RESPONSE TO THE CRISIS: STRENGTHENING RISK MANAGEMENT & SUPERVISORY PRACTICES – CHALLENGES FOR BANKS

Dimantha N. Seneviratne

Chief Risk Officer – HSBC Thailand

This paper is based on the presentation made by the writer at the 7th South East Asian Central Banks (SEACEN) – ABAC/ABA/PECC Public - Private Dialogue for the Asia Pacific Region: the Impact of Global Financial Reforms and Challenges for Asian Emerging Markets, in Colombo, July 2011.

1. Introduction

Since 2008, an increasing number of economists, policy makers and market operators have blamed shortcomings in the Basel II framework on bank capital adequacy to be a major cause for the financial crisis, which initially occurred in the sub-prime sector in the US and subsequently spread around the globe. Though several issues related to the financial markets have been examined, prudential regime for banks seems to be the first to be blamed whilst adequacy and quality of capital level, the role of rating agencies, the pro-cyclicality of minimum capital requirements, and the fair value assessment of banking assets have also become most debated issues. At the same time, weak corporate governance practices that prevailed within the banks have also been highlighted.

This paper will study the pre-crisis regulatory and risk management scenario and the reasons that are believed to have caused the crisis and the repercussions it had on the entire global economy. Subsequent to the crisis, the Basel Committee on Banking Supervision (Basel Committee) prescribed several recommendations to strengthen the stability of the financial services industry which are now commonly known as Basel III recommendations. This paper also looks at some of the key changes brought about by Basel III and other major changes to the regulatory regime that have been proposed in the aftermath of the crisis.

Financial institutions that were known as “too big to fail” or, what have been recently termed as “Systemically Important Financial Institutions (SIFIs)”, have also been at the heart of the financial crisis. Several SIFIs have been bailed out at taxpayer’s expense and the experience of allowing Lehman Brothers to fail caused authorities to ponder over a recurrence of such an event.

This paper will also touch upon challenges and options available for effective cross border supervision of SIFIs, problems with which caused a contagion effect in the overall global melt down.

Stricter financial regulation, going forward, would put the Global Banking Industry in the spotlight. The end effect of this regulation is the improvement of capital requirements during a period where margins are shrinking due to after effects of the crisis and the potential chase for sticky deposits, which could lead to an increase in the cost of banking. In such context, the future of banking, especially raising capital for a low yielding business would prove to be a challenge. This paper would also look at such challenges in the aftermath of the introduction of Basel III.

2. Pre Crisis Regulatory Scenario

It is appropriate to highlight the global regulatory framework that was prevailing at the initial stages of the crisis in and around 2007 in order to ascertain a complete picture of the events that unfolded subsequently. Some of the salient features were:

- International capital standards first introduced way back in 1988 and Basel I, fully implemented in G20 countries by 1992
- Best practices in Corporate Governance (recommendations of the Basel Committee) was introduced in 1999
- Basel II proposals introduced in 2004 and the advanced approaches in 2007
- Bank regulators were guided by the Basel Core Principles which were the building blocks to effective supervision
- Compliance with these were evaluated through the Core Principles Methodology
- Enterprise Risk Management was becoming popular along with integrated risk management

In short, a very comprehensive regulatory framework was in place in the advanced economies and they were being adopted as the best practices internationally, through the efforts of the Basel Committee. Yet, ironically, the problem occurred in countries where all these best practices were widely prevalent.

3. What Went Wrong?

The 2007-08 financial crisis, which erupted in the US sub-prime mortgage sector and led to a collapse in the financial system, has deeply rooted causes. The first determinant has certainly been the evolution of the banks' business models. Indeed, major international banks, particularly in the US, have gradually changed the nature of their operations from the traditional banking operation, where they grant loans to customer and hold them in their balance-sheet (buy and hold), to a model where loans are originated and then securitized (originate to distribute – OTD). As in most economic phenomena, the OTD model has pros and cons. On the one hand, it implies that assets that would have been otherwise held up to maturity are sold to a large number of operators, generating a high volume of funding and thus giving a thrust to the economy as a whole. On the other hand, it favours a high level of leverage and a possible reduction of the

intermediaries' incentives to monitor the quality of their portfolios. In fact, since the mid-eighties, a rapid growth of the indebtedness in the world economy, especially in the household sector, has been noticed. After 2000, it has reached the highest levels. Furthermore, from the second half of 2005, lending to riskier customers has intensified in the United States; this has also been the result of the proliferation of unregulated intermediaries, mainly brokers, that made it easier to match credit supply and demand.

