### ABSTRACT

This paper considers and assesses various explanations attributed as principal factors of the recent Financial Crisis. In particular, it focuses on two principal regulatory tools which constitute the basis of the framework promulgated by recent Basel Committee's initiatives, that is, Basel III. These two regulatory tools being capital and liquidity requirements.

Various conclusions have been put forward to explain what triggered the recent Financial Crisis. This paper aims to explain why the Basel Committee's liquidity requirements and present proposals aimed at addressing liquidity risks, still represent a very modest milestone in efforts aimed at addressing challenges in prudential regulation and supervision. Even though problems attributed to capital adequacy requirements are considered by many authorities to have triggered the recent Crisis, the paper will highlight how runs on banks are triggered by liquidity crises and that liquidity risks cannot be isolated from systemic risks. In so doing, it will incorporate the roles assumed by information asymmetries and market based regulation – hence elaborate on how market based regulation could serve to address problems which trigger liquidity risks. Imperfect knowledge being a factor which is contributory to liquidity crises and bank runs, and market based regulation being essential in facilitating disclosure - since the Basel Committee's focus on banks and prudential supervision cannot on its own, address the challenges encountered in the present regulatory environment.

Furthermore, it will address measures and proposals which could serve as bases for future regulatory reforms - as well as criticisms and challenges still encountered by recent Basel Committee initiatives.

Key Words: capital; liquidity, Basel III, Basel Committee, lender of last resort, banks, insurance, securities, information asymmetry, market based regulation, bail outs, disclosure, moral hazard, Dodd Frank Act, Financial Crisis.

# Preparing for Basel IV – Why Liquidity Risks Still Present a Challenge to Regulators in Prudential Supervision.

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## Introduction

Two vital prudential regulatory tools which Basel III addresses, namely capital and liquidity requirements, are considered to be instrumental in triggering the first of two types of crises (banking crises). These crises, as identified by Lastra and Wood, are banking crises<sup>2</sup> and financial crises.<sup>3</sup> Even though various factors have been put forward as constituting principal contributory factors to the recent Crisis,<sup>4</sup> the need to address liquidity requirements and particularly liquidity risks, – along with the role which market based regulation can assume to achieve this aim, will constitute the recurring theme of this paper.

The definition of liquidity, as provided by the Bank of International Settlements (BIS), is "the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. 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."<sup>5</sup>

A liquidity crisis is considered to be "the classic type of banking crisis whereby a bank for some reason, cannot meet all its payment obligations."<sup>6</sup> The role played by imperfect knowledge in triggering such a crisis is further elaborated. In this sense, bank runs are triggered as a result of such "imperfect knowledge which customers have of their banks, and the links through the interbank market and payment system."<sup>7</sup>

The ECB's Financial Stability Review, identifies the fact that "the specific knowledge that banks possess about their borrowers make bank loans particularly illiquid."<sup>8</sup> The connection between liquidity and systemic risks is further highlighted in the Review where it elaborates on possible consequences resulting from a bank's failure, namely:<sup>9</sup> The "destruction" of such specific knowledge which banks have about their borrowers and the reduction of "the common pool of liquidity."<sup>10</sup> Such reduction in the common pool of liquidity may also trigger the failure of other banks – with the result that i) the value of such illiquid bank assets diminishes and ii) further

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<sup>2 &</sup>quot;Which affect the money stock and thus threaten the economy"; RM Lastra and G Wood, "The Crisis of 2007 – 09:

Nature, Causes and Reactions" Journal of International Economic Law 13(3) 531-550 at page 531

<sup>3 &</sup>quot;Which may destroy wealth but do not endanger the economy as a whole"; ibid.

<sup>4</sup> Those identified by Lastra and Wood include easy money, excessive leverage, risk management failures, bad lending, too big to fail policies, inadequate supervision and ill thought out regulation; see ibid.

