



Regulatory reform: remaining challenges

Speech by Jaime Caruana

General Manager, Bank for International Settlements

Luxembourg, 7 July 2011

Good evening. It is a pleasure to be here in Luxembourg. Thank you very much for inviting me and giving me the opportunity to discuss with all of you some of the key remaining challenges on the regulatory reform agenda. As you know, the BIS is a forum for cooperation among central banks and supervisory authorities. Luxembourg is an important financial centre, and its Central Bank has long been an active contributor to the work of the BIS, especially in key groups such as the Basel Committee on Banking Supervision and the Committee on the Global Financial System. At the Annual General Meeting in June, the BIS Board recognised this long-standing contribution by inviting the Central Bank to become a shareholder of the BIS. We look forward to this additional collaboration.

Next month is the fourth anniversary of what is generally considered to be the start of the financial crisis, August 2007. And today, despite significant progress in a number of crucial areas, both in the global economy and in the financial markets, the situation is still far from normal. Growth is uneven and uncertain. The unsustainable trajectories of public debt in a number of countries create additional risks that interact with remaining fragilities in financial markets. While commodity prices have retreated recently, many are still close to historically high levels and have put some upward pressure on general price levels. And some emerging economies are starting to witness rapid credit growth and related financial sector imbalances. So all in all, despite the exceptional measures that have been taken, the economy and financial systems remain vulnerable to unexpected shocks, and the likelihood of some adverse scenarios materialising has not decreased. This is an important point to remember later when we discuss one of the challenges – reform versus recovery.

In the aftermath of the financial crisis, among the many measures that needed to be taken, there was widespread consensus for building a stronger financial system, and for implementing more intensive and proactive oversight. Today, while progress on regulatory reform has been impressive, and we are focusing more on implementation, building a more robust financial system in a globally consistent way and creating adequate oversight structures and procedures pose a number of challenges. While we should not lose sight of the achievements, which have been substantial, today I will focus on these remaining challenges for financial reform.

In my view, these challenges fall into four broad groups:

- First, consistently implementing the substantial reforms already agreed.
- Second, building a resilient financial system given a still weak recovery. This means getting the transition right – how fast should we move to a more robust system?
- Third, completing the regulatory reform agenda. I will focus on four main issues: systemically important financial institutions (SIFIs), financial market infrastructures, resolution regimes, and the shadow banking system.
- And fourth, ensuring adequate oversight. This has two main parts: macroprudential oversight, and more proactive prudential supervision.



Consistent implementation of what has been agreed

As I said, there has been significant progress in reforming financial regulation. Basel III is a crucial regulatory response to the crisis and a major step forward towards creating a stronger and safer financial system. But agreeing on Basel III is only a first step: the next step is just as critical, and that is implementation. One of the most important lessons we learned from the crisis is the need for full, timely and consistent implementation and enforcement of rules.

I will not go through the details of Basel III, but let me summarise a few elements that are relevant for consistent implementation and outline what remains to be done.

1. Better and more capital – ensuring effective loss absorption capacity

As you all know, Basel III raises the level and quality of capital in the system. When the whole Basel III package is implemented, banks' common equity will need to be at least 7% of risk-weighted assets. This compares to a Basel II level of 2% common equity – and that's before taking account of the changes to definitions and risk weights, which make the effective increase in capital all the greater. The 7% figure includes a 2.5% capital conservation buffer, which is designed to be drawn on in difficult times. And among the improvements in capturing risk on the assets side, I would especially point to the stronger treatment of risks related to securitisation and contingent credit lines.

But what about the rest of Tier 1 and Tier 2 capital, which amounts to another 3.5% of risk-weighted assets? The truth is that during the crisis some of the regulatory capital did not work as intended and did not absorb losses. A number of distressed banks had to be rescued by the public sector injecting capital. This had the effect of supporting not only depositors but also the investors in regulatory capital instruments. Consequently, Tier 2 capital instruments, mainly subordinated debt, and in some cases non-common equity Tier 1 instruments, did not absorb losses incurred by banks that would have failed without public sector support. Insufficient effective capital and the weakness of resolution frameworks left public authorities the painful choice of either letting their institutions fail, thereby further disrupting the financial system, or rescuing them with public funds, thereby socialising the losses and worsening moral hazard.

