

Strengthening the resilience of the banking sector: Proposals to strengthen global capital and liquidity regulations

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ABSTRACT

As well as addressing the Basel Committee's proposals to strengthen global capital and liquidity regulations, this paper also considers several reasons why information disclosure should be encouraged. These include the fact that imperfect information is considered to be a cause of market failure which "reduces the maximisation potential of regulatory competition", and also because disclosure requirements would contribute to the reduction of risks which could be generated when granting reduced capital level rewards to banks who may have poor management systems. Furthermore it draws attention to the need for greater measures aimed at consolidating regulation within (and also extending regulation to) the securities markets – given the fact that "the globalisation of financial markets has made it possible for investors and capital seeking companies to switch to lightly regulated or completely unregulated markets."

Strengthening the Resilience of the Banking Sector: Proposals to Strengthen Global Capital and Liquidity Regulations

Marianne Ojo¹

A. Introduction

The 1988 Basel Accord was adopted as a means of achieving two primary objectives namely:²

- "To help strengthen the soundness and stability of the international banking system. This would be facilitated where international banking organisations were encouraged to supplement their capital positions.
- To mitigate competitive inequalities"

The framework was not only oriented towards increasing the sensitivity of regulatory capital differences in risk profiles which exist within banking organisations, but was also aimed at discouraging the retention of liquid, low risk assets.³ Furthermore, it was designed to take into express consideration, off balance sheet exposures when assessments of capital adequacy are undertaken.⁴

Ten years following the conclusion of the agreement on the 1988 Accord, a Working Party was established to evaluate the impact and achievements of the Basel Accord. Two principal issues which were taken into consideration by the Working Party were: Firstly, whether some banks have been encouraged to hold higher capital ratios than would have been the case if the adoption of fixed minimum capital requirements had not occurred and, whether an increase in capital or reduction of lending has resulted in any increase in ratios. Secondly, an evaluation of the impact of fixed capital requirements on reduced risk taking by banks, in relation to capital, was also to be undertaken.

In response to the first issue, relating to whether an introduction of fixed minimum capital requirements has led to banks maintaining higher capital ratios, some studies which were undertaken, revealed that capital standards, when strictly adhered to, compelled weakly capitalised banks to consolidate their capital ratios.⁶ In response to whether banks adjusted their capital ratios to comply with requirements through an increase in capital or a reduction of risk-weighted assets, research revealed that banks responded to pressures stemming from capital ratios, in a way which they perceived to be most cost effective.⁷ Results obtained in response to an evaluation of the impact of capital requirements on risk taking were

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², Capital Requirements and Bank Behaviour: The Impact of the Basle Accord" Basle Committee on Banking Supervision Working Papers No 1 April 1999 at page 1 < http://www.bis.org/publ/bcbs_wp1.pdf?noframes=1> ³ibid

⁴ibid

⁵ibid

⁶Ibid at page 2

⁷Ibid at page 3

inconclusive. The data available for purposes of measuring bank risk taking, were not only limited, but also complicated the task of making an evaluation thereof. 9

Other issues which were difficult to evaluate included whether an introduction of minimum capital requirements for banks were detrimental to their competitiveness and whether the Basel Accord facilitated competitive inequalities amongst banks. 10 These evaluative difficulties, respectively, were attributed firstly, to the fact that "long term competitiveness of banking" depends on a variety of factors – most of which are not connected to regulation and secondly, to the available evidence at the time – which was inconclusive – and hence, not sufficiently persuasive. 11

I. Amendments to the 1988 Accord

The First Consultative Paper – The Three Pillar Model

In June 1999, as a means of replacing the 1988 Basel Accord, the first consultative paper (on a new capital adequacy framework) was issued by the Basel Committee on Banking Supervision. The First Consultative Paper introduced the "three pillar" model which comprises of "the minimum capital requirements" – that attempt to consolidate the rules established in the 1988 Accord, "supervisory review" and "market discipline" – "as a lever to strengthen disclosure and encourage safe and sound banking practices". Whilst acknowledging that the 1988 Accord had "helped to strengthen the soundness and stability of the international banking system and enhanced competitive equality among internationally active banks", it was added that the new framework provided by the first consultative paper was "designed to better align regulatory capital requirements to underlying risks and to recognise the improvements to risk measurement¹³ and control."

One of the flaws inherent in the 1988 Basel Accord was namely, the fact that it rewarded risky lending since it required banks to set aside the same amount of capital against loans to shaky borrowers as against those with better credits. Apart from the fact that capital requirements were just reasonably related to bank's risk taking, the credit exposure requirement was the same regardless of the credit rating of the borrower. Furthermore, the capital requirement for credit exposure often depended on the exposure's legal form – for instance, an on-balance sheet loan was generally subject to a higher capital requirement than an off-balance sheet to the same borrower. In addition to such insensitivity to risk, another problem which resulted from Basel 2 was the unwillingness of banks to invest in better risk management systems.

