3 Medium-term risks to financial stability

This section takes stock of regulatory reforms and other developments in the Committee's three broad priority areas: the medium-term capital framework for banks (Section 3.1); ending 'too big to fail' (Section 3.2); and diverse and resilient sources of market-based finance (Section 3.3). Significant progress has been made in some, but not all, aspects of reform in these priority areas.

Table 3.A Focus of the FPC's medium-term priorities

Establishing the medium-term capital framework	• Leverage ratio review • Usability and interaction of capital buffers • Overall calibration of UK bank capital requirements, following progress on relevant international agendas and taking into account FPC discussions on ending 'too big to fail'
Ending 'too big to fail'	• Process for identifying domestic systemically important banks in the United Kingdom • Macroprudential objectives to consider when setting the height of the ring-fence • Protocols around stays in derivative contracts • Policies on resolution and on recovery and resolvability • The UK framework for gone-concern loss-absorbing capacity
Ensuring diverse and resilient sources of market-based finance	• Assessing and mitigating systemic risks beyond the existing regulatory perimeter • Risks to stability arising from procyclicality in the availability of finance, including via collateral markets • Resilience of market liquidity

Source: Bank of England.

Table 3.B Basel III leverage ratio for public disclosure has now been defined
The phase-in timetable of Basel III leverage ratio

January 2013	Bank-level reporting of the leverage ratio to national supervisors. BCBS testing a minimum requirement of 3% during January 2013 –January 2017.
January 2014	Definition of the leverage ratio for the purpose of disclosure from January 2015 agreed. Leverage ratio = Tier 1 capital/(on balance sheet exposures + derivative exposures + securities financing transaction exposures + off balance sheet items).
January 2015	Public disclosure starts.
By 2017	Agree on the final calibration and complete any further adjustments to the definition.
January 2018	Plan to start implementing the Basel III leverage ratio as a minimum capital requirement.

Sources: BCBS and BIS.

3.1 Medium-term capital framework for banks

The Basel III leverage ratio has been defined...
Developing and communicating a robust medium-term capital framework for banks is a key priority for the FPC (**Table 3.A**). A large part of the framework is already pinned down by Basel III — the globally agreed regulatory standard for capital adequacy for banks — which is being phased in across jurisdictions with a view to full implementation by 2019.(1) The Capital Requirements Directive IV (CRD IV) package,(2) which came into effect in January, implements Basel III in the European Union.

The leverage ratio is a key element within the Basel III framework. As set out in the November 2013 *Report*, the leverage ratio is a simple, non risk-based measure to complement risk-based capital requirements that are model-based and therefore more susceptible to inaccurate risk measurement.(3) In January 2014, the Basel Committee on Banking Supervision (BCBS) agreed a definition of the leverage ratio, which banks are expected to disclose from 2015. Following an observation period, the BCBS will agree on the final calibration of the ratio and complete any further adjustments to its definition by 2017, with a view to the leverage ratio becoming a formal requirement for banks internationally from 2018 (**Table 3.B**).

In the United Kingdom, the eight largest banks and building societies are already expected to meet a 3% leverage ratio standard from the start of this year, except where the PRA and a firm have agreed a plan for that firm to meet the standard over a longer time frame.(4) In response to a request from the

(1) Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital under Basel III will be phased out during the period from 2013 to 2022.
(2) The CRD IV package consists of the Capital Requirements Directive (CRD) and the Capital Requirements Regulation (CRR).
(3) See Box 2 of the November 2013 *Report* for high-level considerations on the leverage ratio, available at www.bankofengland.co.uk/publications/Documents/fsr/2013/fsrfull1311.pdf.
(4) See the PRA's *Supervisory Statement SS3/13*, 'Capital and leverage ratios for major UK banks and building societies', November 2013, available at www.bankofengland.co.uk/pra/Documents/publications/ss/2013/ss313.pdf.

Chancellor of the Exchequer, the FPC will consult on the role of the leverage ratio framework in the United Kingdom in July and expects to publish its conclusions towards the end of this year.(1)

...and progress is being made on other aspects of the international regulatory framework for banks.
Advances have been made on other aspects of the new capital framework. In March, the BCBS published a new standardised approach for measuring exposure at default for counterparty credit risk in derivative transactions.(2) The new approach reduces the need for discretion by national authorities, limits the use of banks' internal estimates, and avoids undue complexity by drawing upon prudential approaches already available in the capital framework. It thereby seeks to provide regulators with an alternative to reliance on internal models and is a step forward in delivering credible standardised approaches across all risk categories and asset classes. In April, the BCBS also published its final framework for the capitalisation of banks' exposures to central counterparties (CCPs).(3) This aims to balance the need to manage risks to banks from such exposures with the desirability of maintaining incentives to clear centrally.

Other aspects of the capital framework are yet to be finalised, including capital requirements for the trading book and securitisation exposures held in the banking book. In December 2013, a BCBS consultation paper on standards for securitised exposures proposed a more lenient capital treatment of securitisation exposures than in the previous proposal.(4) The final framework is likely to shape the future evolution of securitisation markets (see Section 3.3).

The FPC has provided more information on how it expects to use its power over capital requirements.
The FPC has powers to adjust capital requirements in order to contain emerging threats to financial stability (**Table 3.C**). In April 2013, the Government gave the FPC the power to issue Directions to the PRA requiring it to supplement sectoral capital requirements. In May 2014, the Government made the Bank the designated authority for the countercyclical capital buffer (CCB) with the FPC to take policy decisions.

