

Paul Fisher: The Financial Regulation Reform agenda – what has been achieved and how much is left to do?

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It is now 8 years since the start of the great financial crisis, and 7 years since the collapse of Lehman Brothers and AIG in the United States, followed by the bailing out of HBoS and RBS in the UK. The consequences were not limited to the financial sector – the economic recession that followed in much of the developed world was both deep and prolonged. This naturally created an imperative for changes to the regulation of the financial system to prevent the same thing happening again in future. Since I became Deputy Head of the Prudential Regulation Authority (the PRA) in June 2014, I have been asked a number of times to comment on how far the regulatory reform agenda has advanced. How close are we to ending “too big to fail”? How much more regulatory change can one expect?

In this lecture I will try to bring together in an accessible, structured way, summaries of the most important reform initiatives that are in train – at least those that affect prudential supervision – I will try to set out what they are aiming to achieve and how much further there is to go. I will then reflect on how the regulatory jigsaw fits together and the key questions that are being asked of it.

Alongside the statutory Financial Policy Committee in the Bank of England (the FPC) and the Financial Conduct Authority (the FCA), the PRA was brought into life on 1 April 2013, as part of a reshaping of the UK’s financial regulation landscape. The PRA is the prudential regulator for deposit takers (banks, building societies and credit unions), insurers and major investment firms. It started with two objectives: (i) promoting the safety and soundness of its authorised firms and (ii) specifically for insurers, to contribute to the securing of an appropriate degree of protection for those who are or may become policyholders. A year later, an additional *secondary* objective was added: to, so far as is reasonably possible, act in a way which facilitates effective competition in the markets for services provided by PRA-authorised persons in carrying on regulated activities.

The PRA’s strategy is to deliver a resilient financial sector by seeking: an appropriate quantity and quality of capital; effective risk management; robust business models and sound governance, including clear accountability of a firm’s management. The PRA does not seek to operate a zero-failure regime. But when failure does occur, this should be with limited disruption to the provision of core financial services and without spillovers to the wider financial sector.

One of the main strategic challenges in building the PRA was to establish a new approach to supervision. The key aspects of this are for the PRA to be judgement-based and forward looking, proportionate in its actions, and efficient in its allocation of resources. The PRA’s supervisory approaches for banking and insurance are summarised in published documents and updated regularly.

In the first 2 ½ years of the PRA’s life, much of the effort has been taken up with the implementation of the regulatory reform agenda which is the main topic of this lecture. That is likely to continue to be the case until at least 2019. As I will illustrate, the main planks of the regulatory platform have been put in place and it is difficult to conceive of there being space to add many additional reforms to what is already a comprehensive design – neither the regulators nor the regulated are likely to have much spare resource to support substantially more regulatory change over the next few years than currently in train.

The FPC is increasingly focussed on implementation of the reforms for banks and insurers and on understanding the risk from market-based finance. In response to its Remit set by the Chancellor, the Governor replied on behalf of the FPC in August that:

“The progress made in fixing the fault lines in the banking system means that the Committee is now more able to broaden its focus to potential risks emanating from and associated with non-bank activities. By balance-sheet size, nearly half of the current UK financial system consists of non-bank financial institutions. Capital markets are an increasingly important source of financing for the UK corporate sector and beyond, and globally almost all net finance growth since the crisis has been in market-based finance. A broad agenda encompassing non-banks is necessary to ensure that any potential systemic risks from market-based finance are identified and also that risks do not migrate from one part of the financial system to another.”

“The Committee will (also) review a number of activities in the non-bank financial system over the next year, to consider potential systemic risks posed by: the investment activities of open-ended investment funds and hedge funds; securities financing transactions; the non-traditional, non-insurance and investment activities of insurance companies; and derivative transactions. These reviews will complement the Committee’s annual stocktake of risks outside the core banking system.”

In the rest of this lecture I am going to focus on deposit takers and, to a lesser extent, insurance firms, which are the sectors most subject to regulatory reform to date. I should note that insurance represents a very large part of the PRA’s activities – at the end of the financial year 2014/15 the PRA had around 550 front-line supervisors and risk specialists working on various deposit taking firms compared with over 300 on insurance firms.

Most of the regulatory reforms that the PRA are implementing have not actually originated in the PRA itself. Rather, they have arisen from a variety of external sources. Some are UK initiatives: for example, the new Senior Managers Regime and Senior Insurance Managers Regime implement the recommendations of the Parliamentary Commission on Banking Standards (PCBS) and the structural reform of the major banks (ring-fencing) emerged from the Independent Commission on Banking (ICB, also known as the “Vickers Commission”).

A number of key reforms are European initiatives such as the Solvency II regime for insurers. The banking capital regime, CRDIV, is a European implementation of agreements made in the global Basel Committee on Banking Supervision (BCBS). The development of international insurance standards is being driven by the Financial Stability Board (FSB) via the International Association of Insurance Supervisors (IAIS).

The UK authorities, including the Bank of England and PRA, play a full part in negotiating these reforms, so I wouldn’t claim that they are entirely external, even though there are usually aspects of the final agreements which represent the middle ground in negotiations. The main point I want to make here is that, even though there are international agreements arising out of the alphabet soup of committees, most of these initiatives require detailed interpretation, rule-making and implementation by the PRA, even after transposition into EU or UK law. Since the PRA was created in April 2013 (to 30 September 2015), I count that the PRA has issued 70 consultation papers, 82 supervisory statements or updates thereof and 44 policy statements setting out final rules.

