Redefining a role for central banks: The increased importance of central banks' roles in the management of liquidity risks and macro prudential supervision in the aftermath of the Financial Crisis

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ABSTRACT

Over the recent years, it has increasingly been acknowledged that macro prudential policies are not only considered to be “a missing ingredient from the current policy framework”, but that there has also been “too huge a gap between macro economic policy and the regulation of individual financial institutions.”

The link between monetary policy and macro prudential policies, the knowledge of central banks in matters relating to information on market conditions and their oversight of payment systems, as well as the need to bridge the existing gap between supervisory authorities and central banks whilst executing their supervisory roles and functions, have necessitated an extension of central banks role in the management of liquidity risks and macro prudential supervision.

A fundamental aim of this paper is to address how an extension of central banks’ roles in macro prudential supervision can assist regulators and supervisors in bridging the afore mentioned gap between macro economic policy and the regulation of individual financial institutions. In so doing, the need for greater focus on macro prudential factors, namely, the system as a whole, as opposed to mere focus on the supervision of individual institutions will be highlighted. The expertise and knowledge with which a central bank is endowed in its role as overseer of the entire payments system – as well as the quality of information which it has access to, are some of those factors which add weight to its ability to bridge “the gap”.

Key Words: macro prudential, Financial Crisis, central banks, Basel III, systemic risk, supervision, liquidity, information; Banking Reform Act; Financial Services Act; regulators

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Marianne Ojo[1]

A. Introduction

The Increased Impact of Macro Prudential Supervision

Prudential supervision which is carried out at macro level is distinguished from that which is carried out at micro level in the sense that micro prudential supervision restricts itself to individual firms whilst macro prudential supervision operates on a system wide basis. Pro cyclical effects which have been generated through Basel II internal credit risk models (which relate to the fact banks' internal credit risk models were overly sensitive in their implementation[2] for the calculation of regulatory capital) – along with the need to address systemic risks in a more efficient manner, are amongst some of the reasons attributed to why greater emphasis on prudential supervision at macro level is of vital importance.

The concept "macro prudential" can be defined as "policy which focuses on the financial system as a whole, and also treats aggregate risk as endogenous with regard to the collective behaviour of institutions."[3]

One principal aspect of macro prudential supervision and regulation, as reflected by Basel III, is the fact that it provides for a consideration of the build up of systemic risks over time – particularly pro cyclical effects generated within the financial sector.

Over the recent years, it has increasingly been acknowledged that macro prudential policies are not only considered to be "a missing ingredient from the current policy framework", but that there has also been "too huge a gap between macro economic policy and the regulation of individual financial institutions."[4]

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[2] In their implementation to facilitate "the derivation of fundamental inputs for formulas which will determine the level of capital which large banks must retain."

[3] E P Davis and D Karim, "Macro Prudential Regulation – The Missing Policy Pillar" Keynote Address at the 6th Euro frame Conference on Economic Policy Issues in the European Union, 12th June 2009, entitled „Causes and Consequences of the Current Financial Crisis, What lessons for EU Countries?" at page 2 http://www.ephilipdavis.com/macroprudential_regulation[1].pdf

[4] Please also refer to abstract; See Bank of England, Executive Summary "Role of Macro Prudential Policy" Discussion Paper November 2009 at page 3 http://www.bankofengland.co.uk/publications/other/financialstability/roleofmacroprudentialpolicy091121.pdf

B. An Extension of the Traditional Roles of Central Banks

Traditional Roles of Central Banks

1) Lender of Last Resort Arrangements

The need for the creation of bridge banks and a Special Resolution Regime (SRR) was brought to light following numerous related proposals which were put forward following the financial woes of banks such as Northern Rock and Hypo Real Estate.[5]

One of the weaknesses of central banks which was revealed during the Financial Crisis was the inability of the Bank of England to perform its traditional role as lender of last resort for a limited period of time (without such a role being made public) – which created problems that triggered the run on Northern Rock.

