

## Anand Sinha: Reflections on regulatory challenges and dilemmas

Address by Mr Anand Sinha, Deputy Governor of the Reserve Bank of India, at the FICCI-IBA (Federation of Indian Chambers of Commerce & Industry – Indian Banks' Association) Conference on "Global Banking: Paradigm Shift", Mumbai, 24 August 2011.

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Good Morning. It is indeed my privilege to be addressing you today in this Conference in which officials from industry and banking sector are participating. Today, I want to reflect on some of the challenges and dilemmas that we face as regulators of the banking system. A few of these challenges and dilemmas are in the context of the rapidly evolving regulatory landscape in the aftermath of the crisis, very aptly reflected in the theme of this Conference "Global banking- Paradigm shift".

It has become almost inevitable these days that the speeches start off referring to the financial crisis and, I wish to make no exception today. I would briefly allude to the crisis to provide a context for some of the issues I would be touching upon. I recall a quip, "*Just when we thought we knew all the answers, someone changed the questions*" and I think that the saying best describes what the crisis has done to the hitherto accepted regulators' wisdom. The role of regulators has always been very challenging, as they need to keep running just to stay put in a fast evolving financial landscape and have to run harder and faster, to be ahead of the curve. If anything, the crisis has made their role that much harder.

There are many reasons attributed to the outbreak of crisis and the most notable ones are: inadequate quantity and quality of capital, insufficient liquidity buffers, excessively leveraged financial institutions, inadequate coverage of certain risks, absence of a regulatory framework for addressing systemic risks, proliferation of opaque and poorly understood financial products in search of yields in the backdrop of an era of "great moderation", perverse incentive structure in securitisation process, lack of transparency in OTC markets particularly the CDS, inadequate regulation and supervision, and a burgeoning under/unregulated shadow banking system.

The most glaring inadequacy has been the absence of a framework to deal with systemic risk. There has been an underlying assumption that strong institutions make a strong system. This has been proved to be fallacious as legitimate actions taken by individual institutions for self preservation can destabilise the system. It will be useful to dwell a bit on the notion of systemic risk.

Systemic risk is *the risk of disruptions to financial services that is caused by an impairment of all or parts of the financial system, and can have serious negative consequences for the real economy*<sup>1</sup>. Systemic risk has two facets. One is in terms of its distribution within the system at any given point in time and another is its evolution with time. The cross-sectional dimension is how risk is distributed within the system at any given point in time. Systemic risk in this dimension arises due to the inter-connectedness of institutions, balance sheet entanglements, common exposures and, sometimes, even common business models of financial institutions. The time dimension, on the other hand, deals with how aggregate risks in the financial system evolve over time – the procyclicality issues.

Basel III has been designed to address all the shortcomings that have surfaced in the wake of the crisis including the very important issue of systemic risk. Many measures have been

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<sup>1</sup> IMF-BIS-FSB (2009)

proposed as part of Basel III framework which raise a lot of implementation issues. Let me dwell on some of the issues which pose major regulatory challenges and dilemmas.

## **I. Implementation of Basel III**

### **a) Capital:**

In terms of Basel III guidelines, the capital required, and, particularly, the equity component has become much larger. While the minimum CRAR remains at 8 per cent, the equity component has been raised from 2 per cent to 4.5 per cent. In addition, there is a capital conservation buffer of 2.5 per cent composed of equity. Effectively, therefore, the equity component in capital stands raised from 2 per cent to 7 per cent. In addition, two more capital components, fully composed of equity, have also been prescribed – (a) Countercyclical capital within a range of 0–2.5 per cent and (b) capital surcharge on Global Systemically Important Financial Institutions (G-SIFIs) within a range of 1–2.5 per cent. Indian banks will not be subject to capital surcharge on G-SIFIs at least for quite some time and the countercyclical capital is not required on a continuous basis. Therefore, the immediate concern is of meeting a much higher level of equity component i.e. 7 per cent which, in effect, translates to a higher figure on account of the requirement under Basel III that all deductions are to be adjusted against equity which hitherto were distributed equally between Tier I and II.