The UK financial regulatory system is not solely about the PRA of course. Those firms that are authorised and supervised by the PRA are the banks, building societies, credit unions and major investment firms. Those firms are also regulated by the FCA for conduct matters. The remaining firms and persons within the regulatory perimeter of the financial system are then solo regulated by the FCA for prudential matters as well as conduct. The PRA and FCA arrangement is an example of the modern “twin peaks” model for financial regulation, pioneered in Australia in 1998, which separates out the prudential regulator – which covers the larger, more systemic firms – from the conduct regulator. That gives the latter a very long tail of small firms and financial advisors within its net. For comparison, the PRA authorises

some 1,700 firms and groups and has a budget for some 1,200 staff, plus support services from the wider Bank of England. The FCA regulates over 73,000 firms and employs over 3,000 staff.

The FCA has a strategic objective to ensure that the relevant markets for financial services function well. Its formal operational objectives are to secure an appropriate degree of protection for consumers; to protect and enhance the integrity of the UK financial system; and to promote effective competition in the interests of consumers in relevant markets.

It is obviously important that the FCA and PRA work closely together even though they have separate, differing objectives. Perhaps the most crucial aspects joining us are (i) that all PRA-authorized firms are dual regulated by the FCA as well for conduct purposes (ii) that the FCA has a primary objective to promote effective competition and the PRA has a secondary objective to facilitate it, and (iii) the FCA and PRA depend on shared data to carry out their roles.

The close co-operation of the PRA and FCA is built into the system in part through cross membership of boards. The CEO of the FCA sits on the PRA Board (and is an FPC member ex officio). The CEO of the PRA sits on the FCA Board (and is also an FPC member).

The PRA has a Board because it is currently constituted as a formal subsidiary of the Bank of England. It has been proposed that this arrangement changes so that the PRA becomes an authority within the Bank, and the PRA Board would become a new Prudential Regulation Committee. These proposals are subject to public consultation and will be debated in Parliament before being finalised. These changes should have no impact on the reform agenda and so I won't pursue them further in this lecture.

The PRA Board is independently responsible for delivering the PRA's statutory objectives. It does this by making policies and rules, supervising authorised firms, giving directions, issuing guidance and carrying out other legislative functions. In practice the Board is the senior supervisory committee in the PRA, but delegates some of its functions to the PRA Chief Executive who in turn delegates to the management and staff. In 2014/15 the Board met physically 32 times and had one additional teleconference.

That's enough scene-setting. Let's get on to the reforms themselves.

Capital: banks

Arguably the single most important objective of a prudential regulator is to make sure that firms have an appropriate level of capital. The objective is two-fold. First, there must be sufficient capital to absorb the losses that a firm might make, even under relatively pronounced stress. Second, after the stress, there should be sufficient capital left such that the firm can either (a) carry on its critical economic functions, with customers and market counterparties believing it remains safe and sound, enabling market access to funding and capital or (b) be safely wound up.

It was evident during the financial crisis that the point at which a financial firm is no longer trusted by customers or counterparties can come before it runs out of capital completely or even approaches that level. Also, once a firm has run into trouble, in part because it is in trouble and/or markets are dysfunctional, the marketable value of its assets are often found to be substantially less than valued in accounts – so losses are usually greater than originally expected, once a stress has occurred.

Prior to the financial crisis, firms appeared to hold substantial capital to meet their then regulatory requirements, but in many cases this was illusory – the rules on what could count as capital had been weakened over time and much of it was not properly or easily loss-absorbing in the event. So the quality of capital is also of interest. There is also a challenge of what the minimum level of acceptable capital is, and how to meet it, post-stress. Suppose X is the appropriate level of capital pre-stress, then substantial losses will always leave a firm

with significantly less than X. And raising extra capital in the market in those circumstances is not always feasible, nor can a balance sheet be quickly run down to reduce capital requirements. So how can a firm meet the ongoing requirements for the normal level of capital after a stress event? The answer is usually to start with a buffer above the minimum acceptable and/or to have some way of creating extra capital in a crisis. This latter solution could be implemented in part by restricting distributions such as dividend payments or staff bonuses, but it is also where the concept arises of having eligible debt that can be “bailed in”, whereby some debt instruments can become loss-absorbing capital under stress, to re-capitalise the firm.

For banks, building societies and investment firms the main capital reforms come under the umbrella of CRDIV which is the EU implementation of the internationally agreed capital requirements, as determined by the Basel Committee for Banking Supervision (BCBS). The Basel agreements are ultimately agreed and signed off by a meeting of central bank governors and heads of supervisory authorities. CRDIV is made up of the fourth Capital Requirements Directive (2013) which must be implemented through national law; and the Capital Requirements Regulation (2013), which is directly applicable to firms across the EU.

Amongst other things, CRDIV enshrines enhanced requirements for the quality and quantity of capital and gives the basis for new liquidity and leverage requirements; new rules for counterparty risk; and new macroprudential standards including a countercyclical capital buffer and capital buffers for systemically important institutions. In general, it is fair to say that the implication of CRDIV is that banks will substantially strengthen capital standards relative to pre-crisis. That will mean that the cost of required capital to support banking activity could be higher than it was previously. However, this is not certain. By making firms safer, it is possible that the required risk premia in bank capital and funding instruments will be lower, and hence the effect on the overall cost of funding is uncertain.