Unconventional measures which were introduced by advanced economies in response to the latter stages of 2008 include liquidity provision to banks on extra ordinary terms – particularly for longer periods of maturity and intervention in selected credit markets.[6]

2)Oversight of payment systems

Furthermore, as observed by Hannoun[7], central banks are increasingly being put in charge of overseeing systemic risk. Such an innovative role can be considered to be an extension of their traditional role as overseers of payment systems. Hannoun goes on to attribute the delegation of such responsibility for the oversight of systemic risk as owing to their unique positions as ultimate providers of liquidity – which places them in a such a formidable stance to focus on system wide risks (as well as obtaining an integrated view of both the individual financial institutions and the financial system as a whole).[8]

In addition to their unique position as ultimate providers of liquidity, the extensive knowledge possessed by central banks – such knowledge and expertise being attributed to their role as overseers of payment systems, their means of acquiring such knowledge and expertise, places them in a formidable position in matters relating to the responsibility for macro prudential supervision.

Two examples have been put forward to bolster the argument that "the macro prudential approach to supervision should take into consideration the fact that, even when financial institutions appear to be strong on an individual basis, systemic risk could still emerge as a result of the interconnectedness of financial institutions, markets and infrastructures" - such examples being the creation of the European Systemic Risk Board (ESRB) and the proposed Financial Stability Oversight Council in the United States.[9]

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[5] For further information on bridge banks and means whereby ailing banks could efficiently be relieved of their assets, see D Schäfer and KF Zimmerman, "Bad Bank (s) and Re capitalization of the Banking Sector" (2009) Discussion Paper 897 of DIW Berlin <http://www.voxeu.org/index.php?q=node/3656>

[6] "Such a measure being aimed at supporting secondary market liquidity and the outright purchase of bonds". See H Hannoun, "The Expanding Role of Central Banks Since the Crisis: What are the Limits?" June 2010 Bank for International Settlements Publications http://www.bis.org/speeches/sp100622.pdf?noframes=1 at page 3

[7] see ibid

[8] ibid

[9] ibid

The Role of Central Banks in Managing Liquidity[10] Risks

As well as highlighting the need to address the question on how much maturity transformation is needed – in matters relating to maturity transformation and liquidity risks, it is argued that "maturity transformation is one of those areas which we rely on the banking system to perform and that since there may never be enough short-term liabilities issued by governments and the private sector (to satisfy the demand for liquid short-term savings instruments), that the primary function of banks in providing these vehicles to the public, should be welcomed."[11]

The likelihood that banks are exposed to significant levels of liquidity risks arises from the nature of commercial banks' business, namely, the fact that such business involves, to a fundamental extent, maturity transformation.

The provision of central bank reserves account serves as a means whereby commercial banks are able to manage their liquidity risk – through a process which enables them to meet their "ordinary payment needs – including normal intra day variations."[12]

C. Macro Prudential Supervision and Basel III

Under its macro prudential overlay and its efforts to address stability over time (pro cyclicality), one of those initiatives highlighted under the Basel III framework includes counter cyclical capital charges and forward looking provisioning.

Progress made with Counter Cyclical Measures in Various Jurisdictions

According to Brunnermeier et al, counter cyclical measures should be applied on a country specific basis since cycles are not identical across several jurisdictions around the world.[13] In their opinion, it is yet too early to talk about a "global cycle" since "credit expansion has taken place at a very different pace in various countries."[14] As observed by Caprio Jr, even though[15] no country thus far had adopted a counter cyclical capital requirement policy, as recommended by Brunnermeier et al, a few have adopted counter cyclical provisioning –

[10] "Liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses." See Basel Committee on Banking Supervision, "Principles for Sound Liquidity Risk Management and Supervision" < http://www.bis.org/publ/bcbs144.pdf>

[11] See S Cecchetti, „Financial Reform: A Progress Report" Remarks prepared for the Westminster Economic Forum, National Institute of Economic and Social Research, October 2010 at page 4 of 6 http://www.bis.org/speeches/sp101004.htm

[12] Maturity transformation is evident within the banking system and day to day business operations since "customer deposits may be available for instant withdrawals while bank lending to corporations and households tends to be committed, potentially for many years." See P Fisher, „Managing Liquidity in the System – the Bank's Liquidity Insurance Operations" at page 2 <http://www.bis.org/review/r101004e.pdf>

[13] See M Brunnermeier et al, "The Fundamental Principles of Financial Regulation" Geneva Reports on the World Economy, 11< http://www.princeton.edu/~markus/research/papers/Geneva11.pdf> at page 37 (page 55 of 98)

[14] In this respect, they illustrate with the example that Germany and Italy did not share in the housing cycle that affected the USA, UK, Spain etc. See ibid

[15] As of February 2010

Spain being the first to implement such, followed by Colombia and much more recently, Peru.[16]

