Proposals to reform financial regulation

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Following the significant financial dislocations associated with the financial crisis, there has been widespread support for reforming the financial regulatory architecture. Across the world, major financial centres are considering a wide range of regulatory reforms. To facilitate policy action, a number of reviews have been conducted. Of those affecting the UK, the most significant have been:

- *The Turner Review*, conducted by the UK's Financial Services Authority;
- *The de Larosiére report*, requested by the European Commission;
- *Financial Regulatory Reform* , conducted by the US Treasury;
- A range of reports commissioned by the Basel Committee on Banking Supervision; and
- A range of reports conducted by the Financial Stability Forum (now Financial Stability Board).

This Note provides a summary of the reforms recommended in these documents, and concludes by producing a comparative overview of key recommendations in tabular form.

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1 The Turner Review, March 2009

The Financial Services Authority (FSA) published its review of the financial regulatory structure on 18 March 2009. Although the review addressed the causes of the financial crisis, wider issues and implementation, this note will focus only on the report's main section (Chapter 2) discussing recommended reforms.

1.1 The need for a systemic approach

The Turner Review (the Review) began by proposing that new regulation must be underpinned by a focus on systemic risk. The report provided three reasons for the necessity of the shift in focus:

> • The role of banks as providers of maturity transformation, holding longer tenor assets than liabilities and thus enabling non bank sectors in total to hold longer liabilities than assets. This is a vitally important function delivering important benefits to the economy. But it is inherently risky. If all creditors of a bank simultaneously demanded their money back on the due date, almost no bank would be able to meet this demand unless it received central bank lender of last resort support.
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> • The potentially systemic nature of banking liquidity risks, and to a degree solvency risks. A fall of confidence in one bank is capable of undermining confidence in others. The response of several banks to liquidity problems (e.g. drawing down wholesale lines or reducing wholesale placings) can strain the liquidity of other banks not originally affected. And the simultaneous attempt of many banks to address liquidity problems via sale of assets can generate asset value falls and solvency risks.
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> • The fact that the impact of bank failure and in particular of bank system failure is extremely serious for the real economy. Recent IMF analysis has illustrated that financial economic slowdowns and recessions associated with banking-related financial stress are both deeper and longer lasting than those associated with non-banking financial stress and than those which arose for reasons unrelated to financial system stress (Exhibit 2.1).[1]

1.2 Capital, accounting and liquidity

It identified the interaction of capital, accounting and liquidity rules as critical to the occurrence of the crisis. The Review noted:

> Inadequate capital against trading book positions allowed excessive leverage: changing patterns of maturity transformation created system-wide liquidity risk: mark-to-market accounting helped fuel a self-reinforcing cycle of irrational exuberance. And when the crisis broke, banks did not have sufficient capital buffers to absorb losses, creating the danger of a self-reinforcing feedback loop between weak lending capacity, economic recession, and credit losses.[2]

The Review thus identified seven policy areas requiring reform.

Quality and quantity of capital

It argued that capital requirements should focus "entirely" on the highest quality forms of capital – Tier 1 and core Tier 1 capital. The report criticised the Basel capital requirements for being pragmatic, and not being based in any sound theory of theoretical rationale for the optimal level of capital. Although the Review acknowledged the difficulty of establishing an

1 FSA, Turner Review: A regulatory response to the global banking crisis, 18 March 2009, p52
2 Ibid., p53

optimal capital requirement, it suggested that its level "is likely to be significantly higher than that which appeared appropriate in the past";[3] the FSA commissioned the National Institute for Economic and Social Research to provide a constructive research proposal. Despite such theoretical uncertainty, the FSA explained:

> But there is a strong prima facie case that minimum bank capital requirements should in future be significantly above those which have applied in the past. The FSA is already applying a set of guidelines, which imply a minimum Core Tier 1 capital of 4%. A possible future regime might be one in which the minimum Core Tier 1 ratio throughout the cycle is 4% and the Tier 1 ratio 8%. The dynamic capital mechanism (discussed below in 2.2 (iv)) is expected to generate an additional buffer equivalent to 2-3% of Core Tier 1 capital at the top of the cycle. It should remain open to supervisors to require a further discretionary buffer above this.
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> It is essential, however, that the transition to higher capital requirements is phased, and takes account of the need to avoid procyclical pressure on bank capital adequacy in the current economic downturn.[4]

Trading book capital

While noting the importance of capital requirements, the Review stressed the importance of the risk calculation mechanisms that underpin risk-weighted capital requirements (the widely used standard under the Basel I regulations). Central to the risk-weighting framework is the concept of Value at Risk (VaR), which estimates the probability of losses on an asset before a position is closed. The framework received a number of criticisms from the FSA:

> It can generate procyclical behaviour: it fails to capture the danger of low probability high-impact tail events: and it can suggest to individual banks that the risks facing them are low at the very point when, at the total system level, they are most extreme.[5]

While the risks have always been presented, the report explained that their impact increased as the composition of the financial sector's trading book shifted.

The Review argued that trading book assets were significantly underweighted in the assessment risk-weighted of capital charges:

> A crucial failure of the current capital regime, which played a major role in allowing the developments which led to the crisis, is that it has required only very light levels of capital against trading books on the grounds that the risks are low because assets can be rapidly sold and positions rapidly unwound.[6]

Accordingly, the Review proposed a number of changes to the existing risk valuation process:

> A radical change in the approach to trading book capital is therefore essential:
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> • Proposals already adopted by the Basel Committee, strongly supported by the FSA and planned for implementation by the end of 2010, will make a major difference with (i) requirements for stressed VAR calculations; (ii) an incremental capital charge to cover default and credit risk mitigation; and (iii) increased charges for securitisations, particularly resecuritisations. These changes will in themselves produce increases in capital requirements for some bank trading books of more than three times.

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[3] Ibid., p55
[4] Ibid., p57
[5] Ibid., p58

> • However, in addition, the FSA proposes a more radical review of trading book risk measurement and capital adequacy requirements. This needs to cover the:
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> • definition of assets appropriately booked in trading and banking books;
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> • use of VAR, stressed VAR and other measures of risk; and
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> • the extent to which approaches should vary by trading book activity, to reflect, for instance, different liquidity characteristics.
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> This Review needs to be conducted an international level: the FSA will propose that it is completed within one year.[7]

Pro-cyclicality

Under the changes implemented under Basel II, banks were required to assess the risks on their banking books in a more risk-sensitive fashion. Turner highlighted that this approach has had both its advantages and disadvantages:

> In theory this new approach has advantages: indeed if it had been in place over the last ten years, it might have helped avoid some of the problems which contributed to the current crisis. The previous Basel I regime, by treating all mortgages equally, made more risky mortgages seem more attractive: the new regime can identify that high loan-to-value (LTV) mortgages are likely to be more risky than low LTV. But while this risk sensitivity is a potential advantage, it necessarily increases the danger of procyclicality in capital measures. As the creditworthiness of borrowers declines in a recession, Basel II, unlike Basel I, can require banks to hold more capital.
>
> The extent to which this procyclicality arises in practice depends crucially on the detailed design of the risk measurement models used by banks in their IRB assessments, and in particular on the extent to which their risk models are based on 'point in time' rather than 'through-the-cycle' estimates of loan losses likely to arise in different categories of assets. The 'through-the-cycle' approach is less procyclical and is the preferred Basel II methodology. But several banks did not develop effective 'through-the-cycle' estimates before the launch of Basel II, either because they lacked sufficiently long historic records of past credit losses or because the 'point in time' methodology was computationally simpler.[8]

To avoid the dangers of pro-cyclical tendencies, the FSA published a Discussion Paper to accompany the Review that proposed a number of reforms known as "variable scalars":

> The IRB [Internal Ratings Based] framework aims to set credit risk regulatory capital at the amount needed to cover the losses that might be incurred in a severe economic downturn. However, particularly as regards the PD [Probability of Default] parameter, the design of a bank's rating system has a significant impact on the level and volatility of capital required. More specifically regulators have coined the phrase 'rating philosophy' to describe where a borrower rating system lies between the stylised extremes of PiT [point-in-time] and TTC [through-the-cycle].
>
> Under a PiT system the PDs input into the IRB formula will in effect be heavily dependent on recent data and therefore produce an overall capital requirement which can be highly cyclical. At a more technical level this occurs because of migration of borrowers through rating grades in a way that varies systematically with the cycle. Whereas under a TTC system the PDs will be oriented towards an average of

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6 Ibid., p58
7 Ibid., p58
8 Ibid., p59

> experience across the cycle, resulting in no systematic migration. A TTC approach therefore has the desired characteristic of cyclical volatility in actual default rates being interpreted as reflecting the trend that the IRB approach anticipates, and should not result in changes in capital requirements. Whereas a PiT approach continually rebases the capital requirement in line with recent experience even if this is cyclically driven.
>
> In general firms have not developed TTC rating systems whose technical challenges are typically greater than those of PiT approaches. Consequently, supervisors have allowed IRB firms to use more PiT approaches, relying on stress testing and linked additional capital requirements to cover the consequent cyclical volatility. Firms had been confident that they would be able to manage this greater level of cyclicality. However, some firms did recognise the damaging effects of cyclicality in their regulatory and economic capital requirements, and the FSA has been working with the industry since 2006 on how to develop a quasi-TTC rating approach. This is based on the firm's underlying borrower rating system but achieves relatively stable capital requirements by adjusting the PD to be input depending on the position in the economic cycle by the use of what the FSA describes as a variable scaling factor.
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> Accurate estimation of such a scalar does however require both a considerable history of data and, most crucially, the ability to differentiate changes in default experience that are due entirely to the economic cycle from those that are due to a changing level of noncyclical risk in the portfolio. It would undermine the basis of the IRB approach if capital requirements were not adjusted in response to the latter.
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> Although the mechanics of implementation will vary from case to case, the common theme is that it should be based on segmenting a portfolio by its underlying drivers of default risk and estimating separate long run default rates for each of these segmented pools, while making adjustments for changes in non-cyclical risk that are not captured by the segmentation process.[9]

However, the FSA did state that they are not inflexible on this issue and would consider alternative methods of reducing pro-cyclicality in capital requirements:

> Reducing the cyclicality of the capital requirements can be achieved in ways other than through the use of 'variable scalars' and, as long as the different methods used are transparent and effective, the FSA is open to other approaches being agreed at an international level. The key test is that they deliver a capital requirement with reduced cyclicality, in line with the effects of deploying a TTC ratings philosophy.[10]

Counter-cyclical capital buffers

The FSA argued that because attempts to reduce pro-cyclicality in capital requirements are always likely to be imperfect, there is good reason to overtly include counter-cyclical elements in the regulatory framework. The Review further explained:

> Under such a regime, required and actual capital would increase in good years when loan losses are below long run averages, creating capital buffers which would be drawn down in recession years as losses increase. Such a regime would:
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> • decrease the probability of bank default or of public authorities having to take steps to prevent default;
>
> • decrease the probability of system-wide bank failures; and

9 FSA, A regulatory response to the global banking crisis, Discussion Paper 09/02, 18 March 2009, p89
10 Ibid., p90

• reduce the extent to which bank behaviour increases the amplitude of the economic cycle. A counter-cyclical capital regime would help constrain the growth of bank lending in the upswing, and in the downswing would reduce the extent to which banks need to cut back on lending to maintain capital ratios when capital is depleted by losses.[11]

The Review also sought to more technically discuss the design of a counter-cyclical buffer, concluding that the best approach would be to adopt a buffer that is primarily formula driven:

> Two key choices need to be made in designing the details of a countercyclical regime. The first is how the level of buffers is determined; the second how the impact is presented.
>
> The level of buffer can be defined in either a discretionary or a formula driven fashion:
>
> • Under a discretionary system, bank regulators such as the FSA would need to judge the appropriate level of required capital ratios in the light of analysis of the macroeconomic cycle and of macro-prudential concerns. (The issue of how this analysis and these judgements would be shared between the Bank of England and the FSA is discussed in Section 2.6 below). Such an approach could build on the Basel II Pillar 2 system, which already gives bank regulators the discretion to increase required bank capital above that indicated by Pillar 1 calculations, even though it was not originally designed to serve countercyclical purposes. The discretionary system would have the advantage of allowing a nuanced analysis of macroeconomic and macro-prudential conditions to guide decisions: but it would depend crucially on the quality and independence of the judgements made.
>
> • Under a formula-driven system, the required level of capital would vary according to some predetermined metric such as the growth of the balance sheet or estimates of average through-the-cycle loan. It would provide a preset discipline not dependent on judgement and not subject to the influence of lobbying.
>
> • In both systems, complex issues would arise in relation to large cross-border banks operating in different national economies, and affected therefore by different economic cycles.
>
> The FSA believes that there is merit in making the regime at least to a significant extent formula driven. But this could be combined with regulatory discretion to add additional requirements on top of the formula-driven element if macro-prudential analysis suggested that this was appropriate.
>
> The presentational choice is between a system in which the required capital ratio itself varies through the cycle, and one in which the buffer is present as a reserve but excluded from capital calculations:
>
> • In the first system, either regulatory discretion or a formula would define a minimum required capital which would increase in periods of strong economic growth (for instance from a minimum required CT1 ratio of 4% to 7% at the peak). Banks would need to meet this rising ratio in the upswing, but would be permitted to run down the ratio towards the absolute minimum in an economic downturn. This would clearly communicate the intent of the policy: but with the danger that market expectations might constrain banks from reducing their ratios in the downturn given the apparently negative signal of a falling capital ratio.

[11] FSA, Turner Review: A regulatory response to the global banking crisis, 18 March 2009, p61

• In the second system, the capital buffer would take the form of a reserve deducted from capital in periods of good economic performance, which would then be released in an economic downturn, but with the minimum capital rule kept constant throughout the cycle. The Spanish dynamic provisioning system (described in Box 2C) combines this presentational approach with a formula driven approach to the calculation of the required buffer. This approach could allow for consistency between capital adequacy requirement rules and published account figures (see subsection (v) below).

The pros and cons of these alternative approaches need now to be debated and the FSA would welcome responses to the Discussion Paper as an input to decisions on details. The FSA will also be closely involved in international discussions with the aim of achieving an internationally agreed approach: the Basel Committee is now committed to producing a proposed way forward by the end of 2009.

But the position in principle is clear. The capital adequacy regime, in addition to requiring more and better quality capital, should include the creation of countercyclical capital buffers which are built up in periods of strong economic growth and available for use in downturns. These are needed both to increase the resilience of the banking system and to reduce the potential impact of banking system cycles on the real economy. The appropriate size of the buffer requires detailed debate, but as a starting point proposal, the Discussion Paper suggests that buffers of the order of magnitude of 2 - 3% of WRAs [weighted risk assets] might be appropriate at the peak of the cycle.[12]

Avoiding pro-cyclical accounting

Turner, discussing accounting standards, noted that "the present philosophy is that published accounts should not anticipate possible or probable future events, but should reflect the facts of the situation as at the balance sheet date."[13] In seeking to avoid pro-cyclicality in the financial sector, the report argued that the existing standard should be reformed along a number of lines:

But while this accounting philosophy is appropriate viewed from an idiosyncratic perspective – an individual bank operating in a reasonably stable financial and economic environment – from the point of view of regulators, and of systemic financial risk, it has serious disadvantages. On both the trading book and banking book side, it can fuel systemic procyclicality.

• In the trading books a mark-to-market approach means that irrational exuberance in asset prices can feed through to high published profits and perhaps bonuses, encouraging more irrational exuberance in a self-reinforcing fashion: when markets turn down, it can equally drive irrational despair. And at the total system level, the idea that values are realisable because observable in the market at a point in time is illusory. If all market participants attempt simultaneously to liquidate positions, markets which were previously reasonably liquid will become in illiquid, and realisable values may, for all banks, be significantly lower than the published accounts suggested. While it is difficult to quantify the effect, it is a reasonable judgement that the application of fair value/mark-to-market accounting in trading books, played a significant role in driving the unsustainable upswing in credit security values in the years running up to 2007, and has exacerbated the downswing. Many bonds now trade at yields which reflect very large illiquidity premia, as well as increased reasonable expectations of default (Exhibit 2.3).

12 Ibid., pp61-62
13 Ibid., p63

• On the banking book side meanwhile there are equally important dangers. In good economic times, provisions will be lower than a reasonable expectation of the losses which might arise from existing long-term loan contracts and from customer relations over a complete economic cycle. High declared profits can in turn have two impacts:

• They increase the capital of the bank, which, given unchanged capital ratio requirements, makes more rapid growth possible, potentially driving a credit extension boom.

• And, through the impact on share prices and perhaps bonuses, they can increase management conviction that further rapid growth is desirable.

Whereas the first of these impacts can be offset by a countercyclical capital regime even if published accounts remain unchanged, offsetting the second effect would require adjustments to published accounts.[14]

Recognising the opposing interests of regulators and individual firms in the choice between extant and new accounting procedures, the Review concluded that a compromise should be adopted;

It would be possible, however, to devise an approach which can meet both requirements. Key features would be:

• Existing accounting rules would be used to determine specific P&L [profit and loss] and balance sheet lines for trading books and banking books. Profit and loss figures for trading books (including derivative positions) would continue to reflect fair value / mark-to-market approaches. And banking book specific and portfolio provision figures would continue, as today, to reflect known information on loan servicing and best estimates of incurred loss.

• But these rules would be augmented by the creation of a non-distributable Economic Cycle Reserve, which would set aside profit in good years to anticipate losses likely to arise in future.

As with the regulatory capital buffer discussed above, there are two ways by which the size of this reserve could be determined, either

• proposed by management, extensively debated by boards and risk committees and agreed with the bank regulator; or

• determined by a formula. If this formula were the same as one used to determine the size of the regulatory capital buffer, a full consistency between the approaches to regulatory capital and accounting reserves would be achieved.

There would also be a crucial choice to be made in terms of presentation

• It would be possible for the Economic Cycle Reserve to be shown only as a movement on the balance sheet, rather than on the P&L.

• But there are very strong arguments that it should also appear somewhere on the P&L, allowing bottom line profit and earnings per share (EPS) to be calculated both before and after its effect, and thus providing two measures of profitability, the ‘traditional’ accounting figure and a second figure struck after economic cycle reserving. Incentive-based pay systems which refer to profit and EPS would then be based on distributable profit and distributable EPS, after the deduction of this reserve,

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14 Ibid., pp65-66

> thus ensuring that such systems reflect a reasonable estimate of future possible credit losses and impairments, rather than a point-in-time calculation of profits which may subsequently prove illusory.
>
> The appropriate way forward on accounting now needs careful debate between regulators and the bodies which ultimately set published account standards (the International Accounting Standards Board and the Financial Accounting Standards Board). *But the FSA position is in principle clear*: we believe it important that the counter-cyclical approach to bank capital is reflected in a significant way in highly visible published account figures, creating strong shareholder and management awareness of the need to assess profitability in the light of the position in the economic cycle.[15]

Gross leverage ratio

While acknowledging that a maximum limit on leverage should not, in theory, be required in a regulatory structure, the Review made two arguments in favour of employing a maximum gross leverage ratio:

> • The crisis revealed that assets which are believed to be low risk because highly liquid can be become highly illiquid and risky when systemic problems emerge; and when that happens, the scale of the funding challenges faced by banks and the scale of the systemic impact arising from attempted asset sales is related to the gross scale of the balance sheet positions.
>
> • Moreover, calculating capital requirements based on internal models will always entail significant judgement, and there will always be dangers that debates between bank management and regulators might result in pressure for too lenient a treatment. A back-stop against the impact of creeping regulatory concessions makes sense.[16]

It concluded that such a measure would be valuable and resolved to seek international backing for the principle from the Financial Stability Forum.

Liquidity risks

The FSA critically observed that:

> Measuring and managing bank liquidity risk is as important as capital/solvency risk management, but in the years running up to the crisis did not receive adequate attention, either in the UK or internationally, where debates about bank regulation were dominated by the design of the Basel II capital adequacy standard. It is essential now to restore liquidity regulation and supervision to a position of central importance.[17]

Prior to the Review's publication, the FSA released a Consultation Paper considering means of strengthening liquidity standards in December 2008. The paper focused particularly on the measurement and management of liquidity risks, and proposed:

> • Far more extensive information requirements, with firms required to provide, for example, detailed maturity ladders, analysis of the assumed liquidity of trading assets, and analysis of off-balance sheet positions with liquidity implications.

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15 Ibid., pp66-67
16 Ibid., p67
17 Ibid., p68

• The requirement to produce detailed Individual Liquidity Adequacy Assessments (ILAAs) which the FSA will review and then issue Individual Liquidity Guidance (ILG).

• The definition of a liquid assets buffer whose minimum value (defined relative to balance sheet size) will be determined for each bank in Individual Liquidity Guidance.

• Requirements that firms quantify and reflected in internal costing systems the liquidity risk created by participation in different categories of activity.

• A strong focus on stress testing and crucially: (i) the definition of some required stress tests by the FSA, rather than stress test definition left entirely to bank internal decisions; and (ii) stresses which consider market-wide events as well as firm specific events, recognising that it is systemic risks which can be most important in liquidity management.

• A strong analytical focus on the analysis of cross-system liquidity trends, with the publication of a periodic system-wide report.

• Proposals relating to the management of liquidity by large cross-border banks which would increase FSA powers over local liquidity and require increased information flows relating to whole bank liquidity. The impact of these proposals is discussed in Section 2.10 (i).

Likely impact of already published proposals on maturity transformation and costs. We anticipate that this new liquidity regime will have a significant impact on bank liquidity policies, and will produce a significant reduction in the liquidity risks which were such an important element in the origins of the crisis (see Sections 1.1(iii) and 1.2). In particular, the new regime is likely to result in:

• less reliance on short term wholesale funding, including on wholesale funding from foreign counterparties;

• greater incentives for firms to attract a higher proportion of retail time deposits;

• a higher amount and quality of stocks of liquid assets, including a greater proportion of those assets held in the form of government debt; and

• with, as a result, a check on the unsustainable expansion of banking lending during favourable economic times.[18]

While the Review endorsed the proposals of the earlier paper, it also argued that a more general liquidity rule was required. Unlike the December proposals which focused on individual cases, Turner suggested introducing a limit on the ratio of lending to deposits. However, precise details for such a proposal have not yet been published.

