury. Recognised payment systems are overseen by the Bank under the **Banking Act 2009**.	
CHAPS	Operated by CHAPS Clearing Company Limited (CHAPS Co), is the United Kingdom's high-value payment system, providing real-time gross settlement (RTGS) of sterling transfers between members.
Faster Payments Service (FPS)	Operated by Faster Payments Scheme Limited (FPSL), processes standing orders and electronic retail transactions, including transactions generated in telephone and internet banking.
Bacs	Operated by Bacs Payment Schemes Limited (BPSL), processes high volume and low value payments, such as salary, benefit, Direct Credit and Direct Debit payments.
CLS	Provides a settlement service for foreign exchange transactions in 17 currencies, including sterling.
Securities settlement systems are subject to the **Uncertificated Securities Regulations** in the United Kingdom and in Ireland (although CREST is also a recognised payment system and EUI a recognised clearing house, in the United Kingdom).	
Euroclear UK and Ireland (EUI)	Operates the CREST system, the securities settlement system for UK gilts and money market instruments denominated in sterling, euro and US dollars, as well as United Kingdom and Irish equities, that settles sterling and euro transactions on a gross delivery versus payment basis.
Central counterparties (CCPs) are regulated under **FSMA** as recognised clearing houses (RCHs) and under **EMIR**. The embedded payment systems of LCH.Clearnet Ltd and ICE Clear Europe are also both recognised under the **Banking Act 2009**.	
LCH.Clearnet Ltd	Clears a wide range of exchange-traded and OTC products.
ICE Clear Europe	Clears a range of exchange-traded derivatives and OTC credit default swaps.
CME Clearing Europe	Currently offers clearing in OTC products including interest rate and commodity based derivatives and also plans to add exchange-traded products, including FX and commodities.
European Central Counterparty Ltd (EuroCCP)	Currently clears cash equities but plans to cease its clearing services in the United Kingdom by end-March 2014.

(1) This table sets out the main FMIs supervised by the Bank under UK legislation. The Bank also has other responsibilities such as for recognised overseas clearing houses (discussed in Box 3) and for FMIs under the Settlement Finality Directive (see Glossary).

Chapter 2: Report on the Bank's FMI supervision over the past year

2.1 Progress against 2013 supervisory priorities

As part of its supervisory approach, the Bank sets supervisory priorities for each FMI. These describe where the Bank requires each FMI to focus its effort in order to reduce, or enable better management of, risks in the system.

These priorities reflect the Bank's judgement as to where effort is most needed, following a risk review conducted by supervisory staff and reviewed by senior Bank officials. FMIs are, however, expected to produce their own self-assessment against the *PFMIs*. All recognised payment systems and EUI completed such self-assessments in 2013. For supervised CCPs, the Bank accepted applications for authorisation under EMIR in lieu of self-assessment against the *PFMIs*, given that EMIR requirements are based on the *PFMIs*.

The Bank's 2012 *PSOR* reported the 2013 supervisory priorities for the recognised payment systems already overseen by the Bank. Progress against these priorities is summarised in Box 1.

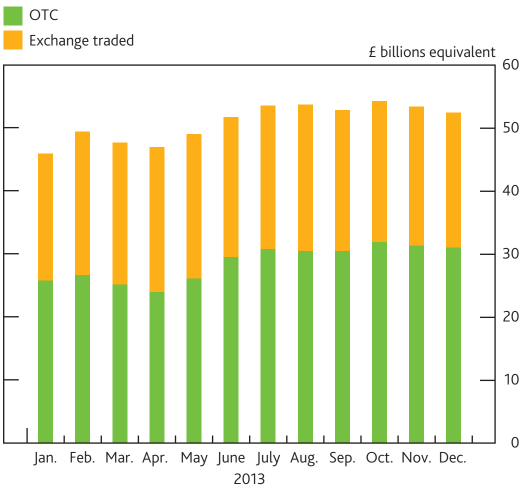
2.1.1 Credit and liquidity risk

The core function of a CCP is to take and manage counterparty credit risk. The CCP's primary tool for reducing this risk is the collection of margin from its clearing members. The amount of margin CCPs are collecting can be seen as a rough proxy for the amount of credit risk they are managing (**Chart 1**).

The level of counterparty credit risk managed, and consequently the amount of margin and other collateral held by UK CCPs, is expected to increase when mandatory clearing for OTC derivatives is implemented across the European Union through EMIR. It is not yet certain when the first clearing obligations will be implemented.

The precise amount of collateral a CCP holds is determined by the margin models and stress-tests that are used. The Bank has therefore devoted a significant part of its supervisory effort to examining a number of key elements of CCPs' margin and default fund calculations.(1) If these are not suitably conservative, a CCP will not be sufficiently protected against member failure. The two largest UK CCPs have made a number of significant enhancements to their margin methodologies since the *PSOR* was published in 2013.

Chart 1 Total initial margin requirement by major UK CCPs by trade type[(a)]



Sources: ICE Clear Europe, LCH.Clearnet Ltd and Bank calculations.