To reduce uncertainty over the use of its powers, the FPC published in January 2014 a Policy Statement, which describes these instruments, the circumstances in which they might be used (including the core indicators that the FPC will routinely review), and the likely impact of these instruments on financial stability and growth.(5) The FPC discussed the setting of the

(1) See the Terms of Reference for the leverage review; www.bankofengland.co.uk/publications/Pages/news/2014/062.aspx.
(2) See www.bis.org/publ/bcbs279.pdf.
(3) See www.bis.org/publ/bcbs282.pdf.
(4) See www.bis.org/publ/bcbs269.pdf.
(5) See Bank of England (2014), 'The Financial Policy Committee's powers to supplement capital requirements: A Policy Statement', available at www.bankofengland.co.uk/financialstability/Documents/fpc/policystatement140113.pdf.

Table 3.C FPC and PRA can impose additional capital requirements and buffers

Capital requirements under full implementation of Basel III in 2019[(a)(b)]

Per cent of risk-weighted assets

	Total (CET1 + AT1 + T2)[(c)]	*of which minimum CET1*
Minimum capital requirement		
Common minimum (Pillar 1) (i)	8.0	*4.5*
Additional firm-specific requirement (Pillar 2A) (ii)	PRA discretion	
(1) Total minimum requirement (i + ii)	**≥8.0**	***≥4.5***
Capital buffers		
Countercyclical capital buffer (iii)	FPC discretion	
Capital conservation buffer (iv)	2.5	*2.5*
Systemic buffers[(d)]		
– buffer for G-SIBs (v)	1–2.5	*1–2.5*
– buffer for ring-fenced banks (vi)[(e)]	1–3	*1–3*
Additional firm-specific buffer (Capital planning buffer (Pillar 2B)) (vii)[(f)]	PRA discretion	
(2) Total buffer		
– for G-SIBs (iii + iv + v + vii)	≥3.5–5	*≥3.5–5*
– for ring-fenced banks (iii + iv + vi + vii)	≥3.5–5.5	*≥3.5–5.5*
– for other banks (iii + iv + vii)	≥2.5	*≥2.5*
(3) Total capital requirements[(g)]		
– for G-SIBs (i + ii + iii + iv + v + vii)	≥11.5–13	*≥8–9.5*
– for ring-fenced banks (i + ii + iii + iv + vi + vii)	≥11.5–13.5	*≥8–10*
– for other banks (i + ii + iii + iv + vii)	≥10.5	*≥7*

Sources: BCBS, BIS, CRD IV, FSB, HM Treasury and PRA .

(a) **Chart A** in Box 3 of this *Report* decomposes these requirements to show the role of additional Tier 1 capital.
(b) Additionally, the FPC has a Direction power in respect of sectoral capital requirements.
(c) Under CRD IV, capital buffers consist of common equity (CET1). AT1 refers to additional Tier 1 capital, and T2 refers to Tier 2 capital.
(d) G-SIBs are global systemically important banks as identified by the FSB. The systemic buffer for ring-fenced banks will be the higher of the G-SIB buffer and the ring-fence buffer (to be introduced through the CRD IV 'systemic risk buffer'). Domestic systemically important banks are yet to be identified.
(e) The authority responsible for setting the buffer for ring-fenced banks is yet to be determined.
(f) The PRA has signalled its intention to replace the capital planning buffer (Pillar 2B buffer) with a PRA buffer and it will consult on the transition to the PRA buffer before the end of 2014. As indicated in CP5/13, the PRA buffer, once introduced, will be set in CET1 capital.
(g) The total capital requirements for a firm may be greater than the numbers in (3) if at least one of the following is applied: additional firm-specific capital requirement (Pillar 2A), countercyclical capital buffer and additional firm-specific capital planning buffer (Pillar 2B).

CCB rate for the first time at its meeting in June. Its decision is set out in Section 5.

Under its Pillar 2 regime, the PRA also has powers to impose additional firm-specific capital requirements against risks that are not captured or not adequately captured in the minimum Pillar 1 capital requirements (**Table 3.C**). In December 2013, the PRA communicated its intention to reform the Pillar 2 regime with the aim of improving the transparency and consistency of its approach to assessing firms' internal capital adequacy.(1) The PRA expects to consult on its proposals before the end of this year with a view to implementing the new regime from January 2016.

The different elements of the new capital framework — including capital buffers that are additional to minimum requirements — are designed to tackle different sources of risk. To ensure that banks can absorb losses and continue to provide credit to the real economy under stress, these capital buffers need to be 'usable', such that banks are willing and able to lower their capital ratios by running down the buffers in stressed periods, instead of cutting back on lending. In March 2014, the FPC agreed that it would examine how the various elements of the capital framework fit together to ensure the usability and coherent interaction of capital buffers, as well as the overall calibration of UK bank capital requirements from a macroprudential perspective. This exercise will follow a review by the FPC of progress made on relevant international agendas and taking into account its discussions on 'too big to fail' (see Section 3.2).

Other reforms will strengthen bank resilience.
In addition to reforms related to the FPC's priority areas on capital, progress has also been made on other measures to enhance bank resilience. This includes: the finalisation of the large exposure framework, which aims to protect banks against large losses from the default of a single counterparty and to reduce the risk of contagion between the global systemically important banks (G-SIBs) (**Table 3.D**); and further progress in implementing the Basel III Liquidity Coverage Ratio (LCR) and defining the Net Stable Funding Ratio (NSFR) (**Table 3.E**).