Careful consideration would have to be given to the most appropriate definition of any such ratio (the one used in Exhibit 2.4 is intended solely to illustrate a possible approach). And the potential role of a core funding ratio could be either as a backstop rule (similar to the function performed by the gross leverage ratio discussed in 2.2 (vi)), or as an indicator rather than a rule, used to identify overall macro-prudential risks and issues to be addressed in Individual Liquidity Guidance.

The FSA believes, however, that the potential role of a 'core funding ratio' merits debates and would welcome feedback to the Discussion Paper, both on the principle and on possible specific design.[19]

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[18] Ibid., pp68-69

1.3 Shadow banking system

The Review identified the shadow banking system – the set of institutions that acted like banks but were not regulated as such – as an important feature in the crisis. The Review points out that these shadow banking institutions caused the financial system to strain:

> The importance of these 'shadow banks', and the extent to which they escaped the regulation applied to banks, differed by country. As Chapter 1.2 set out, mutual funds offering deposit-like promises have never been a major feature of the UK market. And the impact of regulatory boundary problems in the origins of the present crisis should not be overstated. The European Capital Requirement Directive (CRD) did not allow investment banks to escape regulation, applying capital requirements equally to the trading books of investment and commercial banks: and the SEC applied the Basel trading book/market risk regime to the investment banks. One of the most crucial problems indeed was not regulatory arbitrage, but the inadequacy of trading book capital, and the inadequate focus on liquidity risks, as applied to both commercial and investment banks, under both the Basel I and Basel II regimes.
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> But SIVs [special investment vehicles] were a clear case of regulatory arbitrage. And both SIVs and mutual funds were large funders of UK securitised lending: their behavior in the crisis was therefore as relevant to the UK as to the US system. As a more effective regime for trading book capital is designed and implemented, moreover, the incentives for future regulatory arbitrage will increase.[20]

Accordingly, the Review concluded that "regulation should focus on economic substance not legal form."[21] More substantively, it argued:

> Off-balance sheet vehicles which create substantive economic risk, either to an individual bank, or to total system stability, must be treated as if on-balance sheet for regulatory purposes. Prudential oversight of financial institutions should ideally be coordinated in integrated regulators (covering banks, investment banks and insurance companies) reducing the dangers of inconsistency and arbitrage between different authorities within one country. And regulators must have the power to obtain information and identify new forms of financial activity which are developing bank-like characteristics, and if necessary to extend prudential regulation to them, or to restrict their impact on the regulated community.[22]

Hedge funds

Looking specifically at hedge funds, the FSA pointed out that although it regulates UK-registered asset managers, hedge funds themselves are usually domiciled abroad and thus are not subject to either capital or liquidity requirements. However, the Review argued that hedge funds do not currently operate as banks – pointing to their substantially lower leverage ratios, the fact they do not operate retail arms and the fact that investor funds may not be immediately redeemable, the FSA concluded: "They are not therefore at present performing a maturity transformation function fully equivalent to that performed by banks, investment banks, SIVs and mutual funds, in the run-up to the crisis."[23]

However, the FSA cautioned that

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19 Ibid., p70
20 Ibid., p71
21 Ibid., p72
22 Ibid., p72
23 Ibid., p72

> …hedge fund activity in aggregate can have an important procyclical systemic impact. The simultaneous attempt by many hedge funds to deleverage and meet investor redemptions may well have played an important role over the last six months in depressing securities prices in a self-fulfilling cycle. And it is possible that hedge funds could evolve in future years, in their scale, their leverage, and their customer promises, in a way which made them more bank-like and more systemically important.[24]

Accordingly, the Review argued that the appropriate approach to hedge funds would entail:

> • Regulators and central banks in the performance of the macro-prudential analysis role (Section 2.6 below) need to gather much more extensive information on hedge fund activities (or on the activities of any other newly evolving form of investment intermediation) and need to consider the implications of this information for overall macro-prudential risks.
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> • And regulators need the power to apply appropriate prudential regulation (e.g. capital and liquidity rules) to hedge funds or any other category of investment intermediary, (or to otherwise restrict their impact on the regulated community), if at any time they judge that the activities have become bank-like in nature or systemic in importance.[25]

Geographic coverage

Turner also asserted that offshore centres, where many firms are domiciled, would become increasingly important and needed to be brought under effective international financial regulation. However, it recommended that no action be taken at the present time, suggesting that this would be an issue to be resolved in the future by an international body:

> Global agreement on regulatory priorities should therefore include the principle that offshore centers must be brought within the ambit of internationally agreed financial regulation (whether relating to banking, insurance or any other financial sector).
>
> Equally, however, it is important to recognise that the role of offshore financial centers was not central in the origins of the current crisis. Some SIVs were registered in offshore locations; but regulation of banks could have required these to be brought on-balance sheet and captured within the ambit of group capital adequacy requirements. And many of the problems arose from the inadequate regulation of the trading activities of banks operating through onshore legal entities in major financial centres such as London or New York.
>
> Tighter effective controls in offshore centers will, however, become more important over time as regulation is improved in the major onshore locations and as the incentives for regulatory arbitrage through movement offshore therefore increase.[26]

1.4 Deposit insurance

The UK, and many other countries in Europe (as well as the EU as a whole), responded to the financial crisis by significantly increasing their deposit insurance protection. Although the Turner Review did not make specific proposals for reform in this area, it did circumscribe arguments concerning a way forward in the area:

> The appropriate maximum coverage of retail deposit insurance is a matter of judgement. The FSA's Consumer Panel has argued for unlimited coverage, on the

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[24] Ibid., p72
[25] Ibid., p73
[26] Ibid., pp73-74

grounds that retail depositors are not in a position to make informed judgements about the creditworthiness of different banks. The counter arguments are that:

(i) the current maximum already provides 100% cover for the vast majority of depositors: about 97% of accounts are below this level;

(ii) depositors with total savings significantly (but not massively), above this level can reasonably be expected to spread their deposits across several banks or building societies;

(iii) depositors with savings so large that deposit spreading would still leave them exposed can reasonably be expected to exercise some judgements about bank creditworthiness; and

(iv) that some upper limit, by creating incentives for the dispersion of deposits between different institutions, places at least a slight discipline on irresponsibly generous pricing of deposits at the expense of increased bank risk.

The FSA's current intention is therefore to continue the system which has an upper limit, but it is currently consulting on whether that limit should be per legal entity or per brand and will consult shortly on what arrangement should be made to deal with temporary large balances (e.g. related to house purchase or sale). These consultations will be completed by 31 May 2009.

In addition consideration needs to be given to:

• whether prefunding of deposit insurance would create a more appropriate basis for contributions;

• the implications of European moves to harmonise deposit insurance limits: the proposed 100,000 euro limit would be equivalent to about £75-80,000 at recent exchange rates; and

• whether an element of EU coordination of insurance cover (which could include refunding) is required to address the problems which can otherwise arise with bank branches 'passported' into the UK under single market rules (the Landsbanki example). This issue is discussed in Section 2.10 (ii).[27]

1.5 Credit rating agencies

The Review suggested that credit rating agencies (CRAs) played an important role in the escalation of the financial crisis, despite having previously been adjudged "good" assessors of risk. First, the FSA suggested that the dramatic rise of securitisation accentuated some of the pro-cyclical biases inherent to the CRA model. Secondly, the report noted that the stability and accuracy of ratings, especially in structured credit products, had significantly declined. Finally, the FSA suggested that the CRAs "may not have ensured that commercial objectives did not influence judgements on whether the instruments were capable of being rated effectively";[28] furthermore, products may have been structured to achieve a specific rating.

Turner concluded that regulation "can address some of these problems, but only to a degree." Despite this problem, the report highlighted a number of ways in which regulation could be improved:

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[27] Ibid., pp74-75
[28] Ibid., p77

• Regulation can and should address issues relating to the proper governance and conduct of rating agencies and the management of conflict of interest. Legislation to achieve this aim is now being formulated by the European Union with regulation likely to enter into force in late summer 2009 if it is passed in first reading. The FSA supports the aims of this legislation. As the legislation currently stands credit rating agencies will be registered and financial regulators such as the FSA will play a supervisory role, coordinated at European level via colleges, which will ensure that appropriate structures and procedures are in place to manage conflicts of interest and to reinforce analyst independence from commercial revenue maximising objectives. This supervisory oversight should extend to requiring that rating agencies only accept rating assignments where there is a reasonable case (based on historical record and adequate transparency) for believing that a consistent rating could be produced. Given the global nature of capital markets, it is important that the European legislation is matched by agreement of compatible global standards, and the FSA is working through IOSCO to achieve this.

• Some measures can also be taken to reduce the inappropriate use of ratings. The rating agencies themselves have sought to improve communication relating to the purpose of ratings, stressing that they cannot be treated as carrying inferences for liquidity and price. Public policy should avoid unnecessary requirements for investing institutions to hold securities of a specific rating.

• It is important, however, not to overstate the extent to which regulation can guard against the dangers of procyclical hard wiring. The use of ratings based investment and cash management rules by individual companies, foundations and investing institutions is entirely rational at the idiosyncratic level and it is very difficult to imagine how many institutions could operate without such decision rules. And while there is a danger that the use of credit ratings within the Basel II capital adequacy rules could introduce a new element of procyclicality in future, it is likely that other measures of assessing risk (e.g. complete reliance on bank internal models or on market price based indicators) would be still more procyclical.[29]

1.6 Remuneration

The Review emphasised the distinction between short-term remuneration for banks receiving taxpayer support and long-term remuneration structures which determine financial incentives. it concluded that compensation incentives encouraged "some executives and traders to take excessive risks", even if the bonus structure was probably "considerably less important than other factors" in causing the financial crisis.[30] Accordingly, it was argued that a new risk-adjusted approach to bonuses is necessary for long-term financial stability. The Review advocated following guidelines set out by the FSA in March 2009.

On 18 March 2009, the FSA published a Consultation Paper containing proposals for a new code of practice for executive remuneration. The FSA paper emphasised its focus upon the *structure* of remuneration, rather than its *level*:

> We are not concerned with the levels of remuneration, which we regard as a matter for firms' boards and shareholders. None of the principles in our Code will prevent firms providing large remuneration packages to employees if such packages can be justified by their contribution to the success of the firm, adjusted appropriately for risk.[31]

[29] Ibid., pp78-79
[30] Ibid., p80
[31] FSA, Reforming remuneration practices in financial services, Consultation Paper 09/10, 18 March 2009, p6

The code is intended to apply to large banks and brokerages under the authority of the FSA. More specifically, this includes bank and building societies that have consolidated regulatory capital in the UK banking entities in excess of £1bn and/or are part of an international financial group whose regulatory capital is in excess of £20bn. FSA-authorised investment firms are eligible with £750m and £5bn in regulatory capital for UK banking entities and international financial groups respectively. If the proposal is accepted, it is likely to come into force in November 2009; until then, the code should be regarded as a benchmark.

The central proposition of the code, which is proposed as an enforceable rule to be included in the FSA Handbook, addressed risk management. This general requirement stated that:

> A firm must establish, implement and maintain remuneration policies, procedures and practices that are consistent with and promote effective risk management.[32]

In addition, the code proposed ten principles to be included in the Handbook as guidelines, or "evidential provisions" that may determine whether an FSA rule is breached:

1. the committee responsible for determining remuneration should be independent and possess sufficient understanding to make well-informed judgements in the context of a firm's financial situation, prospects and risk management;

2. the procedures for determining compensation should be clear and documented, and must also explicitly consider conflicts of interest as well as input from the risk and compliance departments;

3. the procedures used to calculate employee remuneration in the risk and compliance departments should be independent of those in business areas, and use distinct performance criteria and quantitative targets in order to minimise conflicts of interests;

4. the calculation of bonus pools should be principally based on profits (rather than revenues), and adjust for current and future risk in addition to the costs of required capital and liquidity;

5. the performance-related component of compensation should not be assessed purely on the results of the current financial year, but instead incorporate longer-term considerations;

6. the performance assessment process should also consider non-financial metrics, notably relating to effective risk management and compliance with regulatory systems;

7. long-term incentive plans, including those related to share performance, must also make adjustments for risk;

8. basic salaries should be set at sufficiently high levels such that bonuses may be substantially or wholly reduced in a year of poor financial performance;

9. in the case where a constitutes bonus a large proportion of basic salary, the major part should be deferred with a minimum vesting period (the FSA recommends two-thirds should be deferred); and

[32] Ibid., p28

10. the deferred elements of remuneration should be linked to the future performance of the division or business unit as a whole.[33]

The consultation paper also discussed the implications for London as a globally-competitive finance centre. From a positive perspective the paper argued that the code would not cause a loss of competitiveness if adopted alongside similar regulations in other major financial hubs; had already been at least partially adopted by many firms; and would improve relations with regulators and stakeholders. Conversely, the paper highlighted possible adverse impacts such as remaining discrepancies among major financial hubs, the difficulty of obtaining global consensus and the costs of implementing the code.

The Turner Review set out three aims that adherence to the remuneration code would achieve:

1. the overarching principle of ensuring that remuneration policies are "consistent with effective risk management" will become an FSA rule applying to systemically important firms;

2. integration of remuneration policy assessments into the FSA's standard risk-assessment process, with required improvements detailed in Risk Mitigation Plans; and

3. using the regulatory tools permitted under Pillar II of the Basel II agreement as a penalty for non-compliance.[34]

However, the Review strongly emphasised the need for comparable policies to be adopted abroad, given that the FSA's regulatory capacity only stretches as far as UK firms.

> The effectiveness of this new approach in achieving real change will depend on our ability to gain widespread international agreement to publish and enforce similar principles in all major financial markets. Acting alone, the FSA cannot influence the policies of foreign firms operating in the London market, nor (without possible adverse effects) the practices followed in other financial centres where UK banks have activities.[35]

1.7 Derivative trading

The Review noted the significant increase in the prevalence of derivatives, and particularly credit default swaps (CDSs). The report commented that "the sheer size and the complexity of the market, and the fact that it is traded in an almost entirely Over-the-counter (OTC) fashion, creates the danger that failure of one party could produce market disruption."[36] Turner responded by proposing that a centralised counterparty clearing would be an effective way of addressing some of the risks associated with OTC derivatives:

> The FSA strongly supports the objective of achieving robust and resilient central clearing house arrangements for CDS clearing and has been working with other regulatory authorities (in particular those in the US and Europe) and potential market infrastructure providers to expedite this progress. We also welcome European

[33] Ibid., pp29-34

[34] FSA, Turner Review: A regulatory response to the global banking crisis, 18 March 2009, 81

[35] Ibid., pp80-81

[36] Ibid., p82

> Commission initiatives to ensure that appropriate structures are in place, while believing that proposals that euro-denominated CDS must be cleared 'within the Euro zone' are unnecessary for financial stability reasons which requires only that robust and well regulated arrangements are in place regardless of location. Next steps include assessing current applications for FSA clearing licences and defining cooperation agreements with overseas regulators, with the objective of achieving a significant shift of CDS trading to central counterparty clearing during summer 2009.
>
> But while these measures are important, their potential impact should not be overstated. Clearing and central counterparty systems will only be feasible for the roughly 50-75% of the CDS which is accounted for by standardised contracts (e.g. referencing a standard index): a large volume of bespoke contracts will continue to be traded in an OTC fashion.[37]

1.8 Macro-prudential analysis

The Turner Review stressed the importance of establishing effective macro supervision. The report noted:

> The lack of such a perspective, and the failure to specify and to use macro-prudential levers to offset systemic risks, were far more important to the origins of the crisis than any specific failure in supervisory process relating to individual firms. Getting macro-prudential analysis and tools right for the future is vital.[38]

Turner commented that the "failure to do this analysis and to take action on it was one of the crucial failures of the years running up to the financial crisis."[39] Accordingly, the Review identified a number of specific areas where future focus should lie, in addition to several policy tools with which the authorities may be able to address these areas:

> • The extension of credit to the economy, the pricing of credit, and levels of borrower leverage, and the implications for the risks which both borrowers (households, individuals and companies) and lenders are running.
>
> • The pattern of maturity transformation and resulting liquidity risks e.g. the extent to which banks are increasing or decreasing maturity mismatches, and are relying on wholesale funding or on 'liquidity through marketability'.
>
> • Asset prices in property, equity and securitised credit markets and their possible relationship to long run equilibrium levels.
>
> • Leverage within the financial system, whether at the institutional level (bank capital to asset ratios) or embedded in collateral margins and 'haircuts'.
>
> • The roles being played in the financial system by different institutions and in particular whether the institutions not currently subject to prudential requirements (e.g. hedge funds) are increasingly operating in a way which could create systemic risk.
>
> This analysis could inform the conduct of monetary policy. But it could also lead to decisions to use macro-prudential levers e.g. varying capital requirements in a discretionary and countercyclical fashion (see Section 2.2 (iv) above) or to vary liquidity

[37] Ibid., pp82-82
[38] Ibid., p83
[39] Ibid., p84

> policies and guidance (see Section 2.2(vii)). Fiscal policy choices might also be informed by the analysis. [40]

Turner has argued that collectively the Bank of England and the FSA have the capacity and expertise to administer such supervision:

> Looking forward the analysis needs to be done by both the Bank of England and the FSA, bringing together insights from macro, sector-wide and firm-specific analysis, and with the analysis intensely debated between the two authorities, resulting if needed in agreed actions to translate analysis of risks into macro-prudential policy changes.
>
> There are a number of different ways in which the formal character of the relationship between the Bank of England and the FSA could be defined. These could include:
>
> • The Bank of England being the ultimate arbiter of judgements relating to the position in the economic cycle and the definition of macro-prudential risks, but with the FSA making decisions about which regulatory levers to adjust and by how much. The Bank of England could, for instance, write formally to the FSA setting out its analysis of macro-prudential risks; and the FSA could be required to respond setting out what actions it had taken in response.
>
> • The Bank of England being not only the ultimate arbiter of judgements about the macro-prudential position but also able, at the limit and in the absence of agreement, to require the FSA to take specific macro-prudential measures.
>
> • The Financial Stability Committee, currently defined as a purely Bank of England committee, being designed as a joint committee of the Bank of England and the FSA, with this committee making the final judgement as to macro-prudential conditions and final decisions as to appropriate policy responses.
>
> In principle there are attractions to the third approach. [41]

However, the Review recommended that significant international reform must also be undertaken. The Review noted that for too long international bodies had failed to challenge the financial sector:

> This need for intellectual challenge is also vitally important at the international level. The failure to identify growing system wide risks was a global one. Indeed, it is important to note that not only was there a failure to identify hugely increased risks, but a widely held and authoritatively asserted conventional wisdom that the financial system had become more stable, and the amplitude of economic cycles less pronounced, precisely because of the financial market developments which we now believe led to crisis. [42]

1.9 Corporate governance

Without forcing individual firms to be fully accountable for the crisis, the Review highlighted that enhanced internal procedures would be necessary because:

> While some of the problems could not be identified at firm specific level, and while some well run banks were affected by systemic developments over which they had no

[40] Ibid., pp83-84
[41] Ibid., p84
[42] Ibid., p85

> influence, there were also many cases where internal risk management was ineffective and where boards failed adequately to identify and constrain excessive risk taking.[43]

Although Turner explained that full recommendations would not be made until completion of the Walker Review, the report noted a number of likely proposals in the area of corporate governance:

> Achieving high standards of risk management and governance in all banks is therefore essential. Detailed FSA proposals will await the outcome of the Walker Review (described below) but the key dimensions of required improvement are likely to be:
>
> • Improved professionalism and independence of risk management functions. As already outlined in Section 2.7 above, the FSA will therefore in future play a more active role in assessing the technical competence of senior risk managers. And it will consider whether governance structures for risk oversight need to be changed, with a more direct relationship between senior risk management and Board risk committees.
>
> • Risk management considerations embedded in remuneration policy, in the fashion described in Section 2.5 (ii). This has implications for the remit of remuneration committees and for the non-executive time commitments required.
>
> • Improvements in the skill level and time commitment of non-executive directors. The crisis has revealed the extreme complexity of large banking groups and the difficulties which non-executive directors (NEDs) face in understanding all dimensions of the risks being taken, within the time commitments typically required of NEDs. It has also raised questions about the degree of technical skill and experience required to perform risk committee functions, and whether existing bank boards have sufficient people with these technical skills. In addition it has demonstrated the vital importance of non-executive challenge to dominant chief executives pursuing aggressive growth strategies.
>
> • Shareholder discipline over corporate strategies. As Section 1.4(iv) described, shareholder influence seems to have been relatively ineffective in the past in constraining risky strategies. There may be ways of improving the effectiveness with which shareholder views are communicated to non-executives.[44]

1.10 Regulation of large complex banks

Complex banks, especially investment banks, were at the centre of the financial crisis and have had a pervasive impact on lending to the rest of the economy.

Separation of retail and investment banking functions

The Review discusses separating lending to the real economy from the trading and “casino” functions of modern banks, and concluded that such a distinction would be impractical and possibly disadvantageous in the modern economy:

> The theoretical clarity of this argument has attracted considerable support. But it would be difficult for any one country to pursue a clear separation while other countries did not, particularly within the European Union, and there is unlikely to be an agreement on an appropriate division, given the very different historic traditions. And it is not clear that in its extreme and simple form, it is practical in today’s complex global economy, or that it would radically reduce banking system risks.