(a) Monthly average initial margin requirement.

As well as work on credit risk management models, LCH.Clearnet Ltd, ICE Clear Europe and CME Clearing Europe have also done further work on their monitoring of liquidity risk. In response to a Bank expectation that it reduce credit exposure to its concentration bank, ICE Clear Europe moved to using the Bank of England for the provision of intraday sterling liquidity in June 2013.

Although none of the recognised payment systems acts as principal to the payment transactions they process (and do not, therefore face counterparty credit risk), their design and rules still impact the credit and liquidity risk borne by their members. Members in deferred net settlement systems (DNS)(2) face credit and liquidity risks where payments are credited to recipient accounts before interbank settlement has taken place. This risk can be mitigated through all members 'pre-funding' the payments they make, so that, should a member fail before settlement occurs, the prefunded resources can be used to cover any cash shortfall arising from payments already made.

(1) For a description of how CCPs collect and use margin and default fund contributions, please see the *Bank of England Quarterly Bulletin* article 'Central counterparties: what are they, why do they matter and how does the Bank supervise them?', available at www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2013/qb130206.pdf.
(2) For a detailed description of managing default in DNS systems, please see Box 4 of the 2012 *PSOR*.

Box 1 2012 *Payment Systems Oversight Report* priorities

Progress on priorities set out in the 2012 *PSOR*

The Bank's priorities for payment systems oversight in 2013 were set out in Chapter 3 of the 2012 *PSOR*. This box provides a summary of progress made.

1 Settlement risk in recognised DNS systems

This is being addressed through the 'prefunding' by Bacs and FPS members, discussed in Section 2.1.1. Box 4 in the 2012 *PSOR* provided some detail on the current process for capping exposures in the United Kingdom's DNS systems and how prefunding will change this.

2 Reduction in tiering in wholesale systems

An update on CHAPS Co and EUI's efforts to increase settlement bank membership and reduce tiering is provided in Section 2.1.1.

3 Operational Risk

Operational Risk is covered in Section 2.1.3. The 2012 *PSOR* noted the increased emphasis on cyber risk (discussed in Box 2) and noted the requirements for Bacs to clear a projected three-day backlog of payments in one day (which has now been completed), and for EUI to develop broader regression testing of changes to information technology releases affecting settlement functions (where EUI has made significant progress).

4 Continued improvements in governance

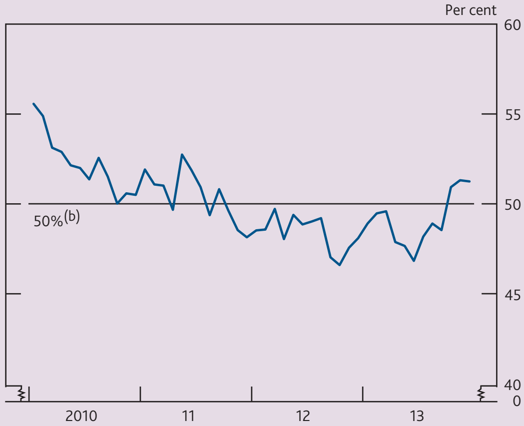
When the 2012 *PSOR* was published in March 2013, CHAPS Co, BPSL and FPSL each lacked a fully independent presence on their boards. As detailed in Section 2.1.4, each system's governance arrangements have since been enhanced by the recruitment of independent directors.

5 Improvements in 'throughput'

In response to a 2013 oversight priority, CHAPS Co implemented formal rules, supported by investigations and sanctions, requiring members to settle 50% and 85% of their payments, by value, by 12pm and 3pm respectively, on average over each calendar month. Holding back payments increases operational risk in the event of an interruption of service and reduces the availability of liquidity to be re-used for making further payments.

There had been evidence of payments being held back until later in the day but, since July 2013, throughput has increased, with system-wide throughput now both above 50% at 12pm (**Chart A**) and 85% at 3pm.

Chart A Percentage of sterling payments sent by CHAPS members by 12pm[a]



Source: CHAPS Co.

(a) Monthly percentage.
(b) CHAPS throughput guideline at 12pm.

6 Credit and liquidity risk in CCP payment arrangements

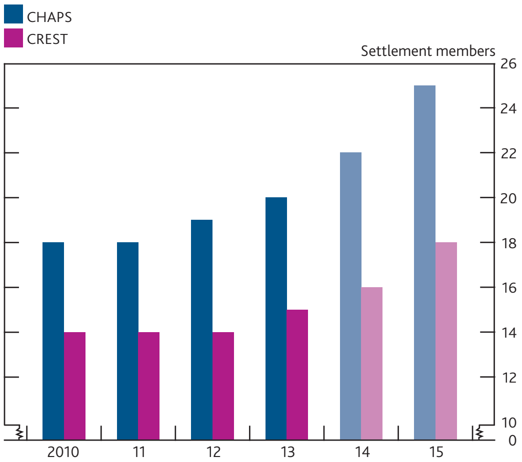
The 2012 *PSOR* noted several improvements in credit and liquidity risks in CCP payment systems and these improvements have continued to be made. As noted in Section 2.1.1, LCH.Clearnet Ltd, ICE Clear Europe and CME Clearing Europe have all made further advances in their monitoring of liquidity risk and ICE Clear Europe has moved to the Bank of England for its intraday sterling liquidity provision.

