

**Financial Stability Governance
Today: A Job Half Done**
Ongoing Questions for Policymakers

Andrew Large

GROUP OF THIRTY WASHINGTON, D.C.



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Introduction

This paper follows the one written by Alastair Clark and me in 2011 entitled “Macroprudential Policy: Addressing the Things We Don’t Know,” published by the Group of Thirty and the Bank of England (Clark and Large 2011). Alastair died in early 2015, but he was anxious for us to write a more ambitious sequel covering the financial stability scene as a whole. Alastair had already contributed much to the thinking behind what follows, so this paper is offered in his memory as a contribution to debate on a subject in which he excelled.

The underlying theme of this paper is that economic growth and social stability depend on financial stability.¹ Yet despite great efforts, not only is the job to secure financial stability incomplete, but there are also signs of a reversion by policymakers to an emphasis on credit creation and growth, spurred on by populist anti-austerity rhetoric in key jurisdictions. So robust processes to support financial stability are still required.

Enormous efforts have been made...

Enormous efforts have been made to seek to ensure that we never experience a repeat of the economic and financial crisis of 2007–09. Supervision of the financial services industry has been radically

¹ “Financial stability” can be described as a state in which there are no substantial discontinuities or disruptions in the functioning of the financial system, in which there is confidence that there will be no substantial discontinuities or disruptions, and in which, should such disturbances occur, their impact on the financial system and real economy is minimized.

overhauled. Banks are safer and better capitalized. Structural reforms have reduced risk taking, and the policy approach has developed significantly. Financial policymakers have mapped out a wide-ranging, intensive agenda to underpin financial stability.

Yet as time passes, the urgency of finding ways to underpin financial stability is challenged by the search for growth. There are understandable signs of fatigue at the public policy level, and, with some exceptions, signs of amnesia or a reversion to pre-crisis ways on the part of the political classes as the horrors of the 2007–09 crisis recede. Making things safer is in danger of being equated with politically toxic “austerity.” Faced with populist political movements emerging in the United States, Europe, and Asia, the political will is in danger of evaporating when confronted by a pro-growth agenda.

It is essential that we do not forget that growth depends on stability. Indeed, social cohesion and political stability go hand in hand with financial stability. So we must ensure that fatigue does not undermine the good work that has already been done.

But huge uncertainties remain

We also need to remember that the job is not yet finished. The next crisis could come from directions quite different from those that led to the crisis of 2007–09, and despite all the recent efforts, can we really feel confident that we have somehow cracked the problem and got financial stability under better control than ten years ago? Have the policymakers finally figured it all out?

One senses in some quarters a certain satisfaction—even perhaps complacency—that we may have “sorted out” financial stability and “ended too big to fail.” Alastair would have been dubious, and so am I. It may be that the banks at least are individually stronger with more capital, and better supervised too. But there are too many uncomfortable realities. Some of the reasons we should still be concerned include the following.

First, the crisis of 2007–09 was exacerbated by the high volumes of debt. However, overall debt levels are not only much the same as they were, but global debt has increased considerably since 2007, even if the balance has shifted more from private sector debt toward government debt (Bird 2015; McKinsey Global Institute 2015). And as regards levels

of debt to GDP, some countries have fared better than others (Group of Thirty 2015a).

Second, both well-intended quantitative easing and fundamental regulatory initiatives launched by public authorities may have alleviated the discomfort, but they have also had damaging unintended consequences. Depression may indeed have been averted by quantitative easing, but at what price? The damage done by distortions of interest rates and asset prices, deliberately engineered by the authorities, worsen the longer quantitative easing continues.² And the longer the measures are in place, the more difficult it is to return to normality. Paradoxically, also, the very liquidity provision that could cushion the impact when the distortions unwind has itself been compromised. Again, this has been deliberate in the sense that banks' proprietary trading has been cut, as a result of both higher capital costs and the Volcker, Vickers, and Liikanen initiatives.³

Third, how can we be confident that in the event of a systemic crisis caused by rampant herd behavior, the state will not be forced to come to the rescue after all, despite higher capital and too-big-to-fail mechanisms? Bail-in provisions⁴ and adequate total loss-absorbing capacity (TLAC)⁵ are designed to prevent banks from failing or from needing state support if they do (FSB 2013a, 2014a). When the bank fails, relevant creditors other than protected depositors automatically become equity holders (and hence contribute to the provision of TLAC), rather than holders of senior debt. Who will these creditors be? Will they often not ultimately be private savers and pensioners? If so, will governments refuse to support them when things go awry? I doubt it.

These concerns led Alastair Clark and me to think about what needs to be done. There are, of course, no silver bullets, and some difficult realities. In many jurisdictions, the machinery for implementing policy is insufficiently developed to respond effectively, though the UK has taken a lead in the design and implementation of its framework.

There are problems with the multiplicity of authorities involved, confusion as to who is responsible for doing what, and inevitable silo-based thinking. This can leave gaps or create overlaps. It can also result

2 The distortional impact of quantitative easing may, of course, cease to rise if the QE "stock" remains stable.

3 For an overview of these three initiatives, see Gambacorta and van Rixtel (2013).

4 Bail-in provisions are terms set for creditors for taking some of the burden by becoming in effect equity holders.

5 TLAC describes the debt or capital available to absorb losses in banks. See www.financialstabilityboard.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet/.

in overkill, since the safety built into each of the three financial stability “components”—macroprudential, microprudential, and recovery and resolution—may add up to more than is necessary, and provide unnecessary constraints on growth.

Equally, we worried that so much of the voluminous material devoted to the subject of financial stability relates to the details and technical features. Much less attention has been paid to viewing the subject top down and examining how the various difficult areas hang together.⁶ This lacuna in the policy debate needs to be addressed. Without a top-down view, it is not only hard to judge how safe the system is, it is impossible to assess whether financial stability policy is calibrated to keep a particular financial system within the targeted comfort zone.

We need to question some of the conventional wisdom and address new issues

We worried, also, that too much attention has been directed to fighting past battles—particularly shoring up the banks—and not enough to considering emerging issues that can blight the future. Too little has been done to tackle the issues of size, interconnectedness, and behavior of the ultimate savers and borrowers that can result in herding.⁷ And just as assets with a presumption of liquidity have grown under the impact of quantitative easing, so the ability of the system to absorb sales of these assets as shocks occur has been compromised.

The so-called shadow banking area is now the subject of much debate, but there is enormous uncertainty about its implications for financial stability, and even what the term applies to.⁸ Opaque credit creation? Certainly. The herd behavior of creditors of shadow banks and other asset holders? Perhaps.

Finally, it is important to remember that financial systems constantly evolve. Preventive actions may help risk-proof parts of the system, or even all of the existing system, but new types of firms, instruments, and activities will emerge and may themselves sow the seeds of future crises.

6 See, however, Tucker (2015).

7 But please see the Bank of England Financial Policy Committee Meeting record of meetings held on June 24, 2015 (<http://www.bankofengland.co.uk/publications/Pages/Records/fpc/2015/jul.aspx>) and September 23, 2015 (<http://www.bankofengland.co.uk/publications/Documents/records/fpc/pdf/2015/record1510.pdf>); the Financial Stability Report, December 2015 (<http://www.bankofengland.co.uk/publications/Pages/fsr/2015/dec.aspx>); and Carney 2015a.

8 For a general overview, see Carney (2015b) and FSB (2014b).

We need to build in robust processes to refrain from ignoring reality

How can financial stability frameworks be strengthened and processes hardwired into the system to make it more difficult for politicians to hijack the macroprudential agenda in favor of growth at the expense of stability? They may need to get reelected. But let us make sure that it is more difficult for them to do so on the basis of an ill-considered anti-austerity agenda, and make it easier for public policymakers to stand up to them, confident that they have the knowledge and tools to make things safer.

