

ABSTRACT

This paper addresses factors which have prompted the need for further revision of banking regulation, with particular reference to the Capital Requirements Directive. The Capital Requirements Directive (CRD), which comprises the 2006/48/EC Directive on the taking up and pursuit of the business of credit institutions and the 2006/49/EC Directive on the capital adequacy of investment firms and credit institutions, implemented the revised framework for the International Convergence of Capital Measurement and Capital Standards (Basel II) within EU member states.

Pro cyclicality has attracted a lot of attention – particularly with regards to the recent financial crisis, owing to concerns arising from increased sensitivity to credit risk under Basel II. This paper not only considers whether such concerns are well-founded, but also the beneficial and not so beneficial consequences emanating from Basel II's increased sensitivity to credit risk (as illustrated by the Internal Ratings Based approaches). In so doing it considers the effects of Pillar 2 of Basel II, namely, supervisory review, with particular reference to buffer levels, and whether banks' actual capital ratios can be expected to correspond with Basel capital requirements given the fact that they are expected to hold certain capital buffers under Pillar 2. Furthermore, it considers how regulators can respond to prevent systemic risks to the financial system during periods when firms which are highly leveraged become reluctant to lend. In deciding to cut back on lending activities, are the decisions of such firms justified in situations where such firms' credit risk models are extremely and unduly sensitive - hence the level of capital being retained is actually much higher than minimum regulatory Basel capital requirements ?

Basel II and the Capital Requirements Directive: Responding to the 2008/09 Financial Crisis

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Introduction

A recurring theme which has featured amongst the reasons attributed to the need for amendments to the Capital Requirements Directive, is the mitigation of pro cyclicalities. Efforts aimed at addressing pro cyclicalities, as stated in the Accompanying Document to the Proposal for a Directive of the European Parliament² focus on areas such as systemically relevant matters, bank regulation and remuneration.³ Bank regulation, namely, Basel II and the Capital Requirements Directive, will constitute the focus of this study. The paper commences with a discussion on developments which have taken place within the legislative framework for capital requirements, embracing events leading up to the adoption and implementation of the CRD. It then follows with a section which considers why further revisions to bank regulation and the Capital Requirements Directive in particular, have become necessary. In so doing, it makes reference to lessons drawn from the recent financial crises and areas in need of greater attention, as identified by the High Level Group on Supervision, and measures put forward to address these problems.

The paper then considers developments which have taken place under Basel II and factors which have prompted the need for such developments, with particular reference to the need for increased sensitivity to credit risk. Basel II's efforts to increase sensitivity to credit risk, whilst having been lauded, has also drawn criticisms and concerns – particularly with regards to one topic, namely, pro cyclicalities. Such concerns will be addressed having regard to safeguards which are in place within the CRD and Basel II, and which have been established as means of mitigating pro cyclicalities. Other proposals put forward by the High Level Group on Supervision in their report will also be considered before a conclusion is arrived at.

Work undertaken on legislative framework for capital requirements

As part of necessary measures aimed at aligning the legislation on capital framework [for credit institutions (banks) and investment firms] with developments in the market, and with the work of the Basle Committee on Banking Supervision, the Consolidated Banking Directive 2000/12/EC and the Capital Adequacy Directive 93/6/EEC, whose legal bases are linked to that of the Basel 1 Accord and the Basel market risk amendments of 1996, were reviewed and updated with final proposals for the Basel II framework (in June 2004) and the Trading Book Review (in July 2005).⁴ The resulting Basel agreement, adopted in June 2006

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² And of the Council, amending Capital Requirements Directive on trading book, securitization issues and remuneration policies

³ See 'Commission proposes further revision of banking regulation to strengthen rules on bank capital and on remuneration in the banking sector' see < <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1120>>

⁴ See Commission Staff Working Document, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council, amending Directives 2006/48/EC and 2006/49/EC, Impact Assessment Document at page 4 < http://ec.europa.eu/internal_market/bank/docs/regcapital/impact_assessment_en.pdf>

as the Capital Requirements Directive (CRD), comprises the 2006/48/EC Directive⁵ and the 2006/49/EC Directive⁶.