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43 Ibid., p92

44 Ibid., p93

• The era of almost complete separation between clearing banks and merchant banks was also an era of fixed exchange rates and exchange controls, with far more limited capital flows and trade flows as a % of GDP, and a much smaller role played by cross-border corporations. Serving the financial needs of today's complex globally interconnected economy, which over the long term has delivered rising prosperity to an increasing number of nations, requires the existence of large complex banking institutions providing financial risk management products which can only be delivered off the platform of extensive market making activities, which inevitably involve at least some position taking.

• It is important therefore when considering whether commercial banks should be involved in 'investment banking' activity to be clear about the different activities covered by that term. Many activities which before the lifting of Glass-Steagall were in the US conducted by investment banks – such as the underwriting of corporate bond issues – are core elements within an integrated service to corporate customers in a world where a significant element of debt is securitised. Large scale proprietary trading through in-house hedge funds is not.

• Moreover, while it is clear that the securitised credit model evolved in a fashion which undermined the initial proposition that it would prove lower cost and lower risk, it is important to recognise that, if more effectively regulated and supervised, it could have those advantages, and that the world has suffered in the past from crises of pure on-balance sheet narrow banking, whose severity might have been reduced if an appropriate form of securitised credit trading and credit insurance had been in place.46 Banks can take excessive risk by making high risk loans which they hold on their own banking book balance sheet, as much as by acquiring securities originated by others. Section 1.4 (ii) argued that the optimal financial system for the future probably will include a significant role for securitised credit, and this will require some banks to be engaged in activities somewhat distinct from those envisaged in the pure 'utility banking' model.

• Furthermore, any idea that risky trading activities in institutions outside the utility banks, can be allowed to grow in an unregulated fashion, subject only to the market discipline that they will not receive LOLR or fiscal support in crisis, is not credible in a world of interconnected markets. Bear Stearns was not involved in any significant way in utility banking activities; but when it was on the verge of failure, the US authorities rightly identified it as systemically important. The direction of change must be towards extending the regulatory boundary to cover all financial activity which might create systemic risk, not allowing some activities to flourish beyond the boundary.

• Finally, it is important to recognize that 'narrow banks' focusing almost entirely on classic commercial and retail banking activities can be extremely risky. Northern Rock, Washington Mutual and IndyMac were all 'narrow banks'.

It does not therefore seem practical to work on the assumption that we can or should achieve the complete institutional separation of 'utility banks' from 'investment banks' which the advocates of that model suggest. Large complex banks spanning a wide range of activities are likely to remain a feature of the world's financial system.[45]

While the Review did not advocate separating the banking the system, it did explain that a number of the problems that an integrated system posed could be resolved through capital, liquidity and remuneration reforms:

[45] Ibid., pp94-95

Large commercial banks enjoy the benefits arising from retail deposit insurance, lender of last resort access, and an implicitly understood 'too big to fail' status. These benefits can be used to support proprietary trading activities which create risks for both the institution and the system: the UBS Shareholder report into the bank's write-downs (April 2008) set out how the expansion of the UBS fixed-income business, and the rapid growth of total leverage, was funded on the back of retail and commercial bank funds onlent at an inadequate transfer price. Future regulation needs to prevent this. The key tools to achieve this will include:

• A regulatory regime for trading book capital (discussed in Sections 2.2 (ii) and (vi)) that combines significantly increased capital requirements with a gross leverage ratio rule which constrains total balance sheet size. Such a regime could include very major variation in capital requirements as between different types of trading activity, effectively achieving a distinction between market making to support customer service and proprietary position taking. The fundamental review of the trading book capital regime, proposed in Section 2.2 (ii), should consider the potential to achieve such distinction.

• A major intensification of the supervision of liquidity risks, as outlined in Chapter 2.2 (vii) and in the FSA's recent Consultation Paper, which will limit the ability of banks to hold potentially illiquid assets funded by short term liabilities, with appropriate internal pricing to reflect liquidity risk.

• Remuneration principles, outlined in 2.5 (ii) which will include a requirement for the calculation of profits to include adequate allowance for the different riskiness of different activities.

This approach is broadly in line with that put forward in the Group of 30 Report; *Financial Reform: A Framework for Financial Stability*, authored by a committee chaired by Paul Volcker, which seeks to constrain risk taking within large integrated banks, rather than require a disintegration into separate institutions. But these changes in regulation may well result in market developments which head in the direction which the 'narrow bank' advocates propose:

• Faced with the new regime, an increased number of banks are likely voluntarily to pursue strategies which are primarily focused on classic commercial and retail banking activity.

• Large complex banks still extensively involved in market making and trading activities will increasingly be doing so in support of customer relationships, rather than as a standalone activity.

• And across the whole banking system, the new regulatory system is certain to result in fewer resources – in terms of people or total balance sheet – devoted to the complex and risky trading activities whose growth was described in Chapter 1.1.[46]

Cross-border institutions

Citing Lehman Brothers as a prime example, the Turner Review noted that the global nature of the financial system meant that the failure of a cross-border bank domiciled in one country could have multiple knock-on effects across others. In order to rectify such problems, the Review recommended that international cooperation be significantly enhanced and include a college of supervisors (at the global and European levels):

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[46] Ibid., pp95-96

> The effective supervision of large cross-border institutions can be improved by maximising the flow of information between home and host country supervisors, sharing insights into the risks which firms are running. The Financial Stability Forum has defined the objective that all major cross-border financial institutions should be covered by a ‘college of supervisors’ and the FSA has led the working party which has defined the working methodology of these colleges. Colleges are now in place and operating for all the largest UK financial groups and for the largest foreign banks operating in London. The FSF has put mechanisms in place for monitoring the establishment of these colleges, and for learning lessons from their future operation (Box 2E).
>
> In addition another FSF working group has defined appropriate processes for increasing international coordination in crisis conditions, at which stage fiscal and monetary authorities need to be intensely involved alongside supervisors given that crisis response almost inevitably involves the extension of LOLR facilities and often the provision of fiscal support. Significant progress has already been made in increasing the intensity of cross-border contingency planning for a wide range of large financial institutions.[47]

However, the report noted that colleges of supervisors would not by sufficient to prevent problems with cross-border institutions:

> But it is important to recognise that there are inherent and important limitations to what can be achieved by increased international supervisory cooperation operating within the existing rules that relate to fiscal support in a crisis. The failure of large financial cross-border banks clearly has global economic consequences; but throughout this crisis, fiscal support for potentially failing institutions has been organized on an entirely national basis. The German government, for instance, supported Hypo Real Estate (HRE) even though many of its problems had arisen within an Irish subsidiary; and the US government has been the sole supporter of major US commercial banks, even though the failure of any one of them would have huge economic consequences across the world.
>
> Until and unless there is a willingness to change this approach and to move to a much more unified approach to global financial supervision and even fiscal support, mechanisms such as colleges of supervisors can make an important but still limited contribution. They can ensure better flows of information between national supervisors and achieve the voluntary coordination of national supervisory actions which will reduce the likelihood of firms coming close to crisis. But they cannot deliver fully integrated global supervision, since legal powers of intervention are national in nature, and since national governments look to national supervisors to protect national interests. In some circumstances, particularly if problems are beginning to emerge, there may therefore be a divergence of interest with, for instance, the home country supervisor wishing to see maximum transferability of liquidity to offset the emergence of group-wide liquidity problems, while host supervisors wish to ring-fence liquidity at national level precisely because they have emerging concerns about the whole group position.[48]

In addition to supra-national supervision, Turner recommended that national authorities expand their supervision of cross-border institutions. The Review explained that, at least in

[47] Ibid., p97
[48] Ibid., pp97-99

part, this could be achieved by capital and liquidity requirements and efforts to ensure that UK elements of cross-national firms become ring-fenced subsidiaries:

> Increased national focus. Alongside enhanced international cooperation, therefore, it is inevitable and appropriate that supervisory authorities throughout the world will increase their focus on the resilience of local legal entities. The FSA has therefore already in its Consultation Paper (08/22) *Strengthening Liquidity Standards* outlined a proposed approach to group liquidity supervision which will involve:
>
> • Gathering far more extensive information from banks and from home country supervisors on the whole bank liquidity of banks operating in the UK, including those operating as branches.
>
> • But with the power to impose tougher local liquidity requirements on branches and subsidiaries if we have any concerns about the quality of information available or the implications of that information.
>
> In addition, the FSA will in future be more willing to use its powers to require major international banks to operate as subsidiaries in the UK, to increase capital requirements on local subsidiaries, and to impose other restrictions on business operation.
>
> The extent to which such measures can ring fence the local operations of a global bank from the failure of the parent must not be overstated. Even well capitalized local bank subsidiaries are likely to face liquidity crises if the whole group is perceived to be in trouble. But even if these arrangements cannot guarantee the survival of a subsidiary if its parent collapses, they can provide better for the orderly run down of the local subsidiary and improve the position of local creditors.
>
> At the group level, the impact of increased host country capital and liquidity requirements will be higher overall levels of group capital and liquidity. Holding that additional capital and liquidity necessarily has the economic cost consequences which were discussed in Section 2.2 (i) and 2.2 (vii) above. As those sections discussed, it is difficult to be precise about how large those costs are. In the face of the huge economic cost created by the current crisis, however, policy should be more willing than in the past to accept the costs arising from the additional capital and liquidity which will help reduce future instability.[49]

The Review, while emphasising the importance of international regulation, was highly critical of the manner in which it operated at the European level. Turner argued that the essence of the European regulatory philosophy – underpinned by minimum standards and national flexibility above that – was "inadequate and unsustainable for the future."[50] The problem was illustrated by the fact that Icelandic banks were free to operate in countries like the UK, but faced limited regulation. The Review, while remaining non-committal, has suggested that European and national authority powers should be enhanced in a fashion that maintains a level playing field for banks while preventing cross-border institutions from operating with impunity:

> It is essential that the European Union now considers the appropriate way forward. The FSA Discussion Paper therefore proposes for debate a number of options, expressing a current preference for:

[49] Ibid., p99
[50] Ibid., p100

• The creation of a new European Union institutional structure, which would replace the Lamfalussy committees. This body would be an independent authority with regulatory powers, a standard setter and overseer in the area of supervision, and would be involved, alongside central banks, in macro-prudential analysis, while leaving the primary responsibility for supervision at member state level (see Box 2 F). These issues are already being considered at European level. The de Larosiere report has suggested arrangements slightly but not radically different from the proposals made here.

• The reinforcement of host country supervisory powers over liquidity, and the right of host country supervisors to demand subsidiarisation and to impose adequate capital requirements and restrictions on local business activity.

In addition the option of introducing pan-European arrangements for the deposit insurance of banks operating across-border in branch form should be considered in more detail.[51]

1.11 The FSA's new approach

The Turner Review argued that the recommendations set out above would fundamentally alter the way in which the FSA would operate. In particular, it was suggested that:

> The approach to capital, accounting, liquidity and institutional coverage outlined above, reflects a significant shift in the emphasis of regulation – from focusing primarily on the regulation of individual institutions, to combining this with a strong focus on the overall system and on the management of systemic risks across the economic cycle.[52]

The FSA refuted accusations that its approach to regulation had been a "light touch":

> The FSA's past supervisory approach has sometimes been described as 'light touch'. This was always somewhat of a caricature, and a term which the FSA never itself used. A clear set of rules has always played an essential role within both prudential and conduct of business regulation, and the FSA has always made extensive use of its powers to require firms to make improvements in prudential management and conduct of business, and extensive use of its powers relating to enforcement of standards.[53]

However, the report did acknowledge that the FSA's decision-making had been centred on a specific philosophy that generated a supervisory approach geared toward individual firms and business regulation that subsequently proved to be inadequate in the face of crisis:

> But the FSA's regulatory and supervisory approach, before the current crisis, was based on a sometimes implicit but at times quite overt philosophy which believed that:
>
> • Markets are in general self correcting, with market discipline a more effective tool than regulation or supervisory oversight through which to ensure that firms' strategies are sound and risks contained.
>
> • The primary responsibility for managing risks lies with the senior management and boards of the individual firms, who are better placed to assess business model risk than bank regulators, and who can be relied on to make appropriate decisions about

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[51] Ibid., p102
[52] Ibid., p86
[53] Ibid., p86

the balance between risk and return, provided appropriate systems, procedures and skilled people are in place.

• Customer protection is best ensured not by product regulation or direct intervention in

markets, but by ensuring that wholesale markets are as unfettered and transparent as possible, and that the way in which firms conduct business (e.g. the definition and execution of sales processes) is appropriate.

This philosophy resulted in a supervisory approach which involved:

• A focus on the supervision of individual institutions rather than on the whole system. This focus it should be noted was a common feature, and in retrospect a common failing, of bank regulation and supervisory systems across the world.

• A focus on ensuring that systems and processes were correctly defined, rather than on challenging business models and strategies. Risk Mitigation Programs set out after ARROW reviews therefore tended to focus more on organisation structures, systems and reporting procedures, than on overall risks in business models.

• A focus within the FSA's oversight of 'approved persons' (e.g. those proposed by firms for key risk management functions) on checking that there were no issues of probity raised by past conduct, rather than assessing technical skills, with the strong presumption that management and boards were in a better position to judge the appropriateness of specific individuals for specific roles.

• A balance between conduct of business regulation and prudential regulation which, with the benefit of hindsight, now appears biased towards the former. This was not the case in all sectors of the financial industry: the FSA for instance introduced in 2002-04 major and very important changes in the prudential supervision of insurance companies which have significantly improved the ability of those companies to face the challenges created by the current crisis. But it was to a degree the case in banking, where a long period of reduced economic volatility, which was attributed by many informed observers to the positive benefits of the securitised credit model, helped foster inadequate focus on system-wide prudential risks.

In addition, though this did not follow necessarily from the overall philosophy of regulation, it is noticeable in retrospect that where there was a focus on bank prudential regulation, it was heavily skewed towards the agreement and then implementation of the Basel II capital adequacy standard, which required the commitment of very large skilled resources both within the FSA and across all of the banks. In retrospect this skew was mistaken since (i) it meant that insufficient attention was paid to growing risks in trading books where Basel II did not change the Basel I approach to any significant extent; (ii) it meant that insufficient attention was directed to liquidity risks, which as Section 1.1 (iii) described, were fundamental to the crisis. This failure to spot emerging issues was rooted in the paucity of macro-prudential, systemic- and system-wide analysis.

The combination of these features, underpinned by the then dominant philosophy of confidence in self correcting markets, meant that even in the many cases where the FSA did meet high standards in the execution of its regulatory and supervisory approach, it was not with hindsight aggressive enough in demanding adjustments to business models which even at level of the individual institution were excessively risky and which pursued simultaneously by several banks, contributed to the build-up of system-wide risks. In addition, however, it is clear that in the specific case of Northern Rock, the FSA also fell short of high professional standards in the execution of its

> supervisory approach, with significant failures in basic management disciplines and procedures which have been set out in its Internal Audit report.[54]

The FSA's new approach, which the report described as "more intrusive and more systemic",[55] will be underpinned by a new regulatory philosophy. The FSA identified that following the FSA's failures concerning Northern Rock, a new approach was adopted; the Review provided an overview of this:

> The new approach has been termed 'intensive supervision'. It involves:
>
> • A significant increase in the resources devoted to the supervision of high impact firms and in particular to high impact and complex banks, with an increase in the frequency of comprehensive risk reviews (ARROWs) from a maximum of three to a maximum of two years, and less for firms facing particularly risky issues.
>
> • A shift in supervisory style from focusing on systems and processes, to focusing on key business outcomes and risks and on the sustainability of business models and strategies. This shift will imply a greater willingness to vary capital and liquidity requirements or to intervene more directly if we perceive that specific business strategies are creating undue risk to the bank itself or to the wider system.
>
> • A shift in the approach to the assessment of approved persons, with a focus on technical skills as well as probity.
>
> • An increase in resources devoted to sectoral and firm comparator analysis, enabling the FSA to better identify firms which are outliers in terms of risks and business strategies and to identify emerging sector wide trends which may create systemic risk.
>
> • Investments in specialist skills (e.g. in the analysis of liquidity risks), with supervisory teams able to draw on enhanced central expert resources.
>
> • A much more intensive analysis of information relating to key risks, with for instance far more detailed information requirements relating to liquidity already outlined in the December Consultation Paper (CP08/22).
>
> • A focus on remuneration policies, and the integration of oversight of remuneration policies into overall assessments of risk in the fashion described in 2.5 (ii) above.[56]

However, in light of the subsequent financial crisis, Turner specified several further reforms to the FSA's governing philosophy:

> • Macro-prudential as well as sectoral analysis. The SEP committed the FSA to develop enhanced capabilities in sectoral analysis. Analysis of the origins of the crisis has reinforced the importance of that commitment and highlighted that sector analysis must be used not just to identify outlier business models and strategies but to help build an overall picture of macro-prudential risks. So the FSA will need to build capabilities in such analysis to inform, for instance, decisions relating to operation of countercyclical capital and liquidity requirements (see Section 2.6 above).

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[54] Ibid., pp87-88
[55] Ibid., p88
[56] Ibid., p88

• A major shift in the role which the FSA plays in relation to published accounts and accounting judgements, with far more intense contact with bank management and auditors on these issues.

• If the Economic Cycle Reserve described in 2.2 (v) above were based to any extent on discretionary judgements, rather than solely on a formula, this would entail in-depth review of the assumptions which management proposed in relation to prudent through-the-cycle loss levels.

• But there is also a strong case for bank regulators such as the FSA to be far more involved than in the past in the review and comparison of accounting approaches to fair value estimates and loan impairment provisions. Over the last six months the FSA has been intensively involved in the analysis of bank balance sheets to inform decisions on bank recapitalisations and the Asset Protection Scheme (APS). This analysis has revealed significant differences in the marks used by different banks to value similar trading book assets and significant differences in the allocation of assets between trading and banking books. The FSA has not in the past monitored these accounting policies as closely as now seems appropriate. A new approach is required, entailing detailed FSA comparative review of the judgements made by different banks, and meetings with management and auditors to explore the reasons for outlier positions.

• In addition it is clear that the FSA needs to understand the assets (and liabilities) in bank balance sheets at the level of detail which has been involved in the APS analysis if it is to properly understand business model risks.[57]

The Turner Review also compared the UK regulatory system with those in other advanced economies. The Review argued that no specific type of system has been particularly effective, and thus justified its view that a major increase in resources would not be required:

It is noticeable, however, that this distinction between supervisory styles is not clearly correlated with relative success. The US system of resource intensive bank examination has been no more successful than the UK's approach in preventing bank failure. Conversely both Canada and Spain, with different supervisory approaches, have so far been less affected by the banking crisis, even though Spain is in a severe macroeconomic downturn.

The evidence is therefore consistent with our current judgement that a major increase in FSA resources devoted to bank supervision, beyond that already planned in the SEP, is not essential to more effective regulation and supervision. The determinants of Spain's and Canada's relative success seem more likely to lie in other factors than in a particular choice of supervisory style. In the Spanish case, the role of dynamic provisioning may be important: in the Canadian case, the particular characteristics of mortgage market regulation45 and the application of a leverage ratio which has constrained Canadian bank participation in trading book activities may have played key roles.

The crucial changes needed in the FSA's approach seem therefore likely to be:

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[57] Ibid., p89

(i) the changes in supervisory approach already planned and being implemented, significantly increasing the intensity of supervision but without progressing to a bank examiner model;

(ii) further steps to intensify supervision in particular high impact areas e.g. oversight of accounting judgements;

(iii) more macro-prudential analysis, and more analysis of and willingness to make judgements on business models; and

(iv) the more effective design and use of a small number of high impact prudential levers in particular those relating to capital, liquidity and accounting policies.[58]

2 The de Larosière report, February 2009

In response to the financial crisis, the European Commission setup the de Larosière Group to recommend changes to the regulatory structure of financial services that would not require changes to the Treaties of the EU. Internal Market and Services Commissioner Charlie McCreevy described this as a "pragmatic approach".[59] The report was published on 25 February 2009.

The report stated its aim to lay out a framework for enhancing EU regulation:

> Towards a new regulatory agenda – to reduce risk and improve risk management; to improve systemic shock absorbers; to weaken pro-cyclical amplifiers; to strengthen transparency; and to get the incentives in financial markets right.
>
> Towards stronger coordinated supervision – macro-prudential and micro-prudential. Building on existing structures. Ambitiously, step by step but with a simple objective. Much stronger, coordinated supervision for all financial actors in the European Un ion. With equivalent standards for all, thereby preserving fair competition throughout the internal market.
>
> Towards effective crisis management procedures – to build confidence among supervisors. And real trust. With agreed methods and criteria. So all Member States can feel that their investors, their depositors, their citizens are properly protected in the European Union.
>
> In essence, we have two alternatives: the first *"chacun pour soi"* beggar-thy-neighbour solutions; or the second – enhanced, pragmatic, sensible European cooperation for the benefit of all to preserve an open world economy. This will bring undoubted economic gains, and this is what we favour. [60]

The following subsections provide details of the central regulatory recommendations contained in the report. The report is divided into two key areas – the regulation, and the supervisory structure, of the financial services sector. The authors noted the mutual dependence of the two areas:

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58 Ibid., pp90-91

59 EU Europa website, José Manuel Barroso, Charlie McCreevy and Joaquín Almunia President of the European Commission, European Commissioner for Internal Market and Services, European Commissioner for Economic and Monetary Policy Introductory remarks at the Joint Press Conference on European Financial Supervision Joint Press Conference on European Financial Supervision, Brussels, SPEECH/09/273, 27 May 2009

60 High-level Group on Financial Supervision in the EU, De Larosiere Report, 25 February 2009

> Regulation and supervision are interdependent: competent supervision cannot make good failures in financial regulatory policy; but without competent and well designed supervision good regulatory policies will be ineffective. High standards in both are therefore required.[61]

2.1 Proposals to alter the regulation of financial services in the EU

Reforming the present framework

The report analysed the failings of the current regulatory system and made multiple recommendations highlighting ways in which problems could be resolved or mitigated.