Originators of subprime loans subsequently sold their mortgages to other intermediaries – often unregulated vehicles – and used the revenues for granting new loans. Securitized loans were then transformed into securities, and tranched according to their creditworthiness. Specialized international agencies have assigned high credit ratings to the senior tranches of such securities. These securities were underwritten by institutional investors and by the banks themselves. Accordingly, high ratings were assigned to tranches presumed to be of higher quality. When the quality of sub prime mortgages started to deteriorate in 2005 (also in connection with the rapid decline of US housing prices and the increase in interest rates), the securities backed by these loans started to lose value, causing losses in investors' portfolios. The unwise use of leverage by some investors had made losses more remarkable. Banks holding these securities encountered difficulties. Liquidity needs also increased because of the withdrawing of credit lines offered to vehicles, which brought about widespread disruptions in the interbank market. Problems arising in the sub-prime segment then affected the markets of all structured products, which were too complex and not liquid enough to be correctly assessed under stressed conditions. The ensuing deleveraging process has been rapid and disordered.

In addition, banking losses resulting from fair-value assessment of assets held in trading portfolios have been remarkable. That dramatically reduced the profitability of a large number of intermediaries. Increasing uncertainty on the effective amount and localization of losses, along with the drastic loss of confidence in the financial system's ability to recover from troubles, disrupted the smooth functioning of interbank markets and entailed the collapse of intermediaries operating on a global scale.

The light touch regulation practised by some of the regulators and weak corporate governance practices among banks, especially with regard to remuneration, were also recipes for disaster.

3.1 The role played by Basel II in the financial crisis

Since late 2007, accusations have been levelled against the Basel II framework on capital adequacy as one of the, if not the major, causes for the crisis.

The main responsibilities ascribed to Basel II in connection with the financial crisis are the following:

1. The average level of capital required by the new discipline is inadequate and this is one of the reasons for the recent collapse of many banks;

2. The Basel II Capital Accord, interacting with fair-value accounting, has caused remarkable losses in the portfolios of intermediaries;
3. Capital requirements based on Basel II regulations are cyclical and therefore tend to reinforce business cycle fluctuations;
4. In the Basel II framework, the assessment of credit risk is delegated to non-banking institutions, such as rating agencies, subject to possible conflicts of interest;
5. The key assumption that banks' internal models for measuring risk exposures are superior to any other has proved wrong;
6. The new Framework provides incentives to intermediaries to deconsolidate from their balance-sheets some very risky exposures.

While some of these arguments raised by Basel critics are not well founded, the crisis did disclose some of the aspects of Basel II that needed rethinking and changes. One point to note, but that is very often forgotten, is that Basel II rules were not actually applied even in major countries when the crisis erupted. In Europe, most banks started to apply new rules in 2008 and in the USA, regulatory agencies had decided to postpone implementation to 2010.

However, it is pertinent to note that Basel II is a milestone with regard to risk measurement and capital allocation, given its comprehensive approach, especially the re-inforcement to risk management and disclosures brought about through Pillars 2 and 3.

Certain other components in the regulatory regime have also shown serious weaknesses during the crisis. Rules on liquidity, for example, have proved unsatisfactory; cross border crisis management hardly employed. In some countries, regulations indicated various shortcomings, specially an increased share of unregulated intermediaries leading to an unregulated shadow banking system and more importantly, the weak supervision which was not fully effective.

4. Basel Committee's Response to the Financial Crisis

The Basel Committee on Banking Supervision, having studied the reasons for the crisis, developed a reform programme to address the lessons of the crisis, which delivers on the mandates for banking sector reforms established by the G20 at their 2009 Pittsburgh Summit.

The key weaknesses that amplified the crisis were excessive leverage, inadequate and low quality capital, and insufficient liquidity buffers. The crisis was exacerbated by a procyclical deleveraging process and the interconnectedness of systemically important financial institutions. Hence, the Committee's reforms seek to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill-over from the financial sector to the real economy.