In implementing the revised framework for the International Convergence of Capital Measurement and Capital Standards (Basel II) within EU member states, the Capital Requirements Directive underwent a two stage procedure. Under the first part of the two stage procedure of implementing the CRD on a national basis, the majority of the rules entered into force on the 1 January 2007 (whereby it could be adopted at an earlier period during 2007 and fully adopted on 1 Jan 2008) whilst the remaining rules were to take effect on 1 Jan 2008.⁷

Even though the Capital Requirements Directive was fully implemented on the 1 January 2008, certain areas were “left open” at the time it was adopted in 2006 – with the intention that such areas, through further policy measures, would be accorded due consideration.⁸ Revisions which relate to such “left open” areas at the time of the CRD adoption comprise:⁹

- Either revisions of rules that were brought forward from previous directives
- Principles and rules that had not been formalised at EU level

In addition to the afore mentioned “left open” areas which are to constitute the subject of future amendments, other reasons which justify the need for amendments within the Capital Requirements Directive arise from: Inconsistencies which, having been identified during the CRD transposition phase, required redress to prevent the goals of the CRD from being undermined; and the amendments of other areas whose flaws were revealed during the recent financial crisis.¹⁰

Objectives aimed at ensuring that the effectiveness of the Capital Requirements Directive is not undermined include:¹¹ The enhancement of financial stability, safeguarding creditor interests, ensuring international competitiveness of the EU banking sector and further promotion of the integration of the internal banking market. Operational objectives which are aimed at resolving drivers of specific problems include : The enhancement of legal certainty, the enhancement of supervisory cooperation, the enhancement of a level playing field, reduction of compliance burden and the facilitation of cross sector convergence, and the objective that these operational objectives, in turn, will facilitate the realisation of the four stated general policy objectives.¹²

⁵ On the taking up and pursuit of the business of credit institutions

⁶ On the capital adequacy of investment firms and credit institutions

⁷ See K McCaw and J Walsh ‘Basel II Big Bang: Full Implementation of the CRD’ <http://www.gtnews.com>
Whilst firms were required to implement the Pillar 1 approaches (approaches to measuring credit, market and operational risks) by the 1 January 2008, this also represented the earliest date for filing for an application of the use of the advanced measurement approaches to measuring both credit and operational risk

⁸ See Commission Staff Working Document, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council, amending Directives 2006/48/EC and 2006/49/EC, Impact Assessment at page 5

⁹ *ibid*

¹⁰ *ibid*

¹¹ *ibid* at page 20

¹² *ibid*

Further revision of banking regulation to strengthen rules on bank capital and on remuneration in the banking sector, as proposed by the Commission

Further proposed amendments to the Capital Requirements Directive, as adopted by the Commission, are not only aimed at capital requirements for the trading book and re securitisations, but also the disclosure of securitisation exposures and remuneration policies.¹³ Further revisions to European capital regulation of banks were proposed in order to prevent the re -occurrence of recent and present financial problems, to manage risks associated with financial instability and pro cyclicity in a more effective way.¹⁴ Efforts aimed at addressing pro cyclicity focus particularly on the following areas:¹⁵ Systemically relevant matters , bank regulation and remuneration.