Asset bubbles

The report identified asset bubbles, particularly the housing market in the US, as a key concern for macro regulation. The report found that although identifying such bubbles is inevitably difficult, there are a number of policies that may be usefully employed to prevent dramatically inflating such bubbles:

> It is commonly agreed today that monetary authorities cannot avoid the creation of bubbles by targeting asset prices and they should not try to prick bubbles. However, they can and should adequately communicate their concerns on the sustainability of strong increases in asset prices and contribute to a more objective assessment of systemic risks. Equally, they can and should implement a monetary policy that looks not only at consumer prices, but also at overall monetary and credit developments, and they should be ready to gradually tighten monetary policy when money or credit grow in an excessive and unsustainable manner. Other competent authorities can also use certain tools to contain money and credit growth. These are of particular importance in the context of the euro zone, where country-specific monetary policies tailored to countries' positions in the economic cycle, and especially in the asset market cycle, cannot be implemented. The following are examples of regulatory tools which can help meet counter-cyclical objectives:
>
> - introducing dynamic provisioning or counter-cyclical reserves on banks in *"good times"* to limit credit expansion and so alleviate pro-cyclicality effects in the *"bad times"*;
>
> - making rules on loans to value more restrictive;
>
> - modifying tax rules that excessively stimulate the demand for assets.[62]

Capital and liquidity requirements

The report found that a more effective and international capital oversight regime is required. In overview, the authors noted:

> Overall cooperation between monetary and regulatory authorities will have to be strengthened, with a view to defining and implementing the policy-mix that can best maintain a stable and balanced macro-economic framework. In this context, it will be important for the ECB to become more involved in over-seeing the macro-prudential aspects of banking activities (see next chapter on supervision). Banks should be subject to more and more intense scrutiny as the bubble builds up.
>
> Finally, a far more effective and symmetric *"multilateral surveillance"* by the IMF covering exchange rates and underlying economic policies is called for if one wants to avoid the continuation of unsustainable deficits (see chapter on global issues).[63]

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[61] Ibid., p38
[62] Ibid., pp14-15
[63] Ibid., p15

The Group also recognised the role of liquidity in the crisis:

> Liquidity issues are important in the context both of individual financial firms and of the regulatory system. The Group believes that both require greater attention than they have hitherto been afforded. Supervisors need to pay greater attention to the specific maturity mismatches of the firms they supervise, and those drawing up capital regulations need to incorporate more fully the impact on capital of liquidity pressures on banks' behaviour.[64]

More specifically, the report identified several areas of cross-national regulation that needed to be enhanced. Although the Basel II framework was not blamed for causing the crisis, the de Larosière Group argued that it "underestimated some important risks and over-estimated banks' ability to handle them."[65] Accordingly, the Group recommended,

> *<u>Recommendation 1</u>: The Group sees the need for a fundamental review of the Basel 2 rules. The Basel Committee of Banking Supervisors should therefore be invited to urgently amend the rules with a view to:*
>
> *- gradually increase minimum capital requirements;*
>
> *- reduce pro-cyclicality, by e.g. encouraging dynamic provisioning or capital buffers;*
>
> *- introduce stricter rules for off-balance sheet items;*
>
> *- tighten norms on liquidity management; and*
>
> *- strengthen the rules for bank's internal control and risk management, notably by reinforcing the "fit and proper" criteria for management and board members.*
>
> *Furthermore, it is essential that rules are complemented by more reliance on judgement.*
>
> *<u>Recommendation 2</u>: In the EU, a common definition of regulatory capital should be adopted, clarifying whether, and if so which, hybrid instruments should be considered as tier 1 capital. This definition should be confirmed by the Basel Committee.*[66]

Credit rating agencies

The report argued that credit rating agencies require regulation due to their central importance in the modern complex financial system, but also because of the conflict of interests and anti-competitive opportunities the industry model presents:

> Given the pivotal and quasi-regulatory role that they play in today's financial markets, Credit Rating Agencies must be regulated effectively to ensure that their ratings are independent, objective and of the highest possible quality. This is all the more true given the oligopolistic nature of this business. The stability and functioning of financial markets should not depend on the opinions of a small number of agencies – whose

[64] Ibid., p16
[65] Ibid.
[66] Ibid., p19

> opinions often were proven wrong, and who have much too frequently substituted for rigorous due diligence by firms.[67]

Although the report generally supported the European Commission's regulatory proposal (submitted in October 2008), it commented that

> …the system of licensing and oversight contained in this proposal is too cumbersome. The allocation of work between the home and host authorities, in particular, is likely to lack effectiveness and efficiency. The Group is of the view that it would be far more rational to entrust the Committee of European Securities Regulators (CESR) with the task of licensing CRAs in the EU, monitoring their performance, and in the light of this imposing changes (as is proposed in the new supervisory framework proposed in the next chapter).[68]

The de Larosière Group concluded by making a number of recommendations:

> *Recommendation 3: Concerning the regulation of Credit Rating Agencies (CRAs), the Group recommends that:*
>
> *- within the EU, a strengthened CESR should be in charge of registering and supervising CRAs;*
>
> *- a fundamental review of CRAs' business model, its financing and of the scope for separating rating and advisory activities should be undertaken;*
>
> *- the use of ratings in financial regulations should be significantly reduced over time;*
>
> *- the rating for structured products should be transformed by introducing distinct codes for such products.*
>
> It is crucial that these regulatory changes are accompanied by increased due diligence and judgement by investors and improved supervision.[69]

Mark-to-market accounting

The mark-to-market accounting principle,[70] which underlies balance sheet calculations in a number of key areas, also received criticism in the report. The Group found that although "in general this principle makes sense, there may be specific conditions where this principle should not apply because it can mislead investors and distort managers' policies."[71] In particular, the report argued that:

- institutions should be able to value assets that it wishes to hold to maturity using a different accounting standard;
- where inactive markets exist it may be inappropriate to enforce mark-to-market in such cases; and
- any accounting system must be avoid pro-cyclicality and remain cycle-neutral.

Specifically, the report recommended:

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67 Ibid.
68 Ibid.
69 Ibid., p20
70 A widely used accounting standard that assigns financial assets their current market value.
71 Ibid.

> <u>Recommendation 4</u>*: With respect to accounting rules the Group considers that a wider reflection on the mark-to-market principle is needed and in particular recommends that:*
>
> *- expeditious solutions should be found to the remaining accounting issues concerning complex products;*
>
> *- accounting standards should not bias business models, promote pro-cyclical behaviour or discourage long-term investment;*
>
> *- the IASB and other accounting standard setters should clarify and agree on a common, transparent methodology for the valuation of assets in illiquid markets where mark-to-market cannot be applied;*
>
> *- the IASB further opens its standard-setting process to the regulatory, supervisory and business communities;*
>
> *- the oversight and governance structure of the IASB be strengthened.*[72]

Despite these recommendations, the report also sought to emphasise the importance of maintaining a transparent global standard:

> To ensure convergence of accounting practices and a level playing-field at the global level, it should be the role of the International Accounting Standard Board (IASB) to foster the emergence of a consensus as to where and how the mark-to-market principle should apply – and where it should not. The IASB must, to this end, open itself up more to the views of the regulatory, supervisory and business communities. This should be coupled with developing a far more responsive, open, accountable and balanced governance structure. If such a consensus does not emerge, it should be the role of the international community to set limits to the application of the mark-to-market principle.[73]

Insurance companies

The Group, noting the systemic importance of insurance giant American International Group (or AIG), supported the Commission's insurance directive, Solvency II. Solvency II aims to more effectively supervise large cross-border insurance companies; in addition, the directive seeks to remedy existing levels of fragmentation in regulation and ensure that risk is more effectively assessed.

The report, endorsing Solvency II, also recommended that disputes regarding the definition of "home" and "host" Member States be resolved:

> <u>Recommendation 5</u>*: The Group considers that the Solvency 2 directive must be adopted and include a balanced group support regime, coupled with sufficient safeguards for host Member States, a binding mediation process between supervisors and the setting-up of harmonised insurance guarantee schemes.*[74]

Sanctions punishment

The report identified sanctions against financial institutions as an area where European legislation and the regulation of individual Member States is severely lacking. The report stated:

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72 Ibid., pp21-22
73 Ibid., p21
74 Ibid., p23

> A sound prudential and conduct of business framework for the financial sector must rest on strong supervisory and sanctioning regimes. Supervisory authorities must be equipped with sufficient powers to act when financial institutions have inadequate risk management and control mechanisms as well as inadequate solvency of liquidity positions. There should also be equal, strong and deterrent sanctions regimes against all financial crimes - sanctions which should be enforced effectively.
>
> Neither of these exist for the time being in the EU. Member States sanctioning regimes are in general weak and heterogeneous. Sanctions for insider trading range from a few thousands of euros in one Member State to millions of euros or jail in another. This can induce regulatory arbitrage in a single market. Sanctions should therefore be urgently strengthened and harmonised. The huge pecuniary differences between the level of fines that can be levied in the competition area and financial fraud penalties is striking. Furthermore, Member States should review their capacity to adequately detect financial crimes when they occur. Where needed, more resources and more sophisticated detection processes should be deployed.
>
> *Recommendation 6: The Group considers that:*
>
> *- Competent authorities in all Member States must have sufficient supervisory powers, including sanctions, to ensure the compliance of financial institutions with the applicable rules;*
>
> *- Competent authorities should also be equipped with strong, equivalent and deterrent sanction regimes to counter all types of financial crime.*[75]

New features for the regulatory framework

The de Larosiére Group also made recommendations highlighting ways in which the current financial problems can be resolved by new regulations.

The "parallel banking system"

The "parallel banking system", as the report described it, encompassed hedge funds, investment banks, mortgage brokers (in some cases) and off-balance sheet vehicles. The report strongly endorsed regulation of these enterprises given their systemic importance and their vulnerability to crises (arising from their relatively limited capital bases):

> The Group considers that appropriate regulation must be extended, in a proportionate manner, to all firms or entities conducting financial activities which may have a systemic impact (i.e. in the form of counterparty, maturity, interest rate risks…) even if they have no direct links with the public at large. This is all the more important since such institutions, having no deposit base, can be very vulnerable when liquidity evaporates – resulting in major impacts in the real economy.[76]

The report focused particularly on enhancing information disclosure in the case of hedge funds, and suggested that EU nations as well as the US should follow the UK's approach of registering hedge funds and monitoring the activities of the largest 30. Equating the proprietary trading activities of investment banks and some commercial banks to hedge funds, the report suggested that capital restrictions and other regulations should be tightened:

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75 Ibid.
76 Ibid., p23

> The conventional wisdom has been that light regulatory principles could apply to these because they were trading "at their own risk". Evidence has shown that the investment banks were subject to very thin capital requirements, became highly leveraged and then created severe systemic problems. ...
>
> While these institutions should not be controlled like ordinary banks, adequate capital requirements should be set for proprietary trading and reporting obligations should be applied in order to assess their degree of leverage. Furthermore, the wrong incentives that induced excessive risk taking (in particular because of the way in which bonuses are structured) must be rectified.[77]

The Group summarised their recommendations:

> *Recommendation 7: Concerning the "parallel banking system" the Group recommends to:*
>
> *- extend appropriate regulation, in a proportionate manner, to all firms or entities conducting financial activities of a potentially systemic nature, even if they have no direct dealings with the public at large;*
>
> *- improve transparency in all financial markets - and notably for systemically important hedge funds - by imposing, in all EU Member States and internationally, registration and information requirements on hedge fund managers, concerning their strategies, methods and leverage, including their worldwide activities;*
>
> *- introduce appropriate capital requirements on banks owning or operating a hedge fund or being otherwise engaged in significant proprietary trading and to closely monitor them.*[78]

Securitisation and derivatives

The de Larosière Group observed that trust in the credit default swap market had rapidly deteriorated, and attributed much of this to fears of counterparty risk arising from a system lacking a centralised clearing party. The high levels of risk detected in securities markets could be mitigated by ensuring that the issuer retains a significant stake in the asset. The report recommended:

> *Recommendation 8: Concerning securitised products and derivatives markets, the Group recommends to:*
>
> *- simplify and standardise over-the-counter derivatives;*
>
> *- introduce and require the use of at least one well-capitalised central clearing house for credit default swaps in the EU;*
>
> *- guarantee that issuers of securitised products retain on their books for the life of the instrument a meaningful amount of the underlying risk (non-hedged).*[79]

Investment funds

Noting the difficulties encountered by money market firms and the Bernard Madoff fraud case in the US, the Group argued that:

> *Recommendation 9: With respect to investment funds, the Group proposes to further develop common rules for investment funds in the EU, notably concerning definitions,*

[77] Ibid., p24
[78] Ibid., p25
[79] Ibid.

codification of assets and rules for delegation. This should be accompanied by a tighter supervisory control over the independent role of depositories and custodians.[80]

Corporate governance

The de Larosière report identified corporate governance as “one of the most important failures of the present crisis.”[81] The report provided an overview of the problems created by financial incentives:

> Most of the incentives – many of them being the result of official action – encouraged financial institutions to act in a short-term perspective and to make as much profit as possible to the detriment of credit quality and prudence; interest rates were low and funding plentiful; the new accounting rules were systematically biased towards short-term performance (indeed these rules led to immediate mark-to-market recognition of profit without allowing a discount for future potential losses). As a result of all this, the longterm, "through the cycle" perspective has been neglected.[82]

Although the Group believed that some of these problematic incentives can be resolved by counter-cyclical capital buffers, changes to accounting procedures and the closure of regulatory gaps, the report also explained that reforms to remuneration and risk management practices would be necessary to maintain a more sustainable financial system.

Remuneration

Distinguishing between the *level* and *structure* of remuneration, the report explained that,

> There are two dimensions to this problem: one is the often excessive level of remuneration in the financial sector; the other one is the structure of this remuneration, notably the fact that they induce too high risk-taking and encourage short-termism to the detriment of long-term performance. Social-political dissatisfaction has tended recently to focus, for understandable reasons, on the former. However, it is primarily the latter issue which has had an adverse impact on risk management and has thereby contributed to the crisis. It is therefore on the structure of remuneration that policy-makers should concentrate reforms going forward.
>
> It is extremely important to re-align compensation incentives with shareholder interests and long-term, firm-wide profitability. Compensation schemes must become fully transparent. Industry has already come up with various sets of useful principles to try and achieve this. The principles agreed in 2008 by the Institute of International Finance, for example, are a first step. [83]

The Group proceeded to outline a number of core principles for determining a prudent remuneration structure:

> <u>Recommendation 11</u>*: In view of the corporate governance failures revealed by the current financial crisis, the Group considers that compensation incentives must be better aligned with shareholder interests and long-term firm-wide profitability by basing the structure of financial sector compensation schemes on the following principles:*
>
> *- the assessment of bonuses should be set in a multi-year framework, spreading bonus payments over the cycle;*

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80 Ibid., p26
81 Ibid., p29
82 Ibid., p30
83 Ibid., pp30-31

- the same principles should apply to proprietary traders and asset managers;

- bonuses should reflect actual performance and not be guaranteed in advance.

Supervisors should oversee the suitability of financial institutions' compensation policies, require changes where compensation policies encourage excessive risk-taking and, where necessary, impose additional capital requirements under pillar 2 of Basel 2 in case no adequate remedial action is being taken.[84]

Risk management

Turning to internal risk procedures, the report argued that "In many cases, risk monitoring and management practices within financial institutions have dramatically failed in the crisis."[85] Accordingly, the report provided a general set of principles that would apply to risk-taking firms:

> <u>Recommendation 12</u>*: With respect to internal risk management, the Group recommends that:*
>
> *- the risk management function within financial institutions must be made independent and responsible for effective, independent stress testing;*
>
> *- senior risk officers should hold a very high rank in the company hierarchy, and - internal risk assessment and proper due diligence must not be neglected by overreliance on external ratings.*
>
> *Supervisors are called upon to frequently inspect financial institutions' internal risk management systems.*[86]

Crisis management

Although the de Larosière Group noted that financial crises were inevitable, it stressed that a more effective supervisory structure could mitigate some of the greatest damage:

> Of course, crisis prevention should be the first preoccupation of national and EU authorities (see chapter on supervision). Supervisors should act as early as possible in order to address the vulnerabilities identified in a given institution, and use all means available to them to this effect (e.g. calling on contributions from shareholders, fostering the acquisition of the institution concerned by a stronger one). In this respect, the role of central banks which are by essence well placed to observe the first signs of vulnerability of a bank is of crucial importance. Therefore in countries where supervision is not in the hands of the central bank, a close collaboration must be ensured between supervisors and central banks. But crises will always occur and recent experiences in managing crises have shown that many improvements to the present system are called for.[87]

Moral hazard

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84 Ibid., p31

85 Ibid., p32

86 Ibid.

87 Ibid., pp32-33

To address the moral hazard issues regarding support for failing institutions,[88] the Group proposed adopting an approach of "constructive ambiguity":

> "Constructive ambiguity" regarding decisions whether or not public sector support will be made available can be useful to contain moral hazard. However, the cure for moral hazard is not to be ambiguous on the issue of public sector involvement as such in crisis management. Two aspects need to be distinguished and require different treatment. On the one hand, a clear and consistent framework for crisis management is required with full transparency and certainty that the authorities have developed concrete crisis management plans to be used in cases where absence of such public sector support is likely to create uncertainty and threaten financial stability. On the other hand, constructive ambiguity and uncertainty is appropriate in the application of these arrangements in future individual cases of distressed banks.[89]

Crisis management framework

The report also noted that a "lack of consistent crisis management and resolution tools across the Single Market places Europe at a disadvantage vis-à-vis the US and these issues should be addressed by the adoption at EU level of adequate measures."[90] To address these concerns, the report recommended a more systematic and structured approach to dealing with financial crises:

> <u>Recommendation 13</u>*: The Group calls for a coherent and workable regulatory framework for crisis management in the EU:*
>
> *- without pre-judging the intervention in future individual cases of distressed financial institutions, a transparent and clear framework for managing crises should be developed;*
>
> *- all relevant authorities in the EU should be equipped with appropriate and equivalent crisis prevention and crisis intervention tools;*
>
> *- legal obstacles which stand in the way of using these tools in a cross-border context should be removed, with adequate measures to be adopted at EU level.*[91]

Deposit guarantee schemes

Although the report applauded the increases in deposit guarantees offered by the EU, it strongly argued that a uniform deposit protection policy should be applied across the EU – not simply a minimum level, as specified by current EU regulations:

> A critical element of this proposal is the requirement that all Member States apply the same amount of DGS protection for each depositor. The EU cannot indeed continue to rely on the principle of a minimum coverage level, which can be topped-up at national level. This principle presents two major flaws: first, in a situation where a national banking sector is perceived as becoming fragile, there is the risk that deposits would be moved to the countries with the most protective regime (thus weakening banks in the first country even further); second, it would mean that in the same Member State the customers of a local bank and those using the services of a third country branch

[88] The problem of moral hazard (a term derived from the principle-agent problem familiar to economists) in the case of finance has been that some banks have become too large to be allowed to fail – upon recognition of this fact, any such institution then faces different incentives. The new incentives are such that there is only a limited downside to taking risk because of the knowledge that the government will provide support if the risk goes wrong.

[89] High-level Group on Financial Supervision in the EU, De Larosiere Report, 25 February 2009, p33

[90] Ibid.

[91] Ibid., p36

> could enjoy different coverage levels. As the crisis has shown, this cannot be reconciled with the notion of a well-functioning Single Market.[92]

The report further argued in favour of pre-funded deposit guarantee schemes funded by the financial sector itself. The authors argued that such "schemes are better to foster confidence and help avoiding pro-cyclical effects resulting from banks having to pay into the schemes at a time where they are already in difficulty."[93] The report added that where large cross-border institutions fail, it should be made clear that the state would be willing provide any additional guarantee funds where necessary. However, the Group decided against recommending a pan-European guarantee fund.

2.2 Proposals to improve the supervision of financial services

The report highlighted the importance of, and distinction between, macro- and micro-prudential supervision:

> The experience of the past few years has brought to the fore the important distinction between micro-prudential and macro-prudential supervision. Both are clearly intertwined, in substance as well as in operational terms. Both are necessary and will be covered in this chapter.
>
> Micro-prudential supervision has traditionally been the centre of the attention of supervisors around the world. The main objective of micro-prudential supervision is to supervise and limit the distress of individual financial institutions, thus protecting the customers of the institution in question. The fact that the financial system as a whole may be exposed to common risks is not always fully taken into account. However, by preventing the failure of individual financial institutions, micro-prudential supervision attempts to prevent (or at least mitigate) the risk of contagion and the subsequent negative externalities in terms of confidence in the overall financial system.
>
> The objective of macro-prudential supervision is to limit the distress of the financial system as a whole in order to protect the overall economy from significant losses in real output. While risks to the financial system can in principle arise from the failure of one financial institution alone if it is large enough in relation to the country concerned and/or with multiple branches/subsidiaries in other countries, the much more important global systemic risk arises from a common exposure of many financial institutions to the same risk factors. Macro-prudential analysis therefore must pay particular attention to common or correlated shocks and to shocks to those parts of the financial system that trigger contagious knock-on or feedback effects.
>
> Macro-prudential supervision cannot be meaningful unless it can somehow impact on supervision at the micro-level; whilst micro-prudential supervision cannot effectively safeguard financial stability without adequately taking account of macro-level developments.[94]

The Group identified a number of problems with the supervisory system operating in the EU, although were careful to explain that it was not the fault of this system that the crisis occurred:

- lack of macro-prudential supervision;

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92 Ibid., p34
93 Ibid.
94 Ibid., p38

- ineffective early warning systems;
- specific failures by some regulators to effectively address crises (eg Northern Rock);
- inadequate processes and practices for challenging the views of an institution's home regulator when they spread across borders (eg Icelandic banks);
- lack of frankness and cooperation between supervisors across borders;
- lack of resources, combined with a heavy workload, inhibited the level 3 pan-EU supervisory bodies (ie Committee of European Securities Regulators, Committee of European banking Supervisors and Committee of European Insurance and Occupational Pensions Supervisors);
- level 3 bodies also lacked the legal basis for making decisive judgements.

