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Preparing for Basel IV : why liquidity risks still present a challenge to regulators in prudential supervision (II)

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ABSTRACT

Whilst the predecessor (Part I) to this paper addresses criticisms and challenges which have arisen in response to recent Basel Committee's initiatives aimed at addressing capital and liquidity standards, the present paper highlights further measures which are being introduced by the Basel Committee to address such criticisms and challenges.

As well as presenting and drawing attention to proposals which could serve as means of addressing challenges presented by liquidity risks, Part I of the paper concludes with the result that market based regulation is an essential and vital tool in the Basel Committee's efforts to address some of the challenges presented by liquidity risks. The present paper highlights the Basel Committee's acknowledgement of this conclusion. Furthermore, it draws attention to other areas which are considered to constitute fertile substrates for purposes of future research.

This paper will also illustrate why the potential of banking regulations and disclosure requirements to impact risk taking levels is not only dependent on certain factors such as the dissemination of information to appropriate recipients, appropriate volume of disseminated information, when to disseminate such information, but also on other factors such as ownership structures and effective corporate governance measures aimed fostering monitoring, supervision and accountability.

Key Words: liquidity risks, systemic risks, capital, standards, Basel III, moral hazard, disclosure, information, Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR)

Preparing for Basel IV – Why Liquidity Risks Still Present a Challenge to Regulators in Prudential Supervision (II)

Marianne Ojo¹

Introduction

The severity and magnitude of the recent Financial Crisis is attributed to sequential factors and events which generated aggregational effects and such amplitude that were to contribute to the most devastating global Financial Crisis till date. These series of events (which generated devastating consequences), it is stated,² are attributed to the build up of excessive on- and off-balance sheet leverage in the banking sectors of many countries, which was followed by the depletion of capital levels and quality – whose occurrence was gradual. It is further argued that many banks were simultaneously retaining inadequate levels of liquidity buffers.³

A procyclical deleveraging process and the interconnectedness of systemic institutions through an array of complex transactions, are also considered to be responsible for the resulting magnitude of the Crisis.⁴

Just as systemic risks and information asymmetries are issues which constitute the embodiment of the rationale for financial regulation, they are also opposite sides of the same coin whose common features can be derived as a result of their link with liquidity risks. If information asymmetries could be mitigated, to the extent that information were to be complete, accurate and timely – with particular emphasis on timely information, could liquidity risks be controlled to such an extent whereby it would also be possible to manage systemic risks?

As discussed in Part One to this paper, transparency and disclosure also have the potential to generate moral hazard. By correctly discerning who to disseminate information to (the appropriate recipients of such information), the appropriate volume of information, as well as when to disseminate such information, moral hazard, as well as liquidity and systemic risks could be managed.

As well as the introduction of measures aimed at consolidating the regulatory capital framework – such consolidation focussing on the three pillars of Basel II, the Basel Committee also introduced macroprudential elements into the capital framework to help contain systemic risks arising from procyclicality and the interconnectedness of financial institutions.⁵

Having considered how market based regulation could help address liquidity risks (Part One to this paper), Part Two will commence with a section which considers other factors which should be taken into account in mitigating liquidity and systemic risks. Section two will then consider recent Basel

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2 Basel Committee on Banking Supervision, „Basel III: A Global Regulatory Framework For More Resilient Banks and Banking Systems“ at page 9 of 77 <http://www.bis.org/publ/bcbs189.pdf>

3 Such series of events were considered to be responsible for the inability of the banking system to absorb „the resulting systemic trading and credit losses „, as well as its inability to cope with „the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system“; *ibid* <http://www.bis.org/publ/bcbs189.pdf>

4 *Ibid*

5 *Ibid* at page 10 of 77

Committee initiatives aimed at improving consistency, transparency and comparability, as well as efforts aimed at enhancing risk coverage. The third section will then highlight efforts undertaken (and being undertaken) by the Basel Committee to manage systemic risks. This will be followed by a section which draws attention to some areas which constitute areas of focus in the Basel Committee's efforts to address liquidity risks - before a conclusion is derived in section five.

I. Corporate Governance and Ownership Structures

The potential of banking regulations and disclosure requirements to impact risk taking levels is not only dependent on the factors already mentioned (dissemination of information to appropriate recipients, appropriate volume of disseminated information, when to disseminate such information), but also on some other factors such as ownership structures and effective corporate governance measures aimed fostering monitoring, supervision and accountability.