Table 1: Three 'waves' of the CRD amendments 2008 - 2009

Timing of proposals	Major CRD provision areas changed	Justification / key objectives
October 2008	Revision of large exposures regime	Area 'left open' at the time of the CRD adoption in 2006
	Establishing a more harmonized treatment of hybrid capital instruments within original own funds	Area 'left open' at the time of the CRD adoption in 2006
	Revision of home-host supervisory and crisis arrangements	Change in response to the financial crisis, to provide for attainment of long-term policy objectives of bank capital regulation
	Derogations for bank networks from certain prudential requirements	Area 'left open' at the time of the CRD adoption in 2006
	Revision of treatment of life insurance as eligible collateral	Inconsistency identified in the CRD transposition process
	Revision of capital requirements for Collective Investment Undertakings under the IRB approach	Inconsistency identified in the CRD transposition process
	Revision of capital and risk management requirements for securitization positions	Change in response to the financial crisis, to provide for attainment of long-term policy objectives of bank capital regulation
July 2009**	Revision of capital requirements for the trading book	Changes in response to the financial crisis, to provide for attainment of long-term policy objectives of bank capital regulation, including enhancing stability and limiting procyclicality of the financial system (for more details, see Table 2)
	Revision of capital requirements for re-securitization positions in the banking book	
	Enhancing disclosure requirements of securitization risks	
	Enhancing supervisory review of remuneration policies	
Autumn 2009 (forthcoming)**	Introduction of supplementary measure to address leverage and/or liquidity risk	Change in response to the financial crisis, to provide for attainment of long-term policy objectives of bank capital regulation, including enhancing stability and limiting procyclicality of the financial system
	Introduction of counter-cyclical treatment of bank loan provisions	Change in response to the financial crisis, to provide for attainment of long-term policy objectives of bank capital regulation, including enhancing stability and limiting procyclicality of the financial system
	Making supervisory rules more consistent by reducing number of national options and discretions	Harmonize core set of standards applied across the Member States

** Changes included in the Commission Communication for the spring European Council of March 4, 2009

Source :¹⁶

¹³ See 'Commission proposes further revision of banking regulation to strengthen rules on bank capital and on remuneration in the banking sector' see < <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1120>> (last visited 10 September 2009)

¹⁴ See Commission Staff Working Document, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitization issues and remuneration policies at page 3 < http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assesment_en.pdf>

¹⁵ ibid at pages 45-47

¹⁶ Commission Staff Working Document, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book,

According to the Report of the High Level Group on Supervision, focus should be placed on principal sources of flaws in the current financial regulatory design – with such focus addressing issues relating to financial bubbles, consolidation of the regulatory oversight of institutions whose regulation has been demonstrated to be insufficient, addressing practices which are both regulatory and related to accounting – which have exacerbated pro cyclical, facilitating proper incentives for good governance and transparency, implementing appropriate safeguards which are aimed at ensuring consistency in standards and rules, as well as greater coordination between regulators and supervisors, internationally.¹⁷ Furthermore, practices which facilitate over regulation should be discouraged since such practices would weaken economic growth on a wider basis, by acting as sources of impediment to financial innovation.¹⁸

The Need for Greater Emphasis on Macro Prudential Aspects and Systemic Risk

The significance of macro economic policies and their relationship to regulatory policies has been identified in the High Level Group's Report where it attributes "ample liquidity and related low interest conditions" as factors which not only contributed to high levels of risk taking by banks and other financial institutions, but eventually led to the crisis.¹⁹ Some lessons from the crisis as identified by the High Level Group on Supervision are as follows:²⁰

- Early warning signal mechanisms not effective enough
- Excessive focus by current EU supervisory arrangements on micro supervision – at the expense of macro supervision
- Competence problems
- Lack of cooperation between supervisors

Addressing inadequate macro prudential supervision and ineffectiveness of early risk warning systems

In view of current EU supervisory arrangements which under estimate macro prudential aspects of supervision, and having regard to the fact that macro prudential supervision is carried out by different fragmented bodies at various levels, without any mechanism to guarantee the implementation of macro prudential risk warnings or recommendations, the Commission is to recommend that the ESRC be reorganised as a new independent body, designated with the task of safeguarding financial stability through its oversight of macro prudential supervision at European level.²¹