In addition CRDIV also makes changes to rules on corporate governance, including remuneration, and introduces standardised EU regulatory reporting. These reporting requirements will specify the information firms must report to supervisors in areas such as own funds, large exposures and financial information. CRDIV will take until 2019 to be fully implemented.

In addition to CRDIV, there are a number of other reviews and developments affecting the banking capital framework. The PRA has been undertaking a review of its approach and application of Pillar 2A requirements to ensure consistency of application across firms. That will be complete in 2016H1. The BCBS is also continuing its work including reviews of the capital held against the trading book, sovereign risk, and securitisation, and more generally reviewing the use of models and Pillar III disclosures.

Leverage

The capital requirements for a bank are generally calculated by first weighting together the assets of a firm, reflecting the underlying risks of each type of asset. Hence the key metric is the capital held relative to “risk weighted assets” or RWAs. Whilst the general approach of being risk sensitive is widely accepted, it does raise issues around consistency. Different firms can assess risk by different methods and models, using different data sets or applying different judgements: assessments undertaken by the BCBS¹ have shown firms can generate quite different RWA calculations for an identical hypothetical portfolio. And firms may choose to optimise both their choice of assets and the weights attached to them to minimise capital requirements. It has been shown that differences in capital ratios calculated on an RWA basis have historically had little or no correlation with whether firms were able to survive a

¹ Basel Committee on Banking Supervision July, 2013. “RCAP – Analysis of risk-weighted assets for credit risk in the banking book”.

stress². A leverage ratio offers an alternative approach, which is not risk sensitive but simply calculates total capital in relation to total assets. The degree of leverage has historically been a much better indicator of likely firm failure (although we can't be sure that correlation will survive if firms start to manage to a constraint!).

As alternatives, the RWA and leverage approaches would generate different incentives for firms to be capital efficient. Under RWAs the incentive can be to expand the balance sheet with assets that carry low risk weights. Under a leverage ratio, the incentive can be to limit balance sheet size but choose riskier assets. Ideally, the two measures would work in tandem to ensure sufficient capital to support both balance sheet size and risk taking.

Even a simple leverage ratio requires some agreement as to what to include in each component (e.g. how to value derivatives for this purpose) and the details of an internationally agreed measure are still being negotiated: they are due to be decided in 2017. A harmonised EU-wide measure will then be implemented.

In advance of that, the FPC in the UK have already decided on a requirement for major UK banks, and on 6 April 2015, the Government gave the FPC the power to set a leverage ratio by direction to the PRA. The initial ratio of capital to unweighted assets was chosen by the FPC to complement the risk-weighted capital framework and to be in line with the level endorsed by the BCBS. The precise requirements were calculated to be consistent with a minimum average risk weight of 35%. This gives a minimum leverage ratio of 3%, with add-ons for individual firms to reflect any systemic risk and counter-cyclical buffer requirements, at 35% of the relevant buffer rates. Details on what capital can be used to meet these requirements have also been specified. The FPC plan to extend the leverage ratio to all the remaining authorised banks, building societies and investment firms from 2018, subject to the outcome of the anticipated 2017 international agreement.

Stress testing

It can be difficult to set capital requirements to meet possible losses, without specifying the likely extent of future stress. Stress testing addresses this by a process of modelling losses under a range of macroeconomic scenarios, to ensure that a firm holds sufficient capital ex ante to withstand shocks of a specified degree of severity. An example might be to assume a recession, with an attendant housing market fall which would stress a portfolio of mortgage loans. In 2014 the FPC, supported by the PRA, undertook and published simultaneous, standardised stress tests for the major UK banks for the first time, following a partial exercise in 2013.³

Meeting minimum prudential requirements after a stress may not be sufficient to ensure financial stability. If a financial firm needs to rebuild its capital ratios then it can do so either by raising more capital or by reducing its assets. In the event of an economy wide stress, this latter approach could amplify the cycle if, say, all banks responded to lower capital by reducing their lending. The stress tests are therefore seeking to ensure that the banks have sufficient capital to at least maintain their levels of lending to the real economy and the stress tests are calibrated assuming that lending is not reduced beyond that which is driven by reductions in demand.

The UK is not the only country with stress testing as part of its supervision tool kit: the US undertakes regular public stress tests of the major banks operating there and the European Banking Authority has also orchestrated stress tests across the major European banks. The UK supervisors had previously undertaken such tests, but not necessarily the same stress

² Bank of England October, 2014. "The Financial Policy Committee's Review of the Leverage Ratio" and the references cited therein.

³ See the Record of the March 2013 FPC meeting.

for each firm, and not at the same time and not as publicly. Further details on the 2015 concurrent stress test can be found on the Bank's website.⁴

Concurrent stress testing for the major banks is an established part of the UK supervisory process, and is also used by smaller banks to perform their own assessment of risks. The stress testing of the major banks is planned to be a regular annual exercise, as it is in the US, although the strategy and details will likely continue to evolve.

Capital: Insurers

Assessing the minimum level of capital for insurers can be an even trickier business than for banks. Any single regime is complicated in part by the three different basic types of insurer: general insurers, life insurers – who in fact often sell what are essentially savings products under an insurance wrapper – and re-insurers. The UK has had a successful capital regime in place for all its authorised firms for around 10 years known as ICAS (Individual Capital Adequacy Standards). Under ICAS, UK insurance firms coped reasonably well during the financial crisis.