⁸ibid

⁹ibid

¹⁰Ibid at page 4

¹¹Ibid at pages 4 and 5

¹²See ,Consultative Paper on a New Capital Adequacy Framework" June 1999 < http://www.bis.org/press/p990603.htm>

¹³See remarks of the chairman of the Task Force on the Future of Capital regulation; ibid

^{14,} Basle bust" *The Economist* April 13th 2000

¹⁵M Saidenberg and T Schuermann, The New Basel Capital Accord and Questions for Research (2003) Wharton Financial Institutions Center Working Paper 2003 at page 4
¹⁶ibid

II. Capital Arbitrage

A general criticism of Basel I relates to the fact that it promoted capital arbitrage. This is attributed to its wide risk categories which provide banks with the liberty to "arbitrage between their economic assessment of risk and the regulatory capital requirements." "Regulatory capital arbitrage" involves the practice by banks of "using securitisation to alter the profile of their book and may produce the effect of making the bank's capital ratios appear inflated. Such a practice justifies the need for regulation to be extended to (and consolidated within) the securities markets – and not merely confined to the field of banking.

Four principal types of identified capital arbitrage include: ¹⁹ cherry picking, securitisation with partial recourse, remote origination and indirect credit.

III. Basel II

Some of the key factors which instigated the introduction of Basel 2 include:²⁰

- "Changes in the structure of capital markets resulting in the need for the incorporation of increased competitiveness of credit markets in capital requirements
- The need for measures which would facilitate the eradication of inefficiencies in lending markets
- Explosive debt levels which were generated during the economic upturn."

Under Basel II, and in response to the fact that the measurement of minimum capital was previously based on a general assessment of risk dispersion which did not correspond to specific circumstances of individual institutions, credit institutions will be required to retain more capital if required. Under Pillar 1, the definition of capital and minimum capital coefficient remain unchanged – however, credit institutions will be required to retain more capital if their individual risk situation so demands.²¹ Further advancements under Basel II are illustrated in the areas of risk measurements. The measurement methods for credit risk are more sophisticated than was previously the case. For the first time, a means of measuring operational risk has been set out.²² Under Pillar One, credit and market risk are supplemented by operational risk – which is to be corroborated by capital.²³

¹⁷ Capital Requirements and Bank Behaviour: The Impact of the Basel Accord' Basel Committee on Banking Supervision Working Papers April 1999 at page 21

¹⁸ibid; Bank's capital ratio may appear inflated "relative to the riskiness of the remaining exposure", see ibid ¹⁹See ibid at pages 22-24

²⁰See A Saunders and L Allen, 'Credit Risk Measurement: New Approaches to Value at Risk and Other Paradigms' Second Edition Wiley Publishers at page 24

²¹See 'Basel II: Minimum Capital Requirements'

http://www.bundesbank.de/bankenaufsicht/bankenaufsicht basel saeule1.en.php

²²ibid

²³ibid

B. Basel Committee's Proposals to Strengthen Global Capital and Liquidity Regulations

- I. Objectives of the Basel Committee's Proposals to Strengthen Global Capital and Liquidity Regulations²⁴
 - "As well as strengthening global capital and liquidity regulations (which would ultimately facilitate a more resilient banking sector), the Basel Committee's reforms are aimed towards improving the banking sector's ability to absorb shocks arising from financial and economic stress hence mitigating spill over risks from the financial sector to the real economy.
 - The Committee is also striving towards the improvement of risk management and governance as well as strengthen banks' transparency and disclosures. "
- II. Key elements of the Basel Committee's proposals
 - 1) The quality, consistency, and transparency of capital base will be raised to ensure that large, internationally active banks are in a better position to absorb losses on both a going concern and gone concern basis. (For example, under the current Basel Committee standard, banks could hold as little as 2% common equity to risk-based assets, before the application of key regulatory adjustments).
- As well as recommending an increase in the quality, consistency and transparency of capital base²⁵, the Basel Committee's recognition of the fact that "insufficient detail on the components of capital"²⁶ render "accurate assessment of its quality or a meaning comparison with other banks difficult", infers its acknowledgement of the importance attributed to enhanced disclosures. Furthermore, the increased importance attached to the role of central counter parties in efforts aimed at reducing systemic risks should also facilitate the process of achieving greater and more enhanced disclosures.
 - 2) The risk coverage of the capital framework will be strengthened. In addition to the trading book and securitisation reforms announced in July 2009, the Committee proposes the consolidation of the capital requirements for counterparty credit risk exposures arising from derivatives and securities financing activities. These enhancements are aimed at strengthening the resilience of individual banking institutions and reducing the risk of shocks being transmitted from one institution to another through the derivatives and financing channel. Consolidated counterparty capital requirements should increase incentives to transfer OTC derivative exposures to central counterparties and exchanges.

