A critical evaluation of the Basel III changed proposal on the Liquidity coverage ratio

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1. Introduction

Banks have been regulated since 1988 based on the Basel I capital accord. The 1988 accord followed a rules based one-size-fits-all approach to regulation of the capital adequacy of banks.

To address the deficiencies in the 1988 Basel Accord, Basel II was implemented. Basel II is a more risk based approach to the regulation of banks. Under the Basel II accord, the banks can determine their capital adequacy ratio based on their own internal risk based model or on the credit ratings of rating agencies (Mostert, 2003).

The key issue was whether the new Basel II accord will be adequate in the face of a global financial meltdown.

The recent global crisis highlighted various issues in terms of the prudent regulation and supervision of banks. Some of these issues include banks that are deemed of too-big-to-fail, moral hazard and the role of regulators in preventing these crises.

The Basel Committee on Bank Supervision has proposed new rules for the capital adequacy of banks after the crisis by launching the Basel III proposals (BIS, 2011). The Basel III proposals mainly focus on refining the definition of capital used to determine the capital adequacy of banks and new guidelines to regulate the liquidity of banks.

In the first part of the paper a short historical overview on the regulation and supervision of banks will be provided with a focus on the main issues necessitating a review of the regulation and supervision of banks. The second part will provide an overview will be provided of the of the Basel III proposals on the capital adequacy and liquidity of banks.

This paper will provide a detailed analysis of the revised proposals for the liquidity coverage ratio that was published by the Bank for International Settlements in January 2013. The analysis will specifically deal with the challenges of implementing the proposals in South Africa. The impact of the establishment of a facility at the South African Reserve bank to obtain additional liquidity, will also be evaluated. One such possible issue is the impact on the cost of credit in South Africa.

2. Historical overview of the regulation and supervision of banks

It is important to provide an overview of the Basel I and Basel II proposals before the Basel III proposals can be evaluated critically. The aim of this section of the paper is to provide a brief overview of the main limitations identified in the Basel I and Basel II proposals.

The 1988 Basel Accord was accepted in 1988 to promote regulatory convergence in terms of the capital adequacy of banks. According to the BIS (1988:1) the proposals had two fundamental objectives. Firstly, "it is that the new framework should serve to strengthen the soundness and stability of the international banking system; and, secondly, that the framework should be fair and have a high degree of consistency in its application to banks in different countries with a view to diminishing an existing source of competitive inequality among international banks".

The 1988 Basel Accord (Basel I) was accepted to develop a single risk-adjusted capital standard that would be applied throughout the major banking countries of the world. This level playing field would cause best practices to be adopted by banks throughout the world thereby enhancing the efficiency, productivity, safety and soundness of the global financial system.

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The Basel process produced many successes, but also several important unintended consequences.

One of the main criticisms against the Basel I accord was the fact that it originally only made provision for credit risk. The system also was to rude for the highly advanced banking systems that it needed to regulate. Another critique was against the fact that it only had four risk buckets, that provided an opportunity for capital arbitrage. Basel I was also criticised for the fact that it only implicitly implied a specific solvency level in banks despite prescribing a specific capital adequacy level.

The advantage of the Basel I accord was that it assisted to increase the capital levels at banks. Over time a need however arisen to develop a more risk focussed approach based on the internal risk models of banks.

The Basel Committee on Banking Supervision duly obliged by launching the Basel II proposals in 2004. The Basel II proposals had three pillars focusing on the capital adequacy of banks, regulatory review and disclosure of information. The aim of the proposals was to increase the market discipline on banks.

Basel II also updated and expanded on the credit risk weighting scheme introduced in Basel I, not only to capture the risk in instruments and activities that had developed since 1988, but also to allow banks to use their internal risk rating systems and approaches to measure credit and operational risk for capital purposes (Hannoun, 2010:2)

Mostert (2003) critically evaluated the Basel II proposals and raised issues like the geographical spread of credit ratings and the sovereign ceiling on ratings in developing countries. Research has also indicated that the rating agencies tended to be pro cyclical during the Asian crisis. The methodology used to determine credit rating is also based on historical information whilst the capital adequacy of banks is more forward looking. Despite these criticisms, Basel II was a proactive step to make the regulation of the capital adequacy of banks more risk based.

