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Impact of Basel III Norms on Banking Sector in Emerging Markets

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ABSTRACT

The financial crisis exhibited many inherent loopholes in the banking system; from non-compliance, non-disclosure and non-transparency to the need to maintain reserves of capital as buffers to be utilized in the crunch situations. What typically started as credit and counterparty risk for banks in the process of underwriting home-mortgage loans to subprime category of consumers and actually mutated into a number of other types of risk through the web of CDS and CDOs and involved almost all sectors and sections of economy engulfing the almost the whole of developed world into recession notwithstanding its impact of the growing emerging markets. This changed the very perception of risk management and control especially for Banks and FIs.

The main objective of this paper is to study and understand the various reformatory measures introduced under Basel III and other measures introduced by international financial authorities like the Federal Reserve, the FSA, the IMF to rehabilitate the banking system and its impact on the banking system of the emerging markets particularly because emerging markets are still in the developing phase with constraints on several fronts; from financial consolidation to financial inclusion.

Keywords - Basel III, Banks, Liquidity, Capital, Reforms, Risk Management.

I. INTRODUCTION

The intensity and depth of financial crisis from the U.S. has dramatically demonstrated the degree to which national economies, developed and developing both have been affected. The problem initially a problem confined to the U.S. housing market, rapidly spilled over to the rest of the U.S. financial system and then to the global economy and it bought the entire economic world into its ripples. The crisis provided an impetus to work towards substantive regulatory reforms to ensure proper checks and controls in place and avoid the happening of such crisis in future.

Emerging market financial systems, including those in Asia, generally have proven to be more robust and less affected by the global turmoil compared to their advanced economy counterparts. It will be important to carefully filter out the right lessons from this outcome. Meanwhile, the imperative of financial development remains as strong as ever in emerging markets although the focus is more on basic elements, such as strengthening banking systems and widening the scope of the formal financial system, rather than on creating sophisticated instruments and innovations.

Emerging markets face particular challenges in stabilizing their nascent financial systems in the face of shocks, both domestic and external. These challenges occur at a basic level in emerging markets, many of which are at the point of creating sound banking systems, widening inclusion in the formal financial system, and creating and managing a broader set of financial markets (such as corporate bond markets and basic currency derivatives). Thus the regulatory challenges in these economies are more about risks emanating from underdeveloped financial systems rather than risks from sophisticated financial innovations.

There is a need to strike a balance between encouraging the banks to lend more, which would probably increase economic growth, while also making sure the banks keep enough capital on hand to avoid a repeat of the financial crisis of the current magnitude.

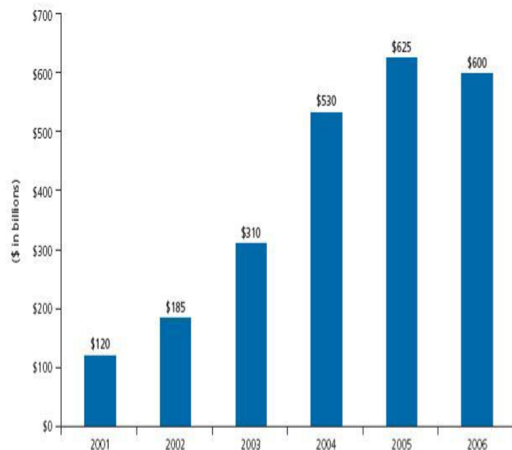
This paper focuses on evaluating the lessons learnt from the crisis and attempts to assess the implications of the financial crisis for the design of regulatory frameworks and models, taking into account the specific constraints in emerging markets.

II. IMPACT OF THE CRISIS ON THE GLOBAL BANKING SYSTEM

Subprime Crisis led to a wave of loan delinquencies, foreclosures and asset write downs of a no. of banks and other financial institutions of which some of them like Bear Stearns and Lehman Brothers had to see the fate of bankruptcy.

Large amount of subprime loans granted by these huge banks, coupled with the offloading of the credit risk through credit derivative instruments like CDS, CDOs etc. led to the crippling effect for the entire economic ecosystem. When the interest rates started increasing, borrowers of subprime loans especially Adjustable Rate Mortgages (ARMs) started defaulting leading to a series of home foreclosures. And with a large no. of such foreclosures and practically no demand from buyers for homes & properties, real estate (housing) market crashed and loans given by banks could not be recovered.

The graph and table below shows the amount of subprime loan origination on books of a few large banks and other financial institutions in US showing the extent of lax practices being followed there.