The Quantitative Impact Study published in December 2010 by BCBS of 91 large banks (including 3 from India) showed a shortfall of Euro 165 bn and Euro 577 bn in equity component vis-à-vis 4.5 per cent and 7 per cent ratios, respectively. This is one of the reasons for an extended timeframe for implementation of Basel III from January 1, 2013 to January 1, 2019. The other reason is to cushion the slowdown in the GDP growth during the transition period on account of much larger capital requirements. According to a study conducted by the Macroeconomic Assessment Group (MAG), a group of modelling experts formed by the FSB and BCBS, while banks may attempt to raise lending rates and reduce credit growth during transition to higher capital levels, this is likely to have a modest impact on the real economy. The maximum decline in GDP over baseline forecast would be 0.22 per cent after 35 quarters (0.03 per cent per annum while the additional capital is being built up) followed by GDP recovery towards trend path. Longer transition period would result in lower costs because, banks will get longer time to build up capital from internal generation and thus there will be a less need to cut back on lending or to raise fresh capital from the market. The private sector estimate done by Institute of International Finance (IIF) is, however, much higher.

As regards India, our estimate is that transition at system level would not be much of an issue as all capital ratios currently are above the minimum requirement of Basel III though a few banks may come under pressure. Moreover, the capital requirement on account of increased coverage of risks would not be so material for Indian banks as either those activities are not allowed (i.e. resecuritisation), or their magnitude is quite small (i.e. trading book). The stress point, however, would be that banks will be required to adjust the unamortised portion of Pension and Gratuity liabilities in the opening balance sheet on April 1, 2013 on transition to IFRS. However, going forward, the capital requirements including equity are likely to be substantial for supporting the high GDP growth and the fact that Credit to GDP ratio, which is currently quite modest at about 55 per cent, is bound to increase substantially on account of structural changes in the economy i.e., Financial Inclusion program, increase in loan requirements from more credit intensive sectors such as manufacturing and infrastructure, etc.

RBI and banks would be estimating the capital requirements under Basel III once our guidelines for implementation of Basel III are finalised. As the capital requirements, both equity and non equity, are likely to be substantial, there will, likely, be pressure on financial

markets, increasing the cost of capital and lowering RoE. Government will have to find resources to infuse capital in the Public Sector Banks. There is a line of argument that Basel III may make raising of capital costlier/difficult for banks due to lower RoE and render banking sector unattractive for investors. This, in my view, is not entirely correct because, investors will eventually recognise that well capitalised banks are less risky and hence will be willing to settle for a lower RoE. Nevertheless, the pressure on RoE should bring about a greater sense of urgency among banks to improve their efficiency by increasing the productivity of their human resources and through leveraging technology. While implementing Basel III, our dilemma is (a) where our capital regulations are more stringent, should we continue with this? (b) should we adhere to the extended timetable or step up the implementation schedule, given the fact that the banking system would be comfortable at the starting point, i.e. at transition?

**(b) Countercyclical capital:**

Regulators may have to contend with situations which have no precedents and where enough data and analytics are not available and yet the cost of inaction may be high. This requires taking a judgment call and respond with policy measures whose outcome may not be known with a great degree of certainty. One such example is when RBI had to raise the capital requirements and provisioning on standard assets for banks' exposure to certain segments (Commercial real estate, Capital markets, Housing, Non Banking Financial Companies (NBFCs) and Retail segment) during the period September 2004 to August 2008. The excessive credit growth in these segments, in conjunction with sharp rise in asset prices on the back of high GDP growth, was causing apprehensions of potential buildup of systemic risk and asset bubbles. These policies, today known as Countercyclical policies or Macroprudential policies in a broader context, were not much known or practised then. We are asked as to how did we choose the instruments i.e. risk weights and provisioning and the measure in which these were applied. The fact is that RBI's methodology has not been based on extensive statistical analysis or modelling or on determination of build-up of asset bubbles. It is largely judgmental, based on trends in aggregate credit and sectoral credit growth in the macro-economic settings. For this reason, it has not been rule bound which will require either some model or at least some measurement of systemic risk and its sensitivity to the prudential parameters.