However there is also a limit to what the capital framework could address. As highlighted by the recent crisis, capital requirements on their own, were insufficient in addressing liquidity and funding problems which arose during the crisis. The importance of enhanced disclosures is also reflected and embodied within the Committee's second objective in relation to its proposal to strengthen the resilience of the banking sector, that is, its endeavours "to improve risk management and governance as well as strengthen banks' transparency and disclosures."

²⁴See Bank For International Settlements, 'Strengthening the Resilience of the Banking Sector' Consultative Document, Basel Committee on Banking Supervision December 2009 at page 1

²⁵ See first key element of the proposals being issued by the Basel Committee.

²⁶ See Consultative Document of the Basel Committee for Banking Supervision, "Strengthening the Resilience of the Banking Sector" December 2009 at page 13

As a result of the inability of bank capital adequacy requirements, on their own, to address funding and liquidity problems²⁷, the need to focus on Pillar 3 of Basel II, namely, market discipline, is growing more apparent. There is growing justification for greater measures aimed at extending capital rules to the securities markets. This not only arises from increased conglomeration and globalisation – which increases risks attributed to systemic contagion, but also the fact that "the globalisation of financial markets has made it possible for investors and capital seeking companies to switch to lightly regulated or completely unregulated markets."²⁸ Furthermore, it is not only argued that "the fact that many banks in a number of countries have chosen to securitise assets is probably largely due to the capital requirements imposed on them", but also that present rules do not "explicitly cover risks other than credit and market risk".²⁹

The engagement of market participants in the corporate reporting process, a process which would consequently enhance market discipline, constitutes a fundamental means whereby greater measures aimed at facilitating prudential supervision, could be extended to the securities markets. Through Pillar 3, market participants like credit agencies can determine the levels of capital retained by banks – hence their potential to rectify or exacerbate pro cyclical effects resulting from Pillars 1 and 2. The challenges encountered by Pillars 1 and 2 in addressing credit risk is reflected by problems identified with pro cyclicality, which are attributed to banks' extremely sensitive internal credit risk models, and the level of capital buffers which should be retained under Pillar Two. Such issues justify the need to give greater prominence to Pillar 3.

As a result of the influence and potential of market participants in determining capital levels, such market participants are able to assist regulators in managing more effectively, the impact of systemic risks which occur when lending criteria is tightened owing to Basel II's procyclical effects. Regulators are able to respond and to manage with greater efficiency, systemic risks to the financial system during periods when firms which are highly leveraged become reluctant to lend. This being particularly the case when such firms decide to cut back on lending activities, and the decisions of such firms cannot be justified in situations where such firms' credit risk models are extremely sensitive – hence the level of capital being retained is actually much higher than minimum regulatory Basel capital requirements.³⁰

The European Central Bank's report on "Credit Default Swaps and Counter Party Risk" identifies asymmetrical information as constituting a challenge for non-dealer market participants since in its view, price information is currently limited, as dealer prices are typically set on a bilateral basis and are not available to non-dealers.³¹ Furthermore, the Report also identifies the role played by credit default swaps in the recent financial crises,

²⁷ See M Ojo, 'Extending the Scope of Prudential Supervision: Regulatory Developments During and Beyond the 'Effective' Periods of the Post BCCI and the Capital Requirements Directives' (January 2010), forthcoming in the Journal of Advanced Research in Law and Economics.

²⁸ See Deutsche Bundesbank , "Securities Market Regulation: International Approaches" Deutsche Bundesbank Monthly Report January 2006 at page 41

²⁹Regulation, it is further argued, "may also impact on the relationship between banks and the securities market as a source of finance. So long as the banks are required to set aside 8% capital for loans to the financially soundest companies, direct borrowing in securities markets will probably be a cheaper form of funding for these companies". See "Basel Committee's Proposal for a New Capital Adequacy Framework"http://www.norges-bank.no/templates/article_l5120.aspx For further information on this see M Ojo, "The Impact of Capital and Disclosure Requirements on Risks and Risk Taking Incentives" (2010)

³⁰For further information on this, see M Ojo, 'Basel II and the Capital Requirements Directive: Responding to the 2008/09 Financial Crisis' (2009)

^{31 &}quot;Credit Default Swaps and Counter Party Risk" European Central Bank 2009 at page 62

highlights the contribution of counter risk management in the collapse of Bear Stearns and Lehman Brothers, and also the challenges relating to the management of counter party risk exposures which arise from Credit Default Swaps (CDSs) and other ("over the counter")OTC derivatives.³²

Furthermore, the ECB recently highlighted that "no disclosure requirements currently exist within the IASB accounting standards with respect to the main counterparts for derivative transactions." Further, it states that "added disclosures for large counter parties and those that exceed certain thresholds would be useful in order to enable market participants to better assess their counterparty³³ risk and the potential for systemic spill over effects."