The most uncertain risks for general insurers tend to be in the policies they have written and therefore on the liability side of the balance sheet, not the asset side. On the other hand, life insurers tend to be more exposed to market (including credit spread) risk on their assets. And although they are less likely than a bank to have a liquidity mismatch, the risk management challenge for an insurer is to try to match the maturity between assets and liabilities (and hence manage their rate of return). That is particularly necessary for life insurers whose liabilities tend to extend well into the future i.e. tens of years for many products.

From 1 January 2016 a new European-wide capital standard will come into force under the Solvency II directive. Solvency II is largely maximum harmonising and should establish a more level playing field between European insurers. In part it embodies some of the basic principles of the UK's ICAS regime, being based on holding sufficient capital to meet an event of such severity that might happen only once in every 200 years. In other aspects it is different, most noticeably in that the UK has a "gone concern" regime – i.e. under ICAS firms hold sufficient capital to run off their liabilities. Solvency II is to be a "going concern" regime – firms have to hold an additional risk margin to allow their business to be transferred to a surviving entity. Similar to banking, insurance firms can choose to use a standard formula or an internal model approach (or a partial model). But it seems to me personally, that both are more complex than their equivalent concepts in banking.

Most insurance firms covered by Solvency II in the UK and elsewhere will be on the standard formula. But, relative to the rest of Europe, the UK has more insurers applying this autumn for approval of internal models for all or part of their capital assessment. Another wave will be applying in the following year or so, potentially giving the UK around 50 insurers using an internal model approach, compared with a handful in most other European countries, even the larger ones. The internal models are complicated, covering all aspects of a firm's risks and setting capital to prescribed rules. The high number of applications to use models in the UK in part reflects the size and complexity of insurance businesses in the UK market, which includes Lloyd's and the London market. The PRA considers the standardised approach is appropriate for the large majority of UK firms. However, for firms with more complex or unusual risk profiles, the standard formula will not be appropriate and an internal model will be needed.

⁴ Bank of England, 30 March, 2015. "Stress testing the UK banking system: key elements of the 2015 stress test".

Although Solvency II is a European directive, with the vast majority of the technical rules in place, a review is planned of the standard elements in 2018, as is typical with many directives post-implementation.

In addition to establishing a European-wide regime, work is also underway to try and harmonise at least some elements of a global capital standard for insurers⁵. A simple Basic Capital Requirement (BCR) for Global Systemically Important Insurers (GSIs) has already been agreed. The UK currently has two GSIs – Prudential and Aviva – out of the 9 globally. Work is now ongoing on a Higher Loss Absorbency (HLA) Standard which will reflect the degree of systemic importance of the firm/group. The plan is that all GSIs should meet capital requirements based on the BCR plus HLA by 2019. The third step in the international plan is to develop a risk-based global International Capital Standard which would apply to all Internationally Active Insurance Groups (IAIGs). That is likely to be challenging, not least because of the different accounting principles used in different jurisdictions, but that is the long-term direction of travel. Work is also ongoing in the IAIS to identify the assessment approach which most accurately identifies whether or not reinsurers pose systemic risk.

The final element on insurers is that stress testing is also being applied to the sector. Last year the UK participated in EU-wide tests carried out by the European Insurance and Occupational Pensions Authority (EIOPA), conducted for the first time on a Solvency II basis. This exercise focussed on the overall impact of an adverse market scenario and a low yield scenario. The tests covered 60 groups and 107 companies from across Europe, including the larger UK firms and from some non-EU countries⁶. In 2015/16 the PRA is currently conducting a stress test on its own authorised General Insurers, covering a range of stresses such as natural catastrophes, terrorism and cyber-attack.

Liquidity

CRDIV covers liquidity requirements as well as capital requirements. The two are quite different in nature and liquidity is, in my personal view, more controversial. Most firms – including banks – if they fail will actually do so when they run out of cash, before they become insolvent. And banks are structurally vulnerable to a liquidity run because their assets, such as mortgages or company loans, are longer maturity than their liabilities, such as corporate or retail deposits. One reason why liquidity requirements can be more controversial is because of the business impact. Capital, in whatever form – whether equity or bonds that could be converted into equity – is actually a source of funding and sits on the liabilities side of the balance sheet. Capital may be more expensive than debt for tax reasons, but both provide funding to be used.

Liquidity requirements usually take the form of a specified minimum holding of liquid assets. They need to be funded by liabilities and may have capital requirements to hold against them – they therefore compete directly with other, less liquid assets on the balance sheet such as loans to the real economy. So holding more liquid assets will usually squeeze out less liquid lending. And assets which are liquid in normal times (i.e. can be easily sold or lent against cash), may become sharply less liquid in a financial crisis. These concerns give one reason why a central bank is usually willing to supply extra liquidity to the banking system in a crisis.

The particular forms of liquidity requirement being introduced by CRDIV are the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).

The LCR has been agreed and will be implemented on 1 October 2015 in the EU. It basically requires banks to hold liquid assets to cover one month of projected outflows, assuming that markets are closed to the raising of new funding. As you might expect, a lot of international

⁵ See IAIS website for more details.

⁶ See EIOPA website for more details.

negotiating time was taken up with deciding what to count as liquid assets! The liquidity requirements will be increased over time until the full requirement is in operation on by January 2019 at the latest.

The NSFR is a somewhat different calculation designed to incentivise banks to hold longer-maturity funding: different liabilities are weighted together according to estimated maturity (reflecting, among other things, their degree of stickiness) and a minimum standard is applied. The NSFR was agreed internationally in the BCBS and announced in October 2014. All jurisdictions have committed to implement by January 2018. The EU is to make legislative proposals based on a report by the European Banking Authority (EBA) due in December 2015.