We need to start with a top-down analysis of some fundamental issues that all jurisdictions need to face. None of them is new, and none has clear answers, but collectively they can make a real difference.

Four difficult top-down issues

1. How safe should the system be?

Despite all the efforts to address financial stability since the crisis of 2007–09, there is a singular lack of clarity about what level or zone of safety governments are trying to achieve. Our starting point is first that there has been too little discussion about just how safe the system should be. It is self-evident that beyond a certain point, measures taken to improve stability can impede growth. But where should the balance of risk lie? Governments need to articulate their risk appetite more clearly and realistically. They also need better information to reach their judgments. This decision is not a responsibility that governments can wisely delegate.

2. What operational framework is needed?

Whatever is decided about the degree of safety required, the question arises as to how to deliver it. Implementing the stability objectives requires an institutional framework or mechanism with transparent processes that will ensure that the collective efforts of the various relevant financial authorities are aligned. The framework needs to contain the power and capacity to deliver what may be unpopular measures. To achieve this, each jurisdiction needs to have a strong and capable “institutional seat of authority” with top-down vision and power or influence to direct and deliver it. This does not have to be yet another new body, but the locus for a clear mandate and delegated authority needs to be clearly visible.

3. How can trust be engendered between public authorities and market participants?

Effective implementation of financial stability policy cannot rely on power and fiat alone. Trust is also crucial, but very fragile, with both domestic and international dimensions.

It is a commodity that has been all but lost as a result of the crisis of 2007–09, and needs to be rebuilt. This will require machinery to ensure better engagement of all parties, and consensual standards that are conformed to. It requires clarity of objectives, and it requires machinery to resolve inevitable conflicts of policy.

Regarding objectives, politicians will inevitably want those involved in financial stability activity to support growth agendas, even if they are “secondary” to financial stability. But asking financial stability authorities to promote growth risks confusing objectives and diluting the efforts of all involved. It also causes confusion as to accountability, and raises the prospect of deflecting those involved with financial stability from their primary task.

4. How do we stop people from arbitraging the rules?

Equally, the danger of arbitrage arises. If rules are too complex or too costly to implement, they will merely encourage people to try to get around them in opaque ways or through other jurisdictions (Large and Walker 2010; Riles 2014). Policymakers certainly need to be alert to the risk of arbitrage that will occur to avoid expensive rules, hence spawning hidden shadow banking areas of credit creation. They equally need to watch the implications of new technology and forms of intermediation, which risk adding activity outside the sight or reach of the regulators.

A more granular approach

Next, we turn to the challenges facing each of the policy “components” that make up the financial stability armory.

In the case of macroprudential policy, we examine the need to address vulnerabilities, including unintended consequences of recent policies, to avoid fighting old battles and to avoid losing vigilance in the face of pressures for growth.

There is a lack of clarity about how the microprudential area of supervision can contribute most effectively to the overall objectives of financial

stability. It is unclear how to determine the adequate weight to apply to the systemic issues arising from the activities of the individual firms being supervised. And as the recent spate of retail and now wholesale (FX [foreign exchange] and LIBOR) episodes has shown, the conduct area, too, has been sadly neglected by both supervisors and the boards of the banks involved. Its potential impact on stability is now clear.

Finally, in the recovery and resolution area, how best can we be prepared with reliable recovery processes when things start to go wrong and, failing recovery, with resolution processes to minimize the costs of putting things right?

Organization of this paper

The paper has two parts, both of which are organized around two sets of questions. In Part 1, the questions address general issues impacting financial stability. In Part 2, the questions relate to the various components of financial stability policy. Each question concludes with a suggested way forward, referencing gaps and how they might be filled.

PART 1

**GENERAL ISSUES IMPACTING
FINANCIAL STABILITY**

QUESTION 1

How safe should the system be?

The financial system can be made safer through, among other things, the imposition of restrictive—and hence resisted—measures on leverage of intermediaries, conduct, and on holders of assets. But who should decide just how safe the system should be? And how can we judge how safe the system is today?

There are several general issues concerning *how safe the system should be* that governments, which need to accept ultimate responsibility, need to consider.

For example, how close to the “cliff” or tipping point, beyond which lies instability and crisis, does a given jurisdiction want to be? By moving further back from the cliff, the financial system can be made safer, but to the detriment of other policy objectives and the economy at large. However, by moving closer, the risk of “falling off” into costly crisis becomes greater. Who should decide on the trade-off? It is surely presumptuous for the central bank or any other single authority to make this decision on its own. They may give advice, but governments must decide.

In looking for solutions, the closest analogy is where many governments set, or give guidance, on a target for monetary policy—the rate of inflation, typically. But for financial stability, there are no metrics or even a full understanding of the determinants of the tipping point. So to state “how safe” needs a different approach.

The issue is complicated further by the lack of clarity as to what should be the degree of tolerance for risk, both of the jurisdiction itself and of

each separate financial authority. Differences here can provoke dissent among financial authorities. Furthermore, assiduous accountability procedures in front of, for example, parliamentary committees, against a background of lack of clarity, can cause undue risk aversion. This leads, in turn, to the concept of a safety zone rather than some theoretical optimal point. The issue is how to land and remain within that zone.

And, of course, the starting point is vital, which is *how safe the system is* at any moment. Before any government can comment on stance, and certainly before any sensible remedial actions can be taken, there needs to be a top-down view of just how safe the system is. This requires an understanding of both the conjunctural vulnerabilities and the degree of resilience in the system: the strength of the banks, other firms, and infrastructure, but also the strength and capability of the supervision by the microprudential supervisors, both prudential and conduct. It also requires an understanding of the strength of the recovery and resolution processes for individual failures as they arise. Both powerful analysis and good judgment are needed regarding the aggregate impact of the different components. There may well be trade-offs, with strengths in some areas balanced by weaknesses in others.

“How safe”: the way forward

Beyond the obvious assertion that not enough thought, including from the academic fraternity, has been accorded to this question, governments need to find practical answers to how safe the system is, and how safe the system should be.

How safe is the system? Judgment of this requires authoritative top-down capability to be in place.⁹ In turn, this needs to be well served by bottom-up capabilities in each of the component areas,¹⁰ and by clarity on how much of this safety should be delivered through macroprudential mechanisms that mitigate vulnerabilities¹¹; microprudential mechanisms, through prudential supervision of individual firms, markets and infrastructure, as well as their conduct¹²; and recovery and resolution capabilities and powers.¹³

9 See Question 2.

10 See Part 2.

11 See Question 5.

12 See Questions 6 and 7.

13 See Question 8.

Experience suggests that each of the above components is pursued somewhat independently and incrementally in most jurisdictions without either a view on how they mutually support or frustrate each other or of a guiding “stance.” In turn, jurisdictions are at risk of solving yesterday’s problems, constraining parts of the system too much or too little, and not optimizing resources and tools that deliver the required level of safety.

How safe should the system be? With greater clarity as to the status quo, thought can then turn to improvements.

A first approach would be for governments to comment on the “stance” toward financial stability being adopted by the institutional seat of authority,¹⁴ and encourage such comments to be acted upon. Going beyond this, they could make provision for a formal override of its decisions. Jurisdictions will differ on the approach they wish to take. But a legitimate and effective accommodation of the issue has to be found so that those involved can act with confidence. External independent or peer group scrutiny by, for example, the IMF or independent fiscal responsibility panels can of course assist, and may be of particular relevance to smaller jurisdictions.¹⁵

A second approach favored by some would be for the government to lay down indicators as proxies for the degree of safety it was prepared to tolerate. But indicators of financial stability are hard to define, mean different things at different times, and are easy to misread.