The cornerstone of the Basel Committee's reforms is stronger capital and liquidity regulation. At the same time, it is critical that these reforms are accompanied by improvements in supervision, risk management and governance, coupled with greater transparency and disclosure.

Collectively, the new Global Standards to address both firm specific and broader systemic risks have been referred to as Basel III, which comprises of the following building blocks:

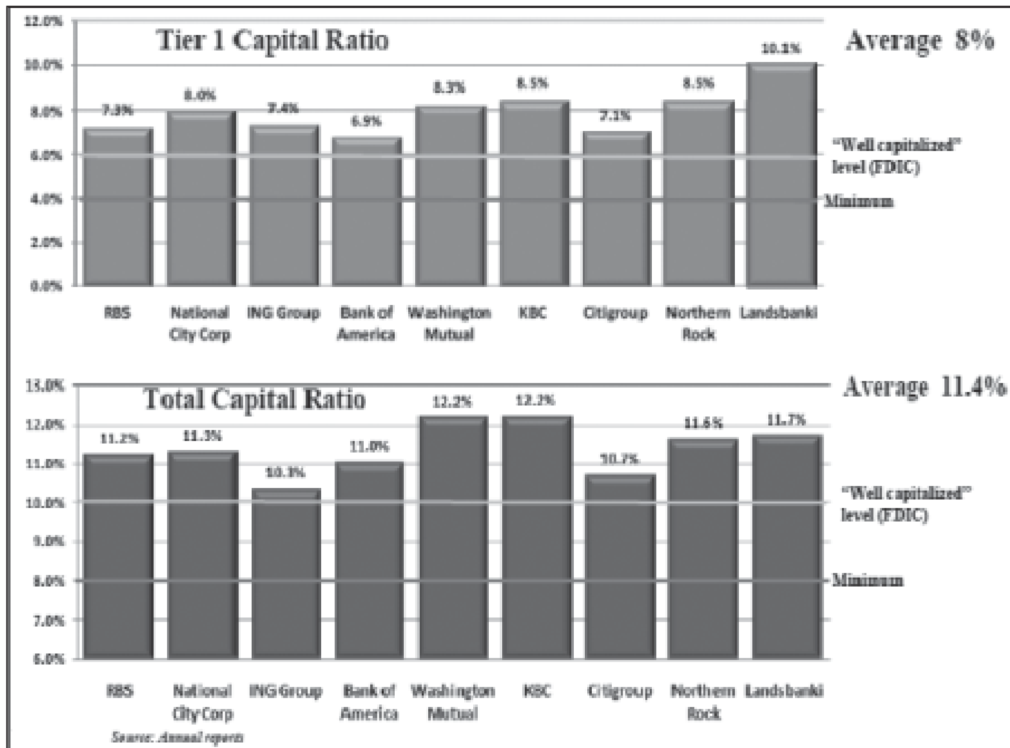
- Raising the quality of capital to ensure banks are better able to absorb losses on both a going concern and a gone concern basis;
- Increasing the risk coverage of the capital framework, in particular, for trading activities, securitizations, exposures to off-balance sheet vehicles and counterparty credit exposures arising from derivatives;
- Raising the level of minimum capital requirement, including an increase in the minimum common equity requirement from 2% to 4.5% and a capital conservation buffer of 2.5%, bringing the total common equity requirement to 7%;
- Introducing an internationally harmonized leverage ratio to serve as a backstop to the risk-based capital measure and to contain the build-up of excessive leverage in the system;
- Raising standards for the supervisory review process (Pillar 2) and public disclosures (Pillar 3), together with additional guidance in the areas of sound valuation practices, stress testing, liquidity risk management, corporate governance and compensation;
- Introducing a minimum global liquidity standard consisting of both a short term liquidity coverage ratio and a longer term, structural net stable funding ratio; and
- Promoting the build up of capital buffers in good times that can be drawn down in periods of stress, including both a capital conservation buffer and a countercyclical buffer to protect the banking sector from periods of excess credit growth.

The Committee is also working with the Financial Stability Board to address the risks arising from systemically important banks.

4.1 Quality of Capital

Table 1 depicts the level of capital recorded by several failed banks during the crisis. All of them recorded capital above the minimum thresholds, but the quality and composition were the main concerns.