securitization issues and remuneration policies at 8 <

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

¹⁷ Report of High Level Group on Supervision at pages 13,14

¹⁸ *ibid*

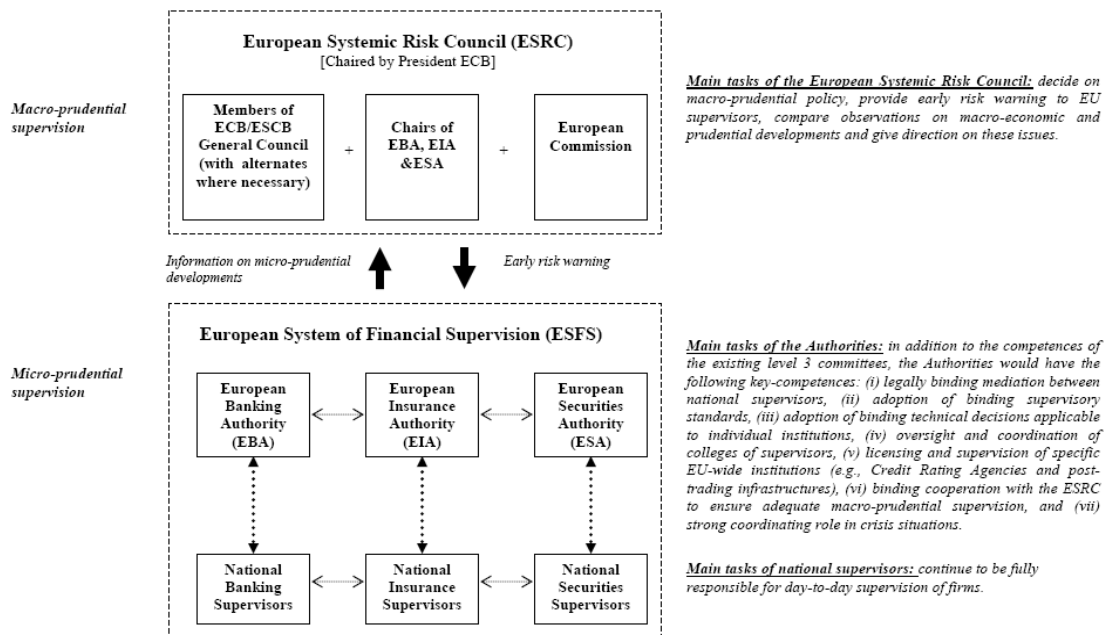
¹⁹ *ibid*

²⁰ *ibid* at pages 39,40

²¹ See European Financial Supervision: European Systemic Risk Council – Role and responsibilities of the ESRC at page 5. Furthermore, the ESRC is to be assigned with the following responsibilities:

- collecting and analysing all information relevant for monitoring and assessing potential threats to financial stability which arise from macro economic developments and developments within the financial system as a whole
- identifying and prioritising such risks
- issuing risk warnings where risks appear to be significant

A new European Framework for Safeguarding Financial Stability



Source: Report by the High Level Group on Supervision²²

Addressing Basel II

Efforts culminating in the revised framework for the International Convergence of Capital Measurement and Capital Standards (Basel 2) were aimed at addressing capital arbitrage and increasing sensitivity to risk – features which were not present under the 1988 Basel Accord. A prominent goal during the negotiations culminating in the Basel II agreement was resolving the problems attributed to the “failure to distinguish between commercial loans of very different degrees of credit risk”.²³ This gap was exploited as a means of transferring low-risk items off-balance sheet whilst retaining those items considered to present a relatively high level of risk.²⁴ “Financial innovations” resulting from the weakness of the 1988 Accord, it is argued, furnished banks with the means of “arbitraging differences between regulatory and economic capital.”²⁵ Even though, it is further argued, that such arbitrage practices have contributed in the minimisation of “allocative inefficiency”²⁶, from a regulatory point of view,

- giving recommendations where necessary – in relation to measures which are to be taken in response to identified risks
- monitoring required follow up to warnings and recommendations, and
- liaising with the IMF, FSB and other counterparts.

²²Report of High Level Group on Supervision at page 57

²³ See M Gordy and B Howells ‘Pro cyclicity in Basel II: Can We Treat the Disease Without Killing the Patient?’ 2004 at page 1 <http://www.bis.org/bcbs/events/rtf04gordy_howells.pdf> (last visited 14 September 2009)

²⁴ *ibid*

²⁵ *ibid*; also see D Jones, ‘Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues’ *Journal of Banking and Finance* 2000 24 (1-2) at pages 35-58

²⁶ It is contended that if banks had not been able to “circumvent” the 1988 Accord, that they would have been placed at a competitively disadvantageous position in their dealings with non bank lenders; see *ibid*

regulatory arbitrage has weakened the potential of the 1988 Accord.²⁷ Under Pillar One, the objective is to align regulatory capital requirements with “economic capital” required by investors and other associated parties.²⁸