Public sector injection of capital needed to avoid the failure of a bank should not protect investors in regulatory capital instruments from absorbing the loss that they would have incurred had the public sector not chosen to rescue the bank. To achieve this objective, the BCBS has agreed that all regulatory capital instruments should include a mechanism in their terms and conditions that ensures they will take a loss at the point when an institution becomes non-viable, including in situations where the public sector steps in to recapitalise a bank that would otherwise fail. Specifically, all non-common equity Tier 1 capital, and all Tier 2 capital, should convert to common equity as soon as authorities make a capital injection to save the firm. This should encourage the holders of these instruments to assess the risk of failure and price them accordingly, providing an additional source of market discipline and reducing moral hazard.

2. Addressing systemic risk

I would also highlight the elements of Basel III that are intended to address systemic risk in its two dimensions: the time dimension, mitigating procyclicality, and the cross-sectional dimension, mitigating interconnection and contagion risk. I will address the latter dimension when I talk about SIFIs. Here, let me briefly mention the countercyclical rule of Basel III. Supervisors will be able to impose a countercyclical buffer on their banking system when credit growth seems to be getting out of hand. They will be able to apply this equally to



foreign and domestic banks. Additionally, a leverage ratio will limit banks' ability to accumulate leverage, even if they are using it to purchase supposedly safe assets.

3. Liquidity management

The third element that was not treated in Basel II was liquidity. Before the crisis, many banks saw liquidity as a free good. They did not imagine that entire markets could freeze up, nor did they anticipate an extended period of illiquidity. When the crisis erupted, central banks were forced to step in and provide money markets and banks with unprecedented amounts of liquidity to help stabilise the market. The crisis exposed a number of deficiencies in banks' liquidity risk management and risk profiles. Basel III tries to address these deficiencies.

This is the first time there have been detailed global liquidity rules, we do not have the same experience and high-quality data as we do for capital, and a number of areas which require careful potential impact assessment were identified. For these reasons, the Committee agreed to take a measured approach in adopting the standards in 2015 and 2018, and will assess the impact during an observation period. This may result in modification of some of the liquidity standards, if the Committee's assessments yield compelling evidence and analysis to support it.

The Committee has begun studying any potential unintended impacts of the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR), particularly as they relate to central bank operations, money markets and the broader financial system. To that end, the Committee is already evaluating these and other liquidity topics, in some cases in close cooperation with other BIS-based groups, such as the Committee on the Global Financial System and the Committee on Payment and Settlement Systems, and in close consultation with the industry.

The bottom line is that Basel III is a much more comprehensive package that incorporates the lessons from this complex crisis. Full, consistent and timely implementation by national jurisdictions is now at the top of the Basel Committee's agenda. In an important next step, through the work of its Standards Implementation Group, the Committee will conduct peer reviews and thematic reviews to help ensure timely and consistent implementation and to assess whether the standards are producing the desired results. For its part, the Financial Stability Board (FSB) is working to promote implementation of global standards through its peer review process. One element that the peer reviews may look at is differences in the calculation of risk-weighted assets in the internal models.

To come to my last point on implementation, we should not forget that the Basel III standards collectively represent a set of *minimum* requirements. They were agreed based on this understanding and were not developed as a menu of options. If jurisdictions were to choose only certain elements of Basel III, it would dilute the effectiveness of the framework. On the contrary, one of the lessons of the crisis is that jurisdictions with higher capital requirements and more active or, if you want, more intrusive supervision performed better than those which favoured "light-touch" supervision. Some jurisdictions are already above the capital standard and others may decide to impose higher standards. So let me emphasise once again that Basel III is a minimum, and that its calendar is also a minimum.

Building strength in a still fragile recovery

Let me now turn to the second set of challenges. A lot has been done to ensure the building of a more resilient financial system. But what should be the right transition?



Both during the debate before the publication of Basel III and since, some have expressed concerns that strengthening bank capital, together with other measures, would be harmful to growth and could delay recovery. This discussion has emerged again in the discussion on how to address SIFIs, and in the context of a waning sense of urgency regarding reform. These risks need to be analysed to avoid the possibility that critical elements of financial reform could be delayed, weakened or not fully carried through.