<sup>5</sup> Principles for Sound Liquidity Risk Management and Supervision Sept 2008 at page 1 <a href="http://www.bis.org/publ/bcbs144.htm">http://www.bis.org/publ/bcbs144.htm</a>

<sup>6</sup> See RM Lastra and G Wood, "The Crisis of 2007 – 09: Nature, Causes and Reactions" Journal of International Economic Law 13(3) at pages 531 and 532

<sup>7</sup> Ibid

<sup>8 &</sup>quot;The Concept of Systemic Risk" Financial Stability Review December 2009 http://www.ecb.int/pub/fsr/shared/pdf/ivbfinancialstabilityreview200912en.pdf? a3fef6891f874a3bd40cd00aef38c64f at page 137

<sup>9</sup> ibid

<sup>10</sup> ibid

problems within the banking systems are aggravated.<sup>11</sup>

In their report on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk", the Financial Stability Forum (FSF) noted that at the onset of the recent financial crises, the complex response of financial institutions to deteriorating market conditions, was to a large extent, attributed to liquidity shortfalls which reflected "on and off balance sheet maturity mismatches and excessive levels of leverage."<sup>12</sup>

For these reasons, even though it has been concluded that "the first crisis of the century was a capital crisis – not a liquidity crisis",<sup>13</sup> this paper advocates for greater attention to be accorded to the topic "liquidity", as well as measures aimed at addressing liquidity shortfalls - such importance being attributed to their contributory roles in triggering systemic and resulting banking crises. Furthermore the paper highlights why greater focus on insurance and securities regulation is required since the most effective tools in addressing systemic risk, to a greater extent, will require the implementation of market based regulation. In addressing some issues which may constitute some areas of consideration in future Basel reforms, the first section not only commences with a consideration of the need to incorporate the role of the lender of last resort in liquidity crises, but also consideration of the need to incorporate the role which central banks are capable of assuming as lenders of last resort in Basel Liquidity Risk Measurements. From this perspective, even though it may not be feasible to incorporate such function in Basel liquidity risk measurements, this provides a suitable forum for the consideration of how market based regulation could contribute in assisting to mitigate situations whereby moral hazard could arise.

A discussion of the need for greater extension of regulation to the securities and insurance industries will not only constitute the topic of discussion in section two, but also partly serve as justification for facilitating market based regulation. The role played by non bank institutions in triggering the recent Financial Crisis also serves as further evidence and justification for the need for greater focus in extending regulation to the insurance and securities sectors. Furthermore, the section will highlight and elaborate on the links between moral hazard, market based regulation, transparency and disclosure.

A brief analysis of other criticisms which have arisen - as well as challenges presented by recent Basel initiatives, will be provided under section three before a conclusion is drawn.

I. The Importance of the Role of the Lender of Last Resort and Liquidity Crises.

Two quotations are considered by Lastra and Wood as providing the best clarification to i) how a lender of last resort operation by the central bank can stop a liquidity crisis, and ii) what constitutes a liquidity crisis.

The first of these makes reference to Thornton's 1802 quotation:<sup>14</sup>

<sup>11</sup> ibid

<sup>12</sup> Report of the Financial Stability Forum on "Addressing Pro cyclicality in the Financial System: Measuring and Funding Liquidity Risk" <u>http://www.financialstabilityboard.org/publications/r\_0904a.pdf</u> at page 24

<sup>13</sup> See RM Lastra and G Wood, "The Crisis of 2007 – 09: Nature, Causes and Reactions" Journal of International Economic Law 13(3) at page 535.

<sup>14</sup> See RM Lastra and G Wood, "The Crisis of 2007 – 09: Nature, Causes and Reactions" Journal of International Economic Law 13(3) at page 532 and also see H Thornton, An Enquiry into the Nature and Effects of the Paper Credit of Great Britain (London: J Hatchard and F and C Rivington, 1802)

 If any bank fails, a general run upon the neighbouring banks is apt to take place, which if not checked, in the beginning by a pouring into the circulation of a very large quantity of gold, leads to a very extensive mischief.

The second relates to Bagehot's quotation - which is as follows: <sup>15</sup>

- What is wanted and what is necessary to stop a panic is to diffuse the impression that though money may be dear, money is still to be had."