- 3) The Basel Committee will introduce a leverage ratio as a supplementary measure to the Basel II risk based framework with a view to changing to a Pillar 1 treatment based on appropriate review and calibration. This should help to contain the build up of excessive leverage in the banking system, introduce additional safeguards against attempts to "game" the risk based requirements, and help address model risk. In order to ensure comparability, the details of the leverage ratio are to be harmonised internationally. making full adjustments for residual accounting differences.
- 4) The Committee will introduce a series of measures aimed at promoting the build up of capital buffers during good times which could be drawn upon during periods of stress. A counter cyclical capital framework will contribute to a more stable banking system which will help dampen, instead of amplify, economic and financial shocks. In addition the Committee will be promoting a more forward looking provisioning which is based on expected losses, and which captures actual losses with greater transparency and which is also less pro cyclical than the present model (the "incurred loss" provisioning model).

As was highlighted under the introductory section, the promotion of financial stability through more risk sensitive capital requirements, constitutes one of Basel II's primary objectives.³⁴ However some problems identified with Basel II are attributed to pro cyclicality and to the fact that not all material credit risks in the trading book are adequately accounted for in the current capital requirements.³⁵ The pro cyclical nature of Basel II has been criticised since "capital requirements for credit risk as a probability of default of an exposure decreases in the economic upswing and increases during the downturn"³⁶ – hence resulting in capital requirements which fluctuate over the cycle. Other identified³⁷ consequential effects include the fact that fluctuations in such capital requirements may result in credit institutions raising their capital during periods when its is costlyfor them to implement such a rise – which has the potential of inducing banks to cut back on their lending. It is concluded that "risk

³² ibid at page 36

³³Private sector financial institutions

³⁴For further objectives, see , Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies. < http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf at page 22 of 47

³⁵See ibid at page 23 of 47

³⁶See Annex on Proc cyclicality, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies. http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf at page 46 of 47

³⁷As identified in the Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies. See page 46 of 47

sensitive capital requirements should have pro cyclical effects principally on undercapitalised banks."38

According to the Financial Stability Forum (FSF), an earlier recognition of loan losses, which could have been facilitated by relevant disclosures about loan loss provisioning, could have reduced pro cyclical effects which occurred during the recent crisis.³⁹ Not only does the FSF propose that amendments be made to the Basel II framework - amendments which are aimed at reducing banks' disincentives to increase their level of provisions for loan losses, it is also of the opinion that measures aimed at improving market discipline could also help in reducing procyclicality and diversity. 40 Furthermore, incentives which would encourage banks to retain liquidity could be introduced – however, such incentives should be granted whilst striving to comply with the aims and objectives of Basel - particularly those aimed at enhancing a regulatory framework which is more aligned with economic and regulatory capital. As acknowledged by the Basel Committee, "certain incentives which assume the form of capital reductions are considered to impose minimum operational standards in recognition that poor management of operational risks (including legal risks) could render such risk mitigants of effectively little or no value and that although partial mitigation is rewarded, banks will be required to hold capital against residual risks". Hence incentives should also adequately account for situations where poor management systems may operate in institutions which are supposed to have risk mitigants.

As well as drawing attention to the fact that capital buffers may not actually mitigate the cyclical effects of bank regulation,⁴¹ regulators are also advised to give due consideration to the effects of risk weights on bank portfolio behaviour when implementing regulations.

5) As its fifth proposal, a global minimum liquidity standard for internationally active banks is to be introduced by the Committee. This will include a 30 day liquidity coverage ratio requirement which is underpinned by a longer term structural liquidity ratio. The framework will also incorporate a common set of monitoring metrics to assist supervisors in their analysis and identification of risk trends . both at the bank and system wide level. Such standards and monitoring metrics will serve to supplement the Basel Committee's Principles for Sound Liquidity Risk Management and Supervision.

III. Other points highlighted by the Committee

- The review of the need for additional capital, liquidity or other supervisory measures aimed at reducing externalities generated by systemically important institutions.