Table 3.D The framework for regulating banks' large exposures has been finalised

- The BCBS large exposure framework aims to protect banks from suffering large losses from the default of a single counterparty and to reduce the risk of contagion between the global systemically important banks (G-SIBs).
- The BCBS finalised the framework in April. The framework limits a bank's total exposure to a single private sector counterparty to 25% of its Tier 1 capital.(a) It also restricts the total exposure of one G-SIB to another to 15% of the bank's Tier 1 capital.
- The framework will be implemented across jurisdictions by 2019.

Sources: BCBS and BIS.

(a) The BCBS will consider the appropriateness of setting out a large exposure limit for banks' exposures to qualifying central counterparties (QCCPs) after an observation period that will be concluded in 2016. In the meantime, the BCBS's assumption is that banks' exposures to QCCPs related to clearing activities are exempted from the large exposures framework.

Table 3.E Progress is being made on Basel III liquidity and stable funding requirements

Liquidity Coverage Ratio (LCR)

- The LCR will become a requirement in 2015. National authorities must set a minimum requirement of at least 60% in 2015, rising to 100% gradually in subsequent years.
- Until the LCR is introduced through the European Commission's Delegated Act in 2015, the PRA's liquidity regime will continue to apply to PRA-authorised banks, building societies and designated investment firms. The PRA will consult on changes to its liquidity regime in due course.

Net Stable Funding Ratio (NSFR)

- The NSFR is designed to reduce banks' funding risk over a longer time horizon by requiring them to fund their exposures with sufficient stable funding.
- The BCBS released a consultation paper on the NSFR in January, with a view to implementing a minimum standard by 2018.

Sources: BCBS, BIS and PRA.

3.2 Ending 'too big to fail'

Reforms are under way to reduce the probability and impact of systemic institutions failing…
The 'too big to fail' problem arises when an institution is so systemically important that its failure would cause instability

(1) See *PRA Policy Statement PS7/13*, 'Strengthening capital standards: implementing CRD IV, feedback and final rules', available from www.bankofengland.co.uk/pra/Documents/publications/policy/2013/strengtheningcapitalps713.pdf. See also *PRA Policy Statement PS3/14*, 'Implementing CRD IV: capital buffers', available at www.bankofengland.co.uk/pra/Documents/publications/policy/2014/capitalbuffersps314.pdf.

Table 3.F Reform is in progress to reduce the probability of systemic financial institutions failing

International progress on identifying SIFIs and requiring additional going-concern loss absorbency

	Identification of institutions	Additional loss absorbency
Banks	The Financial Stability Board (FSB) publishes a list of global systemically important banks (G-SIBs) annually.	Additional capital buffers for G-SIBs to be implemented in phases during 2016–19.
	Other systemically important institutions (O-SIIs) are to be identified by 2016 in the EU based on EBA guidelines.	EU Member States have the option to apply additional capital buffers on O-SIIs from 2016.
Insurers	The FSB publishes a list of global systemically important insurers annually. The FSB is expected to make a decision on whether any reinsurers should be identified as global systemically important insurers in November.	The International Association of Insurance Supervisors (IAIS) will finalise the Basic Capital Requirement by November, to which Higher Loss Absorbency (HLA) requirements for global systemically important insurers can be applied. The IAIS expects to develop the HLA requirements by end-2015.
Non-bank non-insurers	The FSB and the International Organization of Securities Commissions (IOSCO) consulted on a methodology for identifying non-bank non-insurer global systemically important financial institutions.	

Sources: CRD IV, EBA, FSB and IAIS.

Table 3.G Further international work is required to increase the resolvability of financial institutions

Banks	Member States are required to adopt and apply the necessary legislation to comply with the EU Bank Recovery and Resolution Directive (BRRD) by January 2015. Implementation of a bail-in tool and minimum requirement for own funds and eligible liabilities (MREL) is due by January 2016.[a]
	The EBA is to provide technical standards and guidelines relating to the BRRD in the coming years; and to report on implementation of MREL in individual Member States by end-October 2016.
	The FSB is to submit a proposal on gone-concern loss-absorbing capacity (GLAC) for G-SIBs to the G20 in November.
Insurers	Recovery and resolution planning under the FSB's Key Attributes is being applied to global systemically important insurers. This includes the establishment of crisis management groups by mid-2014 and the development of recovery and resolution plans by end-2014. The home authorities for global systemically important insurers are required to provide an interim report to the FSB on progress in these areas by mid-2014.
Non-bank non-insurers	The FSB is determining the core elements that it considers necessary for the resolution of failing financial market infrastructures (FMIs) and failing members of FMIs. It is expected to include these as an Annex to the Key Attributes in 2014. In addition, the FSB is finalising an Annex covering the treatment of client assets in resolution.
	The European Commission is expected to present a proposed framework on recovery and resolution for non-bank financial institutions, including CCPs, later this year.

Sources: BRRD, EBA, European Commission and FSB.

(a) In the United Kingdom, the primary legislation for a bail-in tool is already in place in the Financial Services (Banking Reform) Act 2013.

across the financial system as a whole without a bailout by public authorities. The expectation of such bailouts in turn distorts the cost of funding for systemically important financial institutions (SIFIs) and creates incentives for them to take excessive risks.

Reforms to end 'too big to fail' are advancing. Progress is being made on identifying SIFIs and subjecting them to measures to reduce their probability of failure (**Table 3.F**). Measures are also being implemented to reduce the impact of failure by enabling the authorities to resolve institutions without triggering economic disruption and without recourse to public funds (**Table 3.G**). Significant advances are planned on both of these fronts ahead of the G20 Summit in November.

…beginning with development of frameworks for identifying systemic institutions.

