Macro-prudential Approach to Regulation-
Scope and Issues

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POST-CRISIS FRAMEWORK

- Critical importance of ‘macro prudential perspective’ being clearly recognised

- Two distinct but highly inter-related constructs
  - systemic risk management
  - macro prudential regulation
SYSTEMIC RISK MANAGEMENT

Probability of sudden disruption to a large part of the financial system, reflected in failure of multiple institutions and freezing of markets, triggered by a common shock and propagated through interconnected exposures and correlated positions.
SYSTEMIC RISK MANAGEMENT - ELEMENTS

- Strengthening the financial system’s resilience to economic downturns and other adverse aggregate shocks
- Sound monitoring of common, correlated exposures among financial institutions arising out of network linkages
- Minimising the moral hazard associated with failure of systemically important institutions
- Finding mechanisms to restrict the contagion impact of failing institutions during crisis
MACRO PRUDENTIAL REGULATION

The Idea:

Key instruments of prudential regulation viz. capital, liquidity and provisioning vary dynamically according to macroeconomic circumstances.

In addition to stricter prudential standards for capital, liquidity and leverage across the board.
MACRO PRUDENTIAL REGULATION

Objectives:

- To address procyclical elements in the financial system
- To provide a mechanism to correct the inherently skewed pricing of credit risk by financial institutions through the cycle.
- To attempt pre-empting asset price bubbles in the economy and limit the build-up of financial risks in the system.
MACRO PRUDENTIAL REGULATION

Tools:

- Countercyclical capital buffer
- Conservation buffer
- Forward looking provisions
MACRO PRUDENTIAL REGULATION

Challenge for EMEs:

- Risk of credit constraints given the supply side issues
- Generalized credit increase higher than the trend may not, in itself, be a matter of systemic concern
- Sectoral Approach
  - Difficult to set an optimum level of asset prices as a target.
  - Only bank financed exposures to asset markets can be influenced
  - Will involve an element of regulatory judgement and discretion
<table>
<thead>
<tr>
<th>Year/Month</th>
<th>CRE Risk Weight (%)</th>
<th>CRE Provisions on Standard Assets (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2004</td>
<td>100</td>
<td>0.25</td>
</tr>
<tr>
<td>July 2005</td>
<td>125</td>
<td>0.25</td>
</tr>
<tr>
<td>March 2006</td>
<td>125</td>
<td>0.40</td>
</tr>
<tr>
<td>May 2006</td>
<td>150</td>
<td>1.00</td>
</tr>
<tr>
<td>January 2007</td>
<td>150</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Source: RBI
Did not have any disaggregated statistical data or evidence to support concerns based on the incurred loss method.

What we did have was a clear trend in significant year-to-year increase in aggregate bank credit. The credit-deposit ratio, particularly on an incremental basis, has always been an important factor in the policy framework.
INDIAN EXPERIENCE - BACKDROP
OTHER FACTORS

(i) The onsite inspections of banks had started giving indications of the negative fallouts of the euphoria evident in lax underwriting standards

(ii) Emerging signs of underpricing of risks as the real estate prices were spiralling fuelled by ample liquidity and the dominant wealth effect transmittal from the stock market boom.

(iii) Emerging trend of mortgages for investment purposes – the trend for second homes, particularly in metros having a rising urban population

(iv) Increasing anecdotal evidence of the inventory buildups of completed commercial as well as residential units.

(v) Increasing trend towards monetisation of land by real estate companies on the back of the then booming stock market valuations
KEY INFERENCES

- Harmonisation of the monetary policy objectives and prudential objectives can give a more complete picture, which may not be possible if banking supervision is separate from central banks;
- Sectoral policies alone will not be effective if the monetary policy is very accommodative;
- Supervisors need to have the necessary independence and flexibility to act timely on the basis of available information, which may **albeit** be incomplete.
GOING BEYOND MACRO PRUDENTIAL REGULATION

Difficult to make a binary distinction between micro prudential and macro prudential policies - ultimately all macro risks translate into micro risks for financial institutions.

The critical thing is incorporation of systemic perspective while designing policies.

Many emerging countries, based on past experience have already been using various instruments keeping the broad systemic perspective in mind.
INDIA: OTHER MACROPRUDENTIAL POLICIES (1)

- Interconnectedness
  - Prudential limits on aggregate inter-bank liabilities for banks as a proportion of their net worth.
  - The overnight un-collateralised funding market is restricted only to banks and primary dealers and there are ceilings for both lending as well as borrowing.
  - Investment by banks in subordinated debt of other banks is assigned 100% risk weight for capital adequacy purpose.
  - Banks’ aggregate investment in Tier II bonds issued by other banks and financial institutions is limited to 10 percent of the investing bank's total capital.
INDIA : OTHER MACROPRUDENTIAL POLICIES (2)

- Limits on the proportion of wholesale foreign currency liabilities intermediated through the banking system.