Measures aimed at "building up reserves over the cycle which might be part of regulatory capital or separate from it and which would amount to 2 – 3 % of risk weighted assets at the peak of a boom" have been proposed in the UK by its financial services regulator, the Financial Services Authority.[17] Other measures of counter cyclical regulation which are being considered by other jurisdictions (and which would "limit the scope under Basel 2 arrangements for banks to assess their own risk by providing a one-size fits all ceiling and may be beneficial in making regulation more transparent)[18] could include "an overall leverage ratio of capital to unadjusted assets (rather than risk weighted assets)."[19]

Dynamic Provisioning

Whilst the principles of the Spanish Dynamic Provision Mechanism are lauded by Brunnermeier et al, its "quantitative effect" is not considered by them to have had a moderate effect on the credit cycle – to the same extent as their proposed mechanism. Its universal adoption[20], is however, considered to represent a " counter- cyclical- lite" in the case where their proposal (Brunnermeier et al's proposal) is considered as being too radical.

Why Central Banks Assume Such a Crucial Role Given the Present Framework of Basel III

In its present form, Basel III accords much pre eminence to the need for macro prudential supervision – as well as a macro prudential framework.

Central banks, it is argued, have a key role to play in establishing such a macro prudential framework – as well as a role in macro prudential supervision and regulation for the following reasons:[21]

- Developing and structuring macro prudential measures requires reliable analytical and forecasting skills – for instance, with regard to the overall economy or specific market segments. Central banks have extensive and soundly based knowledge of these fields.

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[16] See G Caprio Jr, "Safe and Sound Banking: A Role for Counter cyclical Regulatory Requirements" World Bank Policy Research Working Paper 5198, The World Bank Development Research Group, Finance and Private Sector Development Team, February 2010 at page 11

[17] See E P Davis and D Karim, "Macro Prudential Regulation – The Missing Policy Pillar" Keynote Address at the 6th Euro frame Conference on Economic Policy Issues in the European Union, 12th June 2009, entitled „Causes and Consequences of the Current Financial Crisis, What lessons for EU Countries?" at page 10 and also Financial Services Authority, "The Turner Review: A Regulatory Response to the Global banking Crisis" FSA Publications 2009

[18] Although it is added that "it is essential that such ceiling applies to all relevant assets and does not encourage banks to use off-balance structures to evade such a ceiling" See E P Davis and D Karim, "Macro Prudential Regulation – The Missing Policy Pillar" Keynote Address at the 6th Euro frame Conference on Economic Policy Issues in the European Union, 12th June 2009, entitled „Causes and Consequences of the Current Financial Crisis, What lessons for EU Countries?" at page 10

[19] ibid

[20] „Including the adjustment of IFRS to allow that to occur"

[21] TJ Jordan, „A Changing Role for Central Banks ?" Speech by Mr Thomas J Jordan, Vice Chairman of the Governing Board of the Swiss National Bank, at the Welcome Event Master of Banking and Finance, St. Gallen, 22 September 2010, page 4
http://www.bis.org/review/r100924b.pdf

- Macro prudential policy interacts closely with monetary policy – which implies that information advantage of central banks could be important in shaping macro prudential measures

We may then infer that central banks' crucial roles in establishing a macro prudential framework provide the key to bridging the gap between macro economic policy and the regulation of individual financial institutions. This however, on its own, is insufficient – close collaboration and effective information sharing between central banks and regulatory authorities is paramount. Principle 17 of the Principles for Sound Liquidity Risk Management and Supervision[22] consolidates on this argument.

Principle 17 of the Principles for Sound Liquidity Risk Management and Supervision[23] elaborates on how cooperation and information sharing between relevant public authorities (including bank supervisors, central banks and securities regulators) can contribute significantly to the effectiveness of the roles assumed by these authorities.