One shortcoming of the Basel Committee in its recent proposals which relate to liquidity risk measurements<sup>16</sup>, as identified by Scott<sup>17</sup> is its "failure to factor in the role of central banks as lenders of last resort." Even though he highlights the Basel Committee's acknowledgement of the fact that particular runs<sup>18</sup> are less likely for certain institutions (where a deposit base and deposit insurance exists)<sup>19</sup> than is the case for institutions with greater wholesale funding, he also adds that the likelihood of runs occurring in the case of banks with a high percentage of liabilities in deposits still exists – this being attributed to either limited deposit insurance amounts or irrational depositors. Where such circumstances arise, that is, where limited deposit insurance amounts or irrational depositors exist, such circumstances, in his opinion, provide the opportunity whereby central banks have functioned as lenders of last resort to banks which are able to "post adequate collateral." He however criticises the Basel Committee's failure to factor such possibility or fact in its calculations.<sup>20</sup>

The role of market based regulation in mitigating excessive risk taking levels – hence addressing risks posed by irrational depositors or negligent management comes into play. Furthermore, the need to adequately and promptly discern those banks which should be provided with assistance from lender of last resort arrangements – hence avoiding moral hazard is of primary importance. The Basel Committe's recent initiatives in amending Pillar III reflect its efforts in facilitating market discipline. Its recent amendments to Pillar 3 of Basel II, include a statement that "banks need to make disclosures that reflect their real risk profile as markets evolve over time", are aimed at strengthening guiding principles of Pillar 3 (as provided for under paragraph 809).<sup>21</sup>

Other measures aimed at enhancing disclosure requirements relate to areas which include "securitisation exposures in the trading book and sponsorship of off balance sheet vehicles."<sup>22</sup>

- 17 See H Scott "Reducing Systemic Risk Through the Reform of Capital Regulation" Journal of International Economic Law 13(3) at page 772
- 18 Runs on banks caused by the insolvency of other banks
- 19 Hence justifying the fact that banks have not traditionally been required to retain sufficient liquidity to survive a run on banks caused by the insolvency of other banks
- 20 In this sense Scott is referring to the Basel Committee's liquidity proposal of December 2009, whereby two objectives were formulated: (i) "that banks should have sufficient high quality liquid resources to survive anacute stress scenario lasting one month, formalized in a Liquidity Coverage Ratio and (ii) that banks should have stable funding in the longer term, formalized in a Net Stable Funding Ratio."
- 21 See Consultative Document of the Basel Committee on Banking Supervision "Proposed Enhancements to the Basel II Framework January 2009" < http://www.bis.org/publ/bcbs150.pdf> and the finalised proposals for enhancing the Basel II framework : "Enhancements to the Basel II Framework" July 2009 particularly "Changes to the Pillar 3 Disclosure Requirements" at page 29 < http://www.bis.org/publ/bcbs157.pdf>
- 22 See Summary of Impact Assessment document amending Capital Requirements Directive on trading book, securitization issues and remuneration policies particularly section 5.3 on "Disclosure of Securitization Risks" at page 5 <<u>http://ec.europa.eu/internal\_market/bank/docs/regcapital/com2009/summary\_en.pdf</u>>

<sup>15</sup> See RM Lastra and G Wood, "The Crisis of 2007 – 09: Nature, Causes and Reactions" Journal of International Economic Law 13(3) at page 533 and W Bagehot, *Lombard Street: A Description of the Money Market* (London: Henry S King & Co, 1873)

<sup>16</sup> Basel Committe on Banking Supervision, "International Framework for Liquidity Risk Measurement, Standards and Monitoring", (December 2009) <a href="http://www.bis.org/publ/bcbs165.pdf">http://www.bis.org/publ/bcbs165.pdf</a>>

According to the Summary of the Impact Assessment Document, such amendments are not only aimed at improving investors' understanding of risk profiles of banks, but also aimed at reinforcing bank risk management incentives – by allowing market participants to exercise discipline.<sup>23</sup>