The global banking system entered the crisis with an insufficient level of high quality capital. In the midst of the crisis, banks were forced to rebuild their common equity capital bases, at the point when it was most difficult to do so. The crisis also revealed the inconsistency in the definition of capital across jurisdictions and the lack of disclosure that would have enabled the market to fully assess and compare the quality of capital across institutions.



4.2 Quality and level of the Capital Base

The Basel Committee reached agreement on a new definition of capital in July 2010. Higher quality capital means more loss-absorbing capacity. This, in turn, means that banks will be stronger, allowing them to better withstand periods of stress.

A key element of the new definition is the greater focus on common equity, the highest quality component of a bank's capital. Credit losses and write downs come directly out of retained earnings, which are part of a bank's common equity base. The Committee, therefore, has adopted a stricter definition of a bank's common equity, requiring regulatory capital deductions to be taken from common equity rather than from Tier 1 or Tier 2 capital as is currently the case. As a result, it will no longer be possible for banks to display strong Tier 1 capital ratios, net of regulatory deductions with limited common equity.

The new definition of capital constitutes a significant improvement in the global capital regime, which will be enhanced further by the other aspects of Basel III.

4.3 Risk coverage

In addition to raising the quality and level of the capital base, there is a need to ensure that all material risks are captured in the capital framework. During the crisis, many risks were not appropriately covered in the risk-based regime. For example, some banks held significant volumes of complex, illiquid credit products in their trading books without a commensurate amount of capital to support the risk. Moreover, failure to capture major on-and-off-balance sheet risks, as well as derivative related exposures, was a key factor that amplified the crisis.

The Committee introduced a set of enhancements to the capital framework that, among other things, considerably strengthen the minimum capital requirements for complex securitizations. This includes higher risk weights for re-securitisation exposures (eg. Collateralised Debt Obligation (CDOs) of Asset Backed Securities (ABS)) to better reflect the risk inherent in these products, as well as raising the capital requirements for certain exposures to off-balance sheet vehicles.

Increasing regulatory capital for the trading book has been another crucial element of the Committee's reform programme. The Committee substantially strengthened the rules that govern capital requirements for trading book exposures. This included a stressed value-at-risk requirement, an incremental risk charge for migration and default risk, as well as higher requirements for structured credit products held in the trading book. The revised trading book framework, on average, requires banks to hold additional capital of around three to four times the old capital requirements, thus better aligning regulatory capital requirements with the risks in bank's trading portfolios.

Deterioration in the credit quality of counterparties was a significant source of credit-related loss. In response, the Committee has focused on increasing regulatory capital requirements and improving risk management for counterparty credit risk. This includes the use of stressed inputs to determine the capital requirement for counterparty credit default risk.

4.4 Raising the level of Capital

The minimum requirement for common equity, the highest form of loss absorbing capital, will be raised from the current 2% level, before the application of regulatory adjustments, to 4.5% after the application of stricter adjustments. Taken together, these measures represent a substantial increase in the minimum capital requirement to help ensure that banks are able to withstand the type of stress experienced in the previous crisis. Moreover, supervisors can require additional capital buffers during periods of excessive credit growth and, in the case of systemically important banks, they can demand additional loss absorbency capacity.

The Tier 1 capital requirement, which includes common equity and other qualifying financial instruments whose inclusion is based on stricter criteria, will increase from 4% to 6%.

4.5 Introducing an internationally harmonized leverage ratio

Another key element of the Basel III regulatory capital framework is the introduction of a non-risk-based leverage ratio that will serve as a backstop to the risk-based capital requirement. In the lead up to the crisis, many banks reported strong Tier 1 risk-based ratios while still being able to build high levels of on and off-balance sheet leverage. The use of a supplementary leverage ratio will help contain the build-up of excessive leverage in the system.