³⁸See "Is Basel II Pro Cyclical? A Selected Review of the Literature" Financial Stability Review December 2009 at page 150

³⁹Report of the Financial Stability Forum on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk" at pages 20 and 22

⁴⁰ibid at pages 21 and 22

⁴¹See P Agénor and L Pereira da Silva , "Cyclical Effects of Bank Capital Requirements with Imperfect Credit Markets" World Bank Policy Research Paper 5067 at page 36. They illustrate through their model that capital buffers, by lowering deposit rates, are actually expansionary and that hence, "if capital buffers are increased during an expansion, with the initial objective of being countercyclical, they may actually turn out to be procyclical." This, in their opinion, is an important conclusion, given the prevailing view that "countercyclical regulatory requirements may be a way to reduce the build up of systemic risks:if the signaling effects of capital buffers are important, "leaning against the wind" may not reduce the amplitude of the financial-business cycle." For more information on this, also see M Ojo, "The Impact of Capital and Disclosure Requirements on Risks and Risk Taking Incentives" (2010)

- Recognition that severity of the economic and financial crisis is attributed to the fact that excessive on- and off-balance sheet leverage had been accumulated by banking sectors of many countries whilst many banks were retaining insufficient liquidity buffers. Consequences resulting from this include the inability of the banking system to absorb the resulting systemic trading and credit losses. Further, the banking system was unable to manage the "re intermediation" of large off balance exposures which had accumulated.
- Aggravation of the crisis owing to pro cyclical effects and the interconnectedness of systemic institutions such interconnectedness being triggered by a range of complex transactions.

Systemic risks and the central role assumed by banks in relation to liquidity serves as greater justification for regulation with respect to banks. "The fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes banks inherently vulnerable to liquidity risk, both of an institution-specific nature and that which affects markets as a whole."

In relation to the securities markets, information asymmetry appears to constitute a greater basis for regulation. However, the existence of information asymmetry within the banking 43 sector has the potential to generate systemic effects within the banking sector – consequences whose effects, it could be said, could have greater repercussions than if such were to originate from within the securities markets.

The link between liquidity and systemic risks as illustrated in the ECB's Financial Stability Review, is attributed to the "destruction of specific knowledge⁴⁴ which banks have about their borrowers and the reduction of the common pool of liquidity."⁴⁵ The importance of the link between liquidity risks and systemic risks within the banking sector is highlighted by the consequences attributed to the reluctance of banks to retain liquidity - given the cost of holding liquidity. The consequential shortfalls of liquidity as reflected by on and off balance sheet maturity mismatches accentuates the importance of the role assumed by central banks in the funding of bank balance sheets. The consequences are sheets.

⁴²Report of the Financial Stability Forum on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk" http://www.financialstabilityboard.org/publications/r_0904a.pdf at page 24

⁴³ According to the Bundesbank, "the economics of information, which is widely applicable to the financial markets, therefore eases the rigorous assumptions about information requirements and market perfection." See Deutsche Bundesbank, "Securities Market Regulation: International Approaches" Deutsche Bundesbank Monthly Report January 2006 at page 36

⁴⁴Since specific knowledge which banks possess about their borrowers is considered to be a factor which determines the illiquidity of bank loans; see "The Concept of Systemic Risk" ECB Financial Stability Review December 2009 at page 137<http://www.ecb.int/pub/fsr/shared/pdf/ivbfinancialstabilityreview200912en.pdf?05d3164914c6a14bb13522

⁴⁵ibid; According to the Review, the reduction in the common pool of liquidity also has the potential to trigger the failure of banks and could consequently lead to a devaluation of illiquid bank assets and further aggravation of problems within the banking sector.

⁴⁶Report of the Financial Stability Forum on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk" http://www.financialstabilityboard.org/publications/r_0904a.pdf at page 24 ⁴⁷ibid

1. Mitigating the Procyclical Effects of Basel II

According to a report,⁴⁸ the two principal solutions which have been endorsed by the Turner Review and the DeLarosiere Report, and which are considered to have the potential to reduce pro cyclical effects⁴⁹ induced by the CRD and Basel II, include: 1) The requirement that banks "hold bigger reserves during good times - hence limiting credit and risk expansion in good times and storing up capital to be used during bad times" (2) "Increasing risk-weighting on a range of assets because this also restricts balance sheet expansion".

Another proposal put forward as an optimal means of rectifying Basel II's procyclical effects – as illustrated through the "amplification of business cycle fluctuations", involves the utilisation of a "business cycle multiplier of the Basel II capital requirements that is increasing in the rate of growth of the GDP". Under such a scheme, it is argued, riskier "banks would face higher capital requirements without regulation exacerbating credit bubbles and crunches." ⁵⁰

Other mechanisms provided under the CRD as means of mitigating pro cyclicality within the capital requirements framework include:⁵¹

- The use of downturn Loss Given Default (LGD) estimates, PD estimates being based on long data series, technical adjustments made to the risk weight function, stress testing requirements and Pillar 2 supervisory review process. It is acknowledged, however, that more measures may be required to mitigate the procyclical effects of the capital requirements framework. Options provided include those aimed at reducing its cyclical risk sensitivity, measures which enhance its risk capture, and the intentional introduction of counter-cyclical buffers (comprising capital and/or provisions).
- 2. Financial Stability Forum Recommendations Aimed at Mitigating Procyclicality

In its report⁵² on "Addressing Procyclicality in the Financial System", the Financial Stability Forum's recommendations to mitigate mechanisms that amplify procyclicality was extended to three areas:⁵³

i) bank capital framework, ii) bank loan loss provisions as well as iii) leverage and valuation issues.