Progress is being made in determining how to identify global and domestic systemically important institutions (**Table 3.F**). In June, the European Banking Authority (EBA) published the final draft technical standards for identifying global systemically important institutions in the European Union. This will implement the G-SIBs framework of the Financial Stability Board (FSB) in the European Union. The EBA is also expected to publish by January 2015 guidelines to support EU Member States in their identification of other systemically important institutions (O-SIIs).(1)

Identification of O-SIIs is important from a macroprudential perspective, given that the distress or failure of an individual firm can potentially have a destabilising effect on the system as a whole. In the United Kingdom, the PRA is responsible for identifying O-SIIs, which will include domestic systemically important banks (D-SIBs) as described by the BCBS, from January 2016. The FPC will review the process for identifying different types of D-SIBs in the United Kingdom as part of its efforts to end 'too big to fail'.

The FSB, with the International Association of Insurance Supervisors (IAIS), is expected to make a decision on whether any reinsurers should be identified as global systemically important insurers in November. Jointly with the International Organization of Securities Commissions (IOSCO), the FSB also held a public consultation on its assessment methodologies for identifying non-bank non-insurer global SIFIs.(2)

The EU Bank Recovery and Resolution Directive will facilitate resolution of banks within the EU…

The EU Bank Recovery and Resolution Directive (BRRD) was approved by the European Parliament in April 2014 and was

(1) O-SIIs in CRD IV cover both domestic and regional systemically important banks and investment firms engaged in certain types of activities.
(2) The FSB-IOSCO consultation paper is available at www.financialstabilityboard.org/publications/r_140108.pdf.

published in June. This is a milestone in the EU legislative framework for the recovery and resolution of banks and large investment firms. In the United Kingdom, the Bank of England plans for and implements resolutions of failing financial institutions under the special resolution regime (except when a firm is placed into temporary public ownership by HM Treasury). The BRRD enhances the special resolution regime and facilitates the resolution of banks and large investment firms within the European Union (**Table 3.G**).

The Directive will ensure that the EU framework for these firms complies with the FSB's 'Key attributes of effective resolution regimes for financial institutions'[1] (Key Attributes). The BRRD equips resolution authorities with powers to take steps to preserve the critical functions of a bank in resolution and to impose losses on the existing holders of its liabilities, including through a bail-in. These powers are a fundamental element of the package of measures that are needed to ensure that failing banks can be resolved while minimising the impact on financial stability (see Box 4).

The BRRD requires that at least 8% of the total liabilities, including own funds, of a firm in resolution must be exposed to loss before resolution funds can be used. The BRRD also introduces the concept of a minimum requirement for own funds and eligible liabilities (MREL), which aims to ensure that all firms have adequate total loss-absorbing capacity, including sufficient liabilities that could credibly be exposed to loss in resolution. All EU banks and investment firms will be subject to MREL, which will be set on a firm-by-firm basis, from 2016 at the latest.

Separately, the FSB is working on a proposal on gone-concern loss-absorbing capacity (GLAC) — such as long-term bonded debt — that will apply for G-SIBs (**Table 3.G**). The forthcoming FSB proposal will aim to establish criteria that bank liabilities should meet in order to be considered as GLAC and ensure that sufficient amounts of GLAC are in the right location within a financial group to support firm-specific resolution strategies. By ensuring that there are liabilities available to be bailed in at the point of resolution, GLAC will complement the BRRD requirements. The UK framework for GLAC is a part of the FPC's medium-term priority to end 'too big to fail'.

As shown in **Table 3.H**, a number of credit rating agency actions have already cited the potential impact of the BRRD in reducing the likelihood of government support.

...but recovery plans and resolution regimes for non-bank financial institutions are not as developed.

Although the BRRD is a major step in facilitating the recovery and resolvability of EU banks and large EU investment firms,

Table 3.H Rating agencies judge government support to be less likely for EU banks due to BRRD[a]

Moody's	Revised down outlooks for supported ratings of 82 banks in the EU, Liechtenstein and Norway to Negative, including six G-SIBs, in May.
S&P	Revised outlooks for eleven EU banks to Negative from Stable, including three G-SIBs, in April.
Fitch Ratings	Revised the outlooks for 18 EU commercial banks' long-term issuer default ratings to Negative from Stable, including four G-SIBs, in March.

Sources: Fitch Ratings (2014), 'Fitch revises outlooks on 18 EU commercial banks to negative on weakening support' (26 March); Moody's (2014), 'Reassessing systemic support for EU banks' (29 May); and S&P (2014), 'Standard & Poor's takes various rating actions on European banks following government support review' (29 April).

(a) The S&P's disclaimer of liability, which applies to the data provided, is available at www.bankofengland.co.uk/publications/Documents/fsr/2014/fsr14jun3.xls.

(1) FSB (2011), 'Key attributes of effective resolution regimes for financial institutions', available at www.financialstabilityboard.org/publications/r_111104cc.pdf.

feasible and credible resolution arrangements for non-bank SIFIs are not as developed (**Table 3.G**). In the United Kingdom, the Financial Services Act 2012 extends the special resolution regime — which originally covered banks and building societies — to also include large investment firms, banking group companies (including holding companies) and CCPs. The secondary legislation required to implement this was submitted to Parliament in June.

International initiatives on the resolution of non-bank financial institutions could enhance the special resolution regime in the future. The FSB is expected to publish later this year an Annex to the Key Attributes that sets out the core elements that the FSB considers necessary for the resolution of failing financial market infrastructures (FMIs) and failing members of FMIs. The European Commission is expected to present a proposed framework on crisis management and resolution for non-bank financial institutions, including CCPs, later this year.