A new EU supervisory structure
In response to these problems, the report proposed that the quality of national *and* Europe-wide supervisory structures be strengthened. The report laid out a number of specific recommendations, including the colleges of supervisors proposed as part of the Capital Requirements Directive and Solvency II proposals, that seek to achieve this goal:

> *<u>Recommendation 16</u>: A new body called the European Systemic Risk Council (ESRC), to be chaired by the ECB President, should be set up under the auspices and with the logistical support of the ECB.*
>
> *- The ESRC should be composed of the members of the General Council of the ECB, the chairpersons of CEBS, CEIOPS and CESR as well as one representative of the European Commission. Whenever the subject discussed justifies the presence of insurance and securities supervisors, the Governor could choose to be represented by the Head of the appropriate national supervisory authority;*
>
> *- The ESRC should pool and analyse all information, relevant for financial stability, pertaining to macro-economic conditions and to macro-prudential developments in all the financial sectors.*
>
> *- A proper flow of information between the ESRC and the micro-prudential supervisors must be ensured.*
>
> *<u>Recommendation 17</u>: an effective risk warning system shall be put in place under the auspices of the ESRC and of the Economic and Financial Committee (EFC).*
>
> *- The ESRC should prioritise and issue macro-prudential risk warnings: there should be mandatory follow up and, where appropriate, action shall be taken by the relevant competent authorities in the EU.*
>
> *- If the risks are of a serious nature, potentially having a negative impact on the financial sector or the economy as a whole, the ESRC shall inform the chairman of the EFC. The EFC, working with the Commission, will then implement a strategy ensuring that the risks are effectively addressed.*
>
> *- If the risks identified relate to a global dysfunction of the monetary and financial system, the ESRC will warn the IMF, the FSF and the BIS in order to define appropriate action at both EU and global levels.*

- If the ESRC judges that the response of a national supervisor to a priority risk warning is inadequate, it shall, after discussion with that supervisor, inform the chairman of the EFC, with a view to further action being taken against that supervisor.[95]

<u>*Recommendation 18*</u>*: A European System of Financial Supervisors (ESFS) should be setup. This ESFS should be a decentralised network:*

- existing national supervisors would continue to carry-out day-to-day supervision;

- three new European Authorities would be set up, replacing CEBS, CEIOPS and CESR, with the role coordinate the application of supervisory standards and guarantee strong cooperation between the national supervisors;

- colleges of supervisors would be set up for all major cross-border institutions.

The ESFS will need to be independent of the political authorities, but be accountable to them.

It should rely on a common set of core harmonised rules and have access to high-quality information.[96]

With regard to the ECB, the report suggested that "the Group supports an extended role for the ECB in macro-prudential oversight," although "it does not support any role for the ECB for micro-prudential supervision."[97]

Creating an EU supervisory structure
The creation of such a supervisory structure is envisaged in two stages. In the first stage,

- national supervisory authorities would be strengthened "with a view to upgrading the quality of supervision in the EU";[98]
- the "EU should also develop a more harmonised set of financial regulations, supervisory powers and sanctioning regimes";[99]
- level 3 committees will receive additional resources, "upgrade the quality and impact of their peer review processes"[100] and "prepare the ground, including through the adoption of adequate supervisory norms, for the setting-up of supervisory colleges for all major cross-border financial firms in the EU by the end of 2009."[101]

The second stage would establish the European System of Financial Supervision:

<u>*Recommendation 22*</u>*: In the second stage (2011-2012), the EU should establish an integrated European System of Financial Supervision (ESFS).*

- The level 3 Committees should be transformed into three European Authorities: a European Banking Authority, a European Insurance Authority and a European Securities Authority.

95 Ibid., p46
96 Ibid., p48
97 Ibid., p43
98 Ibid., p50
99 Ibid., p51
100 Ibid., p52
101 Ibid.

- The Authorities should be managed by a board comprised of the chairs of the national supervisory authorities. The chairpersons and director generals of the Authorities should be full-time independent professionals. The appointment of the chairpersons should be confirmed by the Commission, the European Parliament and the Council and should be valid for a period of 8 years.

- The Authorities should have their own autonomous budget, commensurate with their responsibilities.

- In addition to the competences currently exercised by the level 3 committees, the Authorities should have, inter alia, the following key-competences:

> *i) legally binding mediation between national supervisors;*
>
> *ii adoption of binding supervisory standards;*
>
> *iii) adoption of binding technical decisions applicable to individual financial institutions;*
>
> *iv) oversight and coordination of colleges of supervisors;*
>
> *v) designation, where needed, of group supervisors;*
>
> *vi) licensing and supervision of specific EU-wide institutions (e.g. Credit Rating Agencies, and post-trading infrastructures);*
>
> *vii) binding cooperation with the ESRC to ensure adequate macro-prudential supervision.*

- National supervisory authorities should continue to be fully responsible for the day-to-day supervision of firms.[102]

It was also recommended that the new system be reviewed no later than three years after its establishment. Such a review, it was suggested, should consider shifting the structure to rely upon only two authorities, granting the authorities with wider regulatory powers of horizontal application and examining the case for wider supervisory duties in the EU.[103]

Further detail on the proposed supervisory structures and the stages of its implementation is available in chapter III of the report.

Global implications

However, the Group acknowledged that successfully implementing such a supervisory framework would be difficult, and would likely encounter political problems:

> The goal set out above is an ambitious one. It will require important institutional, legislative and operational changes. It will also require the emergence of the broadest possible political consensus on the necessity to move in this direction and the steps that must be taken to do so. The Group hopes that all Member States will aspire to these changes. If not, a variable geometry approach based on the mechanisms of Enhanced Cooperation or an inter-governmental agreement provided for in the Treaty may be required.[104]

[102] Ibid., pp55-56
[103] Ibid., p58
[104] Ibid., p48

The de Larosière report devoted a final chapter to regulation at the global level. The report noted:

> It is clearly in the EU's interest to try to shape the reform of the international financial architecture. The EU should take the lead by improving its own regulatory and supervisory system, which, necessary in its own right, is also required for international convergence.[105]

The examination of global regulation focused on: enhancing the consistency of regulation across borders; ensuring cooperation among supervisors; developing a financial stability early warning system; increasing the resources available to the IMF in its macroeconomic surveillance function; and increasing capital requirements for institutions operating in zones of inferior regulatory standards. Further detail on suggested reforms to the global supervisory structure is available in chapter IV of the report.

2.3 Immediate EU response to the report

Although the report met with a mixed reception, the President of the European Commission, Jose Manuel Barroso, announced on 4 March 2009 that the Commission had "decided to endorse in general the conclusions" of the report.[106] In particular, the Commission supported the creation of a separate body under ECB auspices to tackle and identify systemic risks and the need for a core EU-wide policy.[107] In addition to the prospect of discussion at the G-20 meeting in London, the Commission also outlined a more definitive timeline for action:

> In April the Commission will bring forward initiatives already in the pipeline on hedge funds, private equity and remuneration structures. Following an impact assessment, the Commission will put forward to the June European Council a detailed timetable for further measures based on the de Larosière report. It will bring forward proposals in the autumn on the new supervisory framework and on issues including: liquidity risk and excessive leverage; further reinforcing protection for depositors and policy holders; and effective sanctions against wrongdoing.[108]

Many of the regulatory reforms proposed in the report had already been initiated by the European Commission. The proposals to alter the supervisory structure also met with approval from the Commission:

> The Commission agrees with the Group's finding that the structure of the existing Committees – whose role has reached the limits of what is legally possible - is not sufficient to ensure financial stability in the EU and its Member States, and that the inefficiencies in the present structure need to be resolved as swiftly as possible. The Commission also considers that there are merits in a system which combines certain centralised responsibilities at European level with maintaining a clear role for national supervisors who are closest to the day-to-day operation of companies.
>
> The Commission considers that action is urgently needed and will propose to accelerate the implementation of the Group's findings. By combining the two phases proposed by the Group, it should be possible to move more quickly to both improve the

[105] Ibid., p59
[106] EU Europa website, Opening remarks of President Barroso at the press conference presenting the Commission's contribution to the Spring European Council, 4 March 2009
[107] European Commission, Communication for the Spring European Council, 4 March 2009
[108] European Commission, Commission calls on EU leaders to stay united against the crisis, move fast on financial market reform and show global leadership at G20, 4 March 2009

quality and coherence of supervision in Europe, and to transform the three existing Committees into authorities within a European financial supervision system. The feasibility of whether to combine one or more of these authorities should be examined with a view to ensuring maximum supervisory coherence and enhancing consistency and interaction between banking, insurance and markets supervisory experts.

The authorities could be charged with oversight and ultimate decision-making powers regarding colleges of supervisors for cross-border groups; ensuring consistency and good practice through setting common high standards and providing common interpretations of requirements for supervisory activities; and a key role in early warning mechanisms and crisis management, working with the body set up to look at the overall picture.

Building on the recommendations of the de Larosière Group, the Commission will now move forward in developing proposals to establish a new European financial supervision system. Drawing on views expressed by Member States, the existing Committees, the European Parliament, the ECB and other stakeholders, the Commission will prepare its proposals on the basis of an impact assessment, in line with its better regulation principles.[109]

3 Financial Regulation Reform, June 2009

On 17 June 2009, President Obama presented his proposals to reform the regulation of the financial services industry to Congress. The Treasury report explained that both the government and regulators had failed to effectively administer the financial system and, accordingly, the regulatory structure would need to be reformed:

> While this crisis had many causes, it is clear now that the government could have done more to prevent many of these problems from growing out of control and threatening the stability of our financial system. Gaps and weaknesses in the supervision and regulation of financial firms presented challenges to our government's ability to monitor, prevent, or address risks as they built up in the system. No regulator saw its job as protecting the economy and financial system as a whole. Existing approaches to bank holding company regulation focused on protecting the subsidiary bank, not on comprehensive regulation of the whole firm. Investment banks were permitted to opt for a different regime under a different regulator, and in doing so, escaped adequate constraints on leverage. Other firms, such as AIG, owned insured depositories, but escaped the strictures of serious holding company regulation because the depositories that they owned were technically not "banks" under relevant law.[110]

The reforms, which were the product of an extensive consultation process that involved a wide variety of figures from government, regulatory agencies and the financial sector, have been divided into five pillars. Specific proposals to reform regulatory content and the wider framework are contained under each of these pillars.

The most notable reforms include: significantly expanded supervisory powers for the Federal Reserve (Fed); the creation of new regulatory bodies such as the Financial Services Oversight Council, National Bank Supervisor and Consumer Financial Protection Agency;

3.1 "Promote Robust Supervision and Regulation of Financial Firms"

The Treasury has identified a number of problems with the regulation of financial firms:

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[109] European Commission, Driving European Recovery, COM(2009) 114, 4 March 2009, 6

[110] US Treasury, Financial Regulatory Reform – A New Foundation: Rebuilding Financial Supervision and Regulation, 17 June 2009, p2

> The current regime for regulating and supervising financial firms suffers from gaps, weaknesses and jurisdictional overlaps. It is also based on an outdated conception of financial risk-focusing on the safety and soundness of individual institutions, but not on the interconnections among firms or the stability of the system as a whole. Supervision has been lax and inconsistent among the various regulators. Many large, highly interconnected institutions have escaped real consolidated supervision. Private pools of capital, such as hedge funds, remain essentially unregulated.[111]

The Treasury also focused on some problems more specific to the financial crisis:

> First, capital and liquidity requirements were simply too low. Regulators did not require firms to hold sufficient capital to cover trading assets, high-risk loans, and off-balance sheet commitments, or to hold increased capital during good times to prepare for bad times. Regulators did not require firms to plan for a scenario in which the availability of liquidity was sharply curtailed.
>
> Second, on a systemic basis, regulators did not take into account the harm that large, interconnected, and highly leveraged institutions could inflict on the financial system and on the economy if they failed.
>
> Third, the responsibility for supervising the consolidated operations of large financial firms was split among various federal agencies. Fragmentation of supervisory responsibility and loopholes in the legal definition of a "bank" allowed owners of banks and other insured depository institutions to shop for the regulator of their choice.
>
> Fourth, investment banks operated with insufficient government oversight. Money market mutual funds were vulnerable to runs. Hedge funds and other private pools of capital operated completely outside of the supervisory framework.[112]

In response, the Treasury has resolved:

> To lay a new foundation for regulation and supervision, the administration's plan will strengthen capital and liquidity requirements for all financial firms, establish a tougher supervisory regime for the firms that pose the most serious risks to financial stability, eliminate gaps, increase transparency, and limit the opportunities for regulatory arbitrage. The plan seeks to protect the integrity of our financial system while encouraging growth and innovation.[113]

More specifically, the Treasury has set out a number of central proposals for reform:

- A new Financial Services Oversight Council containing the heads of the financial regulators, which will be chaired by the Treasury. This body will identify emerging systemic risks, resolve jurisdictional conflicts between regulators, help to coordinate policy and fill supervisory gaps. The body should be granted the power to gather information from any financial firm.

[111] US Treasury, Requiring Strong Supervision And Regulation Of All Financial Firms Factsheet, 17 June 2009, p1
[112] US Treasury, Financial Regulatory Reform – A New Foundation: Rebuilding Financial Supervision and Regulation, 17 June 2009, p5
[113] US Treasury, Requiring Strong Supervision And Regulation Of All Financial Firms Factsheet, 17 June 2009, p1

- The Fed will act as a single point of accountability for the supervision of all firms that own a bank holding company. In addition, the Fed will have the capacity to regulate any firm, whether it is a bank or not, which the Fed identifies as potentially posing a threat to system-wide financial stability.

- Stronger capital and other prudential standards will be applied to all financial firms – a number of working groups will be commissioned to draw up recommendations by the end of 2009. The largest and most interconnected firms (banks and non-banks) in particular will face more stringent standards – "In effect, our proposals would compel these firms to internalize the costs they could impose on society in the event of failure."[114]

- Accounting rules should be reviewed by the Federal Accounting Standards Board, International Accounting Standards Board and the Securities and Exchange Commission (SEC). These reviews should focus on forward-looking loss provisioning, information disclosure and fair value cash flows.

- Compulsory non-binding votes on remuneration packages for all public companies, and regulations requiring that compensation committees become more independent.

- A new National Bank Supervisor to "conduct prudential supervision and regulation of all federally chartered depository institutions, and all federal branches and agencies of foreign banks."[115] This will also involve elimination of the federal thrift charter and other loopholes that allowed some depository institutions to avoid bank holding company regulation by the Federal Reserve.

- The required registration of advisers of hedge funds and other private pools of capital with the SEC. Further, "advisers should be required to report information on the funds they manage that is sufficient to assess whether any fund poses a threat to financial stability."[116]

- The SEC should alter its credit and liquidity risk profiles for money market funds to reduce their susceptibility to runs on their deposits.

- Establish the Office of National Insurance, which will operate within the Treasury, "to gather information, develop expertise, negotiate international agreements, and coordinate policy in the insurance sector."[117]

- A wide range of opinion will be garnered in order to decide what to do with the government-sponsored enterprises Fannie Mae and Freddie Mac. A final report is scheduled for the 2011 budget.

3.2 "Establish Comprehensive Regulation of Financial Markets"

The Treasury noted that despite the complex array of financial products designed to efficiently diversify and reallocate risk to those most willing to bear it, "this process often concentrated risk in opaque and complex ways."[118] Furthermore,

[114] US Treasury, Financial Regulatory Reform – A New Foundation: Rebuilding Financial Supervision and Regulation, 17 June 2009, p6
[115] Ibid., p12
[116] Ibid., p12
[117] Ibid., p13

> Securitization, by breaking down the traditional relationship between borrowers and lenders, created conflicts of interest that market discipline failed to correct. Loan originators failed to require sufficient documentation of income and ability to pay. Securitizers failed to set high standards for the loans they were willing to buy, encouraging underwriting standards to decline. Investors were overly reliant on credit rating agencies. Credit ratings often failed to accurately describe the risk of rated products. In each case, lack of transparency prevented market participants from understanding the full nature of the risks they were taking.[119]

In order for the US financial markets to be able to withstand systemic stress, as well as the collapse of several major institutions, the Treasury has proposed three critical reforms:

- Enhanced regulation of securitization markets, including:
    - new requirements for market transparency to be led by the SEC;
    - regulators should set out compensation regulations that more closely align pay with the long-term performance of the underlying loans;
    - stronger regulation of credit rating agencies should be initiated by the SEC which focuses upon "measures to promote robust policies and procedures that manage and disclose conflicts of interest, differentiate between structured and other products, and otherwise strengthen the integrity of the ratings process";[120]
    - regulators reducing their use of credit ratings in their risk assessments; and
    - a requirement that issuers and originators retain a "material" financial interest in securitized loans.
- Comprehensive regulation of all over-the-counter (OTC) derivative contracts. This will entail increased transparency and market discipline derived from the record-keeping and reporting of all OTC derivatives, the prudential regulation of all derivative dealers and the requirement that all standardised derivative transactions take place via transparent venues with centralised counterparty clearing.
- New authority for the Federal Reserve to oversee the market infrastructure – this includes supervisory powers over payment, clearing, and settlement systems – and strengthen its support functions.
- Harmonisation of the regulation of securities and future contracts, which are currently administered by separate regulators with different requirements. However, the regulatory agencies – the Commodities and Futures Trading Commission and the SEC – themselves will remain distinct.

3.3 "Protect Consumers and Investors from Financial Abuse"

Market failures have also been identified as a key feature of the crisis. Even at the lowest levels, abusive practices occurred – especially in the subprime mortgage market – and this ultimately put significant pressure on financial operations further up the chain. The Treasury suggested that regulation failures were important in the prevalence of such activities:

[118] Ibid., p6
[119] Ibid., p6
[120] Ibid., p13

> Multiple agencies have authority over consumer protection in financial products, but for historical reasons, the supervisory framework for enforcing those regulations had significant gaps and weaknesses. Banking regulators at the state and federal level had a potentially conflicting mission to promote safe and sound banking practices, while other agencies had a clear mission but limited tools and jurisdiction.[121]

The Treasury argued that:

> To rebuild trust in our markets, we need strong and consistent regulation and supervision of consumer financial services and investment markets. We should base this oversight not on speculation or abstract models, but on actual data about how people make financial decisions. We must promote transparency, simplicity, fairness, accountability, and access.[122]

Although Congress has passed reforms addressing problems in the mortgage and credit card markets, the Treasury advised that the government take a more comprehensive approach and thus recommended creating;

- An independent Consumer Financial Protection Agency (CFPA) to protect consumers across the financial sector from unfair, deceptive, and abusive practices by authority to ensure that consumer protection rules are ”written fairly and vigorously enforced”.[123] More specifically, the “CFPA should reduce gaps in federal supervision and enforcement; improve coordination with the states; set higher standards for financial intermediaries; and promote consistent regulation of similar products.”[124]

- Stronger regulations to improve the transparency, simplicity, fairness, and access associated with consumer and investor products and services. A level playing field and higher standards for providers of consumer financial products and services, whether or not they are part of a bank.

- New authorities for the Federal Trade Commission and SEC to protect consumer and investors respectively.

3.4 “Provide the Government with the Tools it Needs to Manage Financial Crises”

The Treasury acknowledged that the government and the regulators lacked the necessary powers to efficaciously respond to the financial crisis. The lack of tools was particularly pertinent in terms of dealing with large and systemically important firms like American International Group (AIG) and Lehman Brothers. Generally, firms facing insolvency would have two options – raise capital or file for bankruptcy. However, in stressed market conditions the first option becomes untenable and the government is left with the choice of whether to allow a firm to go bankrupt, or to bail it out; the Treasury argued that neither option was efficient in the case of crisis. Accordingly, the report recommended:

- Creating a new authority modelled on the Federal Deposit Insurance Corporation (FDIC) to address the potential failure of non-bank financial institutions that could have serious systemic effects. The FDIC already has similar authority for insured banks.

[121] Ibid., p7
[122] Ibid., p3
[123] Ibid., p7
[124] Ibid., p7

- Providing legislative revisions such that the Treasury may, in advance, provide the Fed with the authority to administer emergency lending. In accordance with the Fed's legal charter, this will apply in "unusual exigent circumstances".

3.5 "Raise International Regulatory Standards and Improve International Cooperation"

As with reports in Europe, the Treasury has suggested that international coordination and cooperation will be necessary to curtail future financial problems across highly globalised financial markets.

In order address the need for consistent and enforced global regulation, the Treasury argued that international reforms led by the G-20, Financial Stability Board (FSB) and Basel Committee on Banking Supervision (BCBS) should primarily focus on: "strengthening the capital framework; improving oversight of global financial markets; coordinating supervision of internationally active firms; and enhancing crisis management tools."[125] The Treasury report also provided a more detailed list of the areas which it believed required cross-national attention:

- Strengthening the international capital framework: the BCBS should focus on revising the weightings attached to trading book and securitised products, introducing a maximum gross leverage ration and improving the definition of capital, in addition to introducing pro-cyclical adjustments.

- Improving the oversight of global financial markets: advise the standardisation and improved oversight of credit derivative and other OTC derivative markets, particularly through the use of centralised counterparties.

- Enhancing supervision of international financial firms: the FSB and national authorities should implement commitments toward creating colleges of supervisors for cross-border institutions.

- Reforming crisis prevention procedures: national authorities should improve information-sharing and implement FSB principles for cross-border crisis management.

- Strengthening the FSB: support restructuring such that it may act on a mandate to promote global financial stability by September 2009.

- Strengthening prudential regulations: BCBS should improve liquidity management standards and the BCBS and FSB should develop tools for global macro-prudential regulation.

- Expanding the scope of regulation: ensure that provisions are made for hedge funds and systemically important institutions.

- Introducing better compensation practices: urge national authorities to put in place guidelines to more effectively align compensation with long-term shareholder value and promote compensations structures that do not encourage excessive risk-taking.