⁴⁸The Turner Review :Key Elements of the Turner Review (page 2 of 4) http://www.dlapiper.com

⁴⁹Exacerbated strains on bank capital is the term used to denote procyclicality; see ibid International Accounting Standards are also considered to have had a pro-cyclical impact. It is stated that "in particular moving to marking to market accounting, rather than the more traditional marking to maturity, exacerbated volatility in the accounts of banks – with valuation becoming practically impossible for some securities as the market in them disappeared."; ibid

⁵⁰R Repullo, J Saurina, and Carlos Trucharte, "How to Mitigate the Procyclical Effects of Capital Adequacy Rules" http://www.eurointelligence.com/article.581+M5ff0e4ba595.0.html

⁵¹See the Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf Page 46 of 47

⁵² "Report of the Financial Stability Forum on Addressing Pro cyclicality in the Financial System" http://www.financialstabilityboard.org/publications/r_0904a.pdf

⁵³Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies http://ec.europa.eu/internal market/bank/docs/regcapital/com2009/impact assessment en.pdf page 46 of 47

A summary of the recommendations relating to capital, as provided in the Report of the Financial Stability Forum is as follows:⁵⁴

- That the Basel Committee on Banking Supervision (BCBS) should strengthen the regulatory capital framework so that the quality and level of capital in the banking system increase during strong economic conditions and can be drawn down during periods of economic and financial stress;
- That the BCBS should revise the market risk framework of Basel II to reduce the reliance on cyclical VAR-based capital estimates;
- The BCBS should supplement the risk-based capital requirement with a simple, non-risk based measure to help contain the build-up of leverage in the banking system and put a floor under the Basel II framework;
- Supervisors should use the Basel Committee's enhanced stress testing practices as a critical part of the Pillar 2 supervisory review process to validate the adequacy of banks' capital buffers above the minimum regulatory capital requirement;

That the BCBS should monitor the impact of the Basel II framework and make appropriate adjustments to dampen excessive cyclicality of the minimum capital requirements;

That the BCBS 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.

3. Risk Management and Governance

"Stress testing is an important risk management tool – particularly for counter party risk management." 55

According to the Basel Committee, ⁵⁶ " as public disclosure increases certainty in the market, improves transparency, facilitates valuation, and strengthens market discipline, it is important that banks publicly disclose information on a regular basis that enables market participants to make informed decisions about the soundness of their liquidity risk management framework and liquidity position." The involvement of market participants in the process whereby the Committee strives to facilitate market discipline through the development of "a set of disclosure requirements which will allow such market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence capital adequacy of an institution"⁵⁷ constitutes a vital means whereby effective corporate governance could be facilitated.

⁵⁴ See "Report of the Financial Stability Forum on Addressing Pro cyclicality in the Financial System" at pages 2 and 3 http://www.financialstabilityboard.org/publications/r_0904a.pdf

⁵⁵ See Bank for International Settlements, Consultative Document "Strengthening the Resilience of the Banking Sector" at page 48

⁵⁶See Bank for International Settlements "Proposed Enhancements to the Basel II Framework: Revisions to Pillar 3" (Market Discipline)" Consultative Document, Basel Committee on Banking Supervision paragraph 73 at page 23

⁵⁷See "Enhancements to the Basel II Framework" Basel Committee on Banking Supervision publications July 2009 at page 29 http://www.bis.org/publ/bcbs157.pdf and <a href="http://www.bis.org/publ/b

Recent reports have revealed the lack of knowledge demonstrated by financial institutions in relation to risks involved when engaged with "businesses and structured credit products." The fact that banks "did not adhere to the fundamental tenets of sound financial judgement and prudent risk management" was also highlighted. 59

Greater efforts have been undertaken to involve market participants by encouraging them to assess a bank's risk profile. Such proactive efforts are more desirable than "allowing markets to evolve and decide." As identified by the Basel Committee, "improvements in risk management must evolve to keep pace with rapid financial innovation. Furthermore, it states that "this is particularly relevant for participants in evolving and rapidly growing businesses. Innovation has increased the complexity and potential illiquidity of structured credit products — which in turn, could make such products not only more difficult to value and hedge, but also lead to inadvertent increases in overall risk. Further, the increased growth of complex investor specific products may result in thin markets that are illiquid — which could expose a bank to large losses in times of stress, if the associated risks are not well understood and managed in a timely and effective manner. Stress tests have been identified as means whereby investors' uncertainty about the quality of bank balance sheets, could be eliminated.