In the United Kingdom, the Bank of England is responsible for supervising various kinds of FMIs, including CCPs, securities settlement systems and recognised payment systems.(1) The post-crisis reforms have expanded the role of CCPs in mitigating counterparty risk between firms, thus increasing the importance of ensuring that CCPs have adequate incentives to manage risks.

A recent incident at Korea Exchange (KRX), a Korean CCP, highlights a number of risks associated with CCPs. In December 2013, a clearing member of KRX defaulted with a loss exceeding its initial margin, which did not reflect the intraday risk of its positions. The remaining loss had to be borne by other clearing members via the default fund to which they contribute. Thus, KRX itself did not suffer any loss on its own capital from its clearing member default. In the European Union, CCPs are required to commit part of their own capital to meet losses from a clearing member default, in order to incentivise strong risk management. This is part of a package of new regulatory rules for EU CCPs that have helped to catalyse improvements in risk management across the industry.

Structural reforms will also enhance resolvability of affected institutions.

Structural reforms are being implemented in a number of jurisdictions in order to ensure the continuity of provision of core banking services, facilitate effective resolution of systemic banking groups and increase their resilience. In the United Kingdom, the focus is on ensuring that deposit, payment and overdraft services are continuously available to individuals and small businesses even when a banking group is distressed. These core services will be ring-fenced from

(1) See the first *Annual Report* on FMIs by the Bank of England for an account of its responsibilities for FMI supervision and how it has exercised those responsibilities, available at www.bankofengland.co.uk/publications/Documents/fmi/fmiap1403.pdf.

Table 3.I The Financial Services (Banking Reform) Act 2013 is now in the implementation phase

- The Banking Reform Act received Royal Assent in December 2013.
- Secondary legislation will set out criteria for determining which institutions are subject to ring-fencing and will provide more detail about the activities that ring-fenced banks will be allowed to undertake.
- The Act requires the PRA to make rules for the purposes of ring-fencing. One effect of this will be a degree of separation between the ring-fenced bank and other entities within a banking group.
- The ring-fence will be implemented by 2019.

Sources: Financial Services (Banking Reform) Act 2013 and HM Treasury.

Table 3.J Structural reforms are also in progress in other jurisdictions

The European Union

- Following a report by the Liikanen Group, the European Commission issued a legislative proposal in January 2014 on structural changes for the biggest and most complex banks to further enhance the stability and resilience of the European banking sector.
- It proposes to prohibit these banks from engaging in proprietary trading through dedicated desks and personnel; and investing in hedge funds from January 2017. It also proposes to give the competent authority powers to require separation of certain potentially risky trading activities, such as market-making, from a deposit-taking entity within a banking group if pursuit of such activities is deemed to compromise financial stability. It is proposed that the provisions on separation of trading activities will become effective in July 2018.

The United States

- In December 2013, five Federal agencies issued final rules to implement the Volcker rule, and the Federal Reserve Board extended the conformance period by one year to July 2015. The final rules prohibit banking entities from engaging in proprietary trading and impose limits on their investments in, and other relationships with, hedge funds or private equity funds, subject to certain exemptions.
- In February, the Federal Reserve Board also approved a final rule to strengthen supervision and regulation of large foreign banking organisations. The rule requires a foreign banking organisation with a significant US presence to establish an intermediate holding company over its US subsidiaries. The intermediate holding company will generally be subject to the same prudential standards as those applicable to US bank holding companies. Foreign banking organisations will be subject to the final rule from July 2016.

Sources: European Commission and Federal Reserve Board.

investment banking activities by 2019 under the Banking Reform Act (**Table 3.I**). Similar structural reforms are also in progress in other jurisdictions (**Table 3.J**).

Individually, these structural reforms can enhance domestic and regional financial stability and improve the resolvability of institutions. It is possible, however, that taken together they may constrain somewhat the international flow of capital and liquidity. For example, if a cross-border banking group becomes distressed, protecting domestic creditors can potentially have a detrimental effect on the resolvability of the overall group. The FSB will report to the G20 in November its assessment of the cross-border consistency and global financial stability implications of structural banking reforms.

3.3 Diverse and resilient sources of market-based finance

Non-bank and market-based finance can contribute to financial stability if risks are managed appropriately.
Non-bank and market-based provision of finance can play a number of useful roles in the financial system. For example, they can offer companies alternatives to, and provide competition for, bank lending. They can also help distribute risk exposures among a wider group of counterparties. Resilience and liquidity of markets could also be improved by greater diversity of bank and non-bank participants.

Nevertheless, activities outside the regulated banking sector could potentially present systemic risk, underscoring the need for a mechanism to detect, monitor and manage such risks appropriately. In June, the FPC conducted a review of the regulatory perimeter, in particular of channels through which stress in selected parts of the non-bank financial system could affect wider UK financial stability. This review, and the statutory powers of the FPC in this area, are described in more detail in Section 5.4 and Box 9.

One source of risk to stability arises from procyclicality in the availability of finance. For example, securities financing markets play important roles in enabling firms' risk and collateral management, and supporting secondary market liquidity. But market participants may vary the terms at which they will lend in these markets according to the prevailing economic environment — for example, by demanding more collateral during times of stress. In extreme circumstances, such procyclical behaviour could tighten funding conditions across firms and prompt asset 'fire sales', thus undermining secondary market liquidity.

The FSB is expected to finalise its policy framework regarding collateral haircuts — the degree of overcollateralisation required by market participants — in securities financing and repo markets later this year. This is designed to alleviate procyclicality in the availability of such financing and the risks associated with non-bank entities using secured financing to obtain leverage and engage in maturity transformation outside the regulated banking sector.

Reforms in over-the-counter derivative markets are being implemented across jurisdictions...