A. Accountability, Joint Responsibility and Proportionate Liability

Where a decision is reached by a group of individuals – in contrast to an individual decision, should this infer a greater scope for accountability or fairness (in the sense that more people will be held accountable for the decision) and less scope for injustice (in arriving at that decision)? Baldwin argues that even if responsibility for mediation is clearly and uncontentiously allocated, serious issues of democratic legitimacy and accountability may still arise.⁶ His concept of “thick proceduralisation”, that is, “processes in which mediators can play an enabling role by translating the messages and logics of various systems or groups so that others can understand and so that communication can be facilitated across different systems and groups” was advanced in the hope that parties with differing views could effectively engage in the deliberation process.⁷

As discussed in an earlier paper,⁸ the likelihood of a qualified audit opinion (as regards the auditor's findings on the financial statements) is considered to be less effective as a deterrent to risk taking by management – particularly where an individual manager or few managers are held responsible for fraudulent related acts. Apportionment of liability on a proportionate basis would produce a more equitable result – than in such case where a qualified opinion is issued by the auditor (where an individual manager or few managers are held responsible for fraudulent related acts).

The existence of a lead mediator or translator would resolve the problems attributed to lack of accountability to a large extent – given that such a person would assume joint responsibility and liability (even though at a greater proportion than that attributable to other members of the group) for consequences arising as a result of the group's decisions. Given that such increased responsibility is accepted and given that other group members also assume and accept some form of contributory responsibility for possible consequential liabilities(which accords with proportionate increases in the level of fines imposed on each member), members within the group would also strive towards ensuring that decisions are taken with utmost level of due diligence and that members work on a more cooperative basis – rather than a culture of “passing on the buck” to the lead mediator/communicator. Where such conditions exist and operate, “clear and uncontentiously allocated” responsibilities should facilitate accountability and legitimacy.⁹

6 R Baldwin, “The New Punitive Regulation” May 2004 Volume 67 No 3 Modern law Review at page 380

7 *ibid*

8 See M Ojo, „The Role of the External Auditor in Corporate Governance: Agency Problems and the Management of Risk at page 5 http://mpa.ub.uni-muenchen.de/15989/1/MPRA_paper_15989.pdf and http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1427899

9 For further information on this, see M Ojo, „Building on the Trust of Management: Overcoming the Paradoxes of Principles Based Regulation pages 8 -10 and particularly page 10 http://mpa.ub.uni-muenchen.de/22500/1/MPRA_paper_22500.pdf and http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1600504

B. Impact of Ownership Structures, Bank Regulations and Disclosure Requirements on Risk Taking

In considering the impact of bank regulations and disclosure requirements on risk taking, reference will be made to Laeven and Levine's conclusion that whilst the application of bank regulations could lead to lower levels of risk taking, they could also induce higher levels of risk taking.¹⁰ Lower levels of risk taking may occur where owners are compelled to invest more of their personal wealth in the bank and the converse may occur where capital requirements do not compel owners to invest more of their wealth in the bank – although they might encourage greater levels of capital to be generated.¹¹ However Laeven and Levine add that since the relationship between risk and regulation is critically dependent on individual banks' ownership structures, with the effect that the relationship between regulation and bank risk can vary according to ownership structure, a consideration of the impact of ownership structures is necessary in order to present a more accurate analysis of bank risk taking.¹² Further, they illustrate their assertion through a demonstration of how ownership structure associates with bank regulations to impact the risk taking behaviour of individual banks.¹³

The theories which were considered in illustrating such an assertion are as follows:¹⁴

- That the effect of regulation on risk is dependent on the relative influence of owners who exist within governance structures of individual banks
- That bank regulators influence risk taking incentives of owners in a different manner to those of managers (banking theory),
- That ownership structures affect the ability of owners to influence risk (corporate governance theory)¹⁵

II. Recent Basel Committee Initiatives

- i) Aimed at Improving Consistency, Transparency and Comparability.

In response to some of the concerns raised in Part One to this paper – as regards consistency in the application of the Basel Committee's Capital and Liquidity Standards, the Committee has been engaged in efforts aimed at facilitating the comparability and assessment of the quality of capital between institutions. In order to achieve this aim, improved measures targeted at facilitating disclosure – as well as a definition for capital (such definition facilitating greater consistency across

10 L Laeven and R Levine, 'Bank Governance, Regulations and Risk Taking' 2008 Journal of Financial Economics at page 4

11 See *ibid*; Also see D Kim and A Santomero, 'Risk in Banking and Capital Regulation' 1994 Journal of Finance 43 at 1219-1233

12 L Laeven and R Levine, 'Bank Governance, Regulations and Risk Taking' 2008 Journal of Financial Economics at page 6

13 *ibid* at page 5

14 For further information on this refer to M Ojo, 'The Role of External Auditors in Corporate Governance: Agency Problems and the Management of Risk' at pages 2 and 3