The Committee's acknowledgement of negative incentives arising from the use of external ratings to determine regulatory capital requirements and proposals to mitigate these incentives ⁶⁵ is well - founded – however, regulators will also be able to manage, with greater ability, systemic risks to the financial system during such periods when firms which are highly leveraged become reluctant to lend where more market participants such as credit rating agencies, could be engaged in the supervisory process.⁶⁶ The Annex to Pro cyclicality in the Accompanying Document amending the Capital Requirements Directive⁶⁷ not only importantly emphasises the fact that regulatory capital requirements do not constitute the sole determinants of how much capital banks should hold, but also highlights the role of credit rating agencies in compelling banks to increase their capital levels even where such institution may be complying with regulatory requirements.

⁵⁸Ibid at page 10

⁵⁹ibid

⁶⁰See B Arrunada, "The Provision of Non Audit Services by Auditors: Let the Market Evolve and Decide" 1999 International Review of Law and Economics at page 13. According to Arrunada, regulators should not only focus on policies which would improve transparency of information – hence enhancing market incentives, but should strive towards fostering a greater level of competition. Markets, in his opinion, should be the "driving force behind the evolution of the industry" – since regulators are not well equipped with the necessary knowledge and proper incentives which are required for defining an efficient market framework.

⁶¹ See "Enhancements to the Basel II Framework" Basel Committee on Banking Supervision publications July 2009 at page 12

⁶²ibid

⁶³ibid

⁶⁴See "Economic Crisis in Europe: Causes, Consequences and Responses" Section 3.2.1' Crisis Resolution Policies: Stress Testing of Banks" http://ec.europa.eu/economy-finance/thematic_articles/article15893_en.htm It is also highlighted in the report that stress tests could serve as "decisive tools in accomplishing this task since they provide information about banks' resilience and ability to absorb possible shocks."

⁶⁵ See Consultative Document of the Basel Committee for Banking Supervision, "Strengthening the Resilience of the Banking Sector" December 2009at page 55

⁶⁶See M Ojo, 'Extending the Scope of Prudential Supervision: Regulatory Developments During and Beyond the 'Effective' Periods of the Post BCCI and the Capital Requirements Directives' (January 2010), forthcoming in the Journal of Advanced Research in Law and Economics.

⁶⁷Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies.http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf> See page 46 of 47

Further as rightly acknowledged by the Committee, "recent experience has shown that banks' internal credit models have not performed well. Permitting banks to use their own internal models to estimate the capital requirements for securitisation exposures could increase pressure to permit the use of such models in Basel II more broadly. Thus, while there have been concerns expressed about the use of external ratings under the Basel II framework, including that reliance on external ratings could undermine incentives to conduct independent internal assessments of the credit quality of exposures, the removal of external ratings from the Basel II framework could raise additional issues for determining regulatory capital requirements."

C. Conclusion

As well as the inability of bank capital adequacy requirements, on their own, to address funding and liquidity problems, the need for greater focus on Pillar 3 of Basel II, namely, market discipline, and growing justification for greater measures aimed at extending capital rules to the securities markets, are factors which are becoming more apparent.

Even though markets should be allowed to evolve, checks and controls should exist to ensure that such market activities are effectively managed and controlled. Management information systems (MIS) and banks' credit risk models should be flexible (and not overly sensitive) in order to adapt to the evolving market whilst providing for some element of control. The Basel Committee furthermore, acknowledges the role assumed by management information systems and risk management processes in assisting the bank "to identify and aggregate similar risk exposures across the firm, including legal entities, and asset types (eg loans, derivatives and structured products)." ⁶⁹

The operation of risk mitigants in bank institutions does not justify a reduction in the capital levels to be retained by such banks – since banks operating with risk mitigants could still be considered inefficient operators of their management information systems (MIS), internal control systems, and risk management processes. The fact that banks possess risk mitigants does not necessarily imply that they are complying with Basel Core Principles for effective supervision (particularly Core Principles 7 and 17). Core Principle 7 not only stipulates that "banks and banking groups satisfy supervisory requirements of a comprehensive management process, ensure that this identifies, evaluates, monitors and controls or mitigates all material risks and assesses their overall capital adequacy in relation to their risk profile, but that such processes correspond to the size and complexity of the institution." Certain incentives which assume the form of capital reductions are considered by the Basel Committee to "impose