While the objective of the countercyclical policies is to increase the resilience of the system by building buffers to withstand shocks during downturns, the broader objective is to lean against the wind during the boom phase to dampen the credit and asset price boom. A more ambitious objective would be to ensure stable credit supply through the cycle-through booms and busts. However, our limited experience shows that the countercyclical measures appear to be more effective in moderating the credit supply during the upturn than in increasing the credit supply during the downturn. During the upturn in the economy, the countercyclically raising of capital and/or provisioning for standard assets would moderate the flow of credit by raising the cost and thereby impacting the demand. However, during the downturn, the increase in credit supply on release of buffers does not seem as plausible. The economic agents whose balance sheets are affected due to the downturn would be risk averse as would be the banks who would be excessively cautious thus restricting credit supply. The behaviour of economic agents during both booms and busts seems to be a case of "*disaster myopia*". The likely asymmetric impact of countercyclical measures is another challenge for regulators to revive the economy during downturns.

Today, the choice of instruments for conducting countercyclical policies and their relative effectiveness as also the interaction of these policies with other policies, particularly the monetary policy, is a major area of research. While in our case, the monetary and countercyclical policies have been in the same direction so far, it appears to us, that varying the provisioning requirements may have been more effective than varying risk weights in moderating credit flow to the specific sectors. This is because, since the average capital

adequacy ratio of banks operating in India has been well above 12 per cent for the last many years (as on December 2010, it was above 14 per cent), risk weights may not always be effective in dampening the growth of credit as banks can continue to finance riskier sectors yielding higher returns by allowing their capital adequacy ratios to fall by a few basis points and still remain much above the regulatory requirements and continue to meet market expectation. To the extent higher risk weights translate into increase in interest rates, demand for credit may come down. On the other hand, varying provisioning requirement may be potentially more effective as it would impact the Profit and Loss account of banks to which banks are more sensitive. However, there is no international consensus on these issues. For example, while it is acknowledged that dynamic provisioning which was pioneered by Spain, helped Spanish banks withstand the financial crisis better than banks in other advanced industrialised countries, there is no agreement on whether this measure reduced procyclicality. While some hold that dynamic provision did not discourage credit growth nor prevented housing bubble in Spain, a recent study by Jimenez et al<sup>2</sup>, concludes that dynamic provision did help mitigate procyclicality in Spain.

The BCBS framework uses the metric “Credit to GDP ratio” and its upward deviation from the long term trend to signal the need to build up countercyclical capital buffer. This metric is not suitable for Indian economy and other EMEs, as was also pointed out in the Financial Stability Report (FSR) of June 2011, due to structural changes taking place in the economy on account of high growth rate and financial inclusion etc. We have been using sectoral approach to deal with systemic risk on account of procyclicality which we may have to continue with. The BCBS framework is a “*comply or explain*” framework. While this framework gives us the freedom to deviate from the BCBS methodology, the dilemma is whether the explanation provided for deviation from the BCBS framework would be perceived in proper light by the markets or whether it will be interpreted as non-compliance with the international standards, in which case, it will be disadvantageous to Indian banks. In any case, the macro prudential authorities will have to make determined efforts at communicating the rationale of their policies and actions taken thereunder much as Central Banks have sharpened the art of communication of monetary policy. Focussed communication may improve the understanding of these policies by markets and thus make the actions taken more effective. Such a communication may also help in making the effect of macroprudential policy more symmetric in booms and busts.

**c) Countercyclical provisions:**

In addition to countercyclical capital buffers, Basel III also envisages countercyclical provisions. BCBS is working on an expected loss-based countercyclical provisioning methodology in consultation with IASB. This is likely to take time. In India, banks have a stock of floating provisions which we have not permitted to be used, except under a situation of systemic stress. While the floating provisions may serve the purpose of countercyclical provision, a framework is necessary for allowing its use. As an interim measure, we have been trying to develop a methodology based on the Spanish dynamic provisioning system. This, however, has not been easy given the lack of required data and analytics with the banks. Efforts are underway and we are planning to put a discussion paper in public domain based on the limited data available.