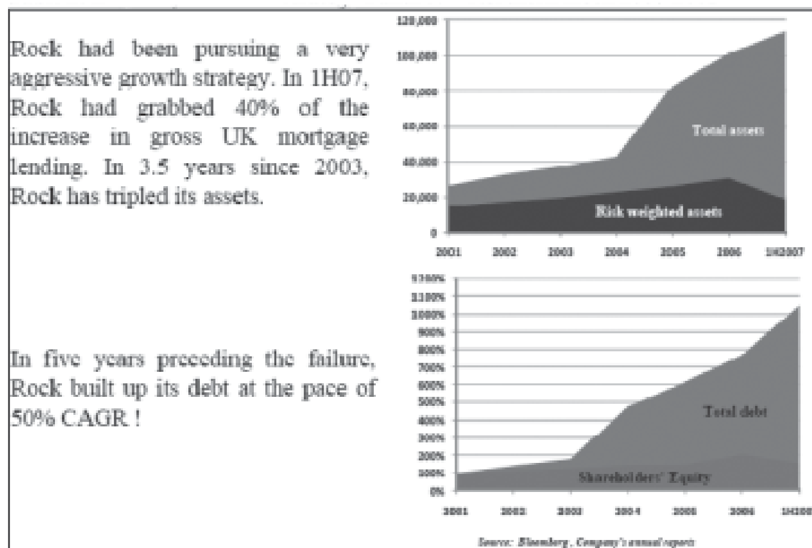
4.6 Liquidity

Strong capital requirements are a necessary condition for banking sector stability but by themselves are not sufficient. Equally important is the introduction of stronger bank liquidity as inadequate standards were a source of both firm level and system wide stress.

During the crisis, funding suddenly dried up and remained in short supply for a very long period. The Committee will introduce global minimum liquidity standards to make banks more resilient to potential short-term disruptions in access to funding and to address longer-term structural liquidity mismatches in their balance sheets.

A study on Northern Rock strategy, as shown below shows the alarming rate at which the assets grew creating a liquidity constraint in funding the balance sheet.

Table 2: Liquidity Crisis or Strategy Failure? – Northern Rock 2007-2008



4.7 Risk management and supervision

Stronger capital and liquidity standards have to be accompanied by better risk management and supervision. This is particularly important in an environment of continuously rapid financial innovation.

The Committee conducted a review of the Pillar 2 supervisory review process to address several notable weaknesses that were revealed in banks' risk management processes during the financial crisis. The areas addressed include:

- Firm-wide governance and risk management;
- Capturing the risk of off-balance sheet exposures and securitization activities;
- Managing risk concentrations;
- Providing incentives for banks to better manage risk and returns over the long term; and
- Sound compensation practices

4.8 Macro Prudential Measures

While stronger individual banks will lead to a stronger banking system, such a firm-specific approach by itself has not been sufficient to promote financial stability. Broader measures to address procyclicality and to strengthen the resilience of the entire banking system are equally important.

The introduction of the leverage ratio to help contain the build-up of excessive leverage in the system during periods of credit expansion is a new, but challenging requirement. An essential element of the new regulatory capital framework is the build-up of capital buffers in good times that can be drawn down in periods of stress.

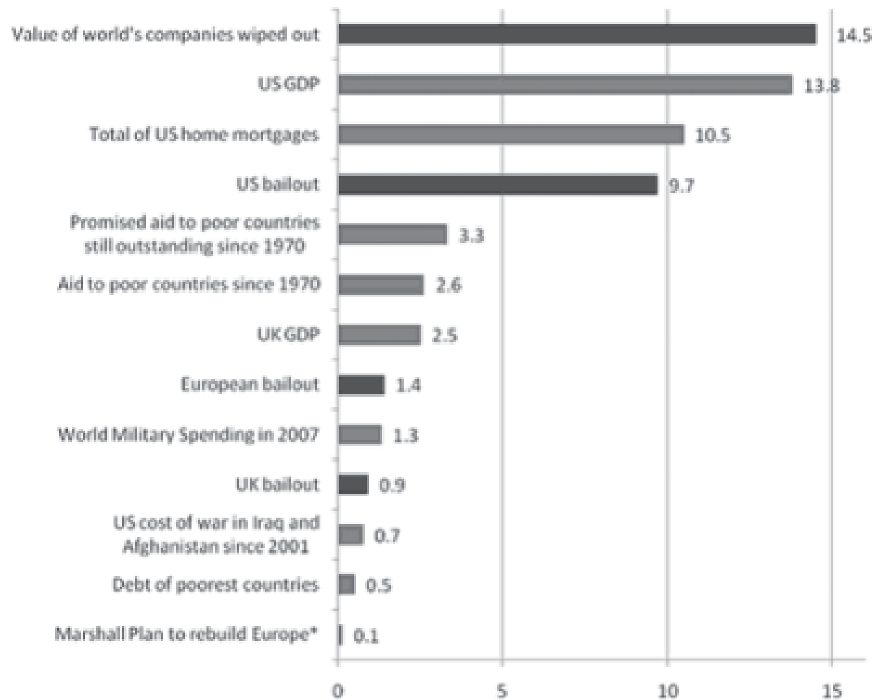
In addition, the Committee's oversight body agreed on a countercyclical buffer comprised of common equity or other fully loss absorbing capital. The purpose of the countercyclical buffer is to achieve the broader macro prudential goal of protecting the banking sector in periods of excess aggregate credit growth resulting in a system wide build up of risk.