The biggest concern on Basel II is its capacity to avoid further global banking crises and the ability of the international banking system to recover from such a global meltdown. The world economy was hit by such a crisis in 2007 that exposed some deficiencies in the way banks were regulated and supervised. The Basel Banking Committee on Banking Supervision decided to refine the regulations for banking supervision with the release of the Basel III proposals for the regulation of banks.

A brief overview about the proposals will now be provided.

3 The Basel III proposals.

The Basel III proposals comprise of the proposals to reform the global capital framework and the proposals towards an international framework for liquidity risk management, standards and monitoring.

According to the BIS (2011(b):1) the Basel Committee on Banking Supervision is trying with these proposals to address the lessons learnt from the recent global financial crisis. The Committee also "aims to improve risk management and governance as well as strengthen banks' transparency and disclosures". The Basel III proposals also want to address the issue of systemically significant cross-border banks.

3.1 Capital adequacy of banks

The erosion of the level and quality of the capital base and insufficient liquidity during the recent financial crisis caused the near demise of the banking system (BIS, 2011:1). These two factors caused a situation where confidence in the solvency and liquidity of the banking system was lost.

The Basel III proposals provide for the improved micro and macroprudential[1] supervision of banks.

The first set of proposals deals with the strengthening of the regulatory capital framework. According to the BIS (2011:2) the reforms raises both the quality and quantity of the regulatory base, enhances the risk coverage of the capital framework and constrains the excess leverage in the banking system. The Basel III proposal also deals with systemic risks like procyclicality and the interconnectedness of banks.

3.2 Liquidity of banks

The BIS (2011:8) highlighted the fact that strong capital requirements are not a sufficient condition for banking system stability but that a strong liquidity base is as important. This was highlighted during the recent financial crisis. During the crisis,

[1] Caruana (2011:2) defines macroprudential policy as the use of primarily prudential tools to limit system-wide financial risk, and so prevent disruption to key financial services and the economy

banks that were still adequately capitalized still experienced difficulties due to a lack of liquidity.

Tarullo (2011) also highlighted the fact that the doubt about the institutions' financial strength contributed to severe liquidity problems during the crises. Investors and other counterparties were not prepared to provide credit of any sort due to the lack of information on the capital adequacy of the banks. Banks were unable to roll over their short term funding. This create a liquidity crisis in the banking system.

The Basel Committee for Banking Supervision has therefore decided to formally regulate the liquidity requirements of banks. The Committee released two minimum standards to complement the *Principles for Sound Liquidity Management* that was released during 2008.

According to the BIS (2011:8) these standards have been developed to achieve two separate but complementary objectives. The first objective is "to promote short term resilience of the banks' liquidity risk profile by ensuring that is has sufficient high quality liquid resources to survive an acute stress scenario lasting for one month" (BIS, 2011:8). This objective is achieved by the Liquidity Cover ratio.

The scenario comprises of a significant stress, but not a worst case scenario, and assumes the following (BIS, 2011:9):

- A significant downgrade of the institution's public credit rating;
- A partial loss of deposits;
- A loss of unsecured wholesale funding;
- A significant increase in secured funding haircuts; and
- Increases in derivative collateral calls and substantial calls on contractual and non-contractual off-balance sheet exposures, including committed credit and liquidity facilities

The second objective is "to promote the longer term horizon by creating additional incentives for a bank to fund its activities with more stable sources of funding on a structural ongoing basis".