**d) Leverage**

Basel III prescribes a leverage ratio (ratio of Tier I capital to book value of assets including off-balance sheet items) as backstop arrangement to supplement the capital adequacy ratio.

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<sup>2</sup> IMF Working paper WP/11/159, “Policy Instruments to lean against the wind in Latin America”, July 2011

Our view has been that since, for Indian banks, the SLR<sup>3</sup> requirements are substantial and carry little risks, these should be kept out of the leverage ratio. However, this was not accepted by BCBS. But the comforting news is that the leverage ratio of Indian banks is modest compared to the levels being contemplated.

#### **e) *Liquidity***

Basel III requires a high level of liquidity to be maintained through a pool of liquid assets. The definition of liquid assets is very stringent including the requirement that they should be freely available. While the Indian banks maintain a large pool of liquid assets through SLR requirement, strictly speaking, these may not qualify as liquid assets under Basel III because SLR requirement, being mandatory, needs to be complied with at all times. Our dilemma is that asking banks to maintain more liquid assets in addition to SLR would put them in a competitively disadvantageous position. We have, therefore, to consider as to what extent the SLR can be reckoned towards Basel III requirements for holding liquid assets.

### **II. Implementation of advanced approaches under Basel II**

Commercial banks in India have already adopted standardised approaches under Basel II. While the schedule for migration to advanced approaches has been issued some time back, we have not received encouraging response from banks so far. Migration to advanced approaches is important from two perspectives. Advanced approaches involve adoption of sophisticated risk management systems well integrated into the banks' business processes, the prerequisites of which are upgradation of technological systems and availability of appropriate skill sets. Further, non-adoption of advanced approaches may have reputational issues for larger banks. Therefore, it is time for larger banks to seriously consider upgrading their systems and migrating to advanced approaches. As regards technology, the implementation of Core Banking Solutions (CBS) provides a platform for augmenting technology to enable real time MIS and data analytics. The Reserve Bank's IT vision document for the period 2011–17, sets the goal and path towards these, among others.

Adoption of advanced approaches requires simultaneous use of the underlying processes in the day-to-day risk management of banks. As regards skills, public sector banks may find it particularly challenging to recruit/hire highly skilled people from outside or to retain their own officers who become highly skilled through training. Skill requirements present another set of challenges: since the high end skills would remain confined to a small number of people (quants, as they are called), if the senior management and/or the Board are totally unequipped, there would be inadequate oversight and the institutions may end up carrying higher risks. Our dilemma is whether to let the larger banks first develop the required systems at their own pace or to nudge them by moral suasion or regulatory mandate which will require them to move to more robust technology and risk management systems at a faster pace and facilitate their early adoption of advanced approaches.

### **III. Information asymmetry**

Information asymmetry between banks and borrowers is an accepted fact. This problem becomes more acute in a multiple banking scenario. The way out is a robust system of pooling and exchanging of credit information through the mechanism of Credit Information Companies (CICs). Lack of full information about a borrower can lead to over-financing and

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<sup>3</sup> Statutory Liquidity Ratio (SLR) is the requirement on the banks in India to maintain a stipulated proportion (currently 24 per cent) of their total net demand and time liabilities in assets such as cash, gold or unencumbered, specified Government securities

diversion of funds, etc. having implications for asset quality. In fact, this was one of the issues in the recent past in the context of forex derivative transactions. Till recently, we had only Credit Information Bureau (India) Limited (CIBIL), but the information asymmetry has continued on account of banks not transmitting data accurately and in time though there is steady improvement in this regard. RBI has granted Certificate of Registration to three more entities to set up CICs who have since commenced operations. As an interim measure, we had instituted a format for exchange of information among banks in a multiple banking scenario. However, this has not functioned smoothly. Hopefully, in the near future, when the new CICs stabilise their operations, this critical gap in our infrastructure would be bridged.