A third approach—probably a step too far at this stage—would be to aim to secure agreement on the long-term growth rate sustainable for financial stability, and mandate that as a target for policymakers. This would certainly be lower than the debt-fueled rate of growth in the run-up to the economic and financial crisis of 2007–09. Growth that is based on ever increasing credit creation and debt, even with the absence of inflation, is unsustainable in the long run, since beyond some point, the debt will have to be repaid or at least contained, and “growth” will fall. People thought in the run-up to 2007 that growth was sustainable because inflation was contained. But we were stoking the fires, which led to disaster. Understanding what that sustainable growth rate might be would be a powerful start.

In our view, the first approach is, for the time being, the most promising.

¹⁴ See Question 2.

¹⁵ Note the cases of, for example, Jersey, and recently, Bermuda.

QUESTION 2

What should the framework be?

Whatever level of safety is desired, are our operational frameworks to underpin stability strong enough? How best can an independent seat of authority be created, with top-down authority to assess issues and deliver policy responses?

Once decisions are made about how safe the system should be, there are formidable challenges and issues to be confronted in seeking to achieve that objective. The following general issues remain intractable.

First, too much leverage leading to too much debt can contribute to financial instability. But in many jurisdictions, indebtedness today remains just as high as before the crisis of 2007–09, even though there has been some shift of indebtedness toward the official sector, and in some cases the consumer (Bird 2015; Group of Thirty 2015a; McKinsey Global Institute 2015).

Second, the dynamics of, and behaviors leading to, tail events are hard to grasp and impossible to quantify, unlike the case for monetary policy formulation, which focuses on a central case. So despite attempts to model financial stability, behavioral herd economics has not yet caught up in terms of its ability to model discontinuities. And unlike the area of monetary policy, the degree of academic guidance is much more limited. Financial stability is not observable. Unlike monetary policy, where you can observe price movements, inflation, and even employment levels, the lack of metrics means you can only see financial instability when you have fallen off the cliff!

Third, mitigating policies are often unpopular. They add to cost, but *ex ante*: you cannot prove they are necessary. So naysayers can object and seek to downplay or ignore the dangers while enjoying the party.

Fourth, financial stability is not symmetrical. If you fail and crisis ensues, you cannot steer yourself back to normal without incurring enormous social cost.

Fifth, there is little political consensus to “delegate” powers into independent, often central-bank based, institutional seats of authority, given that fiscal resources could be at stake. So the “legitimacy” of the decision process can be questioned.

Specific uncertainties need to be confronted. In addition, specific uncertainties need to be confronted, and courage is needed to promulgate policy responses. Endless debate, for example, surrounds what causes instability, and we will always be uncertain what will ignite the flames. Policies deployed to underpin stability have uncertain results; calibration and impact of policy instruments is highly uncertain, even with rising experience. Cost-benefit analysis is imprecise to say the least, since you cannot prove the likelihood or know the potential cost of the counterfactual (a financial crisis). Politics can trump safety; financial stability measures can be politically unpopular, since they can impede growth, at least in the short term.

This time inconsistency in financial stability policy can lead to resistance—perhaps more than is the case for monetary policy. And policy has to be delivered across a wide spectrum of activities in three components of the financial stability function: early warning and risk mitigation through macroprudential policy, maximizing the contribution of microprudential and conduct supervision to financial stability, and contingency planning for recovery and resolution when things go wrong.

These activities inevitably involve a number of different authorities each of which will also have other functions and objectives. To ensure coherence, all the pieces need to be connected. This, in turn, presents policymakers with a formidable challenge.

For these reasons, if we are to have confidence in the financial system, we need to find a way to hardwire into the system processes and powers to take tough decisions. And to be respected, those processes need legitimacy and adequate checks and balances.

Above all, leadership and determination are needed to get things done, something many jurisdictions lack. Somebody has to be in a

position to stand up for, and assert the importance of, underpinning financial stability in the face of politicians—and their electorates—many of whom will tend toward growth and overlook the risks. Democracies find this difficult to achieve.

Results of proactive policymakers have been mixed. Despite good intentions, the proactivity and number of policy initiatives taken by the policymakers since the crisis of 2007–09 has given rise to unexpected hazards. For example, authorities can develop a sense of false security, not to say complacency, that the work “has been done.” This, in turn, reduces determination to confront both continuing and newly emerging areas of uncertainty. Policymakers begin to believe their own rhetoric as politicians want to move on from the past. For example, there is talk about “ending” too big to fail. This is meant to inspire confidence. But is it realistic? If so, is it enough? Even if no single financial institution is too big to fail, the system as a whole may be.

The categorization of institutions into whether they are “systemic” or not (that is, systemically important financial institutions, or SIFIs) gives rise to moral hazard. It is also misleading, since systemic significance will be time- and state-dependent. Even the failure of a small institution can trigger a systemic crisis if it causes contagion.

The banks and other players in the markets, including latterly the insurers, develop a sense of confusion that breeds resentment either because they feel that measures are not explained, or because they appear to be duplicative or disproportionate. Some of these complaints may be posturing, but that resentment hampers positive engagement.

Another unexpected hazard is that the authorities do not give enough consideration to the spillover impacts, aggregation effects, and interdependencies of these policy initiatives, or their unintended consequences.¹⁶ Banks certainly need to develop, to quote Bank of England governor Mark Carney, “a sense of the systemic alongside a sense of self” (Carney 2014). But some of this proactivity by the authorities risks making this elusive where resentments smoulder, given the innate difficulty of getting firms to weigh systemic externalities in their governance and decision-making priorities.

Fatigue can set in. We need frameworks capable of retaining a sense of urgency despite the fatigue of clearing up the mess of the past crisis.

¹⁶ See question 5.

After all, we are still living in a world of leveraged financial institutions. Maybe they are less leveraged. But short of returning to barter, any significant degree of leverage can still lead to crisis.

Crises are idiosyncratic. It is easy for policymakers to forget that the next crisis may start not with the banks themselves but through the herd behavior of financial asset holders. Those who believe that their assets are liquid may panic following a shock, when they discover that that is not the case.

The framework: the way forward

The list of issues for which financial stability frameworks must be operationally effective is formidable. There are no architectural blueprints for this. But there are some basic features that need to be in place that are common to all.

Each jurisdiction, for example, needs to put in place a top-down “institutional seat of authority” with respect to financial stability policy as a whole. Whether this is in the form of an adequately supported council, a standing body, or clear leadership based on memorandums of understanding among different bodies is moot. Input and commitment are, however, needed from the various relevant authorities. A council can gather these efforts together and could perhaps be centered at one of them.

To be effective, such a council needs a top-down line of sight of all the relevant issues, to act coherently across the board, and to take account of unintended consequences. It requires adequate data and understanding of the issues. And it requires authority—statutory, natural, or otherwise—to influence the various parties in the interest of securing desired policy choices. These may relate to macroprudential decisions, microprudential arrangements, or planning for recovery and resolution capabilities. In addition, it needs to be conscious of the need for developing trust,¹⁷ and to respond to that need, and of the implications of arbitrage and of interventions to prevent it.¹⁸

What is the best model for such an arrangement? And how much power should such a council have? Talking shops are of limited value. However, delegating authority to such a seat of authority to use powers

¹⁷ See Question 3.

¹⁸ See Question 4.

of direction over separate authorities can also raise complicated issues. A requirement to “comply or explain,” in accordance with an overall set of mutually agreed objectives is, however, a promising approach.

In practice, while some jurisdictions choose a model based on the ministry of finance, it is more common for it to be centred on the central bank. This may be based on the natural authority that many central banks possess, together with their inherent “systemic sense” DNA, built on their closeness to markets, monetary operations, and payment systems.

However, the extent to which jurisdictions are prepared to delegate the operations of financial stability to a “central-bank-centric” institutional seat of authority as opposed to the ministry of finance or some authority more subject to government control, varies from jurisdiction to jurisdiction. And just as some central banks may be understandably reluctant to assume responsibilities that could dilute their focus on price stability, so also the political process may feel uncomfortable with independence in the area of financial stability increasingly granted to central banks.