Just as the exercise of discipline by market participants could serve as an impediment to excessive risk taking levels, conversely, moral hazard serves as an impediment to market based regulation. The capacity of deposit insurance to serve as an impediment to forces of market discipline has been highlighted. In illustrating its impact on market discipline, Kaufman states that the substantial and easily relatively reduced losses to bank depositors, federal deposit insurance corporation, loan customers and users of the payments system – as well as the reduction in levels of bank failures (generally), may result in the potential for "even temporary disruptions in either bank-loan customer relations or the payments system (through increasing capital requirements and enforcing prompt regulatory corrective intervention and least cost resolution provisions)."<sup>24</sup>

Further means whereby excessive levels of risk taking could be controlled have been advocated. These include the implementation of financial taxes as means of enhancing the regulation of financial markets.<sup>25</sup> Financial taxes are considered to have three main objectives: (i) "to limit excessive risk-taking, (ii) to provide an insurance or resolution fund for systemically important institutions and (iii) to help pay for global public goods." It is also emphasized that these three objectives are separable, both in their economic rationale and in practice.<sup>26</sup>

Kern distinguishes between the FSC (Financial Stability Contribution) which he highlights as being primarily designed as an insurance fund to pay retrospectively for the resolution or bailout of a large systemically important or too-interconnected-to-fail bank or financial institution and, the FAT (Financial Activities Tax) – which he highlights as being primarily applied prospectively to deter excessive risk-taking.<sup>27</sup>

His criticism of the bank balance sheet tax is that it will fail to deter banks from engaging in excessive risk-taking and will not generate adequate revenue to pay for a resolution fund because most banks will avoid the tax by shifting risky assets and liabilities off balance sheet to affiliates and related entities located outside the taxing jurisdiction and that such weaknesses of the proposed bank balance sheet tax suggest that policy-makers should consider the merits of a FTT (Financial Transaction Tax) that would be applied by national governments and collected by banks and dealers.<sup>28</sup>

<sup>23</sup> ibid

<sup>24 &</sup>quot;Such provisions", in Kaufman's opinion, "attempt to mimic forces of market discipline in an insured depositor environment." GG Kaufman "Bank Contagion: A Review of the Theory and Evidence" Journal of Financial Services Research Volume 8 No 2 at page 143 and 144; For further information on the impact of deposit insurance on market discipline, see M Ojo, "The need for government and central bank intervention in financial regulation: Free banking and the challenges of information uncertainty." <u>http://mpra.ub.uni-muenchen.de/23298/</u> at page 6 of 15 and <u>http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1624918</u> at page 5

<sup>25</sup> See A Kern, "International Regulatiory Reform and Financial Taxes" Journal of International Economic Law (13) 3 and particularly page 894.

<sup>26 &</sup>quot;The first objective, limiting excessive risk-taking, is derived from the desire to price risk efficiently. In this case, how the funds are used subsequently is not of primary concern. Second, the proposition that such funds might be used to build an insurance fund is an entirely separate argument related not to mitigating the riskiness of financial transactions but to pricing accurately the implicit insurance provided to institutions deemed too big or too inter-connected to fail. The provision of assistance to those most affected by ill-chosen risk-taking is a third component of an efficient pricing strategy. Hence the objective of efficient pricing may be pursued by adopting all three goals at once, or by pursuing them separately." Ibid

<sup>27</sup> Ibid at page 896

<sup>28</sup> Ibid at page 897

## II. The Extension of Regulation to the Insurance and Securities Industry

As stated in a previous paper,<sup>29</sup> 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."

In his paper, Scott argues that two of the most important policies for dealing with systemic risk are namely: the imposition of capital requirements (or limits on leverage) and the use of market discipline in calibrating, enforcing and regulating these requirements.<sup>30</sup>

Furthermore he adds that "Without eliminating all but assured bailouts for systemically important institutions, creditors will not adequately police financial institution's capital. And, without the right information, the market will be unable to estimate the right amount of capital."