From the beginning, this question has been taken very seriously by policymakers, and has been analysed carefully. Two studies conducted last year under the auspices of the BIS found that the growth costs, both in the transition and in the steady state, are likely to be modest, and far outweighed by the benefits.

The Macroeconomic Assessment Group, or MAG, a group of modelling experts formed by the FSB and the Basel Committee, concluded that, while banks may attempt to raise credit spreads and to reduce lending growth in the transition to higher capital levels, this is likely to have a modest impact on the real economy. Their analysis made use of a suite of models, including both established forecasting models and more innovative techniques. And while their results differed – economists always differ – almost all of them pointed in the same direction. The MAG group found that the impact of higher credit spreads and lower loan growth will be rather small, in the order of a 3 to 5 basis point reduction in annual growth rates, during the time that the extra capital is being built up. Once the banks have completed their adjustment, growth accelerates until it is back to its trend path. The longer the transition period, the lower the costs – this is because banks will have more time to accumulate capital through retained earnings, and will have less need to cut back on their lending or to raise costly new capital on the public market.

So far at least, predictions that the transition to stronger capital requirements would have a significant impact on growth have not been borne out. Many banks have increased their capital ratios ahead of schedule, without a noticeable impact on lending spreads or a tightening of lending terms.

While the MAG was tasked with examining transitional issues, a separate group studied the costs and benefits of the requirements over the long run. This long-term economic impact (LEI) group found that additional *permanent* GDP costs should be small, while the benefits of reducing crisis risks will be substantial. The costs will be low because, as economic theory teaches, eventually investors will recognise that well capitalised banks are less risky, and will demand a lower return on equity. This limits any long-term rise in credit spreads. At the same time, potential benefits will be gained from reducing the risk of financial crises and the resulting permanent losses to GDP. The LEI group found that the range of capital ratios at which the benefits exceed the costs is quite wide. The proposed Basel III minimum of 7% is at the lower end of this range – capital ratios could go quite a bit above this level before the costs start to exceed the benefits.

The MAG and LEI analysis informed the calibration of the capital buffers and the transition paths under Basel III. Supervisors chose to set the regulatory minima at levels substantially above where they are now, but they allowed a lengthy transition period to avoid the adjustment costs from banks trying to achieve higher capital ratios too quickly.

Some observers have suggested that, in the current global environment, regulatory reform should take a back seat to addressing more immediate concerns, such as weak global growth, inflation risks and sovereign risks. On the contrary, I would suggest that the persistence of vulnerabilities and the prospect of further setbacks argue in favour of building strength now. Instead of taking the maximum agreed time to achieve the minimum capital strength, where possible, authorities and banks ought to go faster and further.

A sound recovery is contingent on having a secure financial system. Businesses and households will not regain the confidence to plan, to invest and to innovate until they have been reassured that the financial system is not at risk of another crisis.



Completing the regulatory reform agenda

My third point is that we need to do more to reduce both the probability and the severity of financial crises. As I said at the outset, tremendous progress has been already made, and the financial reform agenda has moved forward incredibly rapidly with the agreement reached on Basel III. Banks have already increased their capital base significantly. These are no mean achievements, and not one of them was assured just a year ago.

But more needs to be done to complete the regulatory reform agenda. The Basel Process, in particular the FSB and the various associated standard setters, is moving full speed with the support of the BIS to enhance financial regulation in many areas, especially concerning SIFIs, market infrastructure, resolution regimes and shadow banking.

1. The SIFI framework

Let me start with SIFIs. The strengthening of capital and liquidity that will take place under Basel III is an important and necessary part of the regulatory agenda. But it is not sufficient to address the negative externalities posed by SIFIs in general and, in particular, to protect the wider financial system from the spillover risks stemming from those institutions that are systemically important at the global level (the “G-SIFIs”). The rationale for adopting additional measures, including higher loss absorption capacity for G-SIFIs, is based on the negative cross-border externalities they create and which current regulatory policies do not fully address.