⁶⁸ See Consultative Document of the Basel Committee for Banking Supervision, "Strengthening the Resilience of the Banking Sector" December 2009 paragraph 185 at page 56; for further information on the strengths and weaknesses of banks' internal credit models, also see M Ojo, 'The Responsive Approach by the Basel Committee (on Banking Supervision) to Regulation: Meta Risk Regulation, the Internal Ratings Based Approaches and the Advanced Measurement Approaches (2009)http://srn.com/abstract=1447446

⁶⁹See "Enhancements to the Basel II Framework" Basel Committee on Banking Supervision publications July 2009 paragraph 29 < http://www.bis.org/publ/bcbs157.pdf?noframes=1 at page 16. The Basel Committee attributes the increased likelihood that different sectors of a bank are exposed to a common set of products, risk factors or counter parties, to the growth of market based intermediation.

minimum operational standards in recognition that poor management of operational risks (including legal risks) could render such risk mitigants of effectively little or no value and that although partial mitigation is rewarded, banks will be required to hold capital against residual risks".

Information disclosure should be encouraged for several reasons, amongst which include the fact that imperfect information is considered to be a cause of market failure – which "reduces the maximisation potential of regulatory competition", and also because disclosure requirements would contribute to the reduction of risks which could be generated when granting reduced capital level rewards to banks who may have poor management systems.

REFERENCES

Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies. <

http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf >

P Agénor and L Pereira da Silva , "Cyclical Effects of Bank Capital Requirements with Imperfect Credit Markets" World Bank Policy Research Paper 5067

Annex on Proc cyclicality, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitisation issues and remuneration policies.

http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf

B Arrunada, "The Provision of Non Audit Services by Auditors: Let the Market Evolve and Decide" 1999 International Review of Law and Economics a

Bank for International Settlements "Proposed Enhancements to the Basel II Framework: Revisions to Pillar 3" (Market Discipline)" Consultative Document, Basel Committee on Banking Supervision paragraph 73 at page 23

Bank for International Settlements "Enhancements to the Basel II Framework" Basel Committee on Banking Supervision publications July 2009 at page 29 http://www.bis.org/publ/bcbs157.pdf and http://www.bis.org/publ/bcbs157.pdf? noframes=1>

Bank For International Settlements, 'Strengthening the Resilience of the Banking Sector' Consultative Document, Basel Committee on Banking Supervision December 2009

"Basle bust" *The Economist* April 13th 2000

"Basel Committee's Proposal for a New Capital Adequacy Framework"http://www.norges-bank.no/templates/article 15120.aspx

'Basel II: Minimum Capital Requirements' http://www.bundesbank.de/bankenaufsicht/bankenaufsicht_basel_saeule1.en.php

"Capital Requirements and Bank Behaviour: The Impact of the Basle Accord" Basle Committee on Banking Supervision Working Papers No 1 April 1999 at page 1 < http://www.bis.org/publ/bcbs_wp1.pdf?noframes=1>

Consultative Paper on a New Capital Adequacy Framework" June 1999 < http://www.bis.org/press/p990603.htm>

Credit Default Swaps and Counter Party Risk" European Central Bank 2009

Deutsche Bundesbank , "Securities Market Regulation: International Approaches" Deutsche Bundesbank Monthly Report January 2006

"Economic Crisis in Europe: Causes, Consequences and Responses" Section 3.2.1' Crisis Resolution Policies: Stress Testing of Banks" http://ec.europa.eu/economy-finance/thematic articles/article15893 en.htm

"Is Basel II Pro Cyclical? A Selected Review of the Literature" Financial Stability Review December 2009

M Ojo, 'Basel II and the Capital Requirements Directive: Responding to the 2008/09 Financial Crisis' (2009)

M Ojo, 'Extending the Scope of Prudential Supervision: Regulatory Developments During and Beyond the 'Effective' Periods of the Post BCCI and the Capital Requirements Directives' January 2010

M Ojo, "The Impact of Capital and Disclosure Requirements on Risks and Risk Taking Incentives" February 2010

Report of the Financial Stability Forum on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk"

R Repullo, J Saurina, and Carlos Trucharte, "How to Mitigate the Procyclical Effects of Capital Adequacy Rules"

http://www.eurointelligence.com/article.581+M5ff0e4ba595.0.html

M Saidenberg and T Schuermann, The New Basel Capital Accord and Questions for Research (2003) Wharton Financial Institutions Center Working Paper 2003 at page 4

A Saunders and L Allen, 'Credit Risk Measurement: New Approaches to Value at Risk and Other Paradigms' Second Edition Wiley Publishers

Turner Review :Key Elements of the Turner Review (page 2 of 4) http://www.dlapiper.com