The importance of addressing moral hazard, its impact on market discipline and the need for greater transparency in financial regulation is thus emphasised again. Interestingly enough, whilst transparency is essential in facilitating disclosure and the right information, it is also considered to facilitate moral hazard.<sup>31</sup> Kaufmann and Weber argue that amongst those reasons put forward as the basis for limiting regulatory transparency, the first phenomenon is the risk of moral hazard. "On the one hand, an investor will undoubtedly have an interest in knowing the consequences in the case that a financial institution becomes insolvent. From his or her perspective, any guarantee that potential losses will be covered by the state or insurance contributes to certainty. On the other hand, from an economic perspective, insolvent— in contrast to 'only' illiquid—financial institutions must not be rescued."<sup>32</sup>

Transparency, in their view, could however achieve its aim of "anchoring financial regulation within the constitutional framework" through the establishment of clear responsibilities and procedures - thereby reducing moral hazard.<sup>33</sup>

The "conventional justification" for regulation within the securities market is attributed to the fact that "exchanges on securities markets lead to external effects (for non participating and therefore non-considered third parties)".<sup>34</sup>Consequently public interest arises – which is aimed at "protecting potentially disadvantaged parties" (owing to reasons attributed to market structure and information asymmetry).<sup>35</sup>

<sup>29</sup> See M Ojo, "The Impact of Capital and Disclosure Requirements on Risks and Risk Taking Incentives"<<u>http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1547023</u> and <u>http://mpra.ub.uni-muenchen.de/20404/1/MPRA paper 20404.pdf</u> at page 5 of 17

<sup>30</sup> See H Scott "Reducing Systemic Risk Through the Reform of Capital Regulation" Journal of International Economic Law 13(3) at page 763

<sup>31</sup> For further information on the need to limit regulatory transparency because of moral hazard, see C Kaufmann and R Weber, Transparency: "Role of Transparency in Financial Regulation" Journal of International Economic Law at page 784.

<sup>32 &</sup>quot;Concerns about moral hazard are one of the reasons why many countries and the European Union (EU) decided not to publish, or not even to establish, rules on which an institution would act as a lender of last resort and under what conditions." ibid

<sup>33</sup> Ibid at page 787

<sup>34</sup> See "Securities Market Regulation: International Approaches" Deutsche Bundesbank Monthly Report January 2006 at page 36

<sup>35</sup> ibid

The role played by non bank institutions in triggering the recent Financial Crisis also serves as evidence and justification for the need for greater focus in extending regulation to the insurance and securities sectors. The need by the Basel Committee, the Financial Stability Forum and the G20 to address future runs which could still be caused by liquidity problems experienced at non-banks, including hedge funds, has been highlighted.<sup>36</sup>

## Transparency

Even though information asymmetry could be considered to constitute a greater basis for regulation within the securities markets, the existence of information asymmetry within the banking sector also 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.

Principles for transparency, as established under constitutional law, are also regarded by Kaufmann and Weber as being applicable to financial regulation. A comprehensive , rule-based – rather than a purely process-oriented approach, which also implies a three dimensional concept of transparency<sup>37</sup> in financial regulation, is proposed.<sup>38</sup>

Their proposed first dimension refers to institutional aspects, i.e. procedures and decision making. These two elements, in their view, having already been identified in a similar way, especially in the context of internet transparency, yet within a conceptually different framework."<sup>39</sup>

By providing legal certainty, transparency in their opinion, serves as an anchor for financial regulation - "the basis for establishing trust, which is the key element of any financial system."

According to their second dimension, transparency is understood as "the substantive backbone of financial regulation which lays open the values and goals of financial policy and regulation".<sup>40</sup>

The third dimension refers to the accountability of actors as an "essential element for rebuilding confidence in the financial system."<sup>41</sup>

<sup>36</sup> Even though the conversion of US investment banks to banks serves to diminish the scope issue with the Basel rules, Scott also argues that the major overall problem in the Basel Committee's approach to both capital and liquidity is that its requirements only focused on banks. He makes reference to the recent crisis and the fact banks are not the only institutions that can trigger or be the victims of a liquidity crisis. "The assisted acquisition of Bear Stearns, the conservatorship of AIG, and the failure of the Reserve Primary Fund, a money market fund, triggered liquidity runs whose victims included, but were not limited to, banks. See H Scott "Reducing Systemic Risk Through the Reform of Capital Regulation" Journal of International Economic Law at page 773

<sup>37</sup> C Kaufmann and R Weber, Transparency: "Role of Transparency in Financial Regulation" Journal of International Economic Law at page 779.