Under Basel 2, unlike the original capital Accord, capital charges are determined in accordance with asset quality – as opposed to asset type.²⁹ The Internal Ratings Based approach to capital requirements for credit risk not only relies significantly on the internal assessment carried out by a bank in relation to counter parties and exposures, but is geared towards the achievement of two primary goals.³⁰ These are namely, “additional risk sensitivity” and “incentive compatibility.”³¹ As a result, the benefits which Basel 2 exhibits, when compared to the 1988 Accord, relate to the fact that there should be a reduction in pricing distortions which may arise across loan categories – owing to risk based capital requirements; and that, incentives to participate in forms of regulatory capital arbitrage should correspondingly be reduced.³² However, concerns which have been raised in relation to Basel II include, amongst other issues, the increased sensitivity to credit risk. This is attributed to the fact that banks would be compelled to maintain higher levels of capital against present loan portfolio in cases where such banks’ capital bases are being depleted by losses arising from its loans and where its existing ‘non defaulted’ borrowers have to be ‘downgraded’ by appropriate credit risk models.³³ Furthermore, banks may also be compelled to restrict the level of loan lending activities where such banks not only find it costly, but also experience difficulties in raising additional capital from external sources during periods of economic downturns – hence further aggravating the extent of the downturn.³⁴ Whilst Heid also argues that the cyclical effects induced by Basel 2 could generate problems in situations where write offs in banks’ loans portfolios lead to the depletion of equity capital, hence triggering an increase in capital charges in periods of economic downturns, he adds that the consequences of a reduction in the lending activities of capital restricted banks, on the economy, could be even more draconian.³⁵ Thus, the alignment of regulatory capital with economic risks, as evidenced under Basel 2; whilst reducing the scope for regulatory arbitrage practices, also has the potential to induce cyclical effects on the required minimum capital – through its ability to increase the sensitivity to credit risk.³⁶ With the Internal Ratings Based approach, credit risk is estimated in relation to four elements namely: The probability of default (PD), loss given default (LGD), exposure at default (EAD); and maturity (M).³⁷

²⁷ See M Gordy and B Howells ‘Pro cyclicity in Basel II: Can We Treat the Disease Without Killing the Patient?’ 2004 at page 1 and D Jones, ‘Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues’ Journal of Banking and Finance 2000 24 (1-2) at pages 35-58

²⁸ *ibid*

²⁹ See F Heid, ‘Cyclical Effects of the Basel II Capital Requirements’ Journal of Banking and Finance Vol 31 Issue 12 2007 at pages 3885-3900

³⁰ ‘The Internal Ratings Based Approach’, Supporting Document to the New Basel Capital Accord 2001 <http://www.bis.org/publ/bcbcsa05.pdf> (last visited 3 August 2009) at page 1

³¹ With respect to „incentive compatibility“, a well- structured IRB approach could stimulate banks to improve their internal management practices on a continual basis. *ibid*

³² Also see A Kashyap and J Stein ‘Cyclical Implications of the Basel II Capital Standards 2003 at page 1

³³ *ibid* at page 2

³⁴ *ibid*

³⁵ See F Heid, ‘Cyclical Effects of the Basel II Capital Requirements’ Journal of Banking and Finance Vol 31 Issue 12 2007 at pages 3885 and 3886

³⁶ *ibid* at pages 3885-3900

³⁷ See A Kashyap and J Stein ‘Cyclical Implications of the Basel II Capital Standards 2003 at page 1

³⁷ *ibid* at page 1

Measures provided for mitigating the effects of pro cyclicalities under the Capital Requirements Directive and Pillar Two of Basel II (Supervisory Review).