15 „By merging the theories, they arrive at the conclusion that: Firstly, owners who have “diversified” their assets have greater incentives to indulge in higher levels of risk taking than managers who are non shareholders and that as a result, banks which have powerful and diversified owners are more likely to be riskier than “widely held banks” – provided other factors are constantly maintained. Secondly, bank regulations such as capital requirements and deposit insurance, generate effects which differ when considered in relation to incentives of owners as opposed to that of managers and that as a result, the “comparative power of shareholders relative to managers within each bank’s corporate governance structure” influences the real impact of regulations on risk taking.“; L Laeven and R Levine, 'Bank Governance, Regulations and Risk Taking' 2008 Journal of Financial Economics at page 5

jurisdictions), comprise some of the efforts currently being undertaken.¹⁶

ii) Aimed at Enhancing Risk Coverage

Failure to capture major on- and off-balance sheet risks, as well as derivative related exposures, it is argued, was a key destabilising factor during the crisis.¹⁷

- In response to these shortcomings, the Committee in July 2009 completed a number of critical reforms to the Basel II framework – such reforms aimed at increasing capital requirements for the trading book and complex securitisation exposures, a major source of losses for many internationally active banks. The enhanced treatment introduces a stressed value-at-risk (VaR) capital requirement based on a continuous 12-month period of significant financial stress. In addition, the Committee has introduced higher capital requirements for so-called resecuritisations in both the banking and the trading book. The reforms also raise the standards of the Pillar 2 supervisory review process and strengthen Pillar 3 disclosures.¹⁸

Even though the Basel Committee's determination of risk-weights and capital charges, and indeed the risk weighting process have been questioned,¹⁹ initiatives in other areas (such initiatives aimed at mitigating pro cyclicity and promoting countercyclical buffers), as well as efforts aimed at facilitating macro prudential supervision have received more positive responses.²⁰

III. Efforts Undertaken by the Basel Committee to Contain Systemic Risks

Mitigating Procyclicality and Promoting Countercyclical Buffers

In collaboration with the Financial Stability Board, the Basel Committee has been developing a „well integrated approach to systemically important financial institutions which could include combinations of capital surcharges, contingent capital and bail-in debt“.²¹

16 In facilitating a more consistent definition for capital, „the predominant form of Tier 1 capital must be common shares and retained earnings. To improve market discipline, the transparency of the capital base is to be improved, with all elements of capital required to be disclosed along with a detailed reconciliation to the reported accounts. The Committee is introducing these changes in a manner that minimises the disruption to capital instruments that are currently outstanding. It will also continue to review the role that contingent capital should play in the regulatory capital framework.“, Basel Committee on Banking Supervision, „Basel III: A Global Regulatory Framework For More Resilient Banks and Banking Systems“ at pages 10 - 11 of 77 <http://www.bis.org/publ/bcbs189.pdf>

17 See *ibid* at page 11 of 77

18 *ibid*

19 See H Scott, „Reducing Systemic Risk Through the Reform of Capital Regulation“ *Journal of International Economic Law* 13(3), 763–778 at page 5 of 16

20 Amongst other initiatives undertaken by the Committee, are those which include the assessment of measures aimed at:

- Mitigating the the reliance on external ratings of the Basel II framework. The measures include requirements for banks to perform their own internal assessments of externally rated securitisation exposures, the elimination of certain “cliff effects” associated with credit risk mitigation practices, and the incorporation of key elements of the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies into the Committee’s eligibility criteria for the use of external ratings in the capital framework.
- Supplementing the risk-based capital requirement with a leverage ratio of the underlying features of the crisis was the build up of excessive on- and off-balance sheet leverage in the banking system. See Basel Committee on Banking Supervision, „Basel III: A Global Regulatory Framework For More Resilient Banks and Banking Systems“ at page 12 of 77

21 *Ibid* at page 15 of 77

Some measures which will be introduced by the Basel Committee in its aim to make banks „more resilient to procyclical dynamics – as well as helping to ensure that the banking sector serves as a shock absorber, instead of a transmitter of risk to the financial system and broader economy“ include:²²

- Leverage ratios:²³ The Committee agreed to introduce a simple, transparent, non-risk based leverage ratio that is calibrated to act as a credible supplementary measure to the risk based capital requirements. The leverage ratio is intended to achieve the objectives of constraining the build-up of leverage in the banking sector, helping avoid destabilising deleveraging processes which can damage the broader financial system and the economy; and reinforcing the risk based requirements with a simple, non-risk based “backstop” measure.
- Measures aimed at addressing procyclicality and raising the resilience of the banking sector in good times. Key objectives of these measures being: to dampen any excess cyclicality of the minimum capital requirement; promote more forward looking provisions; conserve capital to build buffers at individual banks and the banking sector that can be used in stress; and to achieve the broader macroprudential goal of protecting the banking sector from periods of excess credit growth.