To complement this top-down seat of authority, adequate arrangements and capabilities are required to handle macroprudential issues, microprudential issues, and conduct issues for ongoing firms, as well as both the preparations for, and handling of, recovery and resolution processes. Specific challenges facing each of these areas are covered in Part 2.

QUESTION 3

How can we secure or regain trust in the system?

For frameworks to function and deliver, consensus and trust have to exist between authorities both domestically and internationally, and between authorities and industry and the public. A general theme throughout this paper is the deficit in trust felt in three areas: among authorities domestically; among authorities, the industry, and the public; and among authorities internationally, all of which are discussed below. This lack of trust makes it more difficult to underpin financial stability, despite efforts by the authorities to the contrary. Ingredients that can contribute to establishing trust include clarity of objectives, engagement among authorities and industry, standard setting, and conflict resolution capabilities.

First, trust among authorities domestically. Effective financial stability policy requires collaboration among a number of public authorities (regulators, central bank, and finance ministry), each of which has its own governance and priorities. So seamless collaboration can by no means be assumed.

Tensions and lack of trust domestically arise when there is lack of clarity of mutually shared objectives, silo-based adherence to the governance process of each of the relevant authorities, and an inbuilt natural inclination to resist being told what to do by others. Conflicts

of financial stability with broader policy objectives such as welfare and fiscal policy will also arise.

Trust domestically: the way forward

Real issues arise in determining how best to secure a sense of mutual engagement among the various parties involved, given that each authority (central bank, finance ministry, supervisory authority) has its own “day job” functions, governance, and objectives. A combination of measures is needed to encourage mutual trust. These can be promoted by a well-founded council.

A vital ingredient is to agree and promulgate a definition of financial stability and a set of concrete operational objectives for each of its three constituent components (macroprudential mitigation, contribution of microprudential oversight, and planning in steady state for tasks that must be accomplished as tension mounts in the recovery and resolution area). Such a definition and objectives need to be overarching and shared by all relevant authorities so they feel a sense of engagement and mutual endeavour. This can be achieved through statute or administrative processes.

Conflict resolution machinery needs to be put in place. For example, separate mechanisms will be necessary, as between financial stability objectives and those of other areas such as monetary policy and conduct policy. There are many tried techniques such as forms of hierarchy of objectives or cross-membership of committees. Inclusion of those involved in such policy areas can itself have a powerful effect.

Second, trust among authorities, the industry, and the public. Trust, or “social license,” must be earned and retained not only by banks, but also by the insurance, pension, and asset management sectors.

Public authorities feel, with some justification, that bankers brought their problems on themselves. Continued revelations of wrongdoing (FX, LIBOR) and little apparent sense of contrition add to the resentment. But such resentment creates a perception of a need for retribution on the part of the authorities toward the financial services firms. Whatever the sins of the past, this is dysfunctional and prevents a sense of mutual endeavour.

The industry—especially globally active institutions—complains that the plethora of initiatives lacks cohesion, adds to cost, and/or reduces

profits. Whatever the reasons for a degree of stand-off, ways certainly need to be found to improve behaviors. There are several mutually dependent ways to approach this:

- Means need to be found to create ongoing and systematic engagement between the authorities and the banks.
- Approaches to behavioral change have to move away from rules toward other mechanisms, including governance and culture (Group of Thirty 2012, 2013, 2015b), but also to principles-based standards that can apply in a forward-looking sense and are output driven (see below).
- Unintended arbitrage has to be mitigated.¹⁹

Trust among authorities, the industry, and the public: the way forward

High-quality engagement is essential. Engagement—as opposed to lobbying or a blame game—is a vital ingredient to create trust. The authorities need to develop mechanisms to ensure buy-in by the industry for public policy objectives, and the banks need to volunteer how best to deliver these objectives. Objectives of specific policy initiatives and their relation to other related initiatives should be stated with greater clarity.

The financial industry (not just the banks) needs to acknowledge that behaviors need to change—that contrition is called for, and the only way forward is to stop lobbying and special pleading, and to become part of the solution rather than the problem.

The authorities and the industry together need to recognize that each needs the other and should engage collectively with the intent to find better ways (such as standards) to deliver desirable outputs of behavior.

Addressing the creation of common standards. A promising approach relates to creating and ensuring conformity with standards. Accordingly, the authorities need to acknowledge that in areas of behavior, such as managing conflicts of interest between agency and principal, a “standards-based” rather than a “rules-based” approach is likely to be more effective to produce desired outputs. Rules are necessary and will work where the required outcomes are binary or where the capacity

¹⁹ See Question 4.

to apply principles is absent or weak. But they will not work where behavioral outcomes are sought. In such behavioral areas, statutory rules risk complexity and invite arbitrage.

In developing standards, public policymakers and the industry need to agree to articulate the behaviors that are necessary to underpin financial stability. Standard-setting bodies or arrangements can then be put in place to achieve these. The standards setters need to make sure that the standards are clear and unambiguous, and are stated in plain language for the benefit of all stakeholders including customers, and are capable of serving as a basis for enforcement. Sound practice can then emerge to handle the many areas where no single firm or supervisor knows the best way forward (for example, how to determine and then implement risk appetite).

There is no blueprint for this process; industry and supervisors can learn from each other in ways that do not arise in a rules-based regime.

Over time, a series of specific initiatives in different sectors of activity and jurisdiction will need to be developed. Relevant initiatives include the globally active Hedge Funds Standards Board (HFSB);²⁰ the more recent Fixed Income, Currencies and Commodities Markets Standards Board (FMSB);²¹ and the Banking Standards Board.²²

Critics will suggest that standard setting is a way of returning to forms of self-regulation, which have been so universally derided. But this fails to recognize that standard setting can—and now does—take place under a statutory basis. The self-regulation of the 1970s and 1980s, both in domestic jurisdictions such as the UK and in the global capital market, lacked this essential ingredient. In addition, mechanisms to enforce conformity to standards, and hence to deliver the required outcomes, are being developed. A standards-based approach does, however, require high-quality supervisors to ensure that their judgments command respect. A key challenge is to find them, remunerate them, and put them to work. But meeting this challenge will pay huge dividends.

Third, trust among authorities internationally. This is no doubt an area of significant promise. The fact is that there is plenty of international engagement. The efforts of the international standards-setting

20 <http://www.hfsb.org>.

21 <http://www.femr-mpp.co.uk/>.

22 <http://www.bankingstandardsboard.org.uk>.

community²³ on the global scene, and similarly with European institutions, have been prodigious. Such efforts cover creation of global principles and attempts to ensure their consistent implementation²⁴; the difficult area of mutual recognition where standards are diverse (for example, as regards Central Counterparties [CCPs], requirements internationally for capital in the insurance sector); and creating better communication among supervisors at all stages of the recovery and resolution continuum.

Burden sharing. A root cause of distrust among different jurisdictions is the intractable problem of agreement on burden sharing. This makes it difficult to find a solution to the cross-border problems inherent in the recovery and resolution of internationally active groups (Goodhart and Schoenmaker 2009; Thielemans 2003). Establishing a common objective in this area is politically elusive, given the “beggar thy neighbor”²⁵ factors inherently at play. The fraught situation with respect to Greece, which so clearly needs debt forgiveness, is just one example of this, given that authorities in specific jurisdictions have a legal and fiduciary responsibility to protect those in their jurisdiction from being hurt as a result of decisions taken by bankers and authorities elsewhere.

More pernicious is the difficulty as to “who pays?” An important element in the G20/Financial Stability Board (FSB) strategy is to make the creditors and shareholders of failing institutions pay by converting subordinated debt instruments that qualify as TLAC. However, holders of TLAC are often taxpayers, so that the shift in the burden could be largely cosmetic, and if TLAC does not suffice, or if the distress is truly systemic, public money may be needed in any case. Lack of clarity in this respect will hardly help to imbue trust as people discover the realities.