The CRD's potential to generate further pro cyclicalities as a result of greater risk sensitivity induced by its capital requirements, had been anticipated during its design.³⁸ In providing for the possibility of such an occurrence, the CRD incorporates specific elements aimed at alleviating these effects, through the application 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.³⁹ However, the Financial Stability Forum (FSF), in its report which addresses pro cyclicalities in the financial system, lists four recommendations which acknowledge and confirm the need for further measures aimed at mitigating the effects of pro cyclicalities within the capital requirements framework.⁴⁰

Its recommendations embrace a variety of options ranging from a reduction of cyclical risk sensitivity to enhancing its risk capture and deliberately introducing counter-cyclical buffers which are comprised of capital and/or provisions and cover three areas, namely: bank capital framework, bank loan loss provisions and leverage and valuation issues.⁴¹

Pillar Two consists of four principles, namely:⁴²

- Principle 1: Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
- Principle 2: Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.
- Principle 3: Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.
- Principle 4: Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

Even though the ability of supervisors to exercise discretionary powers under Pillar Two, is considered to be a means of mitigating the effects of pro cyclicalities,⁴³ Principles 3 and 4, through the stipulation of undetermined and indefinite buffer levels, can be argued to introduce an element of uncertainty in failing to stipulate precisely the required buffer levels.

³⁸ See Commission Staff Working Document, Accompanying Document to the Proposal for a Directive of the European Parliament and of the Council amending Capital Requirements Directive on trading book, securitization issues and remuneration policies <

http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/impact_assessment_en.pdf> (last visited 10 September 2009) at page 45

³⁹ *ibid*

⁴⁰ *ibid*

⁴¹ *ibid*

⁴² See 'Four Key Principles of Supervisory Review' < <http://www.bis.org/publ/bcbs107c.pdf>> at pages 159 -165

⁴³ Gordy and Howells argue that as a result of the powers granted to supervisors under Pillar Two, such powers could serve to address pro cyclicalities. See M Gordy and B Howells, 'Procyclicality in Basel II: Can We Treat The Disease Without Killing the Patient?' 2004 at page 3

Such element of judgement which is accorded to supervisors could result in situations where supervised institutions actually retain an excessive amount of capital than is required under Basel II – as was evidenced by Northern Rock on the day before its crash.

Other regulatory weaknesses identified by the High Level Group on Supervision which require urgent attention

The High Level Group's Report acknowledged the need to address and revamp the Basel 2 framework.⁴⁴ As well as identifying the under estimation of some significant risks by Basel II's framework, and its over estimation of banks' ability to deal with such risks, it highlighted the inaccuracy (on a global basis), of the "perceived wisdom that distribution of risks through securitisation took risks away from the banks."⁴⁵ Such inaccuracy in its view, resulted insufficient capital requirements being imposed.⁴⁶

Matters relating to liquidity were also considered to be vital – having regards to individual financial firms and the regulatory system.⁴⁷ In the opinion of the High Level Group, greater attention should be given by supervisors to areas involving mismatches of firms being supervised. The extent to which the maturity of funding determines the risk of an asset is an important lesson from the recent financial crises.⁴⁸ A reason which was attributed to Northern Rock's vulnerability was its excessive reliance on wholesale funds.⁴⁹

Conclusion

Whilst it is contended that under Basel 1, based on research evidence, capital buffers increase during economic downturns and decrease during economic booms, and that increased risk sensitivity of Basel 2 would amplify sensitivity of capital charges, it has been demonstrated, in contrast to other studies, that a significant degree of pro cyclicality may still exist even if banks were not restricted by capital.⁵⁰ Furthermore, it is also argued that capital buffers will only diminish the volatility of capital charges to an extent, and that on the whole, Basel 2 will have a pro cyclical effect on lending.⁵¹

The vulnerability of highly leveraged firms in times of economic downturns was demonstrated by Northern Rock.⁵² As well as introducing counter cyclical mechanisms(whose measures are tough during credit booms and relaxed during economic downturns),

⁴⁴ Report of High Level Group on Supervision page 16

⁴⁵ *ibid*

⁴⁶ *ibid*

⁴⁷ See paragraph 55 of the Report of the High Level Group on Supervision at page 16

⁴⁸ See M Brunnermeier and others, 'The Fundamental Principles of Financial Regulation: Geneva Reports on the World Economy 11', Preliminary Draft 2009 at viii

⁴⁹ S Cociuba, 'Seeking Stability: What's Next for Banking Regulation?' Chart 3
<http://www.ideas.repec.org/a/fip/feddel/y2009iaprny.4no.3.html> (last visited 25 May 2009)