Recovery and resolution, MREL, total loss absorbing capacity

As described above, having sufficient capital to meet both anticipated and unexpected losses may still not be enough for a firm to continue trading. Part of the reform agenda is to put in place requirements for greater loss absorbing capacity such that, after a stress, a firm can be recapitalised sufficiently to continue to supply its critical economic functions. To deliver this, the firm's management team needs to have put together a credible plan for recovery, to return the firm to a stable footing. And if even that is not enough, then we want firms to be easily wound down by the authorities i.e. for firms to be able to fail in an orderly fashion, with as close as possible a continuing provision of financial services, minimal spillovers to other firms and no public money involved. That process of managing the failure of a financial firm is what we call resolution.

There are judgements to be made here about how much to rely on these different approaches. If a firm is easily resolvable as described, then the authorities may care less about the potential for recovery. That could be a matter left for the shareholders. The more difficult a resolution would be, the more interest the authorities have in removing any barriers to resolvability in advance.

Failure is usually more problematic for banks than for other commercial firms. When a bank is known to be in trouble, its customers may withdraw funds quickly, creating a liquidity run that might spillover to similar institutions. That places an emphasis on speed of action. In 2009 the UK government introduced permanent legislation that enables banks to be resolved by the authorities, and designated the Bank of England as the UK resolution authority. For the EU as a whole, the Banking Recovery and Resolution Directive (BRRD) took effect at the start of 2015, and brings European legislation on recovery and resolution into line with the FSB's international standards. It requires there to be a resolution authority in every EU country and, amongst other things, specifies how decisions are made to put banks into resolution, how resolutions may be conducted, and what tools should be available to resolution authorities. But there is not yet a special resolution process for insurers. That remains on the wish-list for now.

Effective resolution can be greatly enhanced if the authorities have prepared for the event, with the assistance of the firms concerned. The larger and more complex a firm, the more complex and challenging such planning is likely to be. For large international groups, typically the most complex, the most important decision is whether resolution is going to be addressed at the group level, by the home resolution authority (Single Point of Entry – SPE) or whether each part of the group is looked at separately, usually by the host resolution authority (Multiple Point of Entry – MPE). The choice between SPE and MPE will have implications for resolution planning, including steps that the firm may need to take to be resolved under that strategy – for example in which entities the capital will be held.

The BRRD requires that all banking firms should have recovery plans, and that resolution authorities should develop resolution plans for all firms, based on assessments of their resolvability. The resolution planning that the UK has already carried out has identified some

common barriers to resolvability, such as a lack of loss-absorbing capacity in the right legal entities, that need to be addressed.

The BRRD also establishes that resolution authorities should determine a minimum requirement for own funds and eligible liabilities (MREL) that will be available to absorb losses and form new capital, if the authorities need to carry out a bail-in. The BRRD demands that the MREL requirement will have to be met at all times. It is being introduced from January 2016, but will be phased in over four years (i.e. until 2020). The precise rules for setting MREL in the UK firm by firm are currently being formulated.

Separately, in November 2014, the FSB announced an international agreement on the minimum amount of Total Loss Absorbing Capital (TLAC) to be held, covering all globally significant banks. The motivation and concept of TLAC are very similar to MREL. As the details of the TLAC proposals are finalised, the two should become consistent, with MREL being the mechanism by which European resolution authorities ensure that their Global Systemically Important Banks (GSIBs) all meet the TLAC standards⁷.

More generally, as the PRA develops its detailed rules to implement regulatory reforms, resolvability is a key consideration at each stage. In many cases the precise formulation of a rule will reflect the effects it has on the ease of resolvability. A particular example of this is the rules on ring-fencing which we will now come on to.

Structural reform

Structural reform is the general term for the changes being pursued to implement ring-fencing as originally proposed by the Independent Commission on Banking in (2011). What structural reform intends to achieve is basically to separate out and “ring-fence” into different legal entities, the activities of retail banking from the activities of investment banking. The distinction is set with some flexibility to reflect different business models: retail deposits and payments must be inside the ring fence, and any active trading units must be outside, whereas corporate lending, for example, could be in either. The rules will only apply to banks with core deposits over £25bn (broadly those from individuals and small businesses). Legislation to enable the IBC proposals was passed in 2013⁸.

The benefits from separation are several. Retail deposits tend to be a cheap source of funding. In part that is because retail deposits are protected up to a limit by statutory guarantee – so they tend to be safe, and sticky. Banks that have a range of activities would have an interest in using cheap, protected retail funding to engage in its most risky activities – for which direct funding is likely to be much more expensive. Furthermore, historically, banks with large retail activities have also been viewed by credit rating agencies to have a large degree of implicit government support thus making their public debt issuance cheaper as well. The funding advantage from being seen to be “too big to fail” has been estimated from a range of studies to be equivalent to a subsidy on the scale of hundreds of billions of dollars globally,⁹ encouraging and enabling greater risk-taking by firms than true costs of funding would justify. Separation also means that the structure of firms is simplified and hence they would be easier to resolve if necessary.

The EU more generally is still deciding on its precise approach to structural reform, although the Liikanen report (2012) took a slightly different approach from the IBC. Liikanen made a range of recommendations, but these did not go in quite the same direction as the IBC

⁷ See speech by Andrew Gracie “TLAC and MREL: From design to implementation”, 17 July 2015, Bank of England website.

⁸ Financial Services (Banking Reform) Act, 2013.