<sup>38</sup> Ibid at page 781.

<sup>39</sup> See ibid at page 779; Further, this constitutional dimension, in their view, defines the procedures and institutions by which financial markets are being regulated. A key issue and illustrative example provided by them in this regard is the too-big-to-fail problem in the aftermath of the financial crisis. Financial regulation in their opinion, needs to ,, define the applicable procedures for addressing this problem as well as the competent institutions." Further, ,,this requires a political decision which, regardless of its content, needs to be made transparent. From a transparency perspective, it is thus irrelevant whether a country opts for a 'political' solution by involviere parliament or prefers to take a 'technical' approach by engaging supervisory authorities and the central bank. The key is that whatever decision is made it is laid open and thus fosters credibility of the system as a whole."see ibid at page 796

<sup>40</sup> This second dimension is elaborated on as having two aspects: making the objectives and underlying values of public financial policy transparent whilst ensuring that information is both accessible and comprehensible. The essential element being quality, not quantity, of information. A current example provided in this context is the transparency of central bank objectives. See ibid at page 796

<sup>41</sup> This dimension, in their opinion, also addresses accountability as another important aspect of good governance. "Given the variety of actors and the multitude of standards applicable to financial markets, ensuring accountability

## III. Other Criticisms and Challenges Presented by Recent Basel Reforms

Recent Basel reforms relating to liquidity risk measurements and risk weightings have experienced their fair share of criticisms – as partly illustrated under section one. Furthermore, section two highlights why criticisms have arisen as a result of the Basel Committee's focus on the banking sector. The reliability of credit ratings (in view of the recent Financial Crisis) as means of determining risk weights, basic reforms relating to securitisation (as effective from December 2010), and the impediment faced by the Basel reforms which relate to securitizations and resecuritizations as presented by the Dodd Frank Act<sup>42</sup>(which prevents US regulators from relying on credit ratings in any regulation – thus making the implementation of Basel reforms relating to securitization and resecuritizations impossible), have also been highlighted.<sup>43</sup> Whilst consistency and reliability with its measurements constitutes an issue which the Basel Committee needs to address,<sup>44</sup> enforcement is also another in need of redress. A system geared towards a more rule based approach would definitely foster greater accountability than a principles based approach to regulation.

As well as the consideration of the adequacy and effectiveness of recently proposed liquidity measures, the transition period for the implementation of such rules has also proved to be a contentious topic. As highlighted in a previous paper, whilst some elements of the recent announcements relating to the new framework (for Basel III) are considered by certain jurisdictions to be disappointing - owing to the fact that more stringent definitions for capital had been expected, the phase in periods have been welcomed by several jurisdictions.<sup>45</sup>

### IV. Conclusion

Macro prudential regulation (as the most effective means of addressing systemic risk and maintaining financial stability) and the need for greater focus on liquidity risk related measures and

needs to be addressed from different perspectives. The concept proposed here is based on the distinction between the accountability of states and private actors and their contribution to restoring confidence in the financial system. The result is a threefold matrix for transparent financial regulation, relating to public and private actors and including the international dimension."see ibid at 796

<sup>42</sup> The Dodd Frank Wall Street Reform and Consumer Protection Act

<sup>43</sup> See H Scott, "Reducing Systemic Risk Through the Reform of Capital Regulation" Journal of International Economic Law 13(3) at pages 766-767. In addition, Scott adds that the risk weighting process is not only "methodologically suspect – but also subject to political pressure." In this respect he adds :,,Can there be any other reason why all residential mortgages (prime or subprime) were risk-weighted at 50% in Basel I, while all other secured debt to the private sector was risk-weighted at 100%? Indeed, Basel II was even worse, dropping the risk-weight on residential mortgages to 35%.