Such communication will not only facilitate a process where:[24]

- supervisors are able to improve their assessments of the overall profile of a bank and the risks it faces (and help other authorities assess the risks presented to the broader financial system); but also

- Assist supervisors in informing central banks of their judgement regarding the range of liquidity risks faced by firms (for which they are responsible) while central banks may help supervisors deepen their understanding of the current financial market environment and risks to the financial system as a whole

Central banks' knowledge of information on market conditions could also be beneficial for supervisors in their assessment of the "appropriateness of assumptions made by banks in stress test scenarios and contingency funding plans."[25] Furthermore, in their role as overseers of the payment and settlement system, central banks are able to assist supervisors in "deepening their understanding of the linkages between institutions and the potential for disruptions to spread across the financial system."[26]

In addition to the general practice undertaken by central banks - which involves the implementation of frequent "Financial Stability Reviews" which are aimed at evaluating the outlook for financial stability, "the initial policy objectives" of macro prudential regulation, according to Davis and Karim include the early identification of potential vulnerabilities and the encouragement of such financial institutions to undertake stress testing (this being facilitated through the public reporting which is carried out by financial institutions).[27]

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[22] See Basel Committee on Banking Supervision, "Principles for Sound Liquidity Risk Management and Supervision" paragraph 144, at page 34 < http://www.bis.org/publ/bcbs144.pdf>
[23] ibid
[24] see ibid at page 35
[25] ibid
[26] ibid
[27] See E P Davis and D Karim, "Macro Prudential Regulation – The Missing Policy Pillar" Keynote address at the 6th Euro frame Conference on Economic Policy Issues in the European Union, 12th June 2009, entitled "Causes and Consequences of the Current Financial Crisis, What Lessons for EU Countries?" see particularly pages 10 and 11
http://www.euroframe.org/fileadmin/user_upload/euroframe/docs/2009/EUROF09_macroprudential_regulation.pdf

The previous section focussed on the importance of information sharing and communication between central banks and regulatory agencies. Desirable qualities of such information exchanges and communicative links include timeliness, accuracy and completeness of the information being communicated. As well as information sharing and communication, other aspects which cannot be addressed comprehensively here relate to moral hazard[28] and information asymmetry[29] and particularly, the need to address consequences of excessive risk taking incentives.

D. Re delineating Duties and Roles of Central Banks and Supervisory Agencies in Matters relating to Regulation and Supervision

As was highlighted in a previous paper,[30] even though the aftermath of the recent Financial Crises is likely to witness the era of more prominent roles being transferred to central banks across several jurisdictions, a fundamental change and re-definition in roles and responsibilities between national supervisors and central banks is expected in the United Kingdom – as compared to jurisdictions such as Germany and the United States.[31]

The Banking Reform Act in the UK, not only provides the Bank of England with " a legal objective to contribute to protecting and enhancing the stability of the financial systems of the UK but also formalises the Bank of England's role in the supervision of payment systems."[32] The ability of the Bank to request data from banks through the regulator, the FSA, as compared to the present situation where the FSA is only able to collect data it requires itself, is considered to be "an important innovation"[33] under the Act. These arrangements under the Act are also considered to be an important and vital means whereby the Bank is able to acquire "more detailed understanding of developments about the banking system."[34]

„On 19 November 2009 the Chancellor of the Exchequer introduced the Financial Services Bill into Parliament. The Bill, which reforms financial services regulation and contains provisions to improve redress for consumers, and financial education and awareness, received Royal Assent on 8 April 2010. The Act includes:[35]

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[28] For further information on the need to address moral hazard, exit strategies – as well as the provision by governments of incentives to financial institutions (as a means of preventing them from depending on government support once the economy begins to recover), see J Rodriguez-Miguez and M Ojo, "Juridical and Financial Considerations on the Public Re Capitalisation and Rescue of Financial Institutions During Periods of Financial Crisis" <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1646320>

[29] For further information on information asymmetry and the role of governments and central banks in regulation, see M Ojo, The Need for Government and Central Bank Intervention in Financial Regulation: Free Banking and the Challenges of Information Uncertainty http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1624918

[30] See J Rodriguez - Miguez and M Ojo, "Juridical and Financial Considerations on the Public Re Capitalisation and Rescue of Financial Institutions During Periods of Financial Crisis" <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1646320>

[31] ibid

[32] E P Davis and D Karim, "Macro Prudential Regulation – The Missing Policy Pillar" Keynote address at the 6th Euro frame Conference on Economic Policy Issues in the European Union, 12th June 2009, entitled "Causes and Consequences of the Current Financial Crisis, What Lessons for EU Countries?" at page 12 http://www.qass.org.uk/2009-July_Brunel-conference/Davis.pdf

[33] See ibid

[34] ibid

[35] HM Treasury, „Financial Services Act" http://www.hm-treasury.gov.uk/fin_bill_index.htm

- A new statutory financial stability objective for the Financial Services Authority (FSA);
- A new independent consumer financial education body, established by the FSA;
- Provision for regulations on remuneration transparency, and a duty for the FSA to make rules on remuneration;
- A duty for the FSA to make rules requiring firms to produce recovery and resolution plans (also known as "living wills");
- Power for the FSA to ban short selling of certain instruments, and establish a permanent disclosure regime; and

Greater disciplinary powers for the FSA, including earlier disclosure of investigations."