Source: Inside Mortgage Finance as Presented in Sandra Thompson Testimonx March 22, 2007

Fig. 1

The web of CDS and CDOs formed over such mortgage loans practically became illiquid leading to the crash of entire economy from all facets. Liquidity in the market dried up completely with banks and other financial institutions having enormous write-downs. The heavy dependency of banks on short term loans to finance their long term liabilities and heavy leverage on their balance sheets actually led to a major crisis in the banking industry in US and UK with its ripple effects on banking system worldwide.

TABLE 1

Top Subprime Lenders-9M06 Rank Company		Subprime Origination
1	Well Fargo	$66.8
2	HSBC	$43.1
3	New Century Financial	$39.4
4	Country Wide	$30.5
5	Fremont Investment Loan	$27.9
6	Citigroup	$24.4
7	Ameriquest	$24.0
8	Option one Mortgage (H&R Block)	$22.3
9	Washington Mutual	$21.5
10	First Franklin financial (Merrill Lynch)	$19.6
11	Rescap	$16.7
12	BNC Mortgage/Finance America(Lehman Bro.)	$15.4
13	Aegis Mortgage	$13.0
14	Accredited Home Lenders	$12.4
15	American General Finance (AIG)	$11.6
16	JP Morgan chase	$8.5
17	Ownit Mortgage Solutions*	$8.3
18	Nova Star Financial	$7.6
19	Equi First (Barclays)	$7.5
20	Res mae Mortgage*	$5.7
	Others	$81.8
	Total	$5.8.0

Denotes Bankrupt Lenders

$in Billions, as of 9M06

Source: Various Media sources, Credit Sights

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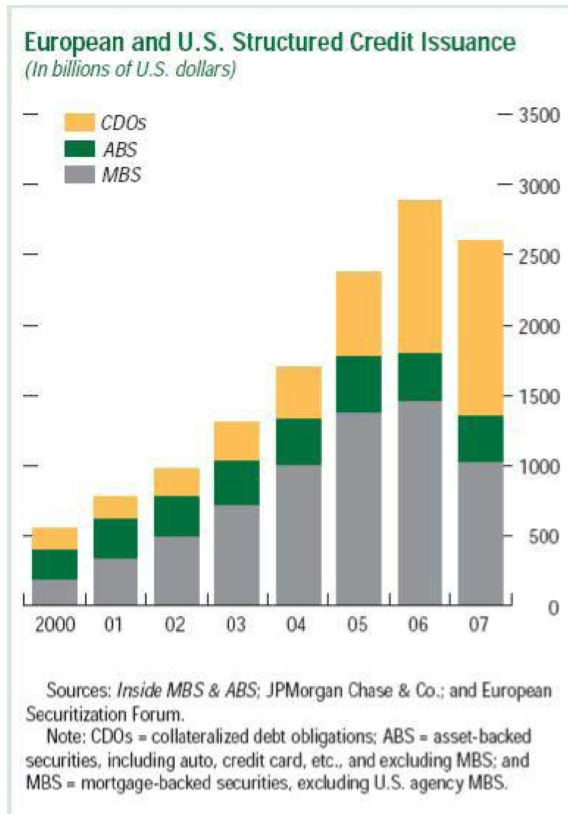
The table shown below depicts the huge amount of credit derivatives instruments that were being written on the mortgage loans and other types of lending issued by banks and other financial institutions reflecting the extent of dependency on these structured instruments.



(*Source:* IMF Report or: Global financial Stability, April 2008)

Fig. 2

Credit squeeze has been a natural consequence of the subprime crisis with lending terms tightening by all the major banks. With the subprime losses touching $312 billion, all major banks have taken various actions to curb losses and future crisis.

The following table shows the $318 billion in asset write downs and credit losses since the beginning of 2007, including reserves set aside for bad loans, at the world's biggest banks and securities firms.

Thus, it became imperative on the part of international financial bodies, governments and regulatory authorities to come into action to restrain the recurrence of such crisis conditions, to address the risk posed by such systemically important institutions like banks, financial institutions etc. Better supervision, better regulatory and liquidity provisions and better risk management practices is the need of the hour. Hence the Basel committee of Banking Supervision revised the Basel II norms and came up with stricter and tighter capital and liquidity requirements to avert the detrimental impact of financial crisis in future.