BPSL and FPSL have developed a plan for the members of Bacs and FPS to prefund their outward payments in full, with cash held at the Bank of England. This will eliminate settlement risk for members of both systems and should be implemented by the end of 2014.

Tiering, the arrangement whereby some market participants access an FMI indirectly via a direct member, entails credit and liquidity exposures between direct and indirect participants. The Bank, in its 2013 priorities for payment systems oversight, noted that CHAPS Co and EUI were each seeking to increase the number of direct settlement banks to reduce tiering. Both have succeeded in obtaining commitments from banks to become direct members in the next few years (**Chart 2**). A recent *Bank of England Quarterly Bulletin* article[1] discusses these developments in detail for CHAPS.

(1) *Tiering in CHAPS*, available at www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2013/qb130408.pdf.

Chart 2 Number of settlement members in CHAPS and CREST[(a)(b)]



Sources: CHAPS Co and Euroclear UK & Ireland.

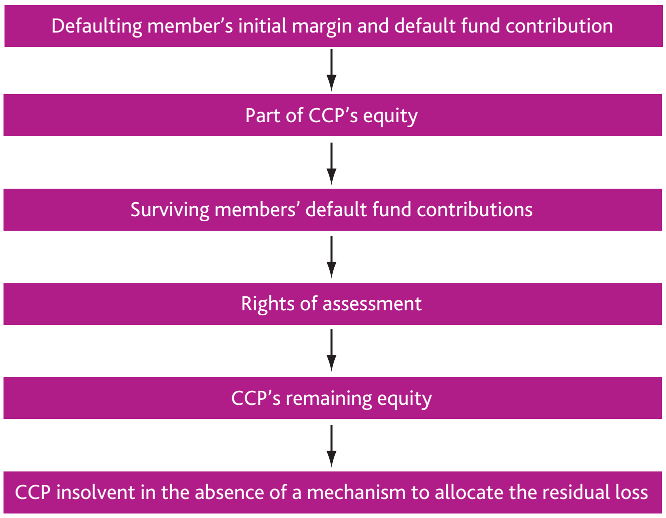
(a) Total settlement members at period end.
(b) Totals for 2014 and 2015 are expected settlement member totals.

2.1.2 Recovery and resolution

Even with strong financial risk mitigation in place, FMIs must still prepare themselves for unexpected financial shocks. The Bank has therefore required all supervised FMIs to work on developing recovery plans.

CCPs face particular risk given the counterparty credit risks they face and the UK CCPs all have loss-allocation rules, covering their whole product range, to manage a loss arising from clearing member default that exceeds their pre-funded default resources. A CCP without such a loss-allocation mechanism would be insolvent if losses exceeded resources (**Chart 3**).

Chart 3 A typical default waterfall for an EU CCP in the absence of a loss-allocation rule



Source: Bank of England.

Implementing loss-allocation rules, which help ensure that CCPs who might be considered 'too important to fail' do not assume support from public funds if they experience severe stress, is a key part of ending 'too big to fail'.[(1)] This ensures that, should market participants still be relying on the continuity of their services, CCPs can continue to provide them, even in the face of losses that would otherwise have caused their insolvency.

The UK CCPs have also started maintaining recovery plans and developing loss-allocation arrangements for non-default losses. The loss-allocation arrangements must be completed by May 2014 to meet UK rules.[(2)]

As payment and securities settlement systems do not take financial exposures to their members they are less likely to face financial loss. However, maintaining continuity of their services can be of equal or even more importance than for CCPs. The Bank has therefore required that they too develop recovery plans to ensure that their critically important functions can be maintained if the operating companies suffer unexpected financial losses.

In addition, in order to protect the critical functions of payment and securities settlement systems in the event of insolvency, the Financial Services (Banking Reform) Act 2013 established a Special Administration Regime to cover recognised payment systems, operators of securities settlement systems and firms which have been designated as their critical service providers. Under the regime, the Bank could apply for a court order to put one of the relevant companies into the Special Administration Regime. The appointed administrator is required to prioritise the continuity of an FMI's critical payment and settlement services. This complements the CCP resolution regime, established as part of the Banking Act 2009 through amendments made in the Financial Services Act 2012 but not yet effected through secondary legislation.

2.1.3 Operational risk management

Because market functioning often relies on the continuity of FMIs' services, the Bank expects FMIs to maintain an extremely high standard of operational resilience.