23 This includes the International Monetary Fund (IMF), the International Organization of Securities Commissioners (IOSCO), the BIS-based Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS), the Committee on Payments and Market Infrastructures (CPMI), the International Association of Insurance Supervisors (IAIS), and the International Association of Deposit Insurers (IADI). On the structure, governance, and “soft-law” approach of international standard setters, see Giovanoli (2009).

24 This effort was originally triggered by the “Asian crisis” toward the end of the last century, resulting in the Financial Stability Forum (forerunner of the FSB) coordinating an effort to identify “Key standards for sound financial systems,” and in the IMF and World Bank monitoring compliance via the Financial Sector Assessment Program (FSAP) and the Report on Standards and Codes (ROSC). On the compendium of key standards, see <http://www.financialstabilityboard.org/what-we-do/about-the-compendium-of-standards/>; and on the FSAP, see <https://www.imf.org/external/np/exr/facts/fsap.htm>.

25 An international trading policy that uses currency devaluations and protective barriers to alleviate a nation’s economic difficulties at the expense of other countries. While the policy may help repair an economic hardship in the nation, it will harm the country’s trading partners, worsening their economic status (<http://www.investopedia.com/terms/b/beggarthyneighbor.asp>).

Group supervision. A consequence of lack of trust is an unwillingness to rely on the “group supervisor” process. Jurisdictions feel that they have no alternative but to trust in their own capabilities over the parts of the group in their jurisdiction. This has led to the fragmentation of regulation back from a “global” to a local approach (so-called Balkanization). For example, subsidiaries of groups are increasingly required to act as though they are stand alone, independent entities in terms of capital and governance. The impact of this is likely to constrain international capital flows, both adding to volatility and having an impact on the real economy via the cost of capital.

It is ironic that these tendencies are probably exacerbated by the understandable demands of parliamentarians to hold supervisors and central bankers to account following the recent disasters.

Trust among authorities internationally: the way forward

In pushing the boundaries of what is politically achievable, attempts to ensure congruence of objectives and prevent duplications and overlaps of the multiple initiatives need to be reinforced.

Pre-agreement on burden sharing among sovereign states is difficult, even in situations such as the Eurozone, which has a degree of pooled sovereignty, and in most cases is probably politically unrealistic. So focus needs to be placed on recognizing this, articulating the consequences, and finding workarounds that avoid them. The many initiatives to improve resilience and reduce the danger of crises are a partial approach, and further efforts are needed to improve resolvability arrangements for internationally active banking groups.

A particular challenge today is how to sustain empowerment of the huge international reform program as memory of the crisis of 2007–09 fades. Politicians need reminding that economic and social progress depend on making tough decisions, and on educating electorates as to their necessity, rather than pretending that “growth is the answer.”

QUESTION 4

How do we prevent arbitrage from undermining policy intentions?

Arbitrage occurs in two main dimensions—between jurisdictions, and within jurisdictions. Within jurisdictions, it can occur in pernicious forms.

Arbitrage between jurisdictions. Given that there is no global government, it is inevitable that there will be differences in law and rules in different jurisdictions (or states within given jurisdictions). This may arise through attempts to attract business activity through regulatory arbitrage with lower standards. In our experience, such arbitrage is now less pervasive, since businesses that operate to lower standards are restricted by their social-network-empowered customers, or are indeed influenced by supervisors in jurisdictions where their head office is located. Consequently, the standards get raised. The case of the governance of hedge funds in the Cayman Islands is a case in point.

This leads to the so-called tax haven issue, which is by no means the preserve of offshore jurisdictions, and pervades larger or more mature jurisdictions such as the US State of Delaware and Luxembourg (some might add the UK, Ireland, or the Netherlands). Stakeholder pressures toward “fairness” are beginning to discourage the more pernicious aspects of such tax arbitrage. So are the efforts of the Organisation for Economic Co-operation and Development (OECD), with its initiative

to avoid Base Erosion and Profit Shifting (BEPS). Recent cases of informal action being taken against Starbucks and Google, and to encourage wealthy residents of jurisdictions to shoulder their fair rate of tax, underline this point.

But the insistence, for example, of some mainly offshore jurisdictions on concealing ownership or management of assets, will pose increasing issues for authorities as they seek to underpin stability through judicious handling of potential herd behaviors. If the herd is concealed “offshore,” how are they to know where to begin? Significant issues for financial stability reside in this area.

Pernicious forms of arbitrage within jurisdictions. Arbitrage can be encouraged or incentivized where regulatory burdens are felt to be high in terms of both cost and complexity, and by the legitimate wishes of firms to avoid the costs involved. The “costs” of needing to maintain higher levels of extra capital are a case in point. Indeed, board members, shareholders, or trustees may see it as their fiduciary duty to avoid these costs. This spawns a mini industry of advisors offering arbitrage opportunities—hardly a healthy development from the point of view of those wanting to underpin stability.

Setting regulatory burdens “too high” in the interest of promoting financial stability can encourage areas of activity—including facilitation of credit creation—to move to more opaque areas in the shadow banking space where loans are made, securitized, sold, and insured, and all the assets created in the process are then actively traded (Group of Thirty 2015a).

It can also encourage “behavioral confusion” within firms. On the one hand, firms legitimately seek ways to get around the intent of measures, by complying only with the letter. But on the other hand, they are encouraged to implement governance mechanisms to deliver outputs that conform to the spirit and intent of the measures. Cultural dissonance can result.

Arbitrage: the way forward

Arbitrage between jurisdictions. Efforts must continue to confront arbitrage. The influence of the OECD with its BEPS initiative has considerable potential, backed up with forms of regulation where relevant. However, mature jurisdictions need to adhere to the same rules!

Arbitrage between firms and the authorities. The authorities need to be more conscious of the potential for arbitrage where cost and complexity burdens are necessarily imposed. Initiatives to counteract the tendencies for arbitrage also need to be bolstered and acted on. Adhering to the recommendations in the reports of the Group of Thirty in the domains of governance and relationships of boards with supervisors (Group of Thirty 2012, 2013) would be a move in that direction.

PART 2

**GRANULAR ISSUES FOR
POLICY COMPONENTS**

The need to consider the collective contribution of the different components of financial stability and the potential for trade-offs among them seems clear. However, just as there are general issues that relate to financial stability as a whole, there are separate specific challenges that relate to each of the component areas of financial stability policy. Examples in each component area follow.

QUESTION 5

What are the challenges for macroprudential policy?

Much progress has been made in the macroprudential area, (to the extent that there is perhaps a risk of it being confused in the public's mind with financial stability as a whole). However, major challenges arise for macroprudential authorities in at least the following six areas: unintended consequences, the issue of symmetry, the dangers (and benefits) of shadow banking and rampant financial innovation, the robustness of infrastructures, the implications of generic stress tests (Oliver Wyman 2015) for macroprudential authorities, and what powers macroprudential authorities should have.

First, unintended consequences. In 2008, the focus was understandably on banks and leverage in the banking system. Today, to avoid fighting the last war, emphasis needs to shift toward other hazards and vulnerabilities including herd behavior of asset holders, the impact of extended periods of low interest rates on insurance companies and pension funds, and the size of the liquidity of, or “exit” from, different asset classes. Fortunately, there are encouraging signs that authorities are beginning to focus on this (FSB 2012b). But it is unfortunate that it has taken so long to wake up to these unanticipated impacts of the many new policy initiatives since 2008.²⁶

²⁶ See, however, the recent Capital Markets Union proposals from the EU Commission; http://europa.eu/rapid/press-release_IP-15-5731_en.htm.