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[125] Ibid., p4

- Promoting stronger regulatory standards: urge increased compliance with international regulatory standards.

- Improving accounting standards: recommend clarity and improved standards on fair value accounting and loan loss provisioning and moving toward a homogeneous global standard.

- Tightening oversight of credit rating agencies: urge increased international oversight of credit rating agencies.

3.6 Immediate response to the report

A hearing of the Senate Banking, Housing and Urban Affairs Committee to discuss the reforms took place on 18 June 2009. Democrat Chairman Chris Dodd came out strongly in support of the consumer protection provisions:

> So as we work together to rebuild and reform the regulatory structures whose failures led us to this crisis, I, along with my colleagues here, will continue to insist that improving consumer protection be a first principle and an urgent priority. I welcome the administration's adoption of this principle, and I'm pleased to see it reflected in the plans that we'll be discussing this morning.[126]

The leading Republican on the committee, Ranking Member Richard Shelby, was more sceptical of the proposals, suggesting that they may be more effective as a starting point for discussion: "The president has now added his voice to the debate, and it is now up to us to add ours. As we do, I hope that we will not allow the administration's recommendations to limit the debate that we are about to undertake."[127]

The *Wall Street Journal* identified qualms held by Congress and the banking sector:

> The process now heads to Capitol Hill. One tenet of the new plan has already made some lawmakers uncomfortable: a push to centralize more power in the Federal Reserve.
>
> Banks, which are expected to lobby hard as the bill moves through Congress, have resisted the provision that would create a new consumer agency. The industry argues it could stifle innovation and make loans more expensive.[128]

Douglas Elliot of the Brookings Institute reacted positively to the proposals, stating that the "proposals are generally quite sensible."[129] However, the "unfortunate aspect is that political constraints have caused the administration to stop short of a full solution in certain areas, most notably in the consolidation of regulatory functions into fewer hands."[130] *Financial Times* columnist Clive Crook supported this perspective, highlighting that "the White House is unwilling to confront the political barriers to fuller reform."[131] Moreover, while Crook applauded the "great care and intelligence" that had gone into the report, he explained that it "ignores many issues, and has more loose ends and suggestions for further review than

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126 Chairman Christopher Dodd, US Senate Committee on Banking, Housing and Urban Affairs, Hearing on the Administration's Proposal to Modernize the Financial Regulatory System, 18 June 2009
127 Ibid., Ranking Member Richard Shelby
128 *Wall Street Journal*, Historic Overhaul of Finance Rules, 18 June 2009
129 *Wall Street Journal*, Economists React: Regulatory Overhaul, Sensible or Burdensome?, 17 June 2009
130 Ibid.
131 Clive Crook, *Financial Times*, A thin outline of regulatory reform, 21 June 2009

actual innovations."[132] In particular, Crook criticised the increased complexity of the new regulatory structure and the obstacles it may pose to increased international co-ordination:

> Unlikely as it may seem, the plan suggests a net increase in regulatory agencies. In the US, this requires real ingenuity. Recognising the issue of "jurisdictional disputes among regulators" – a problem that is going to get worse under these plans – it calls for a new Financial Services Oversight Council, chaired by the Treasury. This would advise the Fed on which firms should be regarded as systemically significant, and "facilitate information sharing and co-ordination". Regulation by committee, atop a system of overlapping agencies unsure of their responsibilities, with financial firms still free to shop around for a regulator they like, does not inspire.
>
> Crucially, it also militates against effective international co-ordination. Aside from poor oversight of the shadow banking system and the system-wide failure to account properly for risk, the biggest weakness in the existing regulatory scheme has been lack of cross-border co-operation by national regulators. The more complicated the domestic regulatory structure, the harder it will be for US regulators to work with their counterparts abroad.[133]

Economist and New York *Times* contributor Paul Krugman highlighted positive and negative elements in the proposals. He explained that: "Yes, the plan would plug some big holes in regulation. But as described, it wouldn't end the skewed incentives that made the current crisis inevitable."[134] In particular, Krugman praised the plan's recommendation to "bring non-bank banking out of the shadows."[135] However, he identified executive compensation and credit rating agencies as two areas that lacked a substantive path for reform.

Other economists have been more critical of the plans. Charles Calomiris, for example, said that:

> The Obama administration deserves a C-, which is not a passing grade in graduate school. This thing will now invite the worst kind of mud wrestling in DC. We could have done so much better if Obama had been willing to be real about what went wrong and what needs fixing. There were some good points, particularly about too big to fail and over-the-counter derivatives trading. But most of the good ideas are presented vaguely, and are surrounded by bad ideas and huge omissions. Important problems and remedies, such as U.S. housing policies that subsidized leverage and regulatory rules that mis-measure risk, are ignored completely or mentioned in passing. Too much weight is attached to populist objectives. And the huge reallocation of power toward the Fed is inadvisable.[136]

Simon Johnson, a former chief economist at the International Monetary Fund, not only criticised the Treasury's perspective on what caused the crisis but suggested that the regulatory proposals made glaring omissions;

> And of course the complete omissions from this document are breathtaking. No mention of executive compensation or the structure of compensation within the financial sector. Not even a hint that the complete breakdown of corporate governance

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[132] Ibid.
[133] Ibid.
[134] Paul Krugman, *New York Times*, Out of the Shadows, 19 June 2009
[135] Ibid.
[136] *Wall Street Journal*, Economists React: Regulatory Overhaul, Sensible or Burdensome?, 17 June 2009

> at major banks contributed to excessive risk taking. And no notion of regulatory capture-by-crazy-ideas of any kind.[137]

Furthermore, investment firm Stifel Nicolaus suggested that the high compliance costs for the financial sector could prove to be a barrier to entry:

> The compliance costs of re-regulation may be exorbitant for those financial firms that do not have large volume generating platforms (i.e. mortgage originations). Will the cost create barriers to entry? If so, do those companies that already have large platforms and can spread out the compliance costs over large volumes benefit from wider spreads from less competition?[138]

4 Basel II Accord and the agenda for reform

The Basel Committee on Banking Supervision (BCBS), a committee at the Bank for International Settlements (BIS) which devises international banking's requirements for regulatory capital, is currently considering revisions to the Basel II standards first agreed in June 2004.

The BIS website summarises the aims of the Basel II Accord, which was generally designed to set requirements in line with the risk of bank strategies:

> It seeks to improve on the existing rules by aligning regulatory capital requirements more closely to the underlying risks that banks face. In addition, the Basel II Framework is intended to promote a more forward-looking approach to capital supervision, one that encourages banks to identify the risks they may face, today and in the future, and to develop or improve their ability to manage those risks. As a result, it is intended to be more flexible and better able to evolve with advances in markets and risk management practices.[139]

The requirements under the Basel II Accord are grouped into three main areas, or pillars:

- *Pillar 1: Minimum Capital Requirements* – requirements sensitive to credit, operational and market risk;
- *Pillar 2: Supervisory Review* – framework laying out the tools with which regulators may actively regulate banks;
- *Pillar 3: Disclosure Requirements.*

The full set of Basel II regulations is available online.[140]

In January 2009 the BCBS published consultative documents looking to reform the Basel standards on securitisation exposures and the Market Risk Framework in light of the problems identified by the banking crisis. These proposals supplemented proposals regarding regulatory capital charges and liquidity management that were issued in July and September 2008 respectively. Further recommendations concerning deposit insurance schemes were also recently published. It is envisaged that further reforms are likely to be

137 The Baseline Scenario, Today's Foundation, Tomorrow's Crisis: The Geithner-Summers Proposals, 15 June 2009
138 *Wall Street Journal*, Regulatory Overhaul: A Boon to Banks? Takeaways from Analysts, 18 June 2009
139 BIS, Basel II: Revised international capital framework, retrieved on 5 June 2009
140 BIS, Basel II: Basel II: International Convergence of Capital Measurement and Capital Standards: a Revised Framework, retrieved on 5 June 2009

initiated to provide simpler overall measures of leverage and counter-cyclical capital requirements.[141]

4.1 Securitisation exposure

That the first Basel Accord in 1988, Basel I, failed to fully address the risks and profits associated with securitisation was one of the driving forces behind the establishment of Basel II. Before Basel II, the capital charges (or the haircuts that firms must book on their balance sheet valuations to reflect the risk of their assets) on securitised products were relatively minimal and thus presented banks with an incentive to shift their portfolios toward riskier high-profit securities that were actually booked as lower risk.

Basel II, however, established a complex set of valuation rules. Under 2006 update of Basel II securities receive risk weights determined by three different methods: most preferred is the Ratings-Based Approach where assets are weighted by their credit rating weighting, their seniority and their granularity; next was the Internal Assessment Approach which mainly applies to asset-backed commercial paper; finally, the Supervisory Formula, the most complex measure, was only expected to be employed by the most sophisticated banks.[142] An article in *Financial Regulation International* has underlined the importance of credit ratings to this process. It is also worth noting that significant supervisory discretion is permitted under the Basel standards; accordingly, different countries allow differing securitisation practices.

A number of problems – including lax monitoring and management by the issuers of asset-backed securities, inaccurate credit ratings and accounting rules forcing dramatic devaluations in accordance with market prices – caused the securitisation model to breakdown.[143]

A number of particular proposals to change the Basel II regulations have been recommended:

> **Enhancements to Pillar 1 (minimum capital requirements)**
>
> In addition to the IRC and other trading book proposals noted above, the Committee is proposing other Pillar 1 enhancements that focus on strengthening the risk capture of the framework. The crisis has clearly shown that collateralised debt obligations comprised of asset-backed securities (ie CDOs of ABS - so-called "resecuritisations") are more highly correlated with systematic risk than are traditional securitisations. Resecuritisations, therefore, warrant a higher capital charge.
>
> Prior to the onset of the financial crisis, banks built up significant exposures to off-balance sheet conduits, which were not adequately reflected in the capital regime. In response, the Committee proposes to increase capital requirements for liquidity lines extended to support asset-backed commercial paper (ABCP) conduits by eliminating the distinction between short-term and long-term liquidity facilities.
>
> The Committee also proposes to require that banks obtain comprehensive information about the underlying exposure characteristics of their externally-rated securitisation positions, both within and across structures. Failure to obtain such information would result in higher capital requirements.

[141] *Financial Regulation International*, "The Basel 2 agenda for 2009: progress so far", Issue 12.4, May 2009, p1

[142] Ibid., p4

[143] For more details please see House of Commons Library, The financial crisis in the US: key events, causes and responses, 22 April 2009

Enhancements to Pillar 2 (supervisory review process)

The purpose of this supplemental Pillar 2 guidance is to address the flaws in risk management practices revealed by the crisis, which in many cases were symptoms of more fundamental shortcomings in governance structures at financial institutions. The industry has taken a number of steps to develop sound principles to address these weaknesses. Pillar 2 of the Basel II capital framework presents supervisors with a stronger tool to ensure that these efforts by the industry are in fact implemented over the long term. This can be reinforced through reviews of banks' risk governance and capital planning processes under Pillar 2 and the adequacy of capital buffers above the regulatory minimum to reflect the unique risk profile of a particular institution.

In support of this objective, the Committee proposes to strengthen its supervisory guidance and the links to the Pillar 2 review process in the following ways:

- *Firm-wide governance and risk management:* The Committee's enhanced guidance sets clear expectations for boards of directors and senior management to understand the firm-wide risk profile; to aggregate firm-wide exposure information in a timely manner using easy to understand and multiple metrics; to define the risk appetite in a manner that considers long-term performance over the cycle; and to set clear incentives across the firm to control risk exposures and concentrations in accordance with the stated risk appetite.

- *Capturing the risk of off-balance sheet exposures and securitisation activities:* The Committee's proposed enhanced guidance will strengthen supervisory expectations for capturing firm-wide risk concentrations arising from both on- and off-balance sheet exposures and securitisation activities. This includes both contractual risks, as well as the potential impact on risk exposures, capital, and liquidity of non-contractual commitments, implicit support, and reputation risk.

- *Incentives to manage risk and returns over the long-term:* The Committee's enhanced Pillar 2 guidance will set the expectation that banks establish appropriate incentives throughout the firm to reflect the long-term risks and rewards associated with their respective business models. The supplemental Pillar 2 guidance will be a key tool for supervisors to reinforce sound compensation schemes as part of the risk management and capital planning process.

The supplemental Pillar 2 guidance also incorporates key recommendations from the following Basel Committee initiatives:

- *Principles for Sound Liquidity Risk Management and Supervision* (September 2008);

- *Supervisory guidance for assessing banks' financial instrument fair value practices* (issued for comment on 28 November 2008); and

Principles for sound stress testing practices and supervision (issued for comment on 6 January 2009).

Enhancements to Pillar 3 (market discipline)

After a careful assessment of leading disclosure practices, the Basel Committee has developed proposed revisions to the existing Pillar 3 requirements, focusing on the following six areas:

- securitisation exposures in the trading book;
- sponsorship of off-balance sheet vehicles;
- the Internal Assessment Approach (IAA) for securitisations and other ABCP liquidity facilities;
- resecuritisation exposures;
- valuation with regard to securitisation exposures; and
- pipeline and warehousing risks with regard to securitisation exposures.

> These disclosures are intended to complement the other two pillars of the Basel II framework by allowing market participants to assess capital adequacy of a bank through key pieces of information on the scope of application, capital, risk exposure and risk assessment process.
>
> The Committee's proposal includes certain disclosure requirements that are not solely related to the understanding of Pillar 1 capital requirements (eg disclosures concerning a bank's sponsorship of off-balance sheet vehicles). These are intended to help market participants better understand a bank's overall risk profile. The Committee believes that these proposed enhanced disclosure requirements will help to avoid a recurrence of market uncertainties about the strength of banks' balance sheets related to their securitisation activities.[144]

Further details of the changes proposed by the BCBS are available online.[145]

4.2 Market Risk Framework

The Market Risk Framework (MRF), which is part of the regulatory rules for banks' capital, allows banks in the vast majority of countries to use internal risk models when measuring market risks. Through an amendment to Basel I, it was determined that two methods of calculating risk could be employed – the (somewhat cumbersome) standardised approach using a series of conversion factors for different types of instrument, and the use of internal models based in the concept of Value at Risk (VaR) that are assessed by the relevant supervisors.[146]

A number of problems have been identified with this framework – not least that increases in risk across the system may cause significant under-estimation of VaR.[147] Although revisions to the framework were implemented in 2005 and 2006, qualms continued to be raised in light of the current financial problems.

In 2008 it was proposed that, reflecting the experience of the credit crisis, the scope of the incremental default charge on trading accounts needed to be expanded to capture price risk beyond default. The proposed Incremental Risk Charge, which seeks to address the need to capture risks such as heightened credit spreads, will contain a set of high-level principles although allow for considerable flexibility in the approach to risk calculation; given the paucity of securitisation risk models, these new rules will not apply to securitised products. Changes

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144 BCBS, Proposed enhancements to the Basel II framework, January 2009

145 BCBS Consultative Document, Proposed enhancements to the Basel II framework, January 2009

146 Where a model is shown to have performed poorly, the supervisor will then attach a greater multiplicative factor to the estimated VaR. Accordingly, where a greater factor is ascribed capital requirements will also increase.

147 *Financial Regulation International*, "The Basel 2 agenda for 2009: progress so far", Issue 12.4, May 2009, p9

to the capital charges for securitisation and resecuritisation have also been proposed (see subsection 3.1). The recommendations also proposed that firms be allowed to employ adjustments to market prices in the case of market illiquidity.

Summarising the recommendations of two consultative papers, the BCBS explained:

> Since the financial crisis began in mid-2007, the majority of losses and most of the build up of leverage occurred in the trading book. An important contributing factor was that the current capital framework for market risk, based on the 1996 amendments to Basel I, does not capture some key risks. In response, the Committee proposes to supplement the current value-at-risk-based trading book framework with an incremental risk capital charge (IRC), which includes default risk as well as migration risk, for unsecuritised credit products. For securitised products, the capital charges of the banking book would apply. Once implemented, the IRC will reduce the incentive for regulatory arbitrage between the banking and trading books.
>
> An additional proposed response is the introduction of a stressed value-at-risk (VaR) requirement. Losses in banks' trading books during the financial crisis have been significantly higher than the minimum capital requirements under the Pillar 1 market risk rules. The Committee therefore proposes to require banks to calculate a stressed VaR taking into account a one-year observation period relating to significant losses, which would be in addition to the VaR based on the most recent one-year observation period. The additional stressed VaR requirement will help reduce the procyclicality of the minimum capital requirements for market risk.
>
> The Committee also proposes to discontinue the preferential treatment of a 4% capital charge for specific risk of equities that is currently applicable to portfolios that are both liquid and well-diversified. As a result, an 8% capital charge for specific risk of equities would apply in all cases.
>
> In addition to the proposed changes noted above, the Committee will be initiating a longer-term, fundamental review of the risk-based capital framework for trading activities.[148]

Secondly,

> The Basel Committee proposes to supplement the current value-at-risk (VaR) regulatory capital framework for trading exposures with an incremental risk capital charge (IRC). Since the financial market crisis that began in mid-2007, a number of major banking organisations have experienced large losses resulting from trading exposures. The IRC proposal follows the Committee's efforts, in collaboration with the International Organization of Securities Commissions (IOSCO), to improve the capital regime for trading book positions.
>
> The IRC would represent an estimate of the default and migration risks of unsecuritised credit products over a one-year capital horizon at a 99.9% confidence level, taking into account the liquidity horizons of individual positions or sets of positions. For securitised products, the capital charges of the banking book would apply. The IRC is intended to complement additional standards being applied to the VaR modelling framework (see the consultative document *Revision to the Basel II market risk framework* for more details regarding the proposed changes to the trading book regime).[149]

[148] BCBS, Revisions to the Basel II market risk framework, January 2009
[149] BCBS, Guidelines for computing capital for incremental risk in the trading book, January 2009

Details of the precise changes proposed by the BCBS are available online.[150]

A final paper, published in April 2009, provided supervisory guidance regarding the assessment of bank instrument valuation procedures. The BCBS summarised its focus as:

> The application of fair value accounting to a wider range of financial instruments, together with experiences from the recent market turmoil, have emphasised the critical importance of robust risk management and control processes around fair value measurements. Moreover, given the significance of fair value measurements for regulatory capital adequacy and internal bank risk management it is equally important that supervisors assess the soundness of banks' valuation practices through the Pillar 2 supervisory review process under the Basel II Framework.
>
> The paper provides guidance to banks and banking supervisors to strengthen valuation processes for financial instruments. The principles promote strong governance processes around valuations; the use of reliable inputs and diverse information sources; the articulation and communication of valuation uncertainty to internal and external stakeholders; the allocation of sufficient banking and supervisory resources to the valuation process; independent verification and validation processes; consistency in valuation practices for risk management and reporting purposes, where possible; and strong supervisory oversight around bank valuation practices.[151]

Details of the advice proposed by the BCBS are available online.[152]

4.3 Liquidity management

In a final report published in September 2008, the BCBS proposed a number of principals that should underpin liquidity management in the financial system. The BCBS identified liquidity as a critical issue in the financial crisis, and noted:

> Liquidity risk management is of paramount importance because a liquidity shortfall at a single institution can have system-wide repercussions. Financial market developments in the past decade have increased the complexity of liquidity risk and its management.
>
> The market turmoil that began in mid-2007 re-emphasised the importance of liquidity to the functioning of financial markets and the banking sector. In advance of the turmoil, asset markets were buoyant and funding was readily available at low cost. The reversal in market conditions illustrated how quickly liquidity can evaporate and that illiquidity can last for an extended period of time. The banking system came under severe stress, which necessitated central bank action to support both the functioning of money markets and, in a few cases, individual institutions.[153]

The BCBS has thus provided increase guidance to firms regarding liquidity, although there are no binding requirements:

> **Principles for the management and supervision of liquidity risk**

[150] BCBS Consultative Document, Revisions to the Basel II market risk framework, January 2009; BCBS Consultative Document, Guidelines for computing capital for incremental risk in the trading book, January 2009

[151] BCBS, Supervisory guidance for assessing banks' financial instrument fair value practices - final paper, April 2009

[152] BCBS Final Paper, Supervisory guidance for assessing banks' financial instrument fair value practices, April 2009

[153] BCBS, Principles for Sound Liquidity Risk Management and Supervision, September 2008

Fundamental principle for the management and supervision of liquidity risk

Principle 1: A bank is responsible for the sound management of liquidity risk. A bank should establish a robust liquidity risk management framework that ensures it maintains sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources. Supervisors should assess the adequacy of both a bank's liquidity risk management framework and its liquidity position and should take prompt action if a bank is deficient in either area in order to protect depositors and to limit potential damage to the financial system.

Governance of liquidity risk management

Principle 2: A bank should clearly articulate a liquidity risk tolerance that is appropriate for its business strategy and its role in the financial system.

Principle 3: Senior management should develop a strategy, policies and practices to manage liquidity risk in accordance with the risk tolerance and to ensure that the bank maintains sufficient liquidity. Senior management should continuously review information on the bank's liquidity developments and report to the board of directors on a regular basis. A bank's board of directors should review and approve the strategy, policies and practices related to the management of liquidity at least annually and ensure that senior management manages liquidity risk effectively.

Principle 4: A bank should incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities (both on- and off-balance sheet), thereby aligning the risk-taking incentives of individual business lines with the liquidity risk exposures their activities create for the bank as a whole.

Measurement and management of liquidity risk

Principle 5: A bank should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities and off-balance sheet items over an appropriate set of time horizons.

Principle 6: A bank should actively monitor and control liquidity risk exposures and funding needs within and across legal entities, business lines and currencies, taking into account legal, regulatory and operational limitations to the transferability of liquidity.