As noted in the 2012 *PSOR*,[(3)] attempts to penetrate, shut down or manipulate FMIs' computer systems are a threat to the provision of these critical services and one that is under increasing focus from the Bank and FMIs. Work currently undertaken and planned for the year ahead in relation to 'cyber risk' is discussed in Box 2.

(1) See Section 3 of the November 2013 *Financial Stability Report*, available at www.bankofengland.co.uk/publications/Documents/fsr/2013/fsr34sec3.pdf.
(2) www.legislation.gov.uk/uksi/2013/1908/regulation/6/made.
(3) 2012 *PSOR*, Chapter 3: The Bank's priorities for oversight in the coming year.

Box 2 Cyber risk

This box describes the work that has been undertaken over the past year, or is in train, in response to the increase in cyber threats.

As the number of cyber attacks on financial institutions has increased, FMIs have, like other financial institutions, had to devote increased attention to understanding and addressing cyber risk. While cyber attacks have more often been directed at banks, FMIs have also been targeted.

Given this context, the Bank has identified addressing cyber risk as a supervisory priority for all the FMIs it supervises.

The Financial Policy Committee (FPC) recommended in June 2013 that the Treasury, regulators (including the Bank, the PRA and the FCA) and other government agencies should work together to assess, test and improve the resilience of core parts of the UK financial sector, including financial market infrastructures, to cyber attack. In response, the UK financial authorities put together a programme of work around four themes:

- enhancing understanding of the threat to the financial sector;
- strengthening work to assess the sector's current resilience to cyber attack;
- developing plans to test the resilience of the sector; and
- improving the sharing of information.

Addressing cyber risk involves both enhancing controls against an attack and a recovery plan in the event that an attack succeeds. The Bank has been in detailed dialogue with FMIs about their capabilities and approach in respect of cyber risk, both to gauge current levels of resilience and to help define a good practice approach for core institutions. Where this work highlights any control gaps or weaknesses, Bank supervisors will work with the FMIs to assess how they can best be remedied.

Part of the programme is vulnerability testing against key cyber threats. As part of this programme the Bank is developing new security testing standards, to which testing providers must be accredited before they can carry out vulnerability tests against financial sector participants including FMIs. This has been designed as a new product, working in conjunction with financial sector participants.

Operational performance of supervised FMIs has generally improved in 2013. The Bank's Real-Time Gross Settlement (RTGS) system supported this through achieving 100% availability, a goal that was also met by the payment systems CHAPS and FPS. Additionally, the implementation of the Market Infrastructure Resiliency Service (MIRS) in February 2014 has provided a more robust contingency option for CHAPS in the event of a catastrophic failure of RTGS.(1)

EUI achieved higher availability over 2013 than in 2012. It has invested additional resource in its testing of information technology releases. Bacs completed the Bank's requirement to test clearance of a hypothetical three-day backlog of payments in one day, to increase confidence that it could recover from a prolonged outage.

2.1.4 Governance

In 2013, the scheme companies operating CHAPS, Bacs and FPS each recruited independent chairs and directors to their boards. LCH.Clearnet Ltd is also recruiting two additional independent directors who will not serve as directors in any other LCH group company.

2.1.5 Disclosure

Over the past year, all supervised FMIs have worked towards meeting the requirements of the CPSS-IOSCO disclosure framework.(2) Through improving the quality, quantity and consistency of information they publicly disclose, FMIs enable stakeholders better to evaluate their systemic importance in the markets they serve, the risks they might bring to these markets and the risks associated with being, or becoming, a participant.

2.2 Use of powers

The Banking Act and FSMA grant the Bank powers to support its oversight and supervision. The powers available to the Bank include requiring FMIs to provide information, commissioning independent reports, making on-site inspections, requiring changes to FMIs' rules and giving directions. If these directions are not followed, the Bank is also empowered to issue sanctions against an FMI including publishing details of any compliance failures, imposing financial penalties, disqualifying management and, ultimately, closing the FMI.

Over the past year, the Bank has exercised its statutory powers to gather information. The co-operation of supervised FMIs in such areas as responding to the Bank's supervisory priorities and adapting their rule sets has meant it has not been necessary to use other powers.

(1) www.swift.com/about_swift/shownews?param_dcr=news.data/en/swift_com/2014/PR_MIRS.xml.
(2) www.bis.org/publ/cpss106.pdf.

2.3 Co-operative oversight

The way FMIs are designed has an impact on the risks borne by their participants. Many of these participants are financial institutions supervised by the Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA). Moreover, some of the FMIs supervised by the Bank are important to global markets and not just to UK participants, with some also being a part of groups that include other overseas FMIs. Effective co-operation with the PRA, FCA and relevant overseas authorities is, therefore, an essential part of the Bank's FMI supervision.

The Bank, including the PRA, and FCA, have agreed a Memorandum of Understanding (MoU) that sets out how they co-operate with one another in relation to the supervision of markets and market infrastructure.(1) This reflects the FCA's and the PRA's responsibility for the supervision of participants of FMIs supervised by the Bank as well as the FCA's responsibilities for trading venues that rely on, or are connected with, FMIs. The Financial Services Act 2012 introduced an obligation to review this MoU annually. The Bank and FCA committed that this review would include feedback from industry and the findings would be published.