5. Challenges for Effective Cross Border Supervision of Systemically Important Financial Institutions (SIFIs)

Whilst procyclicality amplified shocks over the time dimension, excessive interconnectedness among systemically important banks also transmitted shocks across the system and economies. Therefore, financial institutions that were known as "too big to fail" or to use the current terminology "systemically important financial institutions (SIFIs)" have been earmarked for a more prudent regulatory regime.

When it came to a crunch situation, a taxpayer funded rescue of SIFIs was seen as a lesser evil than allowing a disorderly collapse with the consequent loss of the institution's vital economic function and potential knock-on effects on other financial institutions.

The bailouts and losses from the crisis which were substantial are depicted below in context extracted from Bloomberg reports. These were the figures compiled in 2009 but since then, respective governments have further increased their bailout expenditure.



The international scope of many important SIFIs means that many different national supervisors and political authorities are likely to be involved in a 'resolution'. Each has its own domestic constituency, responsibilities and accountabilities and achieving a coherent and timely overall approach is likely to be difficult.

It is against this background that the Financial Stability Board (FSB) made recommendations to the G20 Leaders' Summit held in Seoul in November 2010. These recommendations have been endorsed by the G20 with a timetable agreed to put them into practice. There are two main elements to the agreed policy framework. The first is to improve the regulation and supervision of SIFIs so as to reduce the probability of them failing. There are two parts to this; increasing their capacity to absorb losses and increasing the intensity and effectiveness of supervision. The latter is to ensure that the authorities have the tools to effect a rapid and orderly resolution without recourse to tax payers' funds.

5.1 Greater loss absorbency via more Capital, contingent Capital and 'bail-ins'

The G20 has now agreed that SIFIs should have loss absorbency capacity that is commensurate with the system-wide expected losses that would be occasioned by their failure. SIFIs are effectively being required to internalize the costs of the risks they pose to the financial system.

Initially, the focus will be on Global Systemically Important Financial Institutions (G—SIFIs). These are defined as those SIFIs whose size, market importance and global interconnectedness are such that their distress or failure would cause significant disruption to the global financial system and adverse economic consequences in a number of countries. The FSB and national authorities are to draw up a list of G-SIFIs by the latter half of 2011 on the basis of qualitative and quantitative indicators to be proposed by the Basel Committee on Banking Supervision (BCBS) and agreed by FSB in early 2011.

G-SIFIs will have to have greater capacity to absorb losses while remaining a going concern than will be required under the Basel III minimum standards. This capacity might be supplied in several ways or combinations of ways. One possibility is a simple capital surcharge – eg higher capital ratios. Another possibility is a requirement for a specific quantity of contingent capital – ie capital instruments issued on terms under which they will be converted into ordinary equity on the occurrence of triggers indicative of bank distress. A third possibility is to have a share of debt instruments or other liabilities that are capable of being bailed-in (written down or converted into ordinary equity) by the authorities, under statutory powers, if deemed necessary.

5.2 More intensive and effective supervisory oversight

The primary concern is to ensure that supervisors have the capability to detect problems and to intervene at an early stage. The main aspects are as follows:

- Supervisors' mandates, independence and resources – there should be no ambiguity about supervisors' mandates or independence, and they should have the necessary quantity and quality of resources;
- Supervisors' powers – supervisors should have a full suite of powers available to them to be able to give effect to their mandates;
- Supervisory standards – there should be an improved set of standards for supervisors. In addition, national supervisors should be able to apply differentiated supervisory

requirements of differing intensity to SIFIs that reflect their systemic importance. And for G-SIFIs, there needs to be adequate exchange of information in supervisory colleges to enable rigorous and co-ordinated risk assessment.