The Net Stable Funding Ration (NSFR) has a time horizon of one year and has been developed to provide a sustainable maturity structure of assets and liabilities (BIS, 2011:9). The NSFR requires a minimum amount of stable sources of funding at a bank relative to the liquidity profiles of the assets, as well as the potential contingent liquidity needs arising from off-balance sheet commitments, over a one-year horizon. According to the BIS (2011:9) the NSFR would like to limit the over-reliance on short-term wholesale funding during times of buoyant market liquidity and encourage better assessment of liquidity risk across all on- and off-balance sheet items

The proposals was also refined in January 2013 with the key changes as follows:

First, the range of eligible assets has been extended – it was previously narrow and strict.

Secondly, it has relaxed some of the assumptions about how to estimate the net cash outflow.

Thirdly, banks will now only need to comply fully with the LCR by 2019 (previously, the deadline was 2015) and the requirement will be phased in, starting with 60% then increasing to 70% and so on – so, for example, if you expect R100m net cash outflow in a year you need to hold only R60m of liquid assets according to the 60% allowance.

Finally, in times of stress, the regulator will allow banks to use the stock of liquid assets they have accumulated, which means they will no longer be required to hold 100% at all times

4. Critical evaluation of the Basel III proposals on liquidity

The revised proposals in terms of liquidity in the Basel III accord will now be evaluated. Key issues that will be discussed is the availability of liquidity in South Africa and the unintended impact on monetary policy.

4.1 Regulatory impact

In South Africa it was calculated that ABSA will need to raise R300 million rand to meet the new liquidity requirement of Basel III. Concerns have also been raised about the availability of enough liquid assets in the South African money market to adhere to the new requirements.

The same concerns have been raised in more advanced economies. The Economist (2010) highlighted the concerns around the proposal to force banks significantly to cut their structural reliance on short-term funding. Credit Suisse reckons the regulators' proposed "net stable funding ratio" would require European banks to raise €1.3 trillion ($1.6 trillion) of long-term funding. Even over the course of several years, finding enough deposits or issuing enough bonds to meet that requirement is a hair-raising prospect—not least because of regulators' parallel efforts to remove the implicit guarantee that bank creditors still enjoy

To resolve the issue around the availability of liquid assets that will qualify according to the new liquidity coverage ratio, the South African Reserve bank has started the process to introduce liquidity facility. This facility will enable banks to obtain the necessary liquidity in difficult market conditions.

4.2 Calibration

The main issue raised is not the conceptual basis of the framework but rather the calibration of the framework.

Willink (2011:3) states that the Basel Committee on Banking Supervision will ensure that the framework is calibrated properly by means of regular data collection from banks. Due to the fact that banks have received major financial support from government during the crisis, the Committee cannot only rely on data from the banks. It is also important to make a qualitative assessment.

4.3 Role of the central bank in liquidity crises

Cao and Illing (2011:175) discuss the whole debate around the role of the central bank in liquidity crises. The danger is that the central bank is prepared to assist solvent banks that face a short run liquidity crisis which can lead to moral hazard.

Cao and Iling (2011:176) quotes Goodfriend and King (1988) who agreed that moral hazard can be a problem, but argues that a lender-of-last resort policy should target liquidity provisioning to the market and not to individual banks.

Buiter and Sibert (2007) are of the opinion that it is unfair to expect of banks to keep additional liquidity, because the central bank is in a position to create the liquidity at any stage

The arguments tend to imply that the proposals for liquidity were not necessary. The recent experience in the global crisis tends to indicate the opposite.

4.4 Implementation of the liquidity framework

Tarullo (2011:5) highlights the concern that the implementation of the liquidity requirement can have unintended consequences. The Federal Reserve and other banks, therefore proposes a multi-year observation period before the LCR takes effect. During this period the Basel Committee can collect and analyse data to determine whether the LCR requirement should be refined. It will also be possible to determine the possible impact of the new regulations on the financial markets and the broader economy

4.5 Types of liquid assets

According to Walters (2011:4) the proposals will lead to a greater diversification of the pool of liquid assets held by banks. The liquid assets of banks currently predominantly comprise of exposures to sovereigns, central banks and zero percent risk weighted public sector entities. The Basel Committee on Banking Supervision's recent quantitative impact study showed that these liquid assets comprised more than 85% of the liquid assets held by the banks. Basel III will increase this pool to include high quality corporate bonds and covered bonds