Principle 7: A bank should establish a funding strategy that provides effective diversification in the sources and tenor of funding. It should maintain an ongoing presence in its chosen funding markets and strong relationships with funds providers to promote effective diversification of funding sources. A bank should regularly gauge its capacity to raise funds quickly from each source. It should identify the main factors that affect its ability to raise funds and monitor those factors closely to ensure that estimates of fund raising capacity remain valid.

Principle 8: A bank should actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and thus contribute to the smooth functioning of payment and settlement systems.

Principle 9: A bank should actively manage its collateral positions, differentiating between encumbered and unencumbered assets. A bank should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner.

Principle 10: A bank should conduct stress tests on a regular basis for a variety of short-term and protracted institution-specific and market-wide stress scenarios (individually and in combination) to identify sources of potential liquidity strain and to ensure that current exposures remain in accordance with a bank's established liquidity risk tolerance. A bank should use stress test outcomes to adjust its liquidity risk management strategies, policies, and positions and to develop effective contingency plans.

Principle 11: A bank should have a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations. A CFP should outline policies to manage a range of stress environments, establish clear lines of responsibility, include clear invocation and escalation procedures and be regularly tested and updated to ensure that it is operationally robust.

Principle 12: A bank should maintain a cushion of unencumbered, high quality liquid assets to be held as insurance against a range of liquidity stress scenarios, including those that involve the loss or impairment of unsecured and typically available secured funding sources. There should be no legal, regulatory or operational impediment to using these assets to obtain funding.

Public disclosure

Principle 13: A bank should publicly disclose information on a regular basis that enables market participants to make an informed judgement about the soundness of its liquidity risk management framework and liquidity position.

The role of supervisors

Principle 14: Supervisors should regularly perform a comprehensive assessment of a bank's overall liquidity risk management framework and liquidity position to determine whether they deliver an adequate level of resilience to liquidity stress given the bank's role in the financial system.

Principle 15: Supervisors should supplement their regular assessments of a bank's liquidity risk management framework and liquidity position by monitoring a combination of internal reports, prudential reports and market information. Principle 16: Supervisors should intervene to require effective and timely remedial action by a bank to address deficiencies in its liquidity risk management processes or liquidity position.

Principle 17: Supervisors should communicate with other supervisors and public authorities, such as central banks, both within and across national borders, to facilitate effective cooperation regarding the supervision and oversight of liquidity risk management. Communication should occur regularly during normal times, with the nature and frequency of the information sharing increasing as appropriate during times of stress.[154]

Details of the 17 specific guidelines proposed by the BCBS are available online.[155]

[154] BCBS Final Paper, Principles for Sound Liquidity Risk Management and Supervision, September 2009, pp3-5
[155] Ibid.

4.4 Deposit insurance systems

The BCBS has set out a number of core principles for creating effective deposit insurance systems going forward. Stressing the importance of an international approach to deposit protection in the context of the current financial crisis, the report identified 18 core principles:

Setting objectives

- Principle 1 – Public policy objectives: The first step in adopting a deposit insurance system or reforming an existing system is to specify appropriate public policy objectives that it is expected to achieve. These objectives should be formally specified and well integrated into the design of the deposit insurance system. The principal objectives for deposit insurance systems are to contribute to the stability of the financial system and protect depositors.

- Principle 2 – Mitigating moral hazard: Moral hazard should be mitigated by ensuring that the deposit insurance system contains appropriate design features and through other elements of the financial system safety net (see Preconditions paragraph 16).

Mandates and powers

- Principle 3 – Mandate: It is critical that the mandate selected for a deposit insurer be clear and formally specified and that there be consistency between the stated public policy objectives and the powers and responsibilities given to the deposit insurer.

- Principle 4 – Powers: A deposit insurer should have all powers necessary to fulfill its mandate and these powers should be formally specified. All deposit insurers require the power to finance reimbursements, enter into contracts, set internal operating budgets and procedures, and access timely and accurate information to ensure that they can meet their obligations to depositors promptly.

Governance

- Principle 5 – Governance: The deposit insurer should be operationally independent, transparent, accountable and insulated from undue political and industry influence.

Relationships with other safety-net participants and cross-border issues

- Principle 6 – Relationships with other safety-net participants: A framework should be in place for the close coordination and information sharing, on a routine basis as well as in relation to particular banks, among the deposit insurer and other financial system safety-net participants. Such information should be accurate and timely (subject to confidentiality when required). Information-sharing and coordination arrangements should be formalised.

- Principle 7 – Cross-border issues: Provided confidentiality is ensured, all relevant information should be exchanged between deposit insurers in different jurisdictions and possibly between deposit insurers and other foreign safety-net participants when appropriate. In circumstances where more than one deposit insurer will be responsible for coverage, it is important to determine which deposit insurer or insurers will be responsible for the reimbursement process. The deposit insurance already provided by the home country system should be recognised in the determination of levies and premiums.

Membership and coverage

- Principle 8 – Compulsory membership: Membership in the deposit insurance system should be compulsory for all financial institutions accepting deposits from those deemed most in need of protection (eg retail and small business depositors) to avoid adverse selection.

- Principle 9 – Coverage: Policymakers should define clearly in law, prudential regulations or by-laws what an insurable deposit is. The level of coverage should be limited but credible and be capable of being quickly determined. It should cover adequately the large majority of depositors to meet the public policy objectives of the system and be internally consistent with other deposit insurance system design features.

- Principle 10 – Transitioning from a blanket guarantee to a limited coverage deposit insurance system: When a country decides to transition from a blanket guarantee to a limited coverage deposit insurance system, or to change a given blanket guarantee, the transition should be as rapid as a country's circumstances permit. Blanket guarantees can have a number of adverse effects if retained too long, notably moral hazard. Policymakers should pay particular attention to public attitudes and expectations during the transition period.

Funding

- Principle 11 – Funding: A deposit insurance system should have available all funding mechanisms necessary to ensure the prompt reimbursement of depositors' claims including a means of obtaining supplementary back-up funding for liquidity purposes when required. Primary responsibility for paying the cost of deposit insurance should be borne by banks since they and their clients directly benefit from having an effective deposit insurance system.

- For deposit insurance systems (whether ex-ante, ex-post or hybrid) utilising risk adjusted differential premium systems, the criteria used in the risk-adjusted differential premium system should be transparent to all participants. As well, all necessary resources should be in place to administer the risk-adjusted differential premium system appropriately.

Public awareness

- Principle 12 – Public awareness: In order for a deposit insurance system to be effective it is essential that the public be informed on an ongoing basis about the benefits and limitations of the deposit insurance system.

Selected legal issues

- Principle 13 – Legal protection: The deposit insurer and individuals working for the deposit insurer should be protected against lawsuits for their decisions and actions taken in "good faith" while discharging their mandates. However, individuals must be required to follow appropriate conflict-of-interest rules and codes of conduct to ensure they remain accountable. Legal protection should be defined in legislation and administrative procedures, and under appropriate circumstances, cover legal costs for those indemnified.

- Principle 14 – Dealing with parties at fault in a bank failure: A deposit insurer, or other relevant authority, should be provided with the power to seek legal redress against those parties at fault in a bank failure.

Failure resolution

- Principle 15 – Early detection and timely intervention and resolution: The deposit insurer should be part of a framework within the financial system safety net that provides for the early detection and timely intervention and resolution of troubled banks. The determination and recognition of when a bank is or is expected to be in serious financial difficulty should be made early and on the basis of well defined criteria by safety-net participants with the operational independence and power to act.

- Principle 16 – Effective resolution processes: Effective failure-resolution processes should: facilitate the ability of the deposit insurer to meet its obligations including reimbursement of depositors promptly and accurately and on an equitable basis; minimise resolution costs and disruption of markets; maximise recoveries on assets; and, reinforce discipline through legal actions in cases of negligence or other wrongdoings. In addition, the deposit insurer or other relevant financial system safety-net participant should have the authority to establish a flexible mechanism to help preserve critical banking functions by facilitating the acquisition by an appropriate body of the assets and the assumption of the liabilities of a failed bank (eg providing depositors with continuous access to their funds and maintaining clearing and settlement activities).

Reimbursing depositors and recoveries

- Principle 17 – Reimbursing depositors: The deposit insurance system should give depositors prompt access to their insured funds. Therefore, the deposit insurer should be notified or informed sufficiently in advance of the conditions under which a reimbursement may be required and be provided with access to depositor information in advance. Depositors should have a legal right to reimbursement up to the coverage limit and should know when and under what conditions the deposit insurer will start the payment process, the time frame over which payments will take place, whether any advance or interim payments will be made as well as the applicable coverage limits.

- Principle 18 – Recoveries: The deposit insurer should share in the proceeds of recoveries from the estate of the failed bank. The management of the assets of the failed bank and the recovery process (by the deposit insurer or other party carrying out this role) should be guided by commercial considerations and their economic merits.[156]

5 Financial Stability Forum

The Financial Stability Forum (FSF) was a group containing central bankers and finance ministries from world's leading industrialised economies. The FSF, founded in 1999 by the G7, was charged with maintaining international financial stability; it lead discussion and facilitated the supervision and monitoring of financial institutions.[157] In April 2009, it was agreed that the FSF would be replaced by the Financial Stability Board (FSB), which now includes all members of the G20 (among others). The FSB "has been established to address vulnerabilities and to develop and implement strong regulatory, supervisory and other

[156] BCBS Consultative Document, Core Principles for Effective Deposit Insurance Systems, March 2009
[157] FSB, About the FSB - History, retrieved on 8 June 2009

policies in the interest of financial stability."[158] A more detailed mandate for the FSB is available on its website.[159]

Before the FSF became the FSB, the FSF released a number of papers examining changes to the global financial regulatory framework. It is worth noting that the FSF published a paper entitled *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* on 7 April 2008; a full list of its recommendations is contained in Annex A starting on page 53.[160] More recently, the FSF has published a set of subject-specific papers examining issues such as pro-cyclicality, executive compensation and crisis management.

5.1 Capital requirements

With regard to minimum capital requirements, the FSF noted that credit securities were at the heart of the problems:

> The most serious risk management shortcomings and losses at major financial institutions related to structured credit securitisations. This was particularly so for re-securitisations of debt, i.e., CDOs of ABSs, which pooled and re-tranched already securitised debt. These structures had heightened exposure to systematic risk. In the interest of garnering fee income from selling equity and mezzanine tranches of these instruments, structuring firms retained a large quantity of the highly-rated tranches. In many cases, the complexity of these products led both the firms and CRAs to underestimate the associated risks, and banks to hold inadequate capital to back them.[161]

In accordance with the subsequent findings of the BCBS (with whom the FSF works closely), the FSF pointed to regulatory arbitrage causing insufficient capital to be put aside to reflect risks:

> A large proportion of structured credit products are held in banks' and securities firms' trading books, where capital requirements reflect market risk. Basel II as currently designed only explicitly captures the default risk that is in the banking book. Where market risk capital measures do not fully capture the credit risk of these products, there is a regulatory arbitrage incentive to reduce capital requirements by holding such exposures in the trading book.[162]

Furthermore, the FSF criticised the use of off-balance sheet activity:

> Banks incurred significant losses through poor management of off-balance sheet vehicles they sponsored as part of the structured credit securitisation process. The creation of such vehicles obscured the risks that banks faced.[163]

Ultimately, the FSF recommended that:

> Specific proposals will be issued in 2008 to:
>
> • Raise Basel II capital requirements for certain complex structured credit products;
>
> • Introduce additional capital charges for default and event risk in the trading books of banks and securities firms;

[158] FSB, About the FSB - Overview, retrieved on 8 June 2009
[159] FSB, About the FSB - Mandate, retrieved on 8 June 2009
[160] FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008
[161] Ibid., p14
[162] Ibid.
[163] Ibid.

• Strengthen the capital treatment of liquidity facilities to off-balance sheet conduits.

Changes will be implemented over time to avoid exacerbating short-term stress.[164]

In addition, the FSF argued that insurers and guarantors – who have been accorded increasing significance in the financial system – should face stricter capital requirements to reflect their systemic importance:

> In view of monoline insurers' and financial guarantors' importance to the system, supervisors should strengthen their capital and other regulatory arrangements, to ensure that they are appropriate from a prudential point of view, do not encourage regulatory arbitrage and are sufficient to avoid market dislocations. Such changes should promote a reduction in the risks of these highly leveraged institutions.[165]

More recently, the FSF addressed the problem of pro-cyclicality in capital requirements. A study published in March 2009 contained a number of recommendations pertaining to this area:

1. The Basel Committee should strengthen the regulatory capital framework so that the quality and level of capital in the banking system increase during strong economic conditions that can be drawn down during periods of economic and financial stress.

2. The market risk framework of Basel II should be revised to reduce the reliance on cyclical VAR-based capital estimates.

3. The risk-based capital requirement should be supplemented with a simple, non-risk based measure to help contain the build up of leverage in the banking system.

4. The Basel Committee's enhanced stress testing practices should form a critical part of the Pillar 2 supervisory review process to validate the adequacy of banks' capital buffers above the minimum regulatory capital requirement.

5. The Basel Committee should monitor the impact of the Basel II framework and make appropriate adjustments to dampen excessive cyclicality of the minimum capital requirements.

6. The Basel Committee should carry out regular assessments of the risk coverage of the capital framework in relation to financial developments and banks' evolving risk profiles and make timely enhancements.[166]

Capital requirements addressing pro-cyclicality have yet to be adopted by any international regulator although they are currently under consideration by the BSCS,

5.2 Systemic pro-cyclicality

The FSF has led an in-depth analysis of the pro-cyclicality in the financial sector. In addition to the suggestions made with regard to bank capital above, the FSF report published in April

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[164] Ibid., p3
[165] Ibid., p13
[166] Joint FSF-BCBS Working Group on Bank Capital Issues, Reducing procyclicality arising from the bank capital framework, March 2009, pp2-5

2009 has identified a number of further recommendations in the areas of bank provisioning and the interaction between valuation and leverage.

Provisioning

The FSF report on pro-cyclicality notes that "Earlier recognition of loan losses could have dampened cyclical moves in the current crisis."[167] Accordingly, provisioning – that is the building up of provisions as a buffer against losses in a downturn – has received attention. The FSF has made a number of recommendations pertaining to reforms of the financial regulations and accounting standards:

> 2.1. The FASB and IASB should issue a statement that reiterates for relevant regulators, financial institutions and their auditors that existing standards require the use of judgement to determine an incurred loss for provisioning of loan losses.
>
> …
>
> 2.1. The FASB and IASB should issue a statement that reiterates for relevant regulators, financial institutions and their auditors that existing standards require the use of judgement to determine an incurred loss for provisioning of loan losses.
>
> …
>
> 2.3. The BCBS should undertake a review of Basel II to reduce or eliminate disincentives for establishing appropriate provisions for loan losses.
>
> …
>
> 2.4. The BCBS should undertake a review of Basel II to assess the adequacy of disclosure of loan loss provisioning under Pillar 3.[168]

Although no action has yet been taken on these reforms, the BCBS and IASB are currently considering changes to their banking and accounting regulations respectively.

Interaction between valuation and leverage

The FSF identifies a number of recent developments in the financial sector that have contributed to increasing pro-cyclicality:

> A number of developments in financial systems – including increased direct and embedded leverage, leverage funded with short-term debt, more marketable assets, and extensive application of fair value accounting – have contributed to an increase in the procyclicality of the system.[169]

The FSF, which believes that this is an issue for a macro prudential regulator, proposes a number of ways in which this pro-cyclicality can be reduced:

- Authorities should use quantitative indicators and/or constraints on leverage and margins as macroprudential tools for supervisory purposes:
    - Authorities should use quantitative indicators of leverage as guides for policy, both at the institution-specific and at the macroprudential (system-wide) level. On leverage ratios for banks, work by the BCBS to supplement the risk based

[167] FSF, Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System, 2 April 2009
[168] Ibid., pp4-5
[169] Ibid., p5

capital requirement with a simple, non-risk based measure is welcome (see Recommendation 1.3).

  - Authorities should review enforcing minimum initial margins and haircuts for OTC derivatives and securities financing transactions.

- The BCBS and the CGFS should launch a joint research program to measure funding and liquidity risk attached to maturity transformation, enabling the pricing of liquidity risk in the financial system.

- Based on the conclusions of the above research program, the BIS and IMF could make available to authorities information on leverage and on maturity mismatches on a system-wide basis.

- Accounting standard setters and prudential supervisors should examine the use of valuation reserves or adjustments for fair valued financial instruments when data or modelling needed to support their valuation is weak.

- Accounting standard setters and prudential supervisors should examine possible changes to relevant standards to dampen adverse dynamics potentially associated with fair value accounting. Possible ways to reduce this potential impact include the following:

  - Enhancing the accounting model so that the use of fair value accounting is carefully examined for financial instruments of credit intermediaries.

  - Transfers between financial asset categories.

  - Simplifying hedge accounting requirements.[170]

5.3 Liquidity management

The April report found that effective liquidity risk management and the use of appropriate liquidity buffers were important factors in the crisis. Learning from the pervasive problems with illiquidity, the report proposed:

> • The Basel Committee will issue for consultation sound practice guidance on the management and supervision of liquidity by July 2008. It will cover the following areas:
>
> - the identification and measurement of the full range of liquidity risks, including contingent liquidity risk associated with off-balance sheet vehicles;
>
> - stress tests, including greater emphasis on market-wide stresses and the linkage of stress tests to contingency funding plans;
>
> - the role of supervisors, including communication and cooperation between supervisors, in strengthening liquidity risk management practices;
>
> - the management of intra-day liquidity risks arising from payment and settlement obligations both domestically and across borders;
>
> - cross-border flows and the management of foreign currency liquidity risk; and

[170] Ibid., pp5-6

- the role of disclosure and market discipline in promoting improved liquidity risk management practices.

• National supervisors should closely check banks' implementation of the updated guidance as part of their regular supervision. If banks' implementation of the guidance is inadequate, supervisors will take more prescriptive action to improve practices.

• Supervisors and central banks will examine the scope for additional steps to promote more robust and internationally consistent liquidity approaches for cross-border banks. This will include the scope for more convergence around liquidity supervision as well as central bank liquidity operations.[171]

5.4 Oversight of risk management

The FSF's April 2008 report argued that:

> The turmoil has highlighted the risk of model error in risk calculations. It has emphasised the importance of using multiple risk-measurement tools and stress tests, blending quantitative rigour with qualitative assessments. Use of a wide range of risk measures helps in the adjustment to new market circumstances and in the understanding of the limitations of individual risk measures.
>
> National supervisors will strengthen their assessments of the robustness of banks' stress testing practices and capital cushions over the cycle. Supervisors need to ensure that firms appropriately assess their own capital adequacy based on the risks that may emerge over the full credit cycle, taking account of current and future economic and credit conditions, and the uncertainty that attaches to valuations.[172]

Furthermore, the report added that supervisors and firms themselves should avoid large-scale exposure to specific markets and thus seek to diversify across a number of markets:

> One of the weaknesses exposed by the turmoil has been the overexposure of market participants to individual market sectors, the most extreme being to the US subprime market. Supervisors should therefore strengthen guidance for firm-wide management of concentration risks not only to individual borrowers but to overall sectors, to geographic regions, to economic risk factors, to counterparties and to financial guarantors. The guidance should take account of both direct and indirect exposures and the potential for exposures in related areas to become more correlated at times of market strain.[173]

The FSF saw off-balance sheet activities as being an important contributing factor to the financial crisis, and an area that needed improved supervision:

> *II.15 Supervisory guidance will require banks to manage off-balance sheet exposures appropriately. Supervisors will require that:*
>
> 1 *prudential reports by financial institutions adequately include the risks arising from off-balance sheet exposures;*

[171] FSF Press Release, Financial Stability Forum Recommends Actions to Enhance Market and Institutional Resilience, April 2008, p4
[172] FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008, pp17-18
[173] Ibid., p18

> 2 *financial institutions' internal management information systems capture off-balance sheet exposures, so that these form part of firms' internal capital and liquidity management;*
>
> 3 *financial institutions' stress testing procedures take account of their exposures to off-balance sheet entities, including the risk that they might need to be absorbed on the institution's balance sheet, whether for contractual or non-contractual (e.g. reputational) reasons.*
>
> By implementing the Basel II framework and incorporating the changes described above, supervisors will substantially reduce the incentives that motivated banks to generate and hold large off-balance sheet risk exposures.
>
> Many banks did not adequately measure or understand their contractual and non-contractual off-balance sheet exposures to entities such as conduits and SIVs. Supervisors should require that this information be internally presented to firm's senior management in a timely and useful manner, and that firms have procedures in place to manage these exposures and any related concentrated risks.[174]

The report also proposed that supervisors strengthen risk management in the area of securitisation to reduce reliance on fallible credit rating agencies. Moreover, the report suggested that enhanced counterparty surveillance is necessary:

> Recent events have demonstrated the importance of disciplined management of counterparty credit exposures. Existing national supervisory guidance on counterparty exposures to hedge funds needs to be extended to exposures to other large, highly leveraged counterparties, including other financial institutions and financial guarantors. Counterparty credit exposures to firms providing hedges or guarantees need to take account of the potential correlation of the creditworthiness of those counterparties with the risks of the assets being hedged, particularly in difficult market conditions.[175]

Finally, the report suggested that supervisory bodies ensure that the correct incentives are recognised in remuneration policies.

5.5 Executive compensation

The report released in April 2009, the FSF identified executive compensation as an important area for reform on the basis that it had contributed to the financial crisis's severity:

> To date, most governing bodies (henceforth "board of directors") of financial firms have viewed compensation systems as being largely unrelated to risk management and risk governance. This must change. While voluntary action is desirable, it is unlikely to effectively and durably deliver change given competitive pressures and first-mover disadvantage. The global supervisory and regulatory infrastructure is an appropriate vehicle for making sound compensation practices widespread.[176]

The FSF proceeded to provide a set of guidelines that should apply to large financial institutions, and are designed specifically for systemically important institutions:

> *The FSF Principles for Sound Compensation Practices aim to ensure effective governance of compensation, alignment of compensation with prudent risk taking and*

[174] Ibid., p19
[175] Ibid., pp19-20
[176] FSF, FSF Principles for Sound Compensation Practices, 2 April 2009, p1

effective supervisory oversight and stakeholder engagement in compensation. The benefits of sound compensation practices will be achieved only if there is determined and coordinated action by national regulators, facilitated if necessary by suitable legislative powers and supported by national governments.