5.3 Resolution framework

The FSB recommends that all jurisdictions should have a resolution framework in place to enable the authorities to resolve a SIFI rapidly, in an orderly way, without exposing taxpayers to the risk of loss and without jeopardizing the SIFIs' critical economic and financial functions. In particular, depositors need to be able to continue to access their deposits and to make and receive payments, and the authorities need to be able to transfer and sell viable parts of the institution while apportioning losses to capital providers and creditors in order of seniority. Here the FSB recommends that national authorities should be given legal capacity to share information and to co-operate internationally and should take into account the effects on host countries of their own resolution actions. National laws that protect domestic creditors at the expense of foreign creditors should be reviewed and eliminated where appropriate. Host jurisdictions are encouraged to consider whether to allow a foreign bank, whose operations may be systemically important in the host state, to operate through a branch or whether instead to require the incorporation of a local subsidiary. Further recommendations are made regarding SIFIs that operate through multiple group entities. In particular, undue use of intra-group guarantees, particularly blanket guarantees, will be minimized; intra-group service agreements will be properly documented which are capable of continuing in a resolution situation; and global payment and settlement services will be legally separable and their continuing operability ensured.

6. New Regulations – Challenges to Banks

The new Basel III regulations will prove challenging for banks to comply with, and may put serious strain on profits in the short to medium term, as the banks are required to increase both their capital ratio and liquidity buffer. Though the regulations have been put into place in order to protect banks and customers against potential losses and the liquidity requirements have been designed to make banks more stable by discouraging their reliance on short term funding, it would be a challenge to meet them, especially in a developing economy. The phasing in of the regulations over 2013 – 2018 is expected to provide a certain amount of relief.

The focus is around maintaining a higher level of better quality capital, and it broadens current risk-weighted capital ratio framework based upon a stricter definition of capital including a minimum ratio of common equity, a capital buffer and a counter cyclical provision. The risk-weighted ratios are complemented by a leverage ratio and a minimum liquidity ratio. The impact on these changes are discussed in detail below.

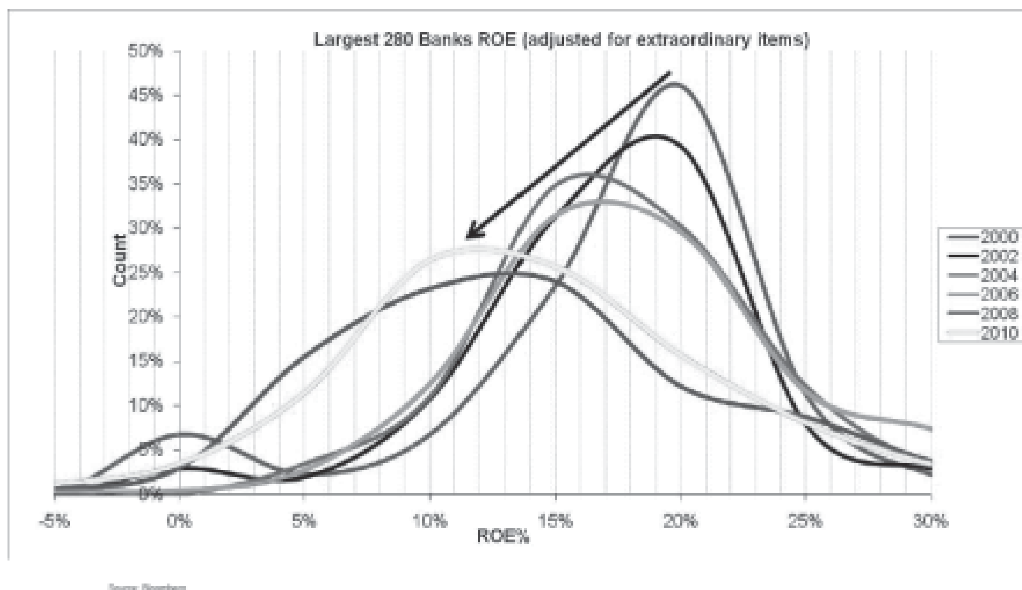
6.1 Impact of Capital changes

Given the higher capital requirements, going forward, capital will become more scarce and/ or even more expensive for all commercial banking activities.