The Bank and FCA conducted the first such review in early 2014, following the commencement of the new regulatory responsibilities in April 2013.

The Deputy Governor Financial Stability at the Bank and the CEO FCA considered the views of industry and staff, concluding that the MoU's arrangements for co-operation have worked well over the first eleven months of the authorities' new responsibilities, with appropriate co-ordination and no material duplication. They noted that as staff who had previously worked together under the aegis of the FSA moved into different roles, it was important to retain strong working level relationships.

Industry respondents expressed their strong desire to see the co-operation continue. Both the Bank and FCA are committed to that, and recognise that the real test of co-ordination will be in times of stress. To embed consultation and co-ordination in their processes, the Bank and FCA now invite the other to send an observer to certain key committee meetings where decisions related to FMIs are made. The co-ordination arrangements will need to be extended to the FCA's new functions in respect of payment systems (see Section 3.2).

2.4 International co-operative engagement

Strengthened cross-border co-operation and information sharing in financial supervision and regulation has been identified by the Financial Stability Board (FSB) as a key element needed to realise fully the benefits of an open, integrated global financial system.(2) The Bank considers that co-operative oversight and supervision can benefit both home and host authorities, and is committed to running effective colleges in respect of UK FMIs which serve global markets, including going beyond the requirements of EMIR and the minimum levels of co-operation set out in the *PFMIs* (under Principle E).

Table B below details the key FMIs for which the Bank engages co-operatively with other authorities, either as a participant in arrangements administered by other authorities or as lead supervisor. In addition to those listed below the Bank has responsibility for the oversight of Recognised Overseas Clearing Houses (ROCHs), detailed in Box 3.

Table B Co-operative arrangements in which the Bank participates

System	Bank role in co-operative oversight arrangements
CLS	Member of CLS Oversight Committee.
CME Clearing Europe	Chair of the EMIR college.
Eurex Clearing	Member of the EMIR college.
Euroclear SA/NV (ESA)	Member of the ESA Higher Level Committee. Member of the ESA Technical Committee.
EuroCCP NV	Member of the EMIR college.
ICE Clear Europe	Chair of the EMIR college. Chair of the 'global' college.
LCH Clearnet Limited	Chair of the EMIR college. Attends the LCH Group 'Joint Regulatory Authorities' chaired by the Banque de France. Chair of the 'global' college.
LME Clear	Chair of the EMIR college. (At the date of publication, the college is yet to be formed).
SWIFT	Member of the international SWIFT Oversight Group.

2.4.1 EMIR colleges

As referenced in Chapter 1, and explained in Box 4, EMIR requires the home regulator, or National Competent Authority (NCA), to establish a regulatory college for each EU-based CCP. This college includes other relevant EU authorities according to criteria specified in EMIR. Colleges play an important part in the EMIR process as the NCA must consult the college on decisions related to authorisation, material changes to risk models, introduction of new products, and change of control.

The Bank is the NCA for UK CCPs and acts as chair for the relevant EMIR colleges. All existing EU CCPs have been required to re-apply to their NCA for authorisation under EMIR, demonstrating that they meet the EMIR standards. The

(1) www.bankofengland.co.uk/financialstability/Documents/fmi/mou.pdf.
(2) www.financialstabilityboard.org/publications/r_140222.pdf.

Box 3 Recognised overseas clearing houses (ROCHs)

This box describes the Bank's responsibilities for ROCHs.

Under FSMA the Bank has responsibility for the supervision of certain recognised non-UK clearing houses. There were seven ROCHs as at end-February 2014:

Cassa di Compensazione e Garanzia
The Chicago Mercantile Exchange
Eurex Clearing
EuroCCP NV
ICE Clear US
LCH.Clearnet SA
SIX x-clear

ROCHs are required to submit an Annual Report to the Bank, detailing any changes that could affect their compliance with the requirements set out in FSMA. The Bank reviews this report and liaises with the ROCH's home supervisory authority where the Bank judges it necessary to discuss areas of regulatory interest.

The ROCH regime for CCPs will be replaced by EMIR. Once a ROCH's application for authorisation by its NCA (if it is established in the European Union) or recognition by ESMA (if it is established outside the European Union) under EMIR is concluded, it will cease to be a ROCH.

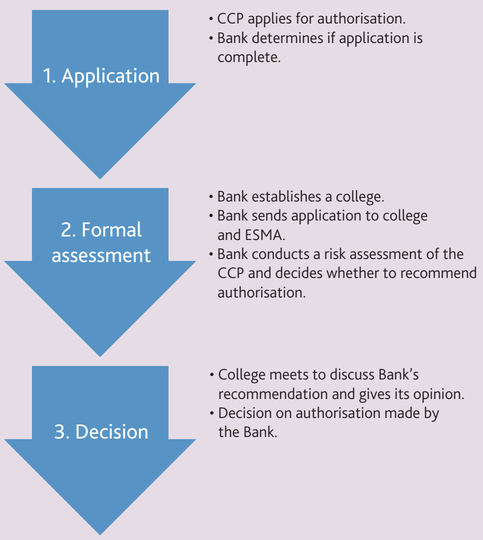
Box 4 Authorisation under EMIR

The Bank's role in the EMIR authorisation process is described in this box.