The framework for SIFIs being developed by the FSB – and by the Basel Committee for those SIFIs that are banks (called global systemically important banks, or G-SIBs) – comprises three main components: greater loss absorbency, more intense supervision and stronger resolution. These complement each other, and aim at a common set of objectives. We know that the distress or failure of certain institutions has a greater impact on the system than the distress of others. So we want to do more to reduce the *probability* of such a failure, by insisting that these institutions have more capital to absorb losses and by strengthening the ability of supervisors to spot potential problems early. Complementing this, we want to do more to reduce the *impact* of a SIFI’s distress or failure, by making it possible to close or restructure such an institution without causing excessive disruption to the rest of the financial system, even if its activities cross national borders. And we want to develop a framework that reduces the probability and impact of a SIFI’s failure without increasing moral hazard or providing an implicit too-big-to-fail subsidy to the banks that are subject to the framework.

On 25 June 2011, the Group of Governors and Heads of Supervision, the oversight body of the Basel Committee, already agreed on specific measures for G-SIBs. This represents an important step forward on the SIFI agenda. A consultative document will be issued around the end of July 2011 after discussion by the FSB, which is coordinating the overall set of measures to reduce the moral hazard posed by all G-SIFIs, whether they are banks or not.

The G-SIB agreement contains important elements:

- The methodology for assessing the systemic importance of G-SIBs is based on an indicator-based approach and comprises five broad categories: size, complexity, cross-border activity, how interconnected the institution is with other players in the system, and whether the institution provides a unique and necessary financial activity.
- The additional loss absorbency requirements are to be met with a progressive Common Equity Tier 1 (CET1) capital requirement ranging from 1% to 2.5%, depending on a bank’s systemic importance. Plus an additional 1% surcharge to



provide a disincentive for banks facing the highest charge to increase materially their global systemic importance.

- The higher loss absorbency requirements will be introduced in parallel with the Basel III capital conservation and countercyclical buffers, ie between 1 January 2016 and year-end 2018, becoming fully effective on 1 January 2019.
- The final element was the use of contingent capital instruments, the so-called cocos. The agreement was to continue to review the role of cocos as vehicles for providing additional loss absorbency and to support the use of contingent capital to meet higher national loss absorbency requirements than the global minimum, as “high-trigger” contingent capital could help absorb losses on a going-concern basis.

The choice among the different instruments is determined by how they meet the objectives stated above relating to the probability-impact of failure, cost-effectiveness and the right incentives to bank management. So-called “early-trigger” or “high-trigger” cocos, which convert to common equity well before a bank has become non-viable, seem to work better in this respect. They can provide a measure of market discipline, since market participants will be keen to price them to reflect the forward-looking risk that a bank will get into trouble. At the same time, it is not clear that they are more cost-effective or provide better signals than conventional common equity. “Late-trigger” cocos, which convert when a firm is no longer viable, are better understood in the context of strengthening resolution, which I will come back to in a moment.

I should emphasise that this is just the global framework, which is to be applied to the world’s largest banks. A number of countries are likely to supplement these rules with additional loss absorbency requirements and other rules applicable to banks which may not be systemic on a global scale, but are systemic within their national financial systems.

Finally, I should note that, while most of the recent discussions have related to systemically important *banks*, there are other financial institutions that, although different in nature, are potentially systemic, such as insurance companies, asset managers and providers of market infrastructure. Discussions on how to strengthen the regulation and supervision of these entities are ongoing. But the underlying principle is the same: that the risks potentially posed by these institutions to the broader financial system call for more intensive supervision and for measures to reduce both the probability and impact of distress or failure.

2. The role of financial market infrastructures

Another important issue relates to the risks posed by the conduct of transactions in financial markets, which, as you know, can be through organised exchanges or over the counter (OTC). Settlement typically takes place in financial market infrastructures like large-value payment systems, securities settlement systems and central counterparties (CCPs).

The way market infrastructures are designed and how they function has important implications for financial stability because they can act as a channel through which disruptions can spread among financial market participants. Hence, these infrastructures can serve as an important means to mitigate the risks arising from the interconnectedness of market participants and can reduce the risk of contagion. The financial crisis revealed a striking weakness in the way important OTC derivatives, in particular credit default swaps, were processed in the post-trade phase. Many of these transactions were inadequately reported, and the bilateral exposures between counterparties were insufficiently collateralised.