#### **IV. Stress testing**

In a world which is getting increasingly interconnected and complex due to innovation, risks have grown manifold, albeit, along with the business opportunities. Badly managed risks could lead to failure of institutions and can quickly transform into a systemic crisis as the recent crisis has emphatically demonstrated. The damage due to the crisis and the reconstruction costs are quite huge. The quantitative risk management models, however, do not completely reflect the risks in the real world and it is in this context that the stress testing assumes criticality. It is now accepted that it is difficult to accurately model the financial markets, as against modelling the physical world as done by physicists. This is because models are an abstraction from reality and the reality in finance is far more complex and unpredictable. The statistical relationships of the past do not necessarily extrapolate to the future, essentially, due to the actions of the human mind which shape the results in the financial markets. I would like to quote Emanuel Derman, a leading quant in this context- *“It’s not that physics is better, but rather that finance is harder. In physics you are playing against the God, and he doesn’t change His laws very often. In finance, you are playing against God’s creatures, agents who value assets based on their ephemeral opinions”*.

Stress tests, therefore, have to be an integral part of risk management. The FSR has been reporting on stress tests carried out under various scenarios. One of the issues that we face in introducing appropriate stress testing scenarios for Indian banks is the absence of severe stress faced by the Indian banking system in the past unlike many countries. For example, 45 countries during 1980s and 63 countries during 1990s faced systemic banking crises. The reconstruction costs were high to the tune of 55 per cent of GDP for Argentina, 42 per cent of GDP for Thailand and about 35 per cent of GDP in the case of Korea. In an ironic sense, our good fortune of not witnessing any severe stress in the past has made the task of specifying stress scenarios for Indian banks rather difficult. An alternative is to apply the stress scenarios observed in the rest of the world but that raises the issue of relevance to Indian banking system. The dilemma, therefore, is in choosing the appropriate extreme scenario for Indian banks.

#### **V. Migration to IFRS**

The Indian banking system will need to address certain issues in implementing the convergence with the IFRS. First, the very crucial IFRS 9 relating to financial instruments, is still evolving and the final standard is unlikely to be available soon. Thereafter, the Institute for Chartered Accountants of India (ICAI) will need to promulgate the converged standard for India. This presents a moving target, given short time available for convergence with IFRS. Converging to the standards would present challenges in terms of considerable skill upgradation and modification in the IT systems of banks. RBI has been undertaking efforts to create awareness and is also undertaking training programmes.

## **VI. Asset quality**

While the Gross NPAs, in percentage terms, have declined sharply and steadily from 15.70 per cent at end March 1997 to 2.24 per cent at end March 2011, this does not fully reveal the underlying realities and some trends are a matter of concern which could put pressure on asset quality of banks in future. The aggressive lending during the high credit growth phase followed by the crisis, resulted in slippage ratio<sup>4</sup> steadily rising from 1.81 per cent at end March 2008 to 2.21 per cent at end March 2010, followed by a slight moderation to 2.01 per cent in 2011. The concern is that the recoveries have not kept pace with slippages since 2007–08 and despite write-offs, the Gross NPAs increased to 2.39 per cent at end March 2010 from 2.26 per cent at end March 2008 (partly also due to slowdown in credit growth). All these are reflected in rising stock of NPAs which is a reversal of an earlier trend (Gross NPAs rose by Rs. 44,828 crore<sup>5</sup> (86.3 per cent) from end March 2006 to end March 2011). Rising interest rates and substantial amount of restructuring done during the crisis period, if not done with due care, are likely to put further pressure on asset quality of banks. Therefore, there is a need for banks to step up efforts to resolve their existing NPAs and tighten their credit risk management systems.

## **VII. Infrastructure financing**

Given the large requirements for financing infrastructure development in India, expectations from banks to play a leading role in extending financial assistance to infrastructure projects are substantial. During the last few years the share of infrastructure finance in the total credit portfolio of banks has risen significantly posing challenges for management of asset liability mismatches. Bank financed infrastructure already enjoys considerable amount of regulatory dispensation. This makes the issue, of finding alternative sources of finance for infrastructure projects, critical. RBI has already taken a number of measures in this regard including permitting higher exposure limits for infrastructure, introducing repos in corporate bonds, permitting CDS for corporate bonds, creating a separate category of NBFCs (NBFC-IFCs), etc. The Government has recently come out with a broad structure of Infrastructure Debt Funds (IDFs) which, when set up, might also provide an alternate source of financing.