⁹ For example, see the range of estimates in the IMF Global Financial Stability Report, April 2014, Chapter 3.

proposals in that they recommended ring-fencing of the high risk activities within a group, whereas the IBC focussed on ring-fencing the retail deposit and payments activities. The anticipated outcome is that whatever is finally decided for the EU should not require UK legislation to change.

Work on implementing structural reform is underway: initial plans were submitted by the banks at the start of 2015, have been reviewed by the PRA, and are being further developed. Structural reform must be fully implemented by the affected banks by 1 January 2019.

Other

This lecture wouldn't be complete without addressing issues around the behaviour of firms, boards and individuals.

Along with capital and liquidity, firm governance is one of the most crucial aspects for a regulator. In particular how boards are constituted and how they operate. It has long been recognised that most firm failures can be traced back to governance issues. The regulatory approach to governance needs to be sensitive to avoid becoming "shadow management": firms must be allowed to manage themselves, and indeed to make business judgements that mean taking calculated risk and hence might go wrong. The regulator's interventions in board affairs need to be particularly measured and proportionate. The PRA recently set out its general expectations in relation to firm governance in a recent consultation paper¹⁰.

In addition to structural governance issues, the conduct of individuals has also raised considerable concern in the past few years. These matters were the subject of the Parliamentary Commission on Banking Standards (PCBS) which reported in June 2013¹¹. The recommendations of that report have been taken forward by the FCA and the PRA and new regimes will come into force in March 2016. For Banks there will be a Senior Managers Regime (SMR) and for insurers a Senior Insurance Managers Regime (SIMR). These new regimes require firms to allocate certain responsibilities explicitly across the senior management and senior non-executives in a firm. They are targeted at the most senior decision makers only and for the SMR only, make it clear that there is an implicit assumption of responsibility for those to whom the firm has allocated it. The intent of the regimes is to make accountability much clearer in advance, so that individuals take more personal responsibility. That in itself should improve the conduct of firms. Where it does not, it should be much easier to hold individuals to account than it has been hitherto.

Alongside the SMR and SIMR, there are also new remuneration codes. CRDIV sets a cap on the proportion of variable pay for bankers. There is a risk that this will simply increase the fixed element of pay, making it harder to adjust pay in the light of performance. The UK's approach nevertheless has to reflect those rules. In addition, the UK has provided for firms to defer elements of pay for up to 7 years – and a further 3 years if conduct investigations are still ongoing. Firms will be able to apply "malus" to variable pay which has been deferred and not yet vested. So if misconduct is discovered or risk-taking turns out to have negative medium-term consequences, the firm can subsequently withhold those deferred elements of remuneration. The UK code also provides for the possibility of clawback of pay that has been vested.

There has also been misconduct discovered in markets that were not previously subject to regulation, such in the setting of LIBOR or behaviour around foreign exchange fixes. The setting of major financial market benchmarks has now been brought within the regulatory perimeter. And the Bank of England, FCA and HMT conducted the Fair and Effective

¹⁰ PRA CP18/15, May 2015. Corporate Governance: Board Responsibilities'.

¹¹ Parliamentary Commission on Banking Standards, June 2013. "Changing Banking for Good".

Markets Review¹² which has made a series of recommendations to improve conduct and the functioning of markets going forward. The next step will be an Open Forum to be held at the Guildhall in November which will bring together policymakers, financial market participants and users, academics, media representatives and wider society to map a positive future for financial markets.

Conclusions

I hope the above gives some idea of the comprehensive set of regulatory reforms that have either been applied or are in train. They cover policies to increase the quantity and quality of capital, to fix appropriate liquidity requirements, to manage systemic risk, move closer to ending too big to fail; and to establish clear management and personal accountability. The chart in Annex 2 shows these initiatives and gives a broad indication of the timelines out to the start of 2019. This is a massive change agenda, absorbing a lot of resources at regulators around the globe, especially in the UK, and many times more resources in the regulated firms themselves. What are the consequences? I frequently get asked questions on this so let me try and give my – strictly personal – answers to the most common questions.

Has the reform agenda been completed? I think most of the major planks are now in place, at least in design, but many have yet to be implemented and there are still details of components being debated; not least the ongoing reviews of elements of the capital framework by the BCBS. It will take at least until 2019 until most of the measures outlined in this lecture are broadly in force, with some taking longer. And no system should be static, since regulation will need to evolve alongside the business.

Will these reforms prevent future financial crises? Almost certainly not. Financial crises have been around for thousands of years (we know that the Romans had them for example) and can be caused by all sorts of unexpected, unpredictable events, including natural catastrophes. We have to assume there will be crises in future. But what the reforms should have done is made the financial system, and its component parts, much more resilient in the face of shocks. Fewer firms should fail, fewer still in a disorderly fashion. Financial instability is therefore less likely and hence there should be greater continuity of financial services. And in consequence of a more resilient financial sector, the wider economy should be able to better withstand shocks with less detrimental effects on unemployment, output or price changes.

Has too big to fail been ended? Not yet. The policies being put in place should, however, take us a considerable way towards that objective. It will certainly be a lot easier to handle a major financial firm failure once they are in force. It should be much less likely that public money is required to underpin financial stability in future.