Against this background, authorities from around the world are pushing for two significant changes in the post-trade infrastructure for OTC derivatives. Both should be implemented by the end of 2012.



First, OTC derivatives will need to be reported to a trade repository (TR), which is an electronic registry that keeps a record of all relevant details of an OTC derivative transaction over its lifetime. If all trades are reported to a TR, and the information is made available to the relevant supervisory authorities, then these authorities will be able to gain an overall view of the OTC derivatives markets, including the most important (gross and net) positions taken by the major dealers in these markets. If TRs had existed before the crisis, the build-up of huge derivative positions, such as those at American International Group (AIG), would have been observed much earlier.

Second, clearing OTC derivatives through a CCP instead of bilaterally can bring about several benefits from a financial stability perspective. A CCP interposes itself between the two original counterparties of a financial transaction. In other words, the CCP isolates the original counterparties from each other should one of them default. Thus, it makes financial institutions less interconnected. However, since risks become concentrated in the CCP, the CCP itself needs to be highly robust: it must protect itself against the default of one or more of its members. To that end, the CCP requires its members to regularly adjust their collateral at the CCP.

The international community is carefully monitoring the progress made towards implementation of OTC derivatives market reforms. In particular, the FSB has been tasked to review how the various G20 commitments concerning standardisation, central clearing, exchange or electronic platform trading, and reporting of OTC derivative transactions to TRs are being implemented in an internationally consistent and non-discriminatory way.

3. Strengthening resolution

As I've noted, another critical element of the global effort to address SIFIs is the strengthening of resolution frameworks. They reduce the possibility that authorities will find themselves forced to bail out institutions in order to prevent a disorderly wind-down of a failed firm. Here progress is slow, but steady; a number of countries have taken steps to improve their domestic processes, while on cross-border aspects experts are isolating issues and developing solutions.

A sound resolution regime needs to have a number of key elements. Among other things, the powers of designated authorities to initiate the wind-down of a troubled institution need to be clear. There need to be mechanisms for coordination and information-sharing across agencies within a jurisdiction, as well as across borders. There needs to be advanced planning, both for the immediate management of a crisis situation and for the longer process of winding down a closed entity. There needs to be financing available to support the operations of an institution that is legally bankrupt but still operational, and to support the transfer of viable operations to other entities. And there need to be mechanisms for safeguarding the assets of depositors and other clients.

The Dodd-Frank Act in the United States provides important new mechanisms whereby the US authorities can act quickly to shut down a failing institution – even a large, complex one – while minimising disruption to the rest of the system. The European Commission's proposal for an EU bank resolution framework, which is due this summer, will be another important contribution.

Fostering the issuance of bonds that can be written down in the event of resolution – so-called “bail-in bonds” – can also be part of the solution. Investors in bank debt need to recognise, and price, the losses they will be exposed to in bankruptcy, just like unsecured creditors in any industry. Making this exposure explicit through bail-in provisions is one way to combat the perception that there is an implicit public guarantee of such debt. Capital instruments that convert from debt to equity at the point of non-viability, the “late-trigger” cocos I mentioned before, can also perform this function. However, banks may respond to



such provisions by shifting their financing to a secured basis, leaving few or no assets for unsecured creditors, including depositors. To limit banks' scope to do so, bail-in needs to be accompanied by limits on asset encumbrance.

Working out all of the elements of this framework in key jurisdictions will take time. Higher loss absorbency for SIFIs can in the meantime reduce our reliance on untested resolution regimes.

4. Shadow banking

Another critical element of the reform agenda is to monitor and, where appropriate, address the risks that may come from the shadow banking system. Last April, the FSB published a brief note entitled "Shadow Banking: Scoping the Issues", which starts this kind of work. Shadow banking is described as "credit intermediation involving entities and activities outside the regular banking system". It can perform valuable functions, including facilitating alternative sources of funding and liquidity and providing banks and investors with a range of vehicles for managing credit, liquidity and maturity risks.

However, as the financial crisis has shown, the shadow banking system can also contribute to systemic risk, both directly and through its interconnectedness with the regular banking system. It can also create opportunities for arbitrage that might undermine stricter bank regulation and lead to a build-up of additional leverage and risks in the system.

