Joint FSF-BCBS Working Group on Bank Capital Issues

Reducing procyclicality arising from the bank capital framework

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Financial Stability Forum

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This note sets out recommendations to address the potential procyclicality of the regulatory capital framework for internationally active banks. Some of these recommendations are focused on mitigating the cyclicality of the minimum capital requirement, while maintaining an appropriate degree of risk sensitivity. Other measures are intended to introduce countercyclical elements into the framework.

The recommendations on procyclicality form a critical part of a comprehensive strategy to address the lessons of the crisis as they relate to the regulation, supervision and risk management of internationally active banks. This strategy covers the following four areas:

- Enhancing the risk coverage of the Basel II framework;
- Strengthening over time the level, quality, consistency and transparency of the regulatory capital base;
- Mitigating the procyclicality of regulatory capital requirements and promoting the build up of capital buffers above the minimum in good economic conditions that can be drawn upon in stress; and
- Supplementing the capital framework with a simple, non-risk based measure to contain the build up of leverage in the banking system.

The objective of these measures is to ensure that the Basel II capital framework promotes prudent capital buffers over the credit cycle and to mitigate the risk that the regulatory capital framework amplifies shocks between the financial and real sectors. As regulatory capital requirements are just one driver of bank lending behaviour, the proposals set out should be considered in the wider context of other measures to address procyclicality and reduce systemic risk.

The Basel Committee will elaborate on the recommendations over the course of 2009, and will develop a final package of proposals by the end of 2009. It should then assess the impact of the proposals on banks' capital requirements and whether further adjustments are needed.

Any implementation of new capital-related measures will be carried out in a manner that does not aggravate the current economic and financial stress. (On this matter, also refer to the Basel Committee's press release of 12 March 2009.[1])

Background

There are a range of macro and micro factors that interact in complex ways to produce procyclicality in the financial system and the broader economy. Regulatory capital requirements and valuations, through their influence on earnings and overall capital levels, are potential sources of procyclicality. Moreover, many major financial institutions have changed their business model from buy-and-hold to originate-and-distribute. This business

[1] Available at http://www.bis.org/press/p090312.htm.

model, and the recent risk management shortcomings around it, have added to the procyclicality of the financial system.

While banks are in the business of providing credit to their customers over the cycle, their risk appetite varies with changing economic conditions.[2] As a result, their business model is inherently cyclical. Moreover, as Basel II is intended to be risk sensitive with respect to changes in credit quality, it is clear that the minimum regulatory capital requirements vary with the credit cycle and with changes in portfolio composition. It is not clear, however, to what extent this *cyclicality* in the minimum capital requirement produces *procyclicality* in financial markets and broader economic activity.[3] Indeed, as Basel II has only recently come into effect in most G10 countries, the interactions between the new minimum regulatory requirement, actual capital, lending and economic activity are not well understood.

Current efforts to assess these relationships are based largely on qualitative discussions with institutions or static analyses of portfolios. However, they do not capture the impact of how Basel II will perform once it is fully and broadly implemented, nor do they capture changes in behaviour that the framework may induce at banks. Moreover, many banks already have in place economic capital frameworks to which they manage, and it is not clear how Basel II will impact these internal assessments at the margin. Finally, many banks have noted that they also face constraints from the market place, such as the requirements of the ratings agencies to achieve a desired credit rating. It is not clear how rating agencies' behaviour will change as a result of Basel II, for example whether they will perform their own analyses based on bank internal information or Pillar 3 disclosures of the Basel framework or if they will simply require a fixed buffer over the regulatory minimum.

Despite these uncertainties about the impact of Basel II on minimum capital requirements, actual capital levels, and ultimate lending behaviour, the crisis has already shown a number of areas where the capital framework could be strengthened to reduce the possibility that it amplifies credit cycles. Moreover, there are opportunities to build countercyclical elements into the framework that will enhance the capacity of the banking sector to withstand periods of stress and that will contribute to mitigating the build up of excessive credit growth and leverage in the broader system.

Recommendation 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.

The capital framework must be enhanced to produce higher capital buffers during strong economic conditions that can be drawn down to a credible minimum requirement during periods of economic and financial stress. Such a countercyclical capital buffer should make the banking sector more resilient to stress and contribute to dampening the inherent procyclicality of the financial system and broader economic activity. To avoid amplifying near term procyclicality, any such measure would be implemented once conditions in the banking sector and the economy improve.

[2] Surveys on credit terms and lending consistently show banks tightening access to credit as economic prospects worsen and visa versa.

[3] "Cyclicality" in this note refers to the tendency for measures like regulatory capital, valuations, and other risk metrics to vary with changes in economic or financial conditions. The term "procyclicality" in this note refers to situations where the cyclicality of such measures causes adverse feedback dynamics which further amplify financial market volatility, illiquidity or economic cycles.