The new statutory duty conferred on the UK's financial services regulator (the FSA), namely, the new financial stability objective, is aimed at reinforcing the FSA's international focus.[36] Such an aim required not only "a consideration of the importance of re affirming the roles of the Treasury, Bank of England and the FSA, but also the need to establish mechanisms which would help ensure that the tripartite authorities speak with a common voice in international fora."[37] Of paramount importance is the expectation that such a statutory duty would complement the Government and the Bank of England's responsibility.[38]

Hence whilst, greater powers have been transferred to the Bank of England[39], the FSA has also acquired a new statutory duty – in addition to the previous four statutory objectives.

E. Need For Central Bank Independence From Political Interference

One vital reason attributed to the need for Government intervention to correct market failure, it is argued, arises from the fact that "market participants cannot manage systemic risks if left to their own devices."[40] This also constitutes a need for macro prudential supervision. However, the question relating to the level of macro prudential oversight to be delegated to central banks and the degree of Government intervention also needs to be addressed. Whilst the flaws inherent within the tripartite authorities in the UK (the Treasury, Bank and FSA) during Northern Rock crisis include the failure to promptly detect and adequately monitor risks to system **as a whole** , and such a flaw could be addressed given the central bank's ability (via its intervention) to provide invaluable source of liquidity funding in terms of timeliness, collaboration between the Government and the central bank should not be so close that such proximity would influence central bank's monetary setting policies. The level of independence required between central banks and their governments (to facilitate effective working relationships) would depend on institutional settings – as well as country specific circumstances.

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[36] See HM Treasury, *Reforming Financial Markets* July 2009 at page 99

[37] „"Whilst continuing to give adequate attention to regulatory debates" ibid

[38] ibid

[39] As well as responsibility for systemic oversight, the grant of further supplementary oversight functions to the Bank of England, it is further argued, will be desirable. For further information on this, see Shearman and Sterling LLP, "UK Government Proposals for Financial Regulatory Reform" June 2010 and Treasury Select Committee, "Banking Crisis: Regulation and Supervision_ Macro prudential Supervision" http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/767/76707.htm

[40] See Statement of Paul Tucker, Deputy Governor of the Bank of England, Treasury Select Committee, "Banking Crisis: Regulation and Supervision_ Macro prudential Supervision" http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/767/76707.htm

ii. Need for Adequate Balance Between Rules and Discretion in Designing an Effective Macro prudential Regime.

Be it a rules- based scheme which stipulates that banks should build up buffers of general provisions,[41] capital conservation rules for stronger capital buffers, or a principles based regime (in which a considerable degree of judgment and discretion will be exercised), "any macroprudential policy framework should seek to be credible, with policy decisions applied consistently and systemically. To be consistent over time, a regime needs to be robust to uncertainty and unforeseen events."[42]

Conclusion

The aftermath of the recent Financial Crisis has witnessed an extension in the roles and responsibilities of central banks across several jurisdictions. Such an extension embraces increased responsibilities for the oversight of systemic risks - as well as the formalisation of responsibilities for the oversight of payment systems. An extension of the central bank's role in macroprudential supervision is not only required because of the expertise and knowledge possessed by central banks in areas relating to the development and structuring of macroprudential measures (which requires reliable and analytical forecasting skills), or because the information advantage of central banks could be important in shaping macroprudential meaures, but because close and effective collaboration between supervisors and central banks, particularly pursuant to Principle 17 of the Principles for Sound Liquidity Risk Management and Supervision, could help bridge the gap between macro economic policy and the regulation of individual financial institutions.

[41]Such as that of the Spanish Dynamic Provisioning Model; such a model „requires banks to build up buffers of general provisions against performing loans during periods of upturns – which could then be drawn from during recessive turns" see Bank of England, „Role of Macroprudential Policy" <http://www.bankofengland.co.uk/publications/other/financialstability/roleofmacroprudential091121.pdf> Discussion Paper November 2009 at page 8

[42]See ibid at page 27

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