1. Effective governance of compensation

The board of directors of major financial firms should exercise good stewardship of their firms' compensation practices and ensure that compensation works in harmony with other practices to implement balanced risk postures. The Principles need to become ingrained over time into the culture of the entire organisation.

1. The firm's board of directors must actively oversee the compensation system's design and operation. The compensation system should not be primarily controlled by the chief executive officer and management team. Relevant board members and employees must have independence and expertise in risk management and compensation.

2. The firm's board of directors must monitor and review the compensation system to ensure the system operates as intended. The compensation system should include controls. The practical operation of the system should be regularly reviewed for compliance with design policies and procedures. Compensation outcomes, risk measurements, and risk outcomes should be regularly reviewed for consistency with intentions.

3. Staff engaged in financial and risk control must be independent, have appropriate authority, and be compensated in a manner that is independent of the business areas they oversee and commensurate with their key role in the firm. Effective independence and appropriate authority of such staff are necessary to preserve the integrity of financial and risk management's influence on incentive compensation.

2. Effective alignment of compensation with prudent risk taking

An employee's compensation should take account of the risks that the employee takes on behalf of the firm. Compensation should take into consideration prospective risks and risk outcomes that are already realised.

4. Compensation must be adjusted for all types of risk. Two employees who generate the same short-run profit but take different amounts of risk on behalf of their firm should not be treated the same by the compensation system. In general, both quantitative measures and human judgment should play a role in determining risk adjustments. Risk adjustments should account for all types of risk, including difficult-to-measure risks such as liquidity risk, reputation risk and cost of capital.

5. Compensation outcomes must be symmetric with risk outcomes. Compensation systems should link the size of the bonus pool to the overall performance of the firm. Employees' incentive payments should be linked to the contribution of the individual and business to such performance. Bonuses should diminish or disappear in the event of poor firm, divisional or business unit performance.

6. Compensation payout schedules must be sensitive to the time horizon of risks. Profits and losses of different activities of a financial firm are realized over different periods of time. Variable compensation payments should be deferred accordingly. Payments should not be finalized over short periods where risks are realized over long periods. Management should question payouts for income that cannot be realized or whose likelihood of realisation remains uncertain at the time of payout.

7. The mix of cash, equity and other forms of compensation must be consistent with risk alignment. The mix will vary depending on the employee's position and role. The firm should be able to explain the rationale for its mix.

3. Effective supervisory oversight and engagement by stakeholders

Firms should demonstrate to the satisfaction of their regulators and other stakeholders that their compensation policies are sound. As with other aspects of risk management and governance, supervisors should take rigorous action when deficiencies are discovered.

8. Supervisory review of compensation practices must be rigorous and sustained, and deficiencies must be addressed promptly with supervisory action. Supervisors should include compensation practices in their risk assessment of firms, and firms should work constructively with supervisors to ensure their practices conform with the Principles. Regulations and supervisory practices will naturally differ across jurisdictions and potentially among authorities within a country. Nevertheless, all supervisors should strive for effective review and intervention. National authorities, working through the FSF, will ensure even application across domestic financial institutions and jurisdictions.

9. Firms must disclose clear, comprehensive and timely information about their compensation practices to facilitate constructive engagement by all stakeholders. Stakeholders need to be able to evaluate the quality of support for the firm's strategy and risk posture. Appropriate disclosure related to risk management and other control systems will enable a firm's counterparties to make informed decisions about their business relations with the firm. Supervisors should have access to all information they need to evaluate the conformance of practice to the Principles.[177]

5.6 Over-the-counter derivatives

The FSF identified a number of problems with over-the-counter credit (OTC) derivative markets, including the possibility that trades may not be properly completed:

> During the turmoil, spikes in credit derivatives trades resulted in substantial increases in backlogs of unconfirmed trades throughout the industry. Despite the significant progress that the industry has made in automating the infrastructure of the OTC derivatives markets during the last two years, the industry has not achieved a "steady state" in which spikes in trading volume do not lead to operational problems.[178]

The FSF concluded that a more effective operational infrastructure would be required for the OTC derivative markets: "Authorities will encourage market participants to act promptly to ensure that the settlement, legal and operational infrastructure for over-the-counter derivatives is sound."[179] More specifically, the FSF proposed:

> • Market participants should amend standard credit derivative trade documentation in accordance with the terms of the cash settlement protocol that has been developed, but not yet incorporated into standard documentation.
>
> • Market participants should automate trade novations and set rigorous standards for the accuracy and timeliness of trade data submissions and the timeliness of resolutions of trade matching errors for OTC derivatives.

[177] Ibid., pp2-3
[178] FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008, p21
[179] Ibid., p3

• The financial industry should develop a longer-term plan for a reliable operational infrastructure supporting OTC derivatives.[180]

5.7 Risk disclosure

In April 2009, the FSF recommended that financial firms increase the quality of their risk disclosures:

> Financial institutions should draw from leading practices to ensure that they provide meaningful disclosures about their risk exposures, risk management and accounting policies that are most relevant in view of current market conditions.[181]

The FSF report provided a template for suggested risk exposures on page 24.

In particular, the FSF has pointed to problems in the securitisation markets where disclosures lacked transparency, and thus accentuated the collapse of the market. The FSF proposed that: "Market participants and securities regulators will expand the information provided about securitised products and their underlying assets."182

5.8 Off-balance sheet activity

The FSF has been highly critical of the build up of off-balance sheet exposures in the finance industry and highlights the dangers that accompany its rise: "The use of off-balance sheet entities created a belief that risk did not lie with arrangers and led market participants to underestimate firms' risk exposures."[183] Consequently, the FSF called for accounting and disclosure standards to be enhanced: firstly, IASB and FASB requirements should be harmonised; secondly, standards should be clearly identifiable and should require significantly greater disclosure.

5.9 Credit rating agencies

The FSF's April 2008 report condemned the ratings provided by the credit rating agencies:

> Poor credit assessments by CRAs contributed both to the build up to and the unfolding of recent events. In particular, CRAs assigned high ratings to complex structured subprime debt based on inadequate historical data and in some cases flawed models. As investors realised this, they lost confidence in ratings of securitised products more generally.
>
> …
>
> One of the important triggers of the current turmoil was the precipitous decline in confidence in ratings of structured credit products. After assigning high ratings to subprime-related RMBSs and CDOs between 2004 and 2007, and thus contributing to the phenomenal growth of subprime lending, since mid-2007 CRAs have announced an inordinate number of rapid multi-notch downgrades of these instruments. This has raised questions about the quality of credit ratings with regard to structured products.[184]

Particular focus was reserved for the conflicts of interest that can arise in the 'investor pays' model of rating provision as well as the lack of transparency and poor performance in the risk

[180] FSF Press Release, Financial Stability Forum Recommends Actions to Enhance Market and Institutional Resilience, April 2008, p5
[181] Ibid., p23
[182] Ibid., p4
[183] Ibid., p25
[184] Ibid., p32

models employed by the rating agencies. Furthermore, the FSF differentiated structured financial product ratings from bond ratings because, unlike bonds, structured products were designed to achieve certain ratings, turned out to be vulnerable to mass default and were especially sensitive to the assumptions underpinning the risk models. The report also criticised the data assessments undertaken by the rating agencies; particularly with regard to input data, the agencies often failed to consider the (sometimes fraudulent) underwriting standards of the underlying loans.

The FSF found that "investors took CRAs' ratings opinion of structured credit products as a seal of approval and looked no further."[185] Despite the problems with the rating agencies, the report was also critical of investors who did not run their own due diligence; ultimately, the report proposed that investors devise alternative means of validating a rating:

> Investors should reconsider how they use credit ratings in their investment guidelines and mandates and for risk management and valuation. Ratings should not replace appropriate risk analysis and management on the part of investors. Investors should conduct risk analysis commensurate with the complexity of the structured product and the materiality of their holding, or refrain from such investments.[186]

Finally, the report found that regulators have an important role to play through the signals that they send to the market by adopting ratings provided by the rating agencies:

> It is important to ensure that the use of ratings by authorities does not contribute to the lack of competition in the CRA industry. Issuers prefer to obtain, and investors prefer to use, the opinions of CRAs that public authorities also use. Regulatory recognition in turn takes into account the extent of use of CRAs in the market. These forces can potentially act as barriers to entry for new participants. Regulators and other bodies need to keep their processes under review to avoid this. Indeed, if regulators require that those CRAs whose ratings are used in regulations maintain adequate disclosures about ratings processes and performance, this can help to promote competition.[187]

The report suggested that:

> Credit rating agencies should:
>
> • Implement the revised IOSCO Code of Conduct Fundamentals for Credit Rating Agencies to manage conflicts of interest in rating structured products and improve the quality of the rating process;
>
> • Differentiate ratings on structured credit products from those on bonds and expand the information they provide.
>
> Regulators will review the roles given to ratings in regulations and prudential frameworks.[188]

[185] Ibid., p34
[186] Ibid., p37
[187] Ibid., p38
[188] Ibid., p4

5.10 Supervisory overview

The FSF proposed a number of reforms to the macro supervisory structure – these principally centred on supervisory actions, information disclosure and sharing and enhancing the role of international bodies:

> Some of the weaknesses that have come to light were known or suspected within the community of financial authorities before the turmoil began. Much work was underway at international levels that – if already implemented – might have tempered the scale of the problems experienced. However, international processes for agreeing and implementing regulatory and supervisory responses have in some cases been too slow given the pace of innovation in financial markets.
>
> ***1. Translating risk analysis into action***
>
> Supervisors, regulators and central banks – individually and collectively – will take additional steps to more effectively translate their risk analysis into actions that mitigate those risks.
>
> • Supervisors should see that they have the requisite resources and expertise to oversee the risks associated with financial innovation and to ensure that firms they supervise have the capacity to understand and manage the risks.
>
> • Supervisors and regulators should formally communicate to firms' boards and senior management at an early stage their concerns about risk exposures and the quality of risk management and the need for firms to take responsive action. Those supervisors who do not already do so should adopt this practice.
>
> ***2. Improving information exchange and cooperation among authorities***
>
> Authorities' exchange of information and cooperation in the development of good practices will be improved at national and international levels.
>
> • The use of international colleges of supervisors should be expanded so that, by end-2008, a college exists for each of the largest global financial institutions. Supervisors involved in these colleges should conduct an exercise, by 2009, to draw lessons about good practices in operating colleges.
>
> • Supervisory exchange of information and coordination in the development of best practice benchmarks should be improved at both national and international levels.
>
> • Supervisors and central banks should improve cooperation and the exchange of information, including in the assessment of financial stability risks. The exchange of information should be rapid during periods of market strain.
>
> • To facilitate central bank mitigation of market liquidity strains, large banks will be required to share their liquidity contingency plans with relevant central banks.
>
> ***3. Enhancing international bodies' policy work***
>
> International bodies will enhance the speed, prioritisation and coordination of their policy development work.
>
> • International regulatory, supervisory and central bank committees will strengthen their prioritisation of issues and, for difficult to resolve issues, establish mechanisms for escalating them to a senior decision-making level.

• National supervisors will, as part of their regular supervision, take additional steps to check the implementation of guidance issued by international committees.

• The FSF will encourage joint strategic reviews by standard-setting committees to better ensure policy development is coordinated and focused on priorities.

• The FSF and IMF will intensify their cooperation on financial stability, with each complementing the other's role. As part of this, the IMF will report the findings from its monitoring of financial stability risks to FSF meetings, and in turn will seek to incorporate relevant FSF's conclusions into its own bilateral and multilateral surveillance work.[189]

5.11 Crisis management

On 2 April 2009, the FSF laid out a set of principles for crisis management. Identifying its aim as being to "prevent serious domestic or international financial instability that would have an adverse impact on the real economy", the FSF provides a new set of principles derived from lessons learned from the financial crisis:

In preparing for financial crises, authorities will:

3. Develop common support tools for managing a cross-border financial crisis, including: these principles; a key data list; a common language for assessing systemic implications (drawing on those developed by the EU and by national authorities); a document that authorities can draw on when considering together the specific issues that may arise in handling severe stress at specific firms; and an experience library, which pools key lessons from different crises.

4. Meet at least annually to consider together the specific issues and barriers to coordinated action that may arise in handling severe stress at specific firms. Home supervisors will coordinate this process, which will directly involve the relevant authorities (including supervisors, central banks, finance ministries) in countries represented on a cross-border bank's core supervisory college. This process will be done for every bank with an FSF core supervisory college, but authorities may also cooperate around other specific cross-border firms as appropriate.

5. Home authorities will work to ensure that all countries in which the firm has systemic importance are kept informed of the arrangements for crisis management developed by the core college country authorities (because all countries in which a bank has operations are not represented on core colleges).

6. Share, at minimum, the following information, where permitted by legal frameworks and confidentiality issues:

• The firm's group structure, including any legal, financial and operational intragroup dependencies, for example arising from the centralisation of liquidity or risk management,

• The interlinkages between the firm and financial system (e.g., in markets, infrastructures) in each jurisdiction in which it operates,

• The firm's contingency funding arrangements,

[189] FSF Press Release, Financial Stability Forum Recommends Actions to Enhance Market and Institutional Resilience, April 2008, pp8-9

• Potential impediments to a coordinated solution stemming from the legal frameworks and bank resolution procedures of the countries in which the firm operates.

7. Ensure that firms are capable of supplying in a timely fashion the information that may be required by the authorities in managing a financial crisis.

8. Strongly encourage firms to maintain contingency plans and procedures for use in a wind-down situation (e.g., factsheets that could easily be used by insolvency practitioners), and regularly review them to ensure that they remain accurate and adequate.

9. Ensure that firms maintain robust, up to date, funding plans that are practical to use in stressed market scenarios, including where large amounts of foreign currency are required. When reviewing firms' plans, authorities will together consider the presumptions made in the plans regarding possible national authority responses (e.g., ring-fencing).

10. Seek to remove any practical barriers to efficient, internationally coordinated resolutions identified when developing contingency plans, working together where necessary and, where they reveal issues that may have broader implications for other firms in general, refer them to the FSF and other relevant international committee(s) (e.g., BCBS, IOSCO, CPSS, IAIS etc.).

In managing a financial crisis, authorities will:

11. Strive to find internationally coordinated solutions that take account of the impact of the crisis on the financial systems and real economies of other countries, drawing on information, arrangements and plans developed ex-ante. These coordinated solutions will most likely be mainly driven by groups of authorities of the most directly involved countries.

12. Share national assessments of systemic implications, using the agreed framework.

13. Share information as freely as practicable with relevant authorities from an early stage in a way that does not materially compromise the prospect of a successful resolution and subject to the application of rules on confidentiality.

14. If a fully coordinated solution is not possible, discuss as promptly as possible national measures with other relevant authorities.

15. For purposes of clarity and coordination, share their plans for public communication with the appropriate authorities from other affected jurisdictions.[190]

6 Comparison of key recommendations

The table below provides a summary of the key recommendations made by a number of prominent reports on the financial regulatory structure in light of the financial crisis. The de Larosiére report was published in February 2009; the Basel Committee on banking Supervision (BCBS) has published a number of papers and proposals for changing the current international capital framework, Basel II; and the Financial Stability Forum (FSF), now Financial Stability Board, published a constructive overview of regulation in April 2008 and subsequently produced a number of specific regulatory recommendations.

[190] FSF, FSF Principles for Cross-border Cooperation on Crisis Management, 2 April 2009, pp2-4

Summary of key recommendations by area

	Turner Review	de Larosiére report	FRR report	BCBS reports	FSF reports
Capital requirements	• increase minimal capital requirements for quality and quantity of Tier 1 and core Tier 1 capital • major increase in capital required for some trading risks • introduce gross leverage upper limit • introduce counter-cyclical capital buffers and risk evaluation horizons • review risk valuation regime	• increase minimum capital requirements • reduce pro-cyclicality	• stricter capital requirements • the most stringent capital standards for those deemed too big to fail • BCBS should consider international regulation with new risk weightings, pro-cyclical requirements and a gross leverage ratio	• increase capital charges on some products including re-securitisations • require more detailed models to justify risk analysis and assess their valuation methods more vigorously • provide assessments of stressed VaR	• raise capital requirements for some complex structured products • introduce capital charges for default and event risk • reduce reliance on cyclical capital measures • provide simple estimates of non-risk capital • supports enhanced provisioning
Liquidity standards	• possible introduction of liquidity rule • thorough stress tests done by regulators • increased information disclosure	• tighten norms on liquidity management • supervisors should pay more attention to liquidity	• BCBS should develop liquidity management standards	• banks should maintain a sufficient liquidity cushion in the face of stress • supervisors should assess liquidity adequacy	• strengthened prudential oversight • require enhanced stress testing • harmonise liquidity across borders
Shadow banking sector	• hedge funds should not be further regulated at the moment • regulators need additional powers to obtain information • bodies should be defined by economic substance not legal form	• extend regulation to firms such as hedge funds which may have a systemic impact • introduce stricter rules for off-balance sheet items • improve transparency and disclosure	• require registration of hedge funds and other private funds • provide detailed report to decide what should be done with Fannie and Freddie	• increase reporting off off-balance sheet instruments	• appropriately manage off-balance sheet exposures and require greater disclosure and stricter accounting

	Turner Review	de Larosiére report	FRR report	BCBS reports	FSF reports
Credit rating agencies	• supports EU legislation • reduce the impact of ratings on investment restrictions	• strengthen supervision and registration • distinguish ratings by the complexity of products • reduce dependence on ratings	• new procedures to manage and disclose conflicts of interest • differentiate structured products • increased international oversight		• separate bond and structured product ratings • regulators should avoid giving tacit approval • reduce potential for conflicts of interest
Securitisation		• require issuers to retain a meaningful proportion of their securitised products	• require issuers to retain a material interest in their securitised products • new requirements for transparency and compensation	• increase capital charges on some products including re-securitisations • penalise firms not conducting adequate due diligence	• strengthen risk management to reduce reliance on fallible credit rating agencies • enhance risk disclosure
Credit default swaps/over-the-counter derivatives	• introduce a centralised counter-party clearing house for CDSs • arrange rules for domestic regulation and cross-national activity	• introduce at least one well-capitalised central clearing house for CDSs	• all transactions must go through centralised counterparty clearing • increased transparency and record-keeping		• need to bolster the infrastructure for derivative trading • increase quality of documentation and timeliness of settlement
Remuneration	• reform structure, not level of pay • remuneration structures should be risk-adjusted, reflect long-term performance and include a deferred element • should be better aligned with shareholder interests • FSA could employ tools for enforcement	• reform structure, not level • realign incentives with shareholder interests and long-term profits by spreading bonus assessment and payment over a business cycle • end guaranteed bonuses	• more homogeneous cross-border principles for compensation to be aligned with shareholder value and prudent risk management • need compulsory non-binding votes on recommended pay	• set incentives to reflect long-term risks and rewards	• staff in risk management should receive incentives that are independent of the what they oversee • compensation should be risk-adjusted • compensation must be symmetric on risk outcomes and reflect risk horizons

	Turner Review	de Larosiére report	FRR report	BCBS reports	FSF reports
Corporate governance	• improved risk management functions, including remuneration • improvement in quality and time-commitment of non-executive directors • increased shareholder influence	• risk management and stress testing should be independent • senior risk offices should hold high ranks in the company			• increase the quality of risk disclosures
Deposit insurance schemes		• recommend a uniform scheme applying across Europe • recommend a pre-funded scheme paid for by the financial sector • governments should be willing to guarantee further funds		• should require compulsory membership • clear legal definitions • banks should take primary responsibility for paying for the scheme	
Accounting	• new counter-cyclical standards should be adopted	• resolve standards for complex products • minimise distortions to business models • seek international consensus	• reviews of fair value, loss provisioning should be undertaken • move toward global standards		• reduce pro-cyclicality in fair value accounting
Crisis management		• need "constructive ambiguity" to avoid problem of moral hazard • develop a clear and transparent framework for crisis management • same powers for all EU authorities	• new body to address potential failure of non-bank financial institutions • national authorities should improve information-sharing and develop FSB principles for crises		• develop common support tools across borders • develop international responses • enhance information disclosures

	Turner Review	de Larosiére report	FRR report	BCBS reports	FSF reports
Supervision	• Bank of England and FSA can together operate as macro-prudential supervisors • FSA should focus on macro-prudential and sectoral concerns, and employ a new regulatory philosophy • the FSA may use the tools of capital requirements, counter-cyclical measures and liquidity measures and guidance • no major increase in FSA resources will be required • increased FSA role in accounting • need stronger and more independent international supervisors • endorsed the FSF's college of supervisors • need enhanced supervision, at EU and national level, of cross-border institutions not domiciled in the UK	• create European System of Financial Supervisors, including national authorities and colleges of supervisors for cross-border firms • create European System Risk Council • create an effective warning system among European supervisory structures • no extended role for ECB • make steps toward global supervisory framework	• creation of Financial Services Oversight Council for systemic risk evaluation • the Fed will be given the power to regulate any financial firm, oversee market infrastructure and provide emergency lending (where permitted by the Treasury) • National Bank Supervisor to supervise banks • harmonise regulation or securities and futures, although the regulatory bodies will remain distinct • creation of Consumer Financial Protection Agency to protect consumers • stronger cross-border regulation with colleges of supervisors		• expand international colleges of supervisors • increase international coordination • central banks should been given macro objectives and additional tools • national supervisors should strengthen their procedures for stress testing • supervisors should ensure firms appropriately address risks

Note: Not all of these reports address the full gamut of regulatory areas, and not all recommendations are included in the table.