EMIR sets new prudential requirements for EU CCPs. Existing EU CCPs, and any future applicants, must apply to their NCA and demonstrate that they meet EMIR standards in order to be authorised as a CCP under EMIR.

UK CCPs were required to apply to the Bank for authorisation under EMIR by 15 September 2013. The Bank has been assessing the CCPs' applications according to the process laid down in EMIR, which is summarised below (**Chart A**).

Chart A The EMIR authorisation process



Source: Bank of England.

Bank also participates in the regulatory colleges for certain non-UK EU CCPs. The PRA and FCA also participate in the regulatory colleges for certain EU CCPs.

2.4.2 Global CCP colleges

Given their role in global markets, the Bank operates global colleges for LCH.Clearnet Ltd and ICE Clear Europe in addition to the EU EMIR colleges.

2.4.3 Other colleges

The Bank continues to participate in the international supervisory arrangements for CLS and SWIFT. CLS is recognised by the HM Treasury under the Banking Act 2009 and the Bank discharges its oversight primarily through the CLS Oversight Committee. The Oversight Committee is chaired by the Federal Reserve Bank of New York with representatives from other central banks whose currencies are settled by CLS.

Although SWIFT is not an FMI and is not recognised under any UK legislation, it is systemically important to the United Kingdom and global financial system. As such, the Bank participates, together with the other G10 central banks, in the international SWIFT Oversight Group, which is chaired by the National Bank of Belgium.

2.4.4 International agreements

The Bank has a number of MoUs with international authorities to support collegiate/co-operative supervision.(1) These MoUs provide a framework for requesting and sharing information and in some cases provide specific details for co-operation concerning certain firms or types of firms. Many of the MoUs were inherited from the FSA and the Bank is reviewing these to ensure they remain adequate to support the Bank's new supervisory model.

(1) www.bankofengland.co.uk/about/Pages/mous/international.aspx.

Chapter 3: Forward-looking priorities and changes ahead

3.1 Forward-looking priorities

The Bank's current priorities for 2014 are discussed below. These are subject to review if new issues or risks emerge. These priorities take into account work to address two of the FMI-relevant recommendations made by the FPC in 2013. These are: work which addresses stress-testing of the financial system, and working with other UK authorities to improve the United Kingdom's resilience to cyber attacks.

3.1.1 Credit and liquidity risk

The Bank is in the early stages of conducting a thematic review of stress-testing practices across UK CCPs. This reflects the Bank's judgment that margin and default fund models are at the heart of CCPs' risk management and should be a focus of CCP and supervisory attention.

As discussed in 2.1.1, the Bank has also made it a supervisory priority that the remaining settlement risk is removed for members of the United Kingdom's recognised retail payment systems by requiring the members of Bacs and FPS to completely prefund their outward payments with cash held at the Bank of England by the end of 2014. This will require members to manage their cash balances so that sufficient sums are set aside to cover payment obligations in Bacs and FPS as they arise.

3.1.2 Recovery and resolution

There are expected to be several legislative changes over the next twelve months that will influence FMIs' recovery and resolution plans.

In July 2013, the Recognition Requirements for UK CCPs were amended to require UK CCPs to adopt loss-allocation rules for default losses, and to have recovery plans in place, by 1 February 2014; and to have rules or other effective arrangements in place to address losses from other sources that could threaten their solvency, by 1 May 2014. RCHs that are not CCPs (such as EUI) are required to have recovery plans in place by 1 May 2014. The first deadline has been met, though further work will be required to refine the recovery plans and, in some cases, the loss-allocation rules. Meeting the second deadline will be a priority for RCHs in 2014.

The Financial Services Act 2012 extended the scope of the resolution regime in the Banking Act 2009 to include CCPs. HM Treasury issued a consultation paper in September 2013 on the secondary legislation that is required to bring the regime into force. This is expected to be laid before Parliament in 2014 Q2. The European Commission is expected to bring forward proposals for European Union legislation on CCP resolution in the course of the next twelve months and providing input to this work will be a policy priority for the Bank.

Other FMIs also still required to produce a full recovery plan. The Bank will work with HM Treasury on the implementation of the new Special Administration Regime (see Section 2.1.2) which will be an important backstop to the recovery plans.

3.1.3 Operational risk management

Over the next year, progress in tackling cyber risk will be an ongoing priority for all FMIs supervised by the Bank.

Cyber risk is, however, only one element of operational risk. For those FMIs where there is evidence of weakness in operational risk management, addressing this will form part of the Bank's supervisory priorities for the FMI.