Each of the major policy initiatives since the crisis of 2007–09 has a major objective, which is probably uncontroversial. However, macro-prudential authorities need to analyze just what the unintended consequences are of each of these initiatives in relation to the key factors that matter for financial stability.

The measures that seem particularly relevant include quantitative easing in several mature jurisdictions; high capital ratio requirements generally for banks; restrictions on remuneration; and so-called structural solutions (the Volcker Rule to prohibit principal-based trading by banks in the United States, the Vickers initiative to ring-fence retail activity in the UK, and the Liikanen initiative in the European Union, also aimed at proprietary trading activity).²⁷ In each case, the impact of the measure—intended or unintended—in relation to the key factors that matter in the conduct of policy in relation to financial stability, needs to be considered. In summary the key factors are:

- Resilience, and in particular the strength and ability of the banking system to sustain and absorb shocks.
- Levels, flows, and transparency in relation to leverage/credit/debt, both for individual entities and at the level of the economy.
- Size and behaviour of the “herd,” that is, the volume of assets in given classes that might move “one way” in a crisis, and the degree of likelihood that those who control them will move at the same time.
- The extent of liquidity or size of the “exit” in given asset classes, that is, the volume of assets that can move without provoking undue price volatility or amplifying yield impact leading to adverse herd behavior.

Taking each measure in turn, in the case of quantitative easing, the overall objective to mitigate the danger of outright depression in mature economies seems to have been broadly successful. However, in terms of financial stability, it has led to the following continuing distortions:

- It has stoked up the volume of “presumed to be liquid” financial assets on the basis of compromised risk appetites, and hence risks increasing the danger of unpredictable herd behavior. For example, it has encouraged large movements into mutual funds, presumed, perhaps not always wisely by their holders, to be both liquid and

27 For an overview of these three initiatives, see Gambacorta and van Rixtel (2013).

secure, and to the extent that these funds hold less-liquid assets such as “bail-inable debt,” it has increased fragility.

- It has arguably moved property and certain other markets higher, and an unexpected large unwind could have negative impacts on stability in asset and debt markets, including in emerging markets.
- It has caused significant flows of capital to emerging markets, which are not only vulnerable to unpredictable unwind, but in the meantime have used these flows to stoke up debt, in some cases to undesirable levels.
- In part due to quantitative easing, the size of the asset management industry has itself been boosted. Many asset managers use similar models. This has the effect of increasing the volume of assets or size of the herd likely to go “one way.” So at a time when other policy measures have reduced the size of the exit (see below), this adds to the danger of asset price volatility, with potential to inhibit the functioning of the financial system.

In the case of higher capital requirements, the main objective of improved resilience of individual banks is no doubt being achieved. However, they also risk reducing the extent of trading capacity and liquidity available for nonbank clients, and hence the “size of the exit.” And in addition to reductions in liquidity, they encourage credit creation to shift to opaque areas as a result of arbitrage.

The combined impact of these potential consequences, in addition to the larger base of relevant assets as a consequence of quantitative easing, should be a cause of intense discomfort for macroprudential authorities, however much there may be room for debate as to the extent and implications.

In the case of restrictions on remuneration, these may indeed help improve resilience by aligning incentives within banks. But they, too, will cause talent to move into fringe or shadow areas where credit can be created without restriction. And in the case of structural solutions, the main objective of reducing the danger of the need for fiscal support for the financial sector through, for example, reducing cultural tensions, reducing proprietary trading, and simplifying resolution, is no doubt laudable.

The extent to which it will in practice be achieved through such remedies is, however, debatable. It was, after all, boring commercial

bank lending rather than investment banks that did much of the damage in the crisis of 2007–09. Equally, however, such solutions are likely to add to moral hazard as far as the commercial banking dimension is concerned, and they will add incentive for arbitrage where credit creation becomes more opaque. They also seem likely to contribute to a reduction in liquidity (or the size of the exit) in the system as a whole. Equally, they will do little to encourage credit to flow to the important small and medium enterprise sector. So the unintended consequences in relation to financial stability may be worse than the benefits. Perhaps it would be wiser to rely more on other existing mechanisms such as capital adequacy!

Collectively, the net result of these policies is the real danger that, although resilience may be higher, the size of the herd in the context of quantitative easing is bigger, and yet the size of the exit in terms of liquidity is smaller. The results of this equation are unclear, though recent periods of high levels of volatility now visible in government debt and equity markets may be a foretaste of things to come. Such volatility cannot be regarded as favorable for financial stability.

Unintended consequences: the way forward

It would be timely for all macroprudential authorities to conduct a comparative analysis of the side effects compared to positive benefits of major recent policy initiatives. This will help identify new areas of vulnerability and assist in the difficult tasks of developing appropriate instruments to mitigate them, thus countering the dangers of potential herd behaviors in given asset classes (for example, in “circuit breaker” space), and providing a basis to look for ways to increase liquidity using methods that themselves do not add to the fragility of the banks.

Second, the issue of symmetry (see Clark and Large 2011, p. 20). If the financial stability authorities have the objective of acting as guardians to maintain stability in the face of mounting vulnerabilities, should they also be given “symmetrical” objectives with a dual mandate of “stability” and “growth?” Or should macroprudential policy just stick to the task of stability and mitigating the danger of crises (Toniolo and White 2014)?

This is a tricky area. Symmetry is certainly important in one sense. A “sunset” obligation to adjust measures to mitigate vulnerabilities needs

to be put in place once those vulnerabilities have been alleviated, including the sanctioning of the rundown of countercyclical buffers. But it is in our view dangerous for the macroprudential authority to be charged with a positive “pro-growth” agenda. It is hard enough to undertake the tasks of mitigating vulnerabilities and to be held to account for them; the impacts of (and hence accountability for) instruments to achieve growth are too uncertain. Besides this, achieving growth depends in large measure on other policy areas such as monetary and fiscal policy, as well as supply-side measures. In addition, the skill sets needed to understand growth dynamics are very different from the forensic attention to vulnerability mitigation needed to prevent busts.

But above all, there is the danger of confusion at the level of the public. Surely it is better for the macroprudential authority to be seen as the guardian of stability rather than also being seen—for many people, confusingly—as a facilitator of exuberance.

Symmetry: the way forward

Opinions may differ, but in our view there is value in clarity of mandate for the macroprudential authority to act as the guardian of financial stability. Mechanisms are certainly needed to “undo” steps taken to contain specific vulnerabilities when they are no longer needed. But adding a growth mandate, even if secondary, risks the macroprudential authority being “used” as an instrument for solving the dangers of exuberance, or indeed for unleashing them. This makes a strong case for the two sets of objectives to be handled separately: government needs to be closer to the growth agenda, just as stability is better handled on a more delegated basis by the macroprudential authority or council.

Third, the dangers (and benefits) of shadow banking²⁸ and rampant financial innovation. Institutions (shadow banks and creators of credit, including the insurance industry) can act as facilitators of credit creation, embedded leverage, or transmission of credit in new ways that may not be visible to, or recognized by, the authorities. And particularly when banks may be constrained, they can provide useful forms of market finance.

28 Shadow banking is the term for credit intermediation involving entities and activities outside the regular bank system; see FSB (2013b). Sometimes the term is used more loosely to include other activities, including aspects of asset management. For a general overview, see Carney (2015b) and FSB (2014b).

The emergence of radically different technologies will produce forms of financial intermediation that will no doubt provide potential benefits. But they will also be systemically significant, give rise to unknown unknowns from a risk perspective, and may occur beyond the perimeter of existing regulation (Adrian 2014). In addition, there may be new vulnerabilities, including where asset managers use similar models and scenario generators, and at a time when the understanding of the causes of herd behavior and how it may be sparked remains unclear.