TABLE 2

Firm	Write Down	Credit Loss	Total
Bank of America	9.2	5.7	14.9
Citigroup	35.3	5.6	40.9
JP Morgan Chase	5.5	4.2	9.7
Barclays	3.2	-	3.2
HSBC	3	9.4	12.4
Royal Bank of Scotland	14.9	-	14.9
Deutsche Bank	7.5	-	7.5
UBS	38	-	38
BNP Paribas	1.4	0.3	1.7
Credit Suisse	9.6	-	9.6
Societe Generale	3.9	-	3.9
Credit Agricole	6.6	-	6.6
Mizuho Financial Group	5.5	-	5.5
Bear Stearns	3.2	-	3.2
Goldman Sachs	3	-	3
Lehman Brothers	3.3	-	3.3
Merrill Lynch	31.7	-	31.7
Morgan Stanley	12.6	-	12.6
IKB Deutsche	9.1	-	9.1
Washington Mutual	0.3	8	8.3
Wachovia	4.9	2.4	7.3
Wells Fargo	0.9	2.7	3.6
ABN Amro	2.5	-	2.5
Canadian Imperial	4.1	-	4.1
Bayerische Landesbank	3.6		3.6
E*Trade	2.5	0.9	3.4

III. NEED OF A STRONGER REGULATION

The crisis resulted into a combination of asset losses and write-downs, extreme uncertainty about the eventual scale of those losses, and the collapse in funding liquidity. A number of major banks and investment institutions announced major write downs in their portfolios on account of exposure to the subprime segment.

The financial crisis exhibited many inherent loopholes in the banking system. What typically started as credit and counterparty risk for banks in the process of underwriting home-mortgage loans to subprime category of consumers and actually mutated into a number of other types of risk through the web of CDS

and CDOs and involved almost all sectors and sections of economy engulfing the almost the whole of developed world into recession notwithstanding its impact of the growing emerging markets. This changed the very perception of risk management and control.

In response, the authorities took unprecedented measures to recapitalize the banking sector and to provide large-scale liquidity support.

IV. ANALYSIS OF BASEL III

Basel committee on banking Supervision (BCBS) has proposed a new regulatory regime on capital requirement. These capital reforms, together with the introduction of a global liquidity standard have been introduced to discourage excessive leverage and risk taking practices, and to reduce pro-cyclicality. Some of the major reforms have been listed below:

Strengthening of Global Capital Standards

The minimum common equity requirement has been increased from 2% to 4.5%. In addition, banks will be required to hold a capital conservation buffer of 2.5% to withstand future periods of stress bringing the total common equity requirements to 7%. This reinforces the stronger definition of capital agreed by BCBS and the higher capital requirements for trading, derivative and securitization activities to be introduced at the end of 2011.

Banks have also proposed another requirement of countercyclical buffer with the idea that when credit is expanding faster than GDP, banks start increasing the capital requirement in advance. The objective is to:

- Slowdown the credit bubbles
- Make the banks stronger
- Offer the way out of the paradox of capital

TABLE 3: CALIBRATION OF THE CAPITAL FRAMEWORK CAPITAL REQUIREMENTS AND BUFFERS (ALL NUMBERS IN PERCENT)

	Common Equity (After Deductions)	Tier 1 Capital	Total Capital
Minimum	4.5	6.0	8.0
Conservation Buffer	2.5		
Minimum Plus Conservation Buffer	7.0	8.5	10.5
Countercyclical Buffer Range*	0-2.5		

Source: Basel Committee on Banking Supervision, Press release dated 12 September 2010

Bank of International Settlements proposes to banks to keep this buffer according to the jurisdiction in which loans are made rather than where their headquarters are. These standards would potentially tighten the discretion of banks with insufficient capital buffers to declare dividends or make other distributions out of earnings. Those constraints would become more restrictive as capital drops closer to the minimum capital requirement.

The deadline for the member nations to begin phase in implementation of Basel III capital requirement is January 1, 2013.

Leverage Ratio

Another significant component of the Capital Reform Proposal is the proposed introduction of a leverage ratio as a supplementary measure to the Basel risk-based capital framework. Tier 1 leverage ratio is proposed to be around 3%, which would limit banks to lending 33 times their capital which in turn represents a cap on bank's risk irrespective of the impact from higher capital nos. After an observation period beginning in 2011, the liquidity coverage ratio (LCR) will be introduced on 1 January 2015. The revised net stable funding ratio (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.

Forward-Looking Provisioning

Basel III is promoting stronger loan-loss provisioning through three related initiatives, including

1. Supporting the International Accounting Standards Board initiative to move to an expected loss approach to loan loss reserves;
2. Revising its supervisory guidance on loan loss reserves to be consistent with the desired expected loss approach and
3. Reviewing the treatment of loan loss provisions under the Basel II framework with the goal of eliminating various disincentives to adequate provisioning. For example, as discussed above, the Proposal calls for any shortfall between reserves and actual loss to be deducted entirely from the common equity component of tier 1 capital, rather than 50 percent from tier 1 and 50 percent from tier 2 as under the current framework.