3.2 New payments regulator

On 18 December 2013, the Financial Services (Banking Reform) Act 2013 received Royal Assent. This Act created a new payments regulator with objectives to promote innovation and competition in payments. It will be a subsidiary of the FCA.

The Bank's oversight of payment systems, for stability purposes, will remain unchanged and preserving financial stability will continue to be given priority in UK decision-making in relation to payments. Innovation and reforms to enhance competition can bring opportunities to further improve resilience and financial stability. The Bank will work closely with the new payments regulator in respect of those systems where both have a regulatory role; co-ordination arrangements will be published in an MoU as envisaged in statute.

3.3 Developments in international policy

The Bank is taking part in CPSS-IOSCO work on monitoring implementation of the *PFMIs* and a number of important

CPSS-IOSCO and FSB workstreams are expected to lead to new international guidance for FMIs being issued in 2014. These relate to recovery and resolution for FMIs[(1)] and quantitative disclosure for CCPs. As described above, requirements for the loss allocation tools that are essential to CCP recovery and resolution have already been included in the UK regulatory regime. The Bank will also expect CCPs to meet the new disclosure requirements.

3.4 Central Securities Depositories Regulation (CSDR)

Common EU laws for central securities depositories, the CSDR, are expected to enter into force in May 2014. Significant work will be required to develop the accompanying 'technical standards'. This work will fall to ESMA's CSDR Task Force (consisting of securities regulators and members of the European System of Central Banks) and the EBA. Draft standards are expected to be consulted upon in September 2014, and must then be finalised and submitted to the European Commission by early 2015. As a member of the Task Force, the Bank will play an active role in helping to develop these standards.

The CSDR will also require the United Kingdom to move from a T+3 to a T+2 settlement cycle for securities transactions executed on a trading venue by 1 January 2015. EUI is leading an industry initiative to implement this, with the support of the Bank and the FCA. The group has chosen to move to T+2 on 6 October 2014.

(1) www.bis.org/press/p130812.htm.

Annex: Volumes, values, members and operational availability in recognised payment systems[a]

	Volume		Value (£ millions)		Number of settlement bank members	Operational availability	Important payment types
	2013	*2012*	2013	*2012*	Dec. 2013	2013	
CHAPS	138,241	*134,667*	277,229	*284,591*	20	100%	• Settlement of financial market transactions • CLS sterling pay-ins and pay-outs • House purchases
Bacs	22,509,992	*22,287,266*	16,674	*16,318*	16	99.8%	• Salary and benefit payments • Direct Debit and Direct Credit payments
Faster Payments Service	3,824,621	*3,218,619*	3,049	*2,452*	10	100%	• Telephone and internet banking • Single immediate and forward-dated payments • Standing order payments
CREST (payment arrangements supporting CREST)							
Sterling	171,055	*164,055*	453,710	*420,561*	15	99.87%	• Settlement of gilts, equities and money market instruments (including in respect of the Bank's Open Market Operations and repo markets transactions more generally)
US dollar	4,016	*3,575*	982	*857*			
Euro	3,638	*3,202*	563	*404*			
Total CREST	178,709	*170,832*	455,255	*421,822*			
LCH.Clearnet Ltd (Protected Payments System)[b][c]							
Sterling	49	*39*	1,149	*644*	11	99.95%	• Settlements in respect of cash margin payments
US dollar	97	*71*	2,533	*1,798*			• Payments for commodity deliveries
Euro	43	*38*	1,596	*1,106*			• Cash settlements
Other	120	*105*	228	*162*			• Default fund contributions
Total LCH	309	*253*	5,507	*3,711*			• Coupon payments
ICE Clear Europe (Assured Payment System)[d]							
Sterling	31	*21*	124	*78*	8	100%	• Settlements in respect of cash margin payments
US dollar	66	*54*	762	*627*			• Payments for commodity deliveries
Euro	61	*49*	456	*493*			• Cash settlements
Other[e]	59	*–*	7	*–*			• Default fund contributions
Total ICE	217	*125*	1,349	*1,199*			
CLS							
All currencies	791,378	*679,334*	3,189,911	*2,956,715*	63	99.84%	• Settlement of foreign exchange trades
Sterling	53,264	*45,457*	244,785	*212,588*			

(a) Volumes and values are the daily averages for 2013, unless otherwise noted.
(b) This refers to cash flows across LCH.Clearnet Ltd's Protected Payments System.
(c) Volumes and values are the daily average for 1 July 2013 to 31 December 2013.
(d) This refers to cash flows across ICE Clear Europe's Assured Payment System.
(e) Volumes and values are the daily average for 1 July 2013 to 31 December 2013.

Glossary of terms

Business risk
Any potential impairment of the FMI's financial position (as a business concern) as a consequence of a decline in its revenues or an increase in its expenses, such that expenses exceed revenues and result in a loss that must be charged against capital.

Central counterparty
An entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer.