Shadow banking and innovation: the way forward

The challenge for macroprudential authorities is to encourage financial innovation but to watch carefully for linkages and their degree of opacity. Properly channelled, technical and financial innovation can foster financial stability by creating alternative channels for providing financial services, such as the securities sector, which is a pivotal theme of the European Union's Capital Markets Union project. Careful scrutiny of these new developments—the present case of blockchain²⁹ is an example—will itself shed light on the shadows and enhance understanding as markets evolve. In addition, flexibility for the authorities to alter the regulatory boundary is vital to assist them in staying ahead of the game.

Fourth, the robustness of infrastructures. Macroprudential policy delivery can encourage the creation of robust utilities that provide essential infrastructure services for the financial system (payment systems, exchange platforms, clearing and settlement systems). These help make the system safe as long as they can provide their services without interruption in all circumstances. Financial institutions such as banks, which in many areas previously provided these services, can then be allowed to fail.

However, the creation of these utilities concentrates risk. They can become “super systemic.” The privatization of many exchanges has also raised the question as to whether the degree of liquidity offered on the exchange (at private risk and cost) is commensurate with the expectations of the marketplace; there is no residual sense of public duty, such as a commitment to providing liquidity that featured in classical models.

29 Blockchain is the ledger of all transactions executed using Bitcoin, a digital currency.

Infrastructure: the way forward

Two options for macroprudential authorities to consider in dealing with this are public provision of the services, or sufficiently strict regulation of privately operated utilities. Efficiency arguments suggest that the latter approach is preferable. The challenge is to put in place sufficiently strict regulation to ensure that available rents as a result of network effects are controlled, and that interoperability exists between competing systems, both on a domestic basis, and, to add to the challenge, internationally. In addition, if utilities or infrastructures fail, mechanisms and processes must be seen to exist to ensure that they can be resolved with essential services maintained.

Fifth, the implications of generic stress tests (Oliver Wyman 2015) for macroprudential authorities. Stress tests are now an established component of both the macro- and microprudential toolkit. The current “state of the art” in stress tests involves robust valuation of assets, projection of incomes/balance sheets under various stress scenarios, public transparency on underlying data and analysis, and an intensive data/insight exchange between supervisory authorities and supervised entities. When executed thoroughly and with demonstrable independence and quality assurance, these processes have been undoubted contributors to financial stability by creating a step change in investor confidence and visibility on financial institutions’ risks. It is broadly recognized, however, that there is a clear danger in stress-testing processes that do not evolve over time and that focus on “yesterday’s problems.” Therefore, assumptions, process, and data inputs will need to evolve over time as systemic risks migrate and the nature of market participants changes.

Stress tests: the way forward

As they plan future stress tests, authorities should consider three elements:

- The dynamic nature of risks and markets suggests that they should constantly challenge themselves to fine-tune stress tests and underlying processes to be better suited to the emerging context, both in terms of the risks included and the scope of participants that are included in such exercises, mindful of shadow banking innovations that may create new risks.

- There is a requirement for logical coherence with Question 1 relating to how safe the system should be. Capital minimums post-stress and specification of the stresses are set somewhat arbitrarily, and there is a clear opportunity to anchor them both in the desired safety of the system.
- Stress testing should also form the kernel of crisis handling and recovery and resolution planning,³⁰ as an alternative way of generating plausible crises and testing institutions' ability and speed of response to them.

Sixth, what powers should the macroprudential authority have? Debate continues as to where these powers should be positioned in the spectrum between “recommendation only” and full powers of direction. There is, of course, no single answer, since powers to ensure delivery will depend on the instruments being considered. But since many of these instruments will need to be deployed by, for example, the supervisory authorities, should they be *directed* by the macroprudential authority to use them even when they may have reasons to resist?

Powers: the way forward

To meet that challenge, a promising formula is that of “comply or explain.” The supervisory authorities will normally be involved as members of the macroprudential authority in deciding on policy actions. If despite this they have a valid objection to decisions, then explaining the reasons for dissent—perhaps publicly—may be the best way forward. This, in turn, will encourage the deployment of other instruments to achieve the same intent. However, a power of direction to vary regulatory parameters temporarily as a backstop may be necessary in some cases—when speed is of the essence, for example. As experience grows, the suite of powers that “work” needs to be disseminated among different jurisdictions.

³⁰ See Question 8.

QUESTION 6

What should the contribution of microprudential supervision to financial stability be?

Supervisors focus on the individual banks and firms. How can supervisors be encouraged to maximize their contribution to systemic issues that underpin financial stability? There are several dimensions.

First, how can we ensure that microprudential policy contributes to the maximum toward financial stability objectives as a whole? Microprudential supervisors inevitably focus on the individual institutions. Many are proud to take seriously the systemic issues, as well, and in addition they are well positioned to act as powerful sources of market intelligence. But conscious effort is in our view necessary to ensure that they contribute fully to mitigation of systemic realities. It might not be obvious, for example, that even where no signs exist of an individual institution posing a threat, in conjunction with others, it might do so.

Second, the scope of coverage of this supervision needs to embrace all areas of financial activity: banks, investment banks, insurers, asset managers, and infrastructure providers, including, for example, payment systems, stock exchanges, and over-the-counter exchanges.

Third, the microprudential component needs to contribute to the maximum toward the objectives of the other two components of the financial stability policy framework. In the macroprudential area,

supervisors need automatically to provide timely, accurate, and relevant assistance with analysis of vulnerabilities, and to deploy policy instruments that they may more normally use for microprudential purposes. In the recovery, resolution, and crisis-handling data area, supervisors need automatically to put in place Recovery and Resolution Plans; as tension mounts at specific institutions, supervisors need to deploy contingent recovery processes; and supervisors need to avoid forbearance at the “point of non-viability,” where handover to the Resolution Authority is called for.

The contribution of microprudential supervision to financial stability: the way forward

First, to ensure that microprudential policy contributes to the maximum toward financial stability objectives as a whole, the task of ensuring that the microprudential supervisors fulfil their mandate falls to their own governance mechanisms. So this mandate needs to go beyond the resilience of individual banks to take account of the broader systemic dimension. Having operational objectives of financial stability bear on them will assist. Beyond this, the institutional seat of authority or council should certainly have some leverage to ensure that they do.

Second, in terms of the scope of coverage, the overall “oversight role” by the council needs to be explicit and hard-wired, and should extend through this wide scope and cover the various supervisors. So the relevant supervisors need to be fully engaged at levels of both support and decision making within the institutional seat of authority.

Finally, as regards contribution to macroprudential policies and recovery and resolution, it is vital that the microprudential supervisor is fully involved in all decision-making and support functions. Creation of a specific macroprudential/microprudential coordination unit can help. Silo-based thinking needs to be addressed. And in the recovery and resolution space, the policy imperatives of putting in place “gone concern” arrangements raises complex interrelationships with the “going concern” supervisors. In each of these areas, the power of the independent seat of authority needs to be available to ensure that policy choices actually get delivered.

QUESTION 7

What should the contribution of customer and market conduct regulation to systemic stability be?

“Retail” misselling contributed to the subprime crisis and has resulted in costly and damaging requirements to provide redress to customers. Market abuse, such as the manipulation of the FX and LIBOR markets and indicators, has had systemic consequences. How can conduct policies best be shaped to contribute to stability?

Consumer protection issues are highly political, are rising up the agenda in many jurisdictions, and can have significant implications for financial stability. Indeed, the lack of proper conduct regulation in the United States in relation to the subprime area was one of the causes of the financial crisis itself. This includes “retail” consumers (for example, buyers of mortgages, investment products, life insurance, or pensions), but also wholesale areas where practices that have come to light in the FX and LIBOR markets have been found to contain unacceptable flaws and conflicts of interest.