Clearly, assigning low risk-weights for residential mortgages was part of the strategy of the USA to promote home ownership, using risk-weights as a means of credit allocation. In addition, the latest revision to Basel II in July 2009, also effective in December 2010, increased capital for market risk (changes in value) of a bank's trading book. These changes also include a stressed value-at-risk (VaR) requirement, which the Committee believes will help dampen the cyclicality of the minimum regulatory capital framework. Again, the issue is whether regulators can get these capital charges right. While in the past capital requirements seem to have been too low, the risk for the future may be that they are too high, which would unnecessarily dampen economic recovery." see ibid at pages 766 -767

<sup>44</sup> An interesting observation also highlighted by Scott relates to the different levels of leverage requirements for depository banks – when compared to investment banks (which do not take deposits) – the leverage levels of deposit banks being much lower than those of investment banks. See ibid at page 766.

<sup>45</sup> For further information on this, as well as the impact of phase in periods on "silent participations", see M Ojo, "Basel III and Responding to the Recent Financial Crisis: Progress made by the Basel Committee in relation to the Need for Increased Bank Capital and Increased Quality of Loss Absorbing Capital" <u>http://mpra.ub.uni-muenchen.de/25291/</u> and http://papers.srn.com/sol3/papers.cfm?abstract\_id=1680886

tools constitute recurring themes from the recent crisis. In agreement with Miles<sup>46</sup>, capital requirments, and explicit limits on gearing constitute more direct means of controlling leverage. Basel reforms (and Basel III in particular) have evolved considerably to address capital requirements. "Financial stability, could be preserved by directing policy instruments at debt gearing (or leverage) – and with banks, this could be achieved through a prevention in the initial (limited) fall in the value of assets and by ensuring that banks are able to withstand falls in asset values through sufficient loss absorbing capital – rather than expecting monetary policy (changes in interest rates) to substantially reduce asset price variability."<sup>47</sup> Other proposals have been highlighted as the way forward, in achieving the goal of maintaining financial stability.<sup>48</sup>

The role of market based regulation in mitigating excessive risk taking levels – hence addressing risks posed by irrational depositors or negligent management, not only serves as a means of addressing the problem of moral hazard, but also serves as a means whereby accountability could be fostered (through greater transparency and facilitation of disclosure requirements). Even though it is argued that the limitation of regulatory transparency serves a basis for limiting moral hazard, transparency, it is further argued (and less contentiously), could achieve its aim of "anchoring financial regulation within the constitutional framework" through the establishment of clear responsibilities and procedures - thereby reducing moral hazard.

To conclude, market based regulation serves as a means of addressing the rationale for financial regulation – which embodies two issues; namely, the issue related to systemic risks and that related to information asymmetry. Market based regulation would not only help address problems attributed to systemic risks and excessive risk taking levels, but also information asymmetries – hence addressing liquidity risks.

<sup>46</sup> See D Miles, "Leverage and Monetary Policy", Speech by David Miles, Member of the Monetary Policy Committee of the Bank of England at the Economic and Social Research Institute Foundation for Fiscal Studies, 12 October 2010 at page 9 <<u>http://www.bis.org/review/r101018e.pdf</u>> and M Ojo, The Role of Monetary Policy in Matters Relating to Financial Stability: Monetary Policy Responses Adopted During the Most Recent Financial Crisis <u>http://mpra.ub.uni-muenchen.de/26925/</u> and http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1713647

<sup>47</sup> ibid

<sup>48</sup> These include: (i) increased integration of banking, securities and insurance supervision ; (ii) transferring the macroprudential supervisory function to the central bank; (iii) articulation of the relation between macro- and microsupervisors through a management by exception system involving direct authority of the macro-supervisor over enforcement and allocation of tasks; (iv) given the difficulty of measuring output on supervisory tasks, the systemic risk supervisor must necessarily be more accountable and less independent than central banks are on their monetary task; (v) the supervisory agency cannot rely on high-powered incentives to motivate supervisors, and must rely on culture instead; (vi) the supervisor must limit its reliance on self regulation; and (vii) the international system should substitute the current loose, networked structure with a more centralized and hierarchical one. See RM Lastra and L Garicano, "Towards a new Architecture For Financial Stability : Seven Principles " Journal of International Economic Law 13(3) at page 597

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