This will have a negative impact on Return On Equity (ROE) for all new and existing business lines. A study done on World's Largest 280 Banks' ROE has indicated that since year 2000, the ROEs of the banking sector has been gradually reducing.

Table 3:

Continued ROE reduction untenable to investors
ROE targets constrained by relative sector performance



This continued ROE reduction would be untenable to investors and partly explains why the banking stock has come down in value in the recent past. In order to attract the returns, going forward, the cost of banking, reflected through pricing or margins may increase.

In addition, the ability the banks had in increasing lending activities in an economic up-swing may get constrained due to increasing capital buffers.

6.2 Impact of leverage ratio

The introduction of a leverage ratio is intended to act as a binding constraint in an up-swing and it is unclear as to how it will interact with the new liquidity requirements. Further, given the inclusion of areas hitherto considered as 'low risk', such as Trade Finance, Mortgages and retail

products, high quality corporate exposures and holding of government exposures, for calculation of the leverage ratio is expected to consume higher capital, thereby increasing the running cost of operations.

6.3 Impact of liquidity ratios

The liquidity requirements are expected to increase attractiveness of retail and sticky deposits thereby potentially increasing competition for deposits and squeezing of deposit margins. In addition, cross border direct investments by banks in cross currencies may get constrained due to limitations in access to liabilities in domestic currency. Moreover, enforced holding of central government bonds for liquidity purposes is likely to increase price of bonds (and reduce yields) and increase the impact risk of any sovereign downgrades.

The rules will be introduced over an extended transition period and fully applicable from 2019. Compared to Basel II, this represents a significant change for banks and markets, as rather than one ratio, banks will now be assessed using up to seven capital ratios. The number of ratios and their complex implementation will prove to be a challenge in years to come.

Before Basel III can even begin to be implemented in developing countries, Banks need to ensure their existing governance, risk management and compliance programmes are sound, as new regulations impose improved risk management on an enterprise level. It is important that right systems are in place to support adherence to above. Given the current 'silo' structure where data is being handled in different ways across a bank, another challenge faced by the banks would be quality data management. This demand from IT and data governance will create yet another challenge.

7. Conclusion

The introduction of any new financial regulation will involve the expression of two polar views. One view is that the regulatory reforms will take a significant toll on the Banking sector and the economy. This is mainly due to increased cost of funding for the economy. It is feared that the financial institutions will then pass this cost onto the private sector through an increase in lending rates or worse, abandon certain finance segments.

The other view is that more stringent regulation will not have any negative impact on growth because it would essentially reduce the frequency of crises, lessen burden to the tax payers and improve long term performance of the economy.

Both views are well informed and have very different underpinnings. Some consequences of regulations are difficult to predict and on the other hand any regulation may have unintended consequences. One of those is to create regulatory arbitrage. It is therefore crucial that regulations are applied consistently across jurisdictions. It is also important that a significant financial intermediation does not shift to the unregulated (shadow) financing sector that would lead to another disruptive financial crisis.

Another point to note is that increasing robustness is a necessary, but not a sufficient condition for safer financial systems.

Therefore, bigger cushions should not be considered as substitutes for inferior risk management and poor strategies and also as a substitute for competent supervision.

The challenge therefore is to find a right balance. There should be a light at the end of the tunnel. While initially the new regulations may place pressure on banks, in the long term the advantages of following this process will deliver benefits far beyond the implementation timeline. It will enable the banks to improve their business in the medium to long term, which will help to offset the predicted profitability squeeze as a result of new regulatory framework.

Despite these regulations, as discussed above, there was, and still is, a need to move from a financial world of excessive risk taking and heavy regulatory arbitrage to a new system of better quality capital and increased risk capture. Implementation of Basel III will provide the appropriate foundation for such a system, provided that phase-in arrangements are respected and implementation is coordinated globally.

However, we should also note that it is a Bank's risk management and governance framework that is the ultimate protection against the next big loss, and not how much capital it has.

Key References:

Basel Committee's response to the Financial Crisis – Report to G20 – October 2010

Reducing the Moral Hazard posed by Systemically Important Financial Institutions – FSB Recommendations and Timelines – October 2010

Systemically Important Financial Institutions : the agreed G20 approach –November 2010