4.6 Liquidity coverage ratio and monetary policy

One possible impact of the implementation of the proposals of the liquidity coverage ratio is the impact on the ability of the central bank to implement monetary policy (Bech and Keister, 2012:48)

According to Bech and Keister, the implementation of the liquidity coverage ratio will involve the setting a target for the interest rate at which banks lend central bank reserves to one another, typically overnight and on an unsecured basis. As has been indicated earlier, these reserves form part of the calculation of the liquidity coverage ratio. This provides the link between the implementation of monetary policy and the implementation of the proposal on the liquidity coverage ratio.

One of the factors that will determine the impact of the liquidity coverage ratio on the the implementation of the liquidity coverage ratio is the extent to which banks are adhering to the liquidity coverage ratio requirements (Bech and Keister, 2012:52). If the banks are easily covering their liquidity requirement is can be expected that the implementation of monetary policy will not be as severely impacted than in case where a bank just managed to reach the minimum requirements for holding liquid assets in terms of the liquidity coverage ratio.

Bech and Kesiter (20123) highlights the fact that a bank that is concerned about possibly violating the liquidity coverage ratio has a stronger incentive to seek term funding in the market and is more likely to borrow from the central bank's standing facility. If the banks perform obtain liquidity in this manner, it will lower the demand of the bank to obtain funding in the overnight market. This lower demand for overnight funds will put downward pressure on the overnight rate, whereas the increased demand for term funding tends to put upward pressure on the very short end of the yield curve. Smaghi (2010:11) highlights the fact that the varying demand for liquidity will also impact on the demand for open market transactions. The demand of liquidity will some days be more for regulatory purposes that for the need for liquidity. This can lead to more volatility in interest rates.

Another concern raised by Tarrulo (2013) is the risk associated with short-term wholesale funding by systemically important firms. One solution offered by Tarulo is to expect systemically important firms to keep a higher liquidity coverage ratio to cover the additional risk. One outstanding issue will be to calibrate the progressive liquidity ratio.

Tarullo (2013) also challenged the basic implicit assumption of the liquidity coverage ratio methodology namely that a firm which balance sheet is perfectly matched is in a fundamentally stable position. On a microprudential level this might be an reasonable assumption. The recent global crisis has howver shown that this is not always true. If confidence is lost in assets under discussion contagion can still create havock in terms of liquidity.

4.7 Impact of open market transactions on liquidity coverage ratio

One possible impact of the new liquidity proposals is that it might increase the demand for liquidity provided by the central banks, because in terms of the calculation of the liquidity ratio, liquidity provided by the Central bank is deemed to be lliquid assets (Smagihi, 2010:8).

According to Smaghi (2010) this higher demand for liquidity and no change in the supply of liquidity by the Central bank, will lead to higher tender rates.

Another unintended consequence of this increased liquidity provisioning by die the central bank is that it might crowd out private sector activity in the money market. Because of the reduced dependence on other player in the private market, the peer monitoring of these players will be reduced. This can lead to more risky behaviour of the banks and counteract the intend of the liquidity proposals of the Basel Committee.

From the discussion it is clear that central banks will have to take the effect of their open market transactions on the balance sheets of banks into account as it will impact on the calculation of their liquidity coverage ratio.

5 Conclusion

The recent global financial crisis highlighted the importance for supervisors and regulators to ensure that banks are suitably capitalised with the correct amount and type of capital.

The liquidity crunch that occurred during the crisis showed that solvent banks can fail due to a sudden drop in the availability of capital.

It is important the Basel III proposals be implemented fully and managed properly in all Basel Committee countries to avoid regulatory arbitrage and a race to the bottom.

The new liquidity requirement will be difficult to implement due to the current use of short term finance to liquidity requirement at banks.

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