Has there been over regulation? The honest answer is: quite possibly, but no one can be sure. This question has many aspects – have there been some reforms that are unnecessary given others? For example as we move closer to ending too big to fail, and with standardised compensation schemes for retail depositors, one could reasonably ask why we need the same degree of regulation at all? Has the cost of providing credit to the economy been increased? Will the reforms restrict competition and innovation? Have capital markets been rendered dysfunctional? It is possible that there are degrees to which all these questions might have positive answers. But against that, the consequences of the Great Financial Crisis were so large, so negative for millions of people around the globe in terms of unemployment and reduced incomes, that more regulation, in every direction has been a necessary response. Over time one may learn where the reforms can be eased, where they

¹² Bank of England/FCA/HMT, June 2015. “Fair and Effective Markets Review”.

need to be tightened, or whether other policies need to be introduced to offset any unwanted side effects. Let me re-state what has been said before – the authorities generally, including regulators, do not want the stability of the graveyard. We want successful, profitable, privately owned firms operating in the best interests of the global economy to support sustainable growth. The regulation of the financial services sector has to be aligned with that. But just as we don't want growth generated by firms causing excess pollution, nor do we want it sustained by financial firms that take excessive risks with other people's money.

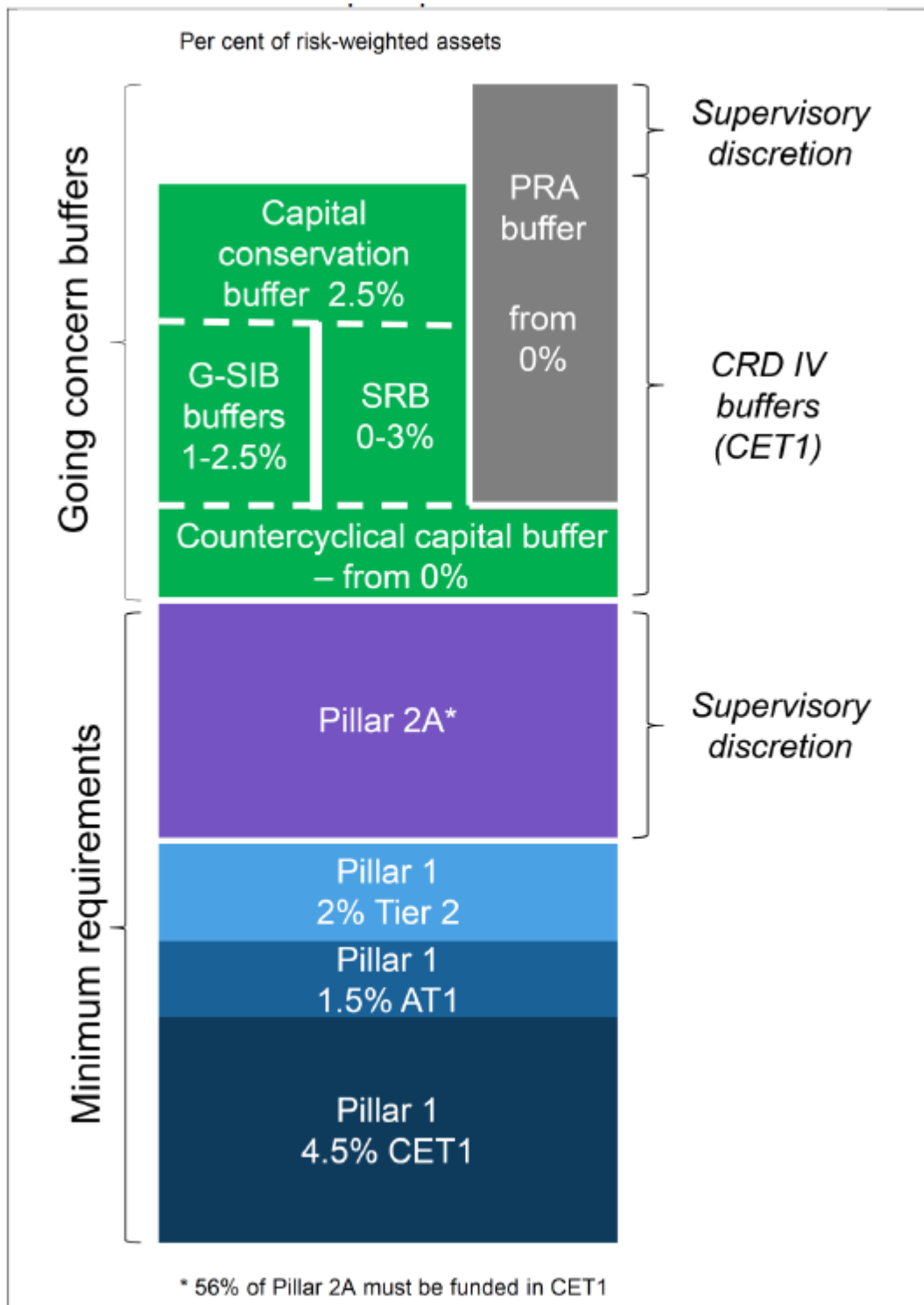
We probably won't know for sure just how effective the new regime is until we reach another crisis. Meanwhile we need to guard against the reforms being rolled back as a result of a period without crisis. Let's complete the programme, give it time to work, be supportive of growth wherever we can, and be open minded about change. But let's also be cautious about the siren voices of financial self-interest that were partly responsible for luring us on the rocks in the first place.