Therefore, it is important to enhance the oversight and examine the potential regulation of the shadow banking system in areas where systemic risk and regulatory arbitrage concerns are inadequately addressed.

To be sure, this is a large and complex issue. It is complex because this is a rapidly evolving area of the financial system, and thus we need to proactively monitor financial innovations that establish new channels that may be facilitating risky increases in leverage, maturity or liquidity mismatches, in order to determine whether and how there is a need to respond.

It is important to recognise that banking and shadow banking activities are strongly interrelated and that in past booms they tended to grow rapidly in tandem. Banks are often part of the shadow banking chain or provide implicit support to shadow banking entities, and typically draw substantial income from shadow banking activities. When banks are capital-constrained during times of credit growth or due to regulation, shadow banking activities have the incentive to grow much more rapidly.

Policy measures will need to have the flexibility to evolve as the system does. The proposals currently being considered by the FSB comprise two main directions:

- Recommendations for monitoring shadow banking on the basis of some high-level principles (comprehensiveness, regularity, flexibility, capacity to collect data, etc) and a three-step monitoring process, starting with a broad sweep of all non-bank intermediation to narrow the focus on the basis of the key systemic risks and the cases of higher potential impact.
- Initial recommendations to structure the work on potential regulations, including data disclosure. One channel for addressing shadow banking risks will thus be through stronger regulation of traditional banks, such as higher risk weights for securitised assets and for contingent credit lines. There is also much that we can do in other areas, such as strengthening the regulation of money market funds and repo markets. Given the global nature of many shadow banking activities, these efforts need to be coordinated at the international level and, as I said, they are at a very early stage.



Proactive oversight of the financial system

So, in my remarks so far today I have emphasised that, first, a lot has already been achieved, and now it's implementation time; second, we have put a transition period in place; and third, we need to complete the reform agenda and finish the job.

But my fourth point is that regulation is not enough, and progress will need to be made in developing the institutions and processes that will ensure that the goals of the new regulatory framework are achieved consistently and effectively. I'll make two points.

First, countries are putting in place macroprudential oversight bodies and frameworks that will support and complement these essentially microprudential measures. Basel III includes important macroprudential elements, for example the countercyclical capital buffer. But discretionary measures may be needed at some point in time, and more work is needed in a number of areas, such as developing techniques to anticipate systemic risk, gathering the consistent global data needed to make such assessments, and strengthening haircutting and margining practices in securities markets.

Second, efforts to implement the new rules need to be supported by strong and enhanced supervision of individual banks. Strong supervision is needed to ensure that banks operate with capital levels, liquidity buffers and risk management practices that are commensurate with the risks taken. It must also address the consequences of financial innovation or risks of regulatory arbitrage that regulation cannot fully capture and, more generally, address the firm-level consequences of emerging risks and economic developments. National authorities must supervise in a more intensive and more intrusive fashion, especially for the largest and most complex banks. It will also be important to reinforce both the firm-specific and macroprudential dimensions of supervision and the way they interact.

Conclusion

The private sector has to contribute to reach a new equilibrium in which the financial system is more resilient, is able to absorb shocks and not amplify them. This requires better risk management and governance and aligned incentive structures, but also a new approach to risk-taking which recognises existing uncertainties, limitations in our knowledge and the complexity of systemic risk. It may, for example, require investors to demand a lower return on equity. A more prudent approach towards risk is the best insurance policy against tail risks: returns may be more modest and stable in good times, but in turmoil losses would be much smaller.

All of these disparate elements will need to be fully and consistently implemented in all major jurisdictions. The objective is to reduce the risks of the *next* crisis, no matter how seriously a given country was affected by the recent crisis. I think that authorities do not gain any advantages through slower or weaker implementation – rather, they increase the exposure of their economy to serious risks, especially if they end up attracting risky, leveraged activities from other financial centres.

Completing the regulatory reform agenda and seeing that it is implemented are thus critical tasks for authorities as we continue to recover from the crisis. They are part of the broader challenge of providing a framework for macroeconomic stability, along with bringing debt back to sustainable levels and normalising monetary policy. All three elements of policy – fiscal, monetary and prudential – will need to work together to deliver strong, sustainable global growth.