Central securities depository
An entity that provides securities accounts, central safekeeping services, and asset services, which may include the administration of corporate actions and redemptions, and plays an important role in helping to ensure the integrity of securities issues (that is, ensure that securities are not accidentally or fraudulently created or destroyed or their details changed).

Credit risk
The risk that a counterparty, whether a participant or other entity, will be unable to meet fully its financial obligations when due, or at any time in the future.

Default fund
A fund consisting of assets contributed by members of a system that would be used to pay liabilities of defaulting members.

Deferred net settlement
A settlement mechanism which settles on a net basis at the end of a predefined settlement cycle.

Exposure
The maximum loss that might be incurred if assets or off balance sheet positions are realised, or if a counterparty (or group of connected counterparties) fails to meet its financial obligations.

Governance
The set of relationships between an FMI's owners, board of directors (or equivalent), management, and other relevant parties, including participants, authorities, and other stakeholders (such as participants' customers, other interdependent FMIs, and the broader market).

Liquidity risk
The risk that a counterparty, whether a participant or other entity, will have insufficient funds to meet its financial obligations as and when expected, although it may be able to do so in the future.

Loss-allocation
Rules or arrangements that specify how losses in excess of a CCP's pre-funded resources would be allocated.

Operational risk
The risk that deficiencies in information systems or internal processes, human errors, management failures, or disruptions from external events will result in the reduction, deterioration, or breakdown of services provided by an FMI.

Payment system
A set of instruments, procedures, and rules for the transfer of funds between or among participants; the system includes the participants and the entity operating the arrangement.

Principal risk
The risk that a counterparty will lose the full value involved in a transaction, for example, the risk that a seller of a financial asset will irrevocably deliver the asset, but not receive payment.

Securities settlement system
An entity that enables securities to be transferred and settled by book entry according to a set of predetermined multilateral rules. Such systems allow transfers of securities either free of payment or against payment.

Settlement risk
The general term used to designate the risk that settlement in a funds or securities transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Systemic risk
The risk that the inability of one or more participants to perform as expected will cause other participants to be unable to meet their obligations when due.

Tiering
Tiered participation occurs when direct participants in a system provide services to other institutions to allow them to access the system indirectly.

Trade repository
An entity that maintains a centralised electronic record (database) of transaction data.

Legislation

Settlement Finality Directive
The EU Directive on Settlement Finality in Payment and Securities Settlement Systems (Directive 98/26/EC) was implemented into UK law by the Financial Markets and Insolvency (Settlement Finality) Regulations. The Bank is the United Kingdom's designating authority.(1) Designated systems receive protections against the operation of normal insolvency law in order to ensure that transactions that have been submitted in the system are irrevocable, to reduce the likelihood of legal challenge to the finality of settlement and to ensure the enforceability of collateral security. The Bank maintains a list of UK designated systems on its website.(2)

Companies Act 1989
Under the Companies Act 1989, the Bank has various powers regarding CCP default rules. These include reviewing CCPs' default rules and giving directions concerning action taken under those default rules. The Bank can also make an Order recognising that the relevant provisions of the default rules of an EEA CCP or third country CCP satisfy relevant requirements. The Bank must maintain and publish a register of Orders made.

(1) The FCA is the designating authority in respect of recognised investment exchanges.
(2) www.bankofengland.co.uk/financialstability/Pages/fmis/supervised_sys/systems.aspx.

Abbreviations

BPSL – Bacs Payment Schemes Limited.
CCP – Central counterparty.
CEO – Chief Executive Officer.
CHAPS – Clearing House Automated Payment System.
CHAPS Co – CHAPS Clearing Company Limited.
CLS – Continuous Linked Settlement.
CME – Chicago Mercantile Exchange.
CPSS – Committee on Payment and Settlement Systems.
CSDR – Central Securities Depositories Regulation.
DNS – Deferred net settlement.
EBA – European Banking Authority.
EEA – European Economic Area.
EMIR – European Market Infrastructure Regulation.
ESA – Euroclear SA/NV.
ESMA – European Securities and Markets Authority.
EUI – Euroclear UK & Ireland.
FCA – Financial Conduct Authority.
FMI – Financial market infrastructure.
FPC – Financial Policy Committee.
FPS – Faster Payments Service.
FPSL – Faster Payments Scheme Limited.
FSA – Financial Services Authority.
FSB – Financial Stability Board.
FSMA – Financial Services and Markets Act 2000.
ICE – InterContinentalExchange.
IOSCO – International Organization of Securities Commissions.
LME – London Metal Exchange.
MIRS – Market Infrastructure Resiliency Service.
MoU – Memorandum of Understanding.
NCA – National Competent Authority.
OTC – Over the counter.
PFMIs – Principles for financial market infrastructures.
PRA – Prudential Regulation Authority.
PSOR – Payment Systems Oversight Report.
RCH – Recognised clearing house.
ROCH – Recognised overseas clearing house.
RTGS – Real-time gross settlement.
SWIFT – Society for Worldwide Interbank Financial Telecommunication.

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