In particular, the Committee should develop mechanisms by which the quality of the capital base and the buffers above the regulatory minimum are built up during periods of strong earnings growth so that they are available to absorb greater losses in stressful environments. Building such a countercyclical capital buffer on banks' earnings capacity would provide a simple and practical link between: (1) the portfolio composition and risk profile of individual banks; (2) the build up of risk in the banking system; and (3) cycles of credit growth, financial innovation and leverage in the broader economy.

As part of this process, the Basel Committee will assess the appropriate balance between discretionary and non-discretionary measures to achieve higher capital levels and ways to promote greater international consistency while reflecting differences in national economic cycles. The Committee also will develop standards for what constitutes a sound capital planning framework, including appropriate dividend and share buyback policies as a way to provide rigour and consistency in achieving appropriate capital buffers within and across jurisdictions.

An important basis for such a countercyclical capital buffer is a clear definition of capital. Banks entered this financial crisis with insufficient levels of high quality capital. This must be addressed once normal conditions are restored. Common shares and reserves/retained earnings should be the predominant form of capital within the Tier 1 requirement. Moreover, to ensure the consistency and quality of the regulatory capital base, the Basel Committee will work to harmonise capital deductions and prudential filters. To reduce the extent to which existing differences give rise to confusion over the quality of capital and to promote more transparency and comparability, the Committee should enhance the disclosure of the components of regulatory capital.

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

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. Losses in many banks' trading books during the financial crisis have been significantly higher than minimum capital requirements under the Pillar 1 market risk rules. Moreover, Value at Risk (VaR) based on the most recent one-year observation period has proven to be procyclical.

The Committee has taken steps to improve the coverage of trading book risks and reduce procyclicality of minimum market risk capital requirements through the proposed introduction of the incremental risk charge, application of banking book treatment for certain structured products and the introduction of a stressed VaR requirement.

In addition to the changes already proposed, the Basel Committee should carry out a more fundamental review of the market risk framework, including the use of VaR estimates as the basis for the minimum capital requirement. A key objective should be to find ways to reduce the reliance on cyclical VaR-based capital estimates, for example by expanding the role of stress testing within the framework.

Recommendation 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

The crisis revealed that many financial institutions, including many banks, had built up excessive levels of on- and off-balance sheet leverage while still showing adequate Tier 1 capital ratios. As a result, many banks were required to deleverage causing further stress to financial markets, earnings and capital.

To contain the build-up of leverage in the banking system, the Basel Committee should develop and introduce a simple, non-risk based measure to complement the risk-based approach of Basel II. The criteria seen as particularly important in the development of a supplementary measure include:

- Transparent and simple to implement;
- Helps limit the build up of leverage in the banking system during periods of rapid credit expansion and revenue growth;
- Puts a simple floor under the risk-based measure that becomes binding if firms take on excessive leverage or attempt to arbitrage the risk-based regime; and
- Does not produce adverse incentives.

As part of this effort, the Committee will assess how to address the impact of IFRS/GAAP accounting differences, the appropriate treatment of off-balance sheet exposures and guarantees, and the treatment of highly liquid government securities, while maintaining the transparency and simplicity of the measure.

Recommendation 4: Supervisors should develop approaches to promote higher provisions during periods of rapid credit expansion and review incentives in regulatory capital frameworks in support of this objective. This work should be coordinated with accounting standard setters.

The FSF WG on Provisioning notes that the stock of provisions should be built up during periods of credit expansion and when lending and credit terms are being eased. It is during these periods when the inherent risks in loan portfolios are rising and when provisions should be increased. Such an approach would help ensure that the losses inherent in banks' credit portfolios are covered through adequate provisions, and that such provisions are accumulated in a manner that does not add to procyclicality of the financial system.

Drawing on the FSF WG on Provisioning, the Basel Committee will assess the range of approaches that could be used to strengthen provisioning at banks, including dynamic provisioning. Moreover, the Committee will assess how higher provisions would be reflected in regulatory frameworks, financial reporting (both balance sheet and profit and loss), and firms' risk management and incentive mechanisms. Such an analysis provides the context for determining whether higher provisions should primarily be achieved within financial reporting, through adjustments to the prudential framework, or a combination of the two. The extent to which existing accounting standards act as a constraint on the preferred approach will be an important part of this analysis and this work should therefore be coordinated with accounting standard setters.

Within this context, the Basel Committee also should review the current capital treatment of provisions and whether it is desirable to increase incentives within the Basel II framework to promote strong provisioning over the credit cycle (or at least to reduce any disincentives). It is working with the FSF WG on Provisioning on these issues.

Recommendation 5: 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.

The depth and duration of the financial crisis has highlighted inadequacies in banks' stress testing practices prior to and during the crisis. Not only was the crisis far more severe in many respects than was indicated by bank stress tests results, but it was possibly compounded by weaknesses in stress testing practices that limited the ability of banks to respond to unfolding events. Stress testing, when used effectively, can mitigate limitations associated with quantitative risk measurement approaches that are backward looking or based on limited data, and by focusing on the potential downside, can serve to limit procyclicality.