⁵⁰ See F Heid, 'Cyclical Effects of the Basel II Capital Requirements' *Journal of Banking and Finance* Vol 31 Issue 12 2007 at pages 3885- 3889

⁵¹ *ibid*

⁵² For detailed information on this, see *The Run on the Rock*, House of Commons Treasury Committee, Fifth Report of Session 2007–08, vol. 1, January 2008, pp. 14–15, S Cociuba, 'Seeking Stability: What's Next for Banking Regulation?', M Brunnermeier et al, *The Fundamental Principles of Financial Regulation: Geneva Reports on the World Economy 11*, Preliminary Draft 2009 at page 32 and HS Shin, 'Reflections on Northern Rock: The Bank Run that Heralded the Global Financial Crisis' forthcoming the *Journal of Economic Perspectives*.

Brünnermeier et al propose a tool which would empower regulators to compel the conversion of existing debt to equity during periods of economic crisis – hence mitigating systemic effects of the crisis.⁵³ It is also added that resort should be had to such a tool only when the entire (or part of) economy is experiencing economic difficulties. In Heid's opinion, in comparison to the 1988 Accord, a unique feature has been introduced by Basel II in the dynamism and the potential it accords to banks in enabling them to manage high levels of credit – through a transformation of their funds from loans to bonds.⁵⁴

As well as the consideration of counter cyclical mechanisms, measures aimed at addressing liquidity risks and special resolution regimes⁵⁵ (as demonstrated in the case of Northern Rock) are assuming increasingly important roles. Liquidity risks and maturity mismatches featured prominently in the events culminating in the collapse of Northern Rock. According to Brunnermeier et al, “the financial system's reliance on short-term funding of long-term assets with potentially low market liquidity” has contributed significantly to instability in the past and present financial crises.⁵⁶

Other proposals aimed at countering the effects of pro cyclicalities of fair value measurements include reclassifications, smoothing techniques and circuit breakers.⁵⁷

The fourth recommendation of the High Level Group on Financial Supervision in the EU, which relates to accounting rules, considers “a wider reflection on the mark-to-market principle” to be vital in addressing pro cyclical effects.⁵⁸ The Report of the High Level Group on Supervision also emphasised the need to facilitate proper incentives for good governance and transparency, the implementation of adequate safeguards aimed at guaranteeing consistency in standards and rules, as well as greater coordination between regulators and supervisors internationally.

One of the financial regulatory weaknesses identified in the recent financial crisis includes an underestimation of the impact of macro prudential regulation and systemic risks. As well as consolidating global arrangements for enhancing global financial stability through the G20's establishment of the Financial Stability Board which will work closely with the International Monetary Fund to provide early warnings relating to macro prudential risk, the need for a body within the EU, which is specially designated for macro supervision within the EU financial services sector, has been identified as another vital factor to ensuring stability.⁵⁹

⁵³ M Brünnermeier et al, *The Fundamental Principles of Financial Regulation: Geneva Reports on the World Economy 11'*, Preliminary Draft 2009 at page 33

⁵⁴ See F Heid, 'Cyclical Effects of the Basel II Capital Requirements' *Journal of Banking and Finance* Vol 31 Issue 12 2007 at pages 3889-3890

⁵⁵ Please refer to M Ojo, 'Central Bank's Role and Involvement in Bank Regulation: Lender of Last Resort Arrangements and the Special Resolution Regime (SRR)' 2009

⁵⁶ *The Fundamental Principles of Financial Regulation: Geneva Reports on the World Economy 11'*, Preliminary Draft 2009 at page 38

⁵⁷ See M Grande „Accounting and Procyclicality“, *Conference on Financial Reporting in a Changing World*, page 2 of 5

⁵⁸ The 'Brief Summary of the De Larosiere Report' at page 9 of 18

⁵⁹ See European Financial Supervision: European Systemic Risk Council – The case for reform of macro prudential supervision at page 4 <
http://ec.europa.eu/internal_market/finances/docs/committees/supervision/communication_may2009/C-2009_715_en.pdf>

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