In over-the-counter (OTC) derivative markets, reforms are progressing across jurisdictions to improve transparency in these markets, mitigate systemic risk, and protect against market abuse.

In the European Union, mandatory trade reporting began in February 2014 to help provide greater visibility to the authorities and participants on market activity. A process of mandating products for central clearing is expected to start later this year which will improve the management of counterparty risks.

In the United States, central clearing of certain OTC derivatives is already required. From February 2014, it became mandatory to trade certain OTC derivatives on swap execution facilities — trading systems or platforms in which multiple participants have the ability to execute or trade swaps.

Although this should improve transparency and help market participants find the most competitive prices, there are signs that non-US investors are avoiding trading on US swap execution facilities until their own jurisdictions' rules for trading facilities are introduced. Such behaviour could potentially fragment the market into non-US and US pools of liquidity, which could increase risks when shocks hit specific markets. This risk is likely to persist until jurisdictions recognise each other's regulatory regimes as equivalent, so non-US investors would not have to comply separately with US regulations.

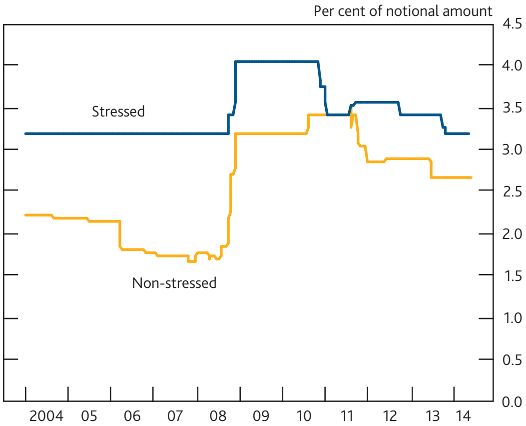
...and measures to reduce procyclicality of margining requirements have been proposed.

Following the finalisation of the BCBS-IOSCO framework for margin requirements for non-centrally cleared derivatives in September 2013, all financial firms and systemically important non-financial entities will be required to exchange initial and variation margin on non-centrally cleared contracts starting in December 2015. Although more comprehensive margining will reduce counterparty credit risk, market participants may at times need to sell assets or borrow unexpectedly to meet margin calls. This could amplify market volatility.

To alleviate this problem, policy proposals include measures to limit potential increases in margins without undermining risk coverage. For example, the EBA recently published a consultation paper on implementing these margining rules in

Chart 3.1 Margin requirements would be more stable if calculated using data from stressed periods

Illustrative effect of stressed calibration on margin requirements(a)

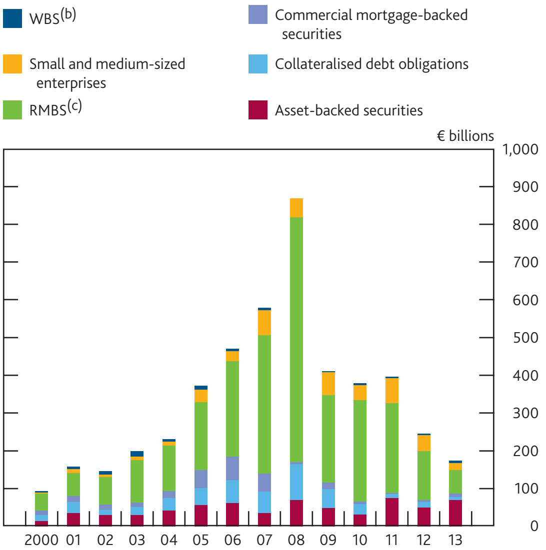


Sources: Bloomberg, Thomson Reuters Datastream and Bank calculations.

(a) Both lines show margin requirements for a ten-year euro interest rate swap, computed as 99th percentiles of ten-day mark-to-market losses over three years' worth of data. In the non-stressed case, the margin calculation is based only on the most recent historical data, whereas in the stressed case, it combines the recent historical data with data from the late 2008 and early 2009 stress period.

Chart 3.2 European securitisation has not recovered since the crisis

European securitisation issuance(a)



Sources: Association for Financial Markets in Europe, Securities Industry and Financial Market Association, Thomson Reuters Datastream and Bank calculations.

(a) Includes retained issuance.
(b) Whole business securitisation and public finance initiatives.
(c) Residential mortgage-backed securities and mixed mortgage-backed securities.

the European Union.(1) It proposed that, where initial margin calculations are based on internal models, stressed observations should constitute at least 25% of the data sample. This is aimed at limiting the scope for large procyclical increases in margin requirements, while still adequately covering counterparty credit risk. As shown in **Chart 3.1**, such measures can reduce the size and frequency of increases in margin requirements, though they are likely to result in higher average levels of margin requirements.

Work is under way to tackle other structural issues related to FPC priorities, such as the robustness of markets...

Financial markets may need a central bank backstop in order to prevent crises of confidence from threatening financial stability and the wider economy. As part of its effort to make markets more robust, the Bank announced in June that it will widen access to its liquidity facilities in the coming year to include the largest broker-dealers regulated in the United Kingdom and CCPs authorised to operate in UK markets. The Bank will also look into whether it should further develop its capacity to lend in currencies other than sterling.

In addition, the Government announced in June a joint review by HM Treasury, the Bank of England and the Financial Conduct Authority into the way wholesale financial markets operate. The objectives of this Fair and Effective Financial Markets Review are to reinforce confidence in the fairness and effectiveness of wholesale financial market activity conducted in the United Kingdom; and to influence the international debate on trading practices. The review will produce a substantive consultation document in the autumn and a final report by June 2015.(2)

...facilitating better functioning securitisation markets...