The Basel Committee's January 2009 sound principles for stress testing address the weaknesses in stress testing practices highlighted by the crisis, and present recommendations to strengthen the governance, design and implementation of stress testing programmes at banks. Supervisors should use the principles as a critical tool in their Pillar 2 assessments of bank capital adequacy. In particular, the stress testing framework should be used to assess the adequacy of banks' capital buffers above the regulatory minimum during periods of economic expansion, when financial market, credit and liquidity conditions appear benign, and when bank earnings are high. The Basel Committee will conduct an assessment of the compliance with the principles once they have been finalised and implemented at banks.

Recommendation 6: 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.

The Basel Committee is tracking the impact of the Basel II framework on the level and cyclicality of capital requirements through regular data collection by its Capital Monitoring Group. Data will be available on a six month reporting cycle. Through this initiative, the Committee should monitor the extent to which the capital regime reveals unacceptably high levels of capital cyclicality and take additional measures as appropriate.

In parallel with this monitoring effort, the Committee should review mechanisms through which known channels of cyclicality in the minimum Pillar 1 capital requirement, such as migrations in credit scores, could be addressed. The preliminary conclusion of the Committee is to maintain the risk sensitivity of the inputs of the Basel II capital requirements and instead focus on dampening the outputs. It is working to develop concrete proposals to mitigate any excessive impact of ratings migrations on regulatory capital requirements.

Recommendation 7: 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.

A significant source of stress and procyclicality in the banking system and broader financial markets has been the failure to capture key risks in capital and risk management frameworks of major banking institutions. Once these risks became apparent to banks and market participants during the current period of stress, they revealed significant capital shortfalls at a number of banks, causing them to scale back their risk profiles thus further amplifying procyclicality in financial markets and lending behaviour. It is therefore critical that the risk coverage of the capital framework be improved.

The move to Basel II will help correct a number of the weaknesses of the Basel I capital framework revealed by the crisis. Among other things, these include a better treatment of off-balance sheet exposures and liquidity commitments, the introduction of a three pillar approach which can promote earlier intervention by supervisors, enhanced market transparency, the introduction of greater risk differentiation for on-balance sheet and securitisation exposures, explicit capital requirements for operational risk, and standards for more rigorous management of risk mitigation techniques. Moreover, the three pillars of Basel II, including the internal ratings based approach to decompose a risk exposure into its basic risk components (PD, LGD and EAD), should help make capital regulation more adaptable to periods of rapid innovation.

However, the crisis has revealed a number of areas where the framework should be strengthened to enhance the resilience of individual banks, the banking sector and the broader financial system to periods of stress. These areas are outlined in the Committee's January 2009 package of proposals, which has been issued for public comment. In particular, they include:

- Raising capital requirements for resecuritisations under both the standardised and advanced approaches of the Basel II framework;
- Raising the standardised capital requirement for short term liquidity lines to ABCP conduits to that of longer term exposures to such vehicles, thus eliminating an arbitrage opportunity in the framework (as well as removing the zero percent risk weight for general market disruption lines); and
- Strengthening trading book capital requirements by requiring a stressed VaR add-on and introducing an incremental risk charge to capture default and migration risk for unsecuritised credit products. Moreover, securitisation exposures in the trading book would be subject to the capital charges of the banking book, reducing arbitrage opportunities between the two books.

Moreover, the Committee should strengthen the Basel II framework in the following areas:

- Improving the treatment of counterparty credit risk under the three pillars of the Basel II framework. This includes strengthening the level of capital for counterparty credit exposures and addressing any excess cyclicality in these capital requirements; and
- Reviewing the role of external ratings under Basel II and determining whether there are any adverse incentives that need to be addressed. This includes an assessment of any "cliff effects" which could cause regulatory capital requirements to rise significantly as a result of external ratings downgrades.

The Committee should carry out regular assessments of the need for future enhancements to the framework to ensure that banks' evolving risk profiles are captured in an appropriate manner.

Annex: List of members

Joint FSF-BCBS Working Group on Bank Capital Issues

Chair	**Nout Wellink** President, Netherlands Bank Chairman, Basel Committee on Banking Supervision (BCBS)
Canada	**Julie Dickson** Superintendent Office of the Superintendent of Financial Institutions
France	**Jean-Pierre Landau** Deputy Governor Bank of France
Germany	**Jochen Sanio** President Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)
Italy	**Giovanni Carosio** Deputy Director General Bank of Italy
Japan	**Junichi Maruyama** Deputy Commissioner for International Affairs Financial Services Agency
Switzerland	**Philipp Hildebrand** Vice-Chairman of the Governing Board Swiss National Bank
United Kingdom	**Adair Turner** Chairman Financial Services Authority
United States	**John Dugan** Chairman, Joint Forum (Comptroller, Office of the Comptroller of the Currency)
	Arthur Angulo Senior Vice President, Federal Reserve Bank of New York
	Kathleen Casey Commissioner Securities and Exchange Commission
IMF	**Jaime Caruana** Director, Monetary and Capital Markets Department

Secretariat	**Svein Andresen** FSF, Secretary General **Stefan Walter** BCBS, Secretary General