IV. Identified Areas which Constitute Focus in Relation to Liquidity Risks

Such identified areas include:²⁴

(a) Contractual maturity mismatch:

- To gain an understanding of the basic aspects of a bank’s liquidity needs, banks should frequently conduct a contractual maturity mismatch assessment. This metric provides an initial, simple baseline of contractual commitments and is useful in comparing liquidity risk profiles across institutions, and to highlight to both banks and supervisors when potential liquidity needs could arise.

(b) Concentration of funding:

- This metric involves analysing concentrations of wholesale funding provided by specific counterparties, instruments and currencies. A metric covering concentrations of wholesale funding assists supervisors in assessing the extent to which funding liquidity risks could occur in the event that one or more of the funding sources are withdrawn.

(c) Available unencumbered assets:

This metric measures the amount of unencumbered assets a bank has which could potentially be used as collateral for secured funding either in the market or at standing central bank facilities. This should make banks (and supervisors) more aware of their potential capacity to raise additional secured funds, keeping in mind that in a stressed situation this ability may decrease.

²² See *ibid* at page 13 of 77

²³ „One of the underlying features of the crisis was the build-up of excessive on- and off-balance sheet leverage in the banking system. In many cases, banks built up excessive leverage while still showing strong risk based capital ratios. During the most severe part of the crisis, the banking sector was forced by the market to reduce its leverage in a manner that amplified downward pressure on asset prices, further exacerbating the positive feedback loop between losses, declines in bank capital, and contraction in credit availability. „*ibid* at page 68 -69 of 77

²⁴ *Ibid* at page 18 of 77

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(d) LCR by currency:

In recognition that foreign exchange risk is a component of liquidity risk, the LCR should also be assessed in each significant currency, in order to monitor and manage the overall level and trend of currency exposure at a bank.

(e) Market-related monitoring tools:

- In order to have a source of instantaneous data on potential liquidity difficulties, useful data to monitor includes market-wide data on asset prices and liquidity, institution-related information such as credit default swap (CDS) spreads and equity prices, and additional institution-specific information related to the ability of the institution to fund itself in various wholesale funding markets and the price at which it can do so.

In relation to transitional arrangements,²⁵ the Committee is introducing such arrangements „to implement the new standards that help ensure that the banking sector can meet the higher capital standards through reasonable earnings retention and capital raising, while still supporting lending to the economy.“²⁶ Both the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) are to be subject to an observation period and will include a review clause to address any unintended consequences.²⁷

V. Conclusion

Whilst immense efforts and initiatives have been promulgated by the Basel Committee (in relation to systemic and liquidity risks), responses to its introduction of capital standards and its initiatives in relation to the control of systemic risks remain more positive than those which relate to liquidity standards and metrics. The conclusion derived from the first part of this paper, as well as certain observations raised in the present paper, can only lead to an inference that greater focus on market based regulation, greater focus on initiatives and incentives aimed at deterring management from taking undue and unnecessary risks (including improved corporate governance measures and practices), constitute some vital factors which should be taken into consideration if liquidity and (consequently) systemic risks are to be effectively controlled and managed.

25 For further information on transitional arrangements and scope of application (page 2/ page 8 of 53), monitoring tools relating to contractual maturity mismatch, concentration of funding, available unencumbered assets and market related monitoring tools (31-38), and application issues for standards (pages 38 – 40) see **Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring** <<http://www.bis.org/publ/bcbs188.pdf>>

26 „After an observation period beginning in 2011, the LCR will be introduced on 1 January 2015. The NSFR will move to a minimum standard by 1 January 2018. The Committee will put in place rigorous reporting processes to monitor the ratios during the transition period and will continue to review the implications of these standards for financial markets, credit extension and economic growth, addressing unintended consequences as necessary. „

27 „No additional work was done on the impact of stronger liquidity requirements in this report, in view of the fact that the liquidity requirements are still subject to an observation period. The Liquidity Coverage Ratio will be introduced in 2015 and the Net Stable Funding Ratio in 2018. The estimates for the impact of these measures provided in the Interim Report assume a shorter implementation period than that agreed to by the BCBS, and can therefore be viewed as conservative estimates. „ See the Final Report of the Macroeconomic Assessment Group (established by the Financial Stability Board and the Basel Committee on Banking Supervision) „Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements, Bank for International Settlement Publications December 2010

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