## **VIII. Legislative reforms**

Sound and unambiguous legislative framework is a prerequisite for an efficient regulatory system. At present, in India, there are about 60 Acts and multiple rules and regulations, many of which are archaic and the large number of amendments have made the laws ambiguous and complex. Government of India has constituted a Financial Sector Legislative Reforms Commission (FSLRC) to rewrite and streamline the financial sector laws, rules and regulations to bring them in harmony with India's fast growing financial sector.

## **IX. Product innovation**

While RBI welcomes product innovation, the concern is whether the products are properly understood and backed by robust risk management systems and whether there is a framework regarding suitability and appropriateness to prevent mis-selling. These concerns shape RBI's regulatory guidelines for products, either already in the financial markets or

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<sup>4</sup> Slippage ratio is the ratio of NPAs generated in a year to the outstanding stock of "standard assets" at the beginning of the year.

<sup>5</sup> 1 Crore = 10 million

being permitted by RBI. Designing such regulatory policies is always challenging as it requires balancing innovation with prudence. Some of the examples are

- RBI set out securitisation guidelines in 2006 after the securitisation market had developed but was not functioning in a prudentially sound manner. Among other things, the guidelines stipulated amortising the profit earned on securitisation transactions over the period of securitisation which prevented the development of an “originate to distribute” model that was at the heart of misaligned incentives in securitisation process in the advanced economies particularly, USA.
- In the forex derivative segment, there were several cases of mis-selling despite detailed guidelines on suitability and appropriateness. These guidelines have been further modified recently in the light of experience gained. One of the important new regulations is that banks including foreign banks cannot deal with any derivative product which they cannot price independently (locally in the case of foreign banks).
- The issue of wealth management practices came to the fore in the light of a major fraud. We are currently studying the wealth management practices in the banking system as well as in the international jurisdictions. The main challenge is to put in place a set of regulations from the perspective of suitability and appropriateness.
- Keeping in view our objectives, we have introduced, to begin with, single name plain vanilla CDS on corporate bonds permitting only regulated entities to act as market makers.
- Considering that guaranteeing of corporate bonds by banks would not be conducive to the development of corporate bond market, we have not permitted this despite a strong body of opinion supporting bank guarantees. The experience of some of the countries (China, South Korea etc.) in this regard, validates our apprehension.

## **X. Regulation and supervision of non-banking segment**

One of the causes behind the global crisis was the rapid growth of the shadow banking system which also undertakes credit intermediation function involving liquidity and maturity transformation and often with some degree of leverage. Its rapid growth was due to regulatory arbitrage as the sector was un/under regulated. In many cases banks had parked their riskier activities in vehicles or structures that were not consolidated with them but when the crunch came, banks had to take these risks on their balance sheets. As the height of the credit boom, the size of the shadow banking system in USA was roughly twice as large as the banking sector and is still 25 per cent larger. In several other advanced countries including Canada, the sector is at least as large as the banking sector. Therefore, the oversight and regulation of this segment has acquired urgency and currently is an important international agenda. The basic tenet is that no systemically important entity should escape regulation or oversight. While in US, under the Dodd-Frank Act, all systemically important financial institutions would come under the purview of Fed, this is not necessarily the position in other jurisdictions. The regulatory challenge would be to devise a framework for identifying systemically important non-banking financial institutions, markets and products, and evolve a framework, for the oversight and, if need be, prudential regulation. While this issue is important for regulated financial groups, it is of greater significance where such entities are not part of regulated financial groups.

The current evolving approach is a three stage process: (i) Scanning and mapping of the overall shadow banking system, (ii) Identification of the aspects of shadow banking system which may pose systemic risk or regulatory arbitrage concerns on account of maturity transformation, credit risk transfer or leverage, etc., and (iii) Detailed assessment of the shadow banking system raising systemic risk and/or regulatory arbitrage concerns leading to deeper analysis of the entities, markets and instruments that are giving rise to concerns. The



oversight of the shadow banking system would also involve indirect regulation by regulating of banks' interactions with shadow banking entities as well as strengthening of regulation of money market funds, repo markets and other shadow banking entities.