Well-functioning securitisation markets can also support market-based finance, and help banks access funding from a diverse range of investors. But securitisation issuance in Europe has not recovered since the financial crisis (**Chart 3.2**).

Impediments to a resumption of securitisation in Europe could include uncertainty over the final form of regulations relating to securitisation. Market participants may have concerns about the potential for stricter capital requirements (applied to banks and insurers) for asset-backed securities exposures, relative to exposures to other securities, such as covered bonds. Securitisation issuance might also be hampered by the difficulties that investors face in assessing and managing risks, including credit risk and risks associated with market liquidity. Moreover, potential issuers may be unable or unwilling to offer

(1) The EBA's consultation paper can be found at www.eba.europa.eu/documents/10180/655149/JC+CP+2014+03+%28CP+on+risk+mitigation+for+OTC+derivatives%29.pdf.
(2) The Terms of Reference of the review can be found at www.bankofengland.co.uk/publications/Documents/news/2014/tor120614.pdf.

sufficiently attractive spreads to investors given the availability of cheaper alternative sources of funding.

A recent joint Bank of England and ECB Discussion Paper outlined the case for a better functioning securitisation market in the European Union and suggested policy options to facilitate this.(1) The key recommendations include the development of high-level principles for 'qualifying securitisation' to promote securitisations where risks and pay-offs are easily understood; further standardisation of prospectus and investor reports; and, as discussed further below, the creation of credit registers.

…and improving the availability of data on commercial borrowers, which could support the provision of credit.
The Bank also recently published a Discussion Paper that sets out the potential benefits of improving the availability of credit data.(2) Such an improvement would support more informed lending decisions and enhance competition by removing barriers to entry and expansion. That in turn is likely to improve the availability and stability of credit, particularly for small and medium-sized enterprises. Access to more comprehensive and timely credit data would also greatly assist policymakers — for example, by informing stress tests of banks' resilience and assessments of the impact of macroprudential policy tools. The paper outlines several possible solutions, including some that involve credit reference agencies and the possible establishment of a Central Credit Register.

(1) Bank of England and European Central Bank (2014), 'The case for a better functioning securitisation market in the European Union: A Discussion Paper', available at www.bankofengland.co.uk/publications/Documents/news/2014/paper300514.pdf.
(2) Bank of England (2014), 'Should the availability of UK credit data be improved? A Discussion Paper', available at www.bankofengland.co.uk/publications/Documents/news/2014/dp300514.pdf.

Box 4
Effective resolution strategies

Introduction

One of the key strands of the G20's programme of fundamental reform of the global financial system[1] is the development of effective resolution strategies that ensure full resolvability of global systemically important financial institutions (G-SIFIs). Full resolvability means that G-SIFIs must be able to fail without causing excessive disruption to the financial system, without interruption to critical services provided to the real economy, and without cost to public funds. This box explains the role of resolution strategies in the process of achieving feasible and credible resolution, and the key elements that are necessary for resolution strategies to be effective.

Resolution strategies

The Key Attributes[2] require the development of firm-specific resolution strategies for G-SIFIs. These strategies should outline the authorities' preferred approach for resolving the failing firm in a way that protects the critical functions provided by the firm, financial stability, and public funds. Guidance on the development of effective resolution strategies has been published by the FSB.[3] Resolution strategies should be supported by detailed operational plans, setting out the specific actions that must be taken by the relevant authorities. The strategies need to be accompanied by detailed assessments of the resolvability of the firm, which identify any potential barriers to carrying out the strategy and the actions needed to remove those barriers.

As an example, the resolution strategy for a G-SIFI might involve the home resolution authority[4] conducting a bail-in at the group holding company. The bail-in would write down and/or convert to equity the claims of the holding company's shareholders and unsecured creditors. If losses were concentrated at a particular operating bank (a subsidiary of the holding company), this would be accompanied by a reduction of the holding company's claims on the operating bank, thereby serving to recapitalise that bank's balance sheet. Following this initial stabilisation of the group, the authorities would then have time to restructure the bank to address the causes of its failure while ensuring that critical services continue to be provided.

Alternatively, the preferred resolution strategy could involve authorities in the major jurisdictions in which the G-SIFI operates conducting local resolutions, such as bail-in at the relevant level, to ensure that the local entities can be stabilised (**Figure A**). Again this would be followed by any reorganisation that may be needed.

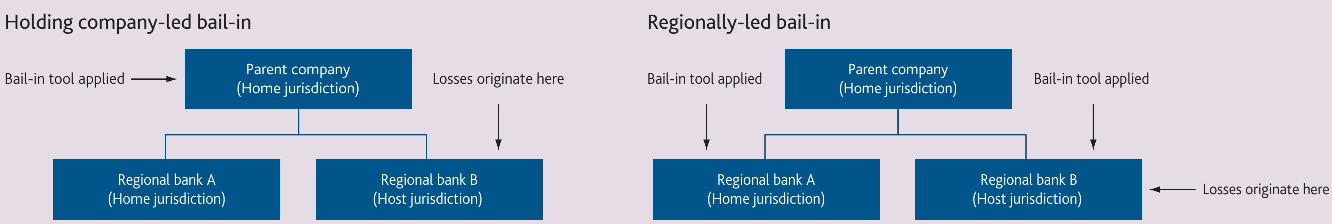
Fundamental elements to support strategies

In order for a resolution strategy to be feasible, the authorities in relevant jurisdictions must have the necessary powers and the capacity to apply them. In order for the strategy to be credible, use of these powers should not result in unacceptable adverse consequences for the financial system and the real economy. In its guidance, the FSB sets out the fundamental elements that must be in place to ensure that resolution strategies for a G-SIFI can be carried out, if the need should arise. These elements have been further specified by the Bank Recovery and Resolution Directive (BRRD). The elements include that:

- **The necessary powers are available to the relevant authorities.** These would include, for example, powers to transfer some or all of the shares, assets and liabilities of the failing firm to another institution or to a bridge bank, powers to conduct a bail-in of the uninsured, unsecured creditors at the relevant entity of the failing firm, and powers to wind down non-critical parts of the balance sheet — either directly or through transfer to an asset management vehicle. The resolution authority will also need to be able to require the resolved firm or a successor entity to adopt a new business plan, to overhaul the internal governance of the firm and in particular to remove senior management responsible for the firm's failure.