Box: The Capital Stack

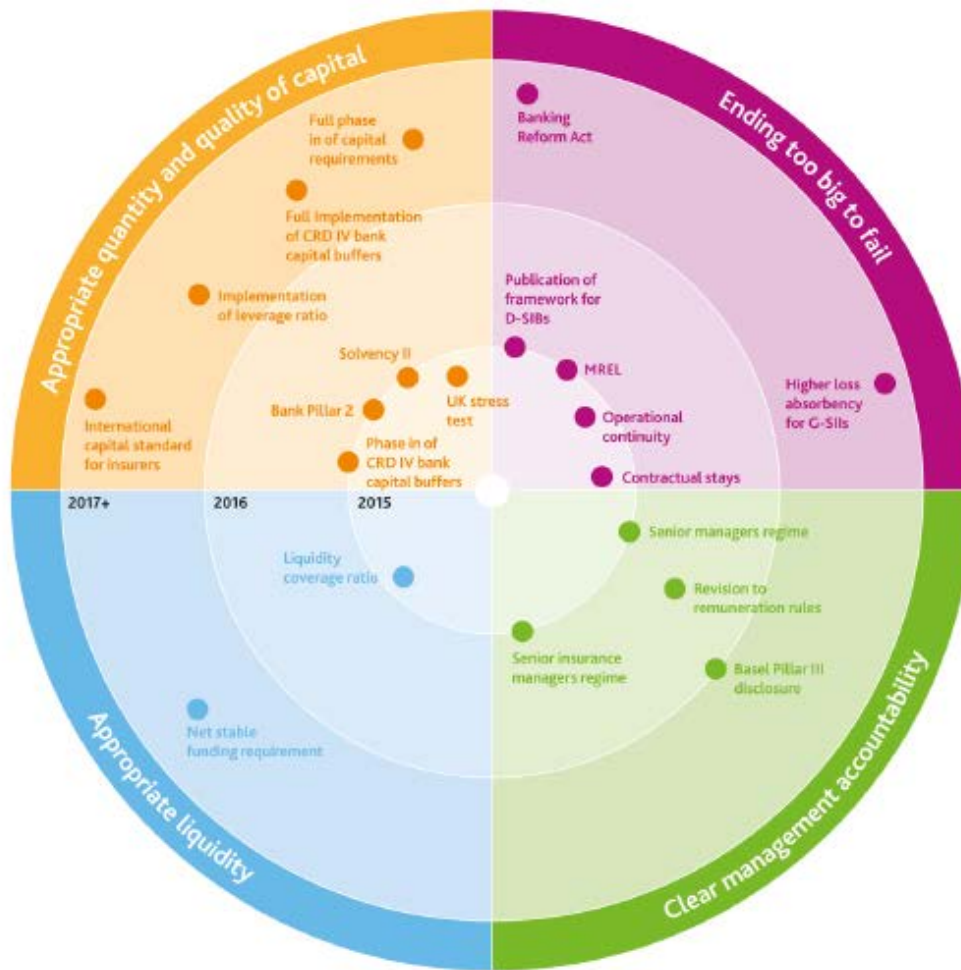
The capital requirements for a bank are generally calculated by first weighting together the assets of a firm to reflect the underlying risks of each type of asset. Hence the key metric is the capital held relative to 'risk weighted assets' or RWAs. Under CRDIV, the requirements are built up from the following components (see Annex 1 for a chart showing how the capital stack fits together):

- Pillar 1 is the internationally agreed standard for requirements to protect against credit, market and operational risk. The new regime will require banks to hold a minimum of Common Equity Tier 1 (CET1) capital equivalent to 4.5% of risk weighted assets (RWAs); a minimum of Tier 1 capital equivalent to 6% of RWAs; and a minimum total capital equivalent to 8% of RWAs. Pillar 1 requirements were fully met in the UK by January 2015, with some temporary grandfathering of ineligible instruments.
- Pillar 2A requirements vary by firm and are set by supervisory authorities to cover any risks omitted or only partially covered under Pillar 1 (e.g. risks related to pension scheme deficits). Pillar 1 plus Pillar 2A represents a firm's Individual Capital Guidance (ICG) – which is what the PRA regards as the minimum amount of capital that a bank should maintain at all times.
- The capital 'buffers' that may be drawn down under stress. Under CRDIV there will be 3 such buffers which are additive:
 - A capital conservation buffer equivalent to 2.5% RWAs, for all banks to be phased in from January 2016.
 - A buffer depending on the global and/or domestic systemic importance of the firm. This will apply to G-SIB groups, UK ring-fenced banks or large building societies. From January 2016 the G-SIB buffers will range 0-2.5%, but with scope to go higher, and from 2019 the wider systemic risk buffer will range up to 3.0%. If the two differ, the higher number will apply.
 - A variable counter-cyclical buffer of up to 2.5% (or more⁽¹⁾) of RWAs, set by nominated authorities (the FPC in the UK). The intention is that this capital buffer would be increased when financial conditions were strong, to build resilience and then decreased if conditions turned into stress. The rate is currently set at 0%
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- In addition the PRA can set a further buffer to cover forward-looking risks, if the combined buffers are not thought adequate, e.g. in the light of its forward-looking stress tests. The PRA buffer will be calculated to avoid double counting wherever possible and will be implemented in January 2016, replacing the Pillar 2B capital planning buffer currently in place.

Annex 1 – Risk based minimum capital requirements and buffers under CRDIV



Annex 2 – Key policy initiatives, by intended implementation date



This diagram, which appeared in the PRA Annual Report 2014/15, highlights some of the major policy work streams that will support delivery of the PRA's strategy. It includes initiatives for which there is a publicly identified implementation date at UK or international level; however these may be subject to future revision.