- Retail foreign currency deposits from non-residents are subject to minimum maturity requirements and interest rate caps.

- Banks are required to hold a minimum of 25 percent of their liabilities in the form of liquid domestic sovereign securities.

- The credit conversion factors (CCF) used for calculating the potential future credit exposure for off-balance sheet interest rate as well as exchange rate contracts were doubled across all maturities in 2008.
INDIA : OTHER
MACROPRUDENTIAL POLICIES (3)

Securitisation

- Profits on sale of assets to an SPV under securitisation are not allowed to be recognised immediately on sale but over the life of the pass through certificates issued by the SPV.

- Any liquidity facility by the originator or a third party is to be treated as an off-balance sheet item and attracts 100% credit conversion factor as well as 100% risk weight.
INDIA : OTHER MACROPRUDENTIAL POLICIES (4)

- **Capital Account Management Framework**
  - Substantially large freedom to equity flows – both FDI as well as portfolio flows
  - Debt flows have been attempted to be modulated contextually through a regulatory framework with a combination of quantitative and price based measures.

- **Management of sovereign borrowings**
  - Limited dependence on foreign investors in respect of domestic currency debt
  - Strong domestic investor base, apart from banks, in the form of insurance and pension/provident funds which has enabled India to elongate the maturity of its domestic debt.
SYSTEMICALLY IMPORTANT FINANCIAL INSTITUTIONS (SIFI)

- FSB workstreams
  - reducing the probability and impact of failure
  - improving resolution capacity
  - strengthening the core financial infrastructures and markets

- ‘Constrained discretion’ approach
SYSTEMICALLY IMPORTANT FINANCIAL INSTITUTIONS (SIFI)

- Reducing the probability and impact of failure
  - Public good cause to contain the riskiness of these large institutions because of significant negative externalities

- Improving resolution capacity
  - a special resolution regime which makes the shareholders and creditors share the losses;
  - a bailout fund, contributed by the same entities expected to be bailed out.

- Strengthening markets and market infrastructure - CCPs
STRENGTHENING MARKETS AND MARKET PRACTICES

- Need to regulate the OTC derivatives markets in interest rate, credit and forex products from a systemic perspective

- Credit rating agencies
  - The moral hazard issue of implicit sovereign support available to systemically important institutions

- Increasing collateralization of bank balance sheets
  - Incentivising leverage
  - Pro-cyclical impact on bank balance sheets
ISSUES TO BE ADDRESSED FOR A CCP REGIME

- Cross margining across CCPs or across different products

- Pro-cyclicality of the margin requirements

- Adverse incentives for increased volumes at the cost of lower margins or relaxed netting and margin offsets

- Risk of transactions undertaken through CCP sitting in banks/regulated financial entities - in the form of Lines of credit or to intermediaries such as brokers and market participants in the form of margins for trades, payment commitments or other forms of guarantees.
EXISTING FRAMEWORK IN INDIA

- Two-pronged structured process in the nature of off-site surveillance and the periodic interface with the conglomerates
- Formal arrangement for supervisory information sharing amongst the regulators to address specific issues in the monitoring of the identified conglomerate
- Steps underway to tighten the capital adequacy norms for these conglomerates to ensure coverage of discretionary risks as well as non-discretionary risks like operational, reputational, strategic and risks from fiduciary activities.
PERSPECTIVES ON THE INDIAN APPROACH (1)

- Focused primarily on a more intensive supervisory process aimed at capturing risk concentrations within the group;

- A differential prudential framework for systemically large institutions has not been considered necessary as the regulatory framework for banks, in general, tries to address issues of excessive risk taking by individual institutions.

- The sole metric of size has not been found to be much helpful as, apart from the largest bank which is state owned and a large private sector bank which has a relatively lower market share, the market share of the other larger banks is not that significant.
PERSPECTIVES ON THE INDIAN APPROACH (2)

- The financial system is considerably less complex than most of the developed markets as many complex, high risk products are not allowed or are regulated.

- The real concern from the inter-connectedness perspective arises from the non-banking financial sector.
CONCLUSION(1)

- Macro-prudential regulation is an inexact science and needs to be used in conjunction with other policies to be effective.

- Important to acknowledge what macroprudential regulation cannot do: it cannot manage economic cycles and or target asset prices. It can only provide instruments to respond to these developments to cushion the financial system from potential stresses.

- The real challenge of macroprudential regulation is strong resistance to countercyclical actions during booms. Having a rule based approach will to a large extent obviate this problem but this approach has its own limitations.
CONCLUSION(2)

- An issue which will be of critical importance to the EMEs from a stability perspective is the nature of presence of foreign financial institutions - exposure of the domestic financial systems to the risk of proxy contamination with problems in global markets.
- Effectiveness and intensity of supervisory process is critical.
- Need for clear decision making framework and space for the regulators given that dynamic judgement is necessary to deal with system risk that is mutable.