- **There is sufficient gone-concern loss-absorbing capacity (GLAC), in the appropriate form and at the right location in the group.** This is essential to achieve a recapitalisation or orderly wind-down of the firm (or part of the firm) without the use of public funds. The FSB guidance recognised that authorities may need to introduce requirements for firms to hold a sufficient amount of GLAC (Section 3.2), so that there are liabilities available to bail in at the point of entry into resolution.[5] The FSB will also need to consider whether GLAC should only be held by those who can most readily absorb losses — in the event that the firm fails — without generating adverse effects on

Figure A Stylised resolution strategies



financial stability and the real economy. And the choice of resolution strategy for the group will affect where GLAC needs to be located within the group, in order to achieve the desired result (**Figure A**).

- **There is sufficient legal certainty that resolution authorities' powers will be effective across borders.** Ultimately this would require that the statutory framework in each jurisdiction recognises the resolution actions of other jurisdictions in an appropriate way. This should include both recognition of the resolution actions (such as bail-in) of other jurisdictions, and that entry into resolution does not by itself give counterparties the right to terminate financial contracts they have entered into with the firm being resolved. Until the necessary statutory changes have been adopted in key home and host jurisdictions of G-SIFIs, amendments need to be made to contractual arrangements to achieve a similar effect.

  For example, clauses recognising resolution actions by the home resolution authority may need to be included in debt or other financial instruments subject to the law of a host jurisdiction, so that a bail-in will be enforceable across borders. Individual jurisdictions are seeking to ensure that the necessary contractual terms are included in newly issued instruments. Amendments to netting agreements will also be required, to prevent large-scale, uncoordinated close out of financial contracts (such as derivatives and repo transactions) entered into with the entity being resolved. Such close-outs are likely to be very disruptive, both for the firm itself — which would become exposed to the market and credit risks that these transactions were intended to protect against — and to the wider market. The FSB and its members are working with the International Swaps and Derivatives Association to develop a protocol that would amend master agreements in order to prevent entry into resolution from triggering close-out rights.

- **The operational and legal structure of the firm supports continuity of the firm's critical functions in resolution.** The firm in resolution, or the entity to which critical functions have been transferred, must be able to continue to rely on services provided by other entities in the group (such as shared service companies), third-party providers (such as outsourced service companies), and of course the financial market infrastructures in which it participates. The method for ensuring access to such services must be clear from the resolution strategy.

- **The amount and method of providing temporary liquidity to the firm in resolution**, or a successor that assumes the critical functions of the firm, **has been identified in the strategy**. The FSB is conducting further analysis of this issue.

- **There is agreement between the home and host authorities of a G-SIFI over the arrangements for co-operation and co-ordination** to implement the resolution strategy and operational plan. For example, the circumstances in which the home and relevant host authorities would be prepared to co-operate to carry out a group-wide resolution strategy should be clear, as well as what conditions might apply to ensure co-operation.

As well as the above elements, resolution strategies should be supported by clear arrangements for co-ordination between supervisory authorities and resolution authorities as the firm approaches failure, an understanding of the approvals and authorisations that will be required from different authorities during resolution, and fallback options in the event that the preferred resolution strategy cannot be carried out.

Outstanding priorities

The key outstanding priorities for the FSB to ensure that the necessary elements are in place to support effective resolution strategies are: agreement of a proposal for GLAC to be applied to G-SIBs, being developed for the G20 summit in Brisbane in November 2014; progress on the contractual and statutory approaches to ensuring that financial contracts are robust to the entry of a firm into resolution; and more detailed individual assessments of the resolvability of the group of G-SIFIs — including what barriers to resolution exist and how these can be removed — as part of the FSB's resolvability assessment process (RAP).

Given recent advances in the United Kingdom's statutory arrangements for resolution and the adoption of the BRRD, the above priorities are also core concerns for the United Kingdom.

(1) See G20 (2010), 'Seoul Summit Leaders' Declaration 11–12 November 2010', available at www.g20.utoronto.ca/2010/g20seoul.html.
(2) FSB (2011), 'Key attributes of effective resolution regimes for financial institutions' which sets out the core elements that the FSB considers to be necessary for an effective resolution regime, available at www.financialstabilityboard.org/publications/r_111104cc.pdf.
(3) See FSB (2013), 'Guidance on developing effective resolution strategies', available at www.financialstabilityboard.org/publications/r_130716b.pdf.
(4) The home resolution authority is the authority for the country in which the regulated financial institution is headquartered. The host authority is the resolution authority for a country where the firm operates, for example through a branch or subsidiary, but is headquartered elsewhere.
(5) The position of GLAC in the creditor hierarchy must also be assessed when considering the feasibility of any resolution strategy. The authorities will need to respect the normal creditor hierarchy during a resolution, including treating similarly situated creditors equally, except where the latter approach gives rise to financial stability concerns or is not technically feasible.