Accordingly, ways to protect the wholesale and retail customer need to be reconciled with the need to promote systemic resilience (Bieri 2015; O’Brien, Gilligan, and Miller 2014). The natural objectives of conduct regulation differ from, and may be in conflict with, those of financial stability. Protecting the individual from conflicts of interest requires a different mindset from mitigating systemic vulnerabilities of,

for example, herd behavior, even if failure in the one area can lead to failure in the other.

One view in responding to this is to claim that prudential and consumer protection areas should strengthen each other through a build-up of trust in the financial sector. However, situations arise where prudential and systemic considerations to avoid bank runs can conflict. For example, the supervisor may resist warning depositors that a bank may be failing, whereas the consumer protection authority may feel obliged to do so. Ways must be found to give due weight to financial stability considerations in such circumstances.

The contribution of customer and market conduct regulation to systemic stability: the way forward

Clarity on objectives. Absolute clarity of the respective policy objectives is needed for prudential supervision and conduct (consumer protection and market). This, and the insistence that the financial stability objective bears on both policy areas, can help achieve mutual engagement.

In the case of conduct, an important—and difficult—consideration is to find agreement on the level of protection that should be provided. To what extent will the customer be relied on to take appropriate care? To what extent should the “caveat emptor” obligation be disappplied? The greater the extent, the stronger the position of the consumer protection objective may need to be compared to that of financial stability.

Different approaches need to be taken, as between retail and wholesale, including market conduct. The former often relies on rules-based approaches to deliver appropriate conduct, with varying degrees of success. In reality, both call for standards-based measures to improve behavior.

Experience suggests that providing the conduct regulator a “seat at the table” at the institutional seat of authority is a vital ingredient to encourage engagement. Whatever organizational or architectural solution is adopted, articulation of respective objectives must be clear. Management of silo tendencies is needed, whether different functions are handled within the same or in separate entities. As a general matter, it may be unwise to put conduct regulation within the central bank. This risks making it too powerful, and also is far removed from the DNA of central banking. Engagement between the two areas may provide a better solution.

QUESTION 8

What should the recovery, resolution, and crisis handling processes be?

A “continuum” of processes is needed to include recovery of banks getting into trouble, resolution of banks that fail, and handling a crisis when the system fails. Who should take responsibility for these preparations?

The wisdom of being prepared for firms that fail, and the need to eliminate knock-on impact leading to the need for fiscal resort, is manifest. Failures will happen, and jurisdictions must be ready to handle them to minimize social cost. Without adequate machinery to cope with the resultant challenges, any framework for financial stability would be seriously deficient. However, our experience is that for many jurisdictions, this area of financial stability policy is where they struggle most.

Given that most of the work to provide resilience in this area must be done when the sky appears to be clear, people find it hard to engender the necessary sense of urgency. And whether wealthy or otherwise, jurisdictions may lack enthusiasm to tackle the difficult issues in this area. There is a fire brigade quality to being sure that you are ready at all times for unlikely events.

Inertia can also arise due to the inevitable tensions between different parties that have important roles in the field. This, together with a lack of urgency, can provide a strong force for inertia.

A real example of such tensions are those between “going concern” (microprudential) supervisors and “gone concern” (the Resolution

Authority) supervisors. The role of the going concern supervisors is to keep the banks on the road and in good health. Suggestions that they might not be successful in doing so can elicit feelings of forbearance, given that failure of a bank would be an event for which they could be blamed. Gone concern supervisors have different objectives and priorities, namely, on the assumption that a firm has or will have failed, to ensure that the clearing up is least costly to the taxpayer.

To add to the difficulties, the sheer number of contingent tasks that need to be prepared for is daunting. They need to cover the whole sequence of stages that we have labeled a “continuum,” as tension and extent of failure mount. We use the word continuum because each state escalates from the last as tension mounts, and movement between them must be seamless. The stages unfold as follows:

- Initially, determination and putting into place of recovery and resolution plans;
- Then, as tension at a firm rises, early intervention recovery processes begin;
- A decision on the point of non-viability occurs, where actual responsibility for supervision must switch from going concern supervisor to gone concern supervisor;
- And once the firm has failed, the resolution processes themselves.

When a full-blown crisis occurs, crisis management processes are crucial.

Each of these stages will have its own set of tasks. For these to be carried out effectively, and for the movement from one stage to the next to be seamless as tension mounts, each set of tasks requires legal backing, with relevant orders under which rules and processes will be in place; people, designated up-front, trained and with the responsibilities for, and skill sets to accomplish, the necessary tasks; clarity of their roles and responsibilities in carrying out the tasks; the necessary IT and communications support; and clarity of accountability.

It is fair to say that most jurisdictions have capabilities for at least some of these tasks. But very few could say with confidence that they are comfortable that there are no gaps in their processes or that the overall contribution of their recovery and resolution processes to the resilience of the financial stability framework is as high as it should be.

An additional challenge exists in the increasingly cross-border context of the operations and incorporation of financial institutions. There still exist incompatible legal principles that apply to recognition and enforcement of foreign orders by regulators or courts, and while the FSB's "Key Attributes of Effective Resolution Regimes for Financial Institutions" (2014c) offers some guidelines, they do not completely resolve existing conflict-of-law problems (Giovanoli and Heinrich 1999).

Putting these guidelines in place is a huge undertaking, but it is neglected at the peril of any jurisdiction, however well-endowed it might be. A dedicated team, properly empowered, can help accomplish what is needed.

In summary, when the contingent events do occur, total reliance will need to be placed on the preparations made in advance. Muddling through will be ineffectual and/or expensive, and there will be no time to develop capabilities if crisis then ensues. The costs that would arise of failing to get this right justify a significant and ongoing effort.

The recovery, resolution, and crisis handling processes: the way forward

The area of recovery, resolution, and crisis handling is particularly difficult, but is vital to minimizing recourse to fiscal sources.

First, a dedicated unit or team needs to be put in place to "project manage" the preparations with a mixture of determination, skillsets, and authority to command the full cooperation and involvement of many parties. Locating this team at the resolution authority or gone concern supervisor under the auspices of the institutional seat of authority, or council, can be an effective means to achieve this. The unit needs to adopt a "top-down" view, to ensure cohesion of all the various tasks that need to be connected. Members need to include the "gone concern" authority itself, and the relevant "going concern" supervisory authorities, who supervise both the firms (for example, in creating recovery and resolution plans), but also the infrastructure providers such as exchanges and payment systems.

The unit needs to be responsible for, among other things:

- Defining the scope of each of the tasks at each stage in the continuum. Much expert guidance is now available in that area through, for example, the FSB's "Key Attributes of Effective Resolution Regimes for Financial Institutions" (2014c).

- Ensuring functionality is in place for each contingent task—people, responsibilities, skills, and experience from different authorities; training, communications, and IT, together with legal powers and backing.
- Overcoming silo-based resistance from going concern supervisors to agree on mechanisms for implementing recovery and resolution plans. The governance and structural arrangements of each financial institution will in practice be determinants of the loss-absorbing capacity available in the event of failure, and hence of potential fiscal cost.
- Developing the architecture for a resolution authority. To avoid forbearance issues, this would normally be constituted as a separate unit—at the central bank, in the deposit insurance authority, or on its own. It will need powers to intervene—and perhaps to determine—the point of non-viability. The Authority may be permanent in cases where there are regular failures (such as the United States), and contingent in cases where fewer are expected.
- Overcoming the so-called fire brigade issue; that is, keeping people motivated to undertake contingent tasks expected to be infrequent or remote. Testing can help keep people up to the mark and ensure that the processes are coherent and have no gaps.

Second, in an operational sense, a decision-making mechanism, in practice perhaps a standing group at the unit itself, needs to be put in place. Operational decisions will be needed on the multitude of issues along the continuum as tension mounts, including the handling of crises should they occur. This mechanism needs to incorporate adequate links to the fiscal authority, particularly to cover situations approaching crisis, in view of the enhanced danger of fiscal support becoming necessary.

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