In India, these issues were recognised by RBI much earlier. RBI had put in place, as far back as 2006, a calibrated regulatory framework for Systemically Important Non-Deposit taking NBFCs, which hitherto were very lightly regulated, to address the issue of regulatory arbitrage and systemic risk.,. The components of the framework included prudential capital requirements, exposure norms, liquidity management, reporting requirements, corporate governance and disclosure norms. There was also an institutional mechanism in the form of the High Level Coordination Committee on Financial Markets (HLCCFM) now replaced by the Financial Stability Development Council (FSDC) for coordination among financial sector regulators and with Government.

Despite an extensive regulatory framework for NBFCs, many gaps still remain. As pointed out in the FSR (June 2011), differences in regulations for NBFCs vis-a-vis banks and between NBFCs under the purview of different regulators add to the scope for regulatory arbitrage. There are gaps and weaknesses in the regulatory perimeter-wealth management activities, structured products, hedge funds, private equity funds etc., need to be addressed. The systemic importance of the Government owned NBFCs has grown over the years and the regulatory framework for such entities need to be re-examined. A Committee (Chair: Smt. Usha Thorat, ex Deputy Governor, RBI) is looking into some of these issues i.e. definition of NBFCs, regulatory gaps and regulatory arbitrage, corporate governance and supervision etc. While dealing with the shadow banking system, the challenge lies in evolving a prudential framework which, while recognising the difference of this segment from banks, deals effectively with the potential of creating systemic risk and regulatory arbitrage. Implementing the international agenda in this regard would be very challenging.

## **XI. Introduction of holding company structure for financial conglomerates in India**

At present, most of the financial groups in India are led by banks and organised under the Bank Subsidiary model. This model puts the onus on the parent bank for corporate governance, performance and capital requirement of the subsidiaries. Besides, the parent carries very substantial reputational risk. The Working Group on "Introduction of Holding Company structure in India for banks" has recommended migration of major financial conglomerates to the holding company structure to address these limitations to some extent. The main challenges in implementing the recommendations include, formulating a new law governing functioning of financial holding companies, providing right incentives to the existing Financial Conglomerates through appropriate tax treatment and resolution of strategic and public policy issues by the Government in the case of Public Sector Banks.

In the end, let me congratulate FICCI and IBA for organizing this intellectually stimulating and educating conference. Let me also thank you for your patient hearing of the regulatory dilemmas and the challenges facing regulators in the world that is becoming increasingly uncertain. I am sure conferences of this kind which provide a forum for exchange of ideas between regulators, policy makers and the market participants would certainly help in reducing the uncertainty and make the task easier.

### **References:**

Admati, Anat R., DeMarzo, Peter M., Hellwig, Martin F., Pfleiderer, Paul P., March 2011, "Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Expensive"

Bank for International Settlements, December 2010, Results of the comprehensive quantitative impact study

Caruana, Jaime, July 2011, "Regulatory reform: remaining challenges", Luxembourg

International Monetary Fund, July 2011, “Policy Instruments to Lean Against the Wind in Latin America”, Working Paper WP/11/159

Macklem, Tiff, July 2011, “Global Financial Reform: Maintaining the Momentum”, remarks at G-20 workshop, Paris

Mohan, Rakesh, Dec 2007, “India’s Financial Sector Reforms: Fostering Growth while Containing Risk”, Speech, Reserve Bank of India

Reserve Bank of India, 2010–2011, Financial Stability Reports

----, May 2011, Report of the Working Group on Introduction of Financial Holding Company Structure in India,

Sinha, Anand, June 2011, “Macroprudential Policies – Indian Experience”, address at Eleventh Annual International Seminar on Policy Challenges for the Financial Sector, co-hosted by the Board of Governors of the Federal Reserve System, the International Monetary Fund and the World Bank, Washington DC

Wellink, Nout, April 2011, “Basel III and the impact on financial markets” speech at ING Basel III Financing Conference, Amsterdam

Fernandez de Lis, Santiago, Garcia-Herrero, Alicia, May 2010, “Dynamic Provisioning: Some Lessons from Existing Experiences”, ADBI Working Paper Series No. 218