TABLE 4: TIME TABLE FOR THE PHASE IN DISTRIBUTION OF CAPITAL REQUIREMENT

	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%
Minimum common equity plus capital conservation buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer			8.0%	8.0%	8.0%	8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						
Liquidity coverage ratio	Observation period begins				Introduce minimum standard				
Net stable funding ratio		Observation period begins						Introduce minimum standard	

Source: Basel Committee on Banking Supervision, Press release dated 12 September 2010

Fundamental Review of Securitization Framework

The Basel Committee is undertaking a "more fundamental review" of the entire securitization framework under Basel II, which may lead to revised capital charges for securitization exposures, as well as to a reconsideration of the hierarchy rule requiring the use of the Ratings-Based Approach to risk-weight a securitization exposure if an external rating exists.

Systemic Banks, Contingent Capital and a Capital Surcharge

The Basel Committee has developed a proposal based on a requirement that the contractual terms of capital instruments will allow them at the option of the regulatory authority to be written-off or converted to common shares in the event that a bank is unable to support itself in the private market in the absence of such conversions. At its July meeting, the Committee agreed to issue for consultation such a "gone concern" proposal that requires capital to convert at the point of non-viability.

V. BASEL III & ITS IMPACT ON EMERGING MARKET ECONOMIES

The biggest challenge that arises from the introduction of new regulatory and liquidity regime in the banking system of the emerging markets like India is the tradeoff that needs to be made between the promotion of financial stability and achievement of sustainable growth and job creation.

Higher capital requirements comes at a cost of slower economic growth for a no. of years because banking will be modestly more expensive—loans will be a little costlier and a little harder to get, make it harder for businesses and individuals to obtain loans, lower will be the interest rates offered to depositors and other suppliers of funds, and there will be reduction in the market value of the common stock of existing banks.

For emerging markets, the regulatory reform agenda is closely linked to their financial development agenda. Some of these economies suffer from financial instability as well as underdeveloped financial markets

like bond market and derivatives market. This creates its own set of regulatory challenges. It is worth aligning the reformatory agenda with the two main priorities of emerging economies—financial development and financial inclusion—and to find out how they can be achieved in parallel with regulatory issues. For most emerging economies, the relatively small size of banking sector demands a lot of capital to expand and penetrate the untapped markets. Also, there is a lot of scope of financial innovation like development of currency derivatives market, bond market etc. which are still in the stage of infancy. Share of banking system in financial intermediation is required to a greater extent at this stage of development.

Most emerging market banking systems will be challenged by the liquidity proposals in specific as most of their domestic long-term bank funding markets is relatively thin. In some cases (especially East Asia), the supply of eligible liquid assets is also limited.

Also, the provision of excluding minority interests from capital would also raise operating costs for many mature market banks with businesses in emerging economies as many of them have infused foreign equity into local banking systems. Also brought with it new practices to improve local banking efficiency and competition. Current Basel III proposals would significantly increase the cost of maintaining such local emerging market presence for banks based in mature countries.

Besides all the above mentioned issues, the direct negative economic effects on emerging economies from regulatory reform will be compounded by indirect effects, which will operate mainly through the transmission mechanism of cross-border capital flows.

VI. CONCLUSION

The emerging markets already suffer from a myriad of complexities like financial under development, high inflation, large fiscal deficits etc. Though government ownership of banks has proved to be very helpful in a crisis but it creates conflict between monetary policy and regulatory objectives even in normal times. Interest rate changes to maintain price stability may not always be consistent with the stability and profitability of the banking system. This creates another layer of tension among a central bank's mandates.

The priorities for strengthening banking systems in emerging markets are quite different from those in advanced economies. While banks in many emerging markets, including China and India, meet or exceed even the higher capital requirements proposed under the Basel III Accord, the major priority for these banks is to improve risk management practices rather than to strengthen their capital bases. Given the high domestic saving rates in these economies and the likelihood that banks will remain dominant in their financial systems for some time to come, more efficient banking systems that can do a better job at intermediating domestic savings into productive investment can enhance growth and economic welfare.

Further analysis is also needed to determine what additional instruments the central banks will require to establish a balance between multiple objectives and to address questions such as what sort of rules and regulations can be used to keep asset prices in line, especially when there is a conflict between hitting an inflation objective and dampening asset price bubbles.

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