# Duvvuri Subbarao: Post-crisis reforms to banking regulation and supervision – think global, act local

Inaugural address by Dr D Subbarao, Governor of the Reserve Bank of India, at the Federation of Indian Chambers of Commerce & Industry-Indian Banks' Association (FICCI-IBA) Conference on "Global Banking: Paradigm Shift", Mumbai, 7 September 2010.

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- 1. Thank you very much for inviting me to inaugurate this FICCI-IBA Conference on "Global Banking: Paradigm Shift". This Conference is a flagship event in the annual banking calendar, and I attach a lot of value to this opportunity of speaking to and interacting with the banking community.
- 2. When I spoke at this forum last year, I had touched on some of the early lessons of the global crisis and how they were shaping the debate on reforms to banking regulation and supervision. Over the last one year, there has been significant progress in crystallizing the reform agenda and in reaching a shared understanding on most of the measures. The thrust of the reform package has been to fortify the banking system, correct the incentive framework and ensure its long term stability. Reflecting one of the big lessons of the crisis that a collection of healthy banks does not necessarily result in a healthy banking system at the aggregate level, the reforms focus on both the microprudential dimension at the individual institution level and the macroprudential dimension at the systemic level.
- 3. The effort has been led by the Basel Committee on Banking Supervision (BCBS) which held several meetings and consultations over the last year to define the reform agenda and to flesh out the individual components. India, as you know, has been a newly inducted member of the BCBS, and the Reserve Bank has been actively engaged in the process of crystallizing what has now come to be called Basel III.
- 4. In July 2010, the BCBS put out a comprehensive paper indicating the broad agreement reached on the Basel III proposals. Broadly, these reforms will require banks to hold more and better quality capital and to carry more liquid assets, will limit their leverage and mandate them to build up capital buffers in good times that can be drawn down in periods of stress. The Basel III process is not yet complete. In particular, the actual calibration of the measures and their phasing in is yet to be determined. This will be done after a further assessment of the reasonableness of these measures and their impact on banks' balance sheets as well as the national economies.
- 5. Quite understandably, there has been a lot of international media attention on the implications of the Basel III proposals and their pros and cons. We have had some of that in India too focusing on what the proposed reforms might mean for us. I thought the most efficient way to use this FICCI-IBA platform that you have so kindly provided me is to highlight the broad contours of the Basel III proposals and their potential implications for Indian banks. The theme of this conference, "Banking 2020 Making the Decade's Promise Come True" is very appropriate as the banking sector needs to evaluate how best it can contribute to the double digit growth and rapid poverty reduction that we are aspiring to. Hopefully, the assessment of the Basel III package that I will give will contribute to a more informed evaluation of the role that banks should play in our growth process.
- 6. Let me start by taking each of the major components of the Basel III package. On each, I will explain what the proposal implies in general and then look at it from an Indian perspective.

# I. Capital adequacy framework – BCBS proposals

# Improving quality, consistency and transparency of capital

7. The proposals regarding the capital adequacy framework aim at ensuring that the quality of capital is high, there is consistency in the definition of capital across various jurisdictions and that there are appropriate disclosures to make the capital base transparent. The focus is on making common equity the predominant form of bank capital and to enhance the loss absorbing capacity of the other elements of regulatory capital. The key changes include prescription of an explicit minimum Tier I requirement; deduction above a certain threshold, from common equity, of significant investments in the common shares of unconsolidated financial institutions and deferred tax assets arising from timing differences etc.; limiting the recognition of minority interest in group capital to the extent of its share in the minimum capital required for subsidiary banks; and appropriate disclosure of various elements of capital.

# Improving risk coverage of the Basel II framework

- 8. The crisis has exposed several flaws in the quantitative risk management models used by banks. One of the flaws is the inability of the models to capture the market risk in their trading book positions, particularly under stressed conditions. This is sought to be corrected by requiring that the capital calculations be made on parameters calibrated to stressed conditions.
- 9. The last decade witnessed a quantum jump in the derivatives activities of banks leading to a phenomenal rise in counterparty credit risk. One of the shortcomings of the prevailing Basel II framework is that it does not fully capture the unexpected rise in counterparty exposures under stressed conditions. Besides, during the crisis we saw the financial condition of counterparties worsen at the same time when they suffered losses on their derivatives transactions, leading to the so called "wrong way risk". The counterparty credit risk framework of Basel II is being revised to address these concerns.

# Capital adequacy framework: impact on Indian banks

- 10. Indian banks are not likely to be significantly impacted by the proposed new capital rules. As on June 30, 2010, the aggregate capital to risk weighted assets ratio of the Indian banking system stood at 13.4 per cent of which Tier I capital constituted 9.3 per cent. Although the Basel III norms are yet to be calibrated, it is unlikely that they will be higher than the above figures. As such, we do not expect our banking system to be significantly stretched in meeting the proposed new capital rules both in terms of the overall capital requirement and the quality of capital.
- 11. Indian banks already make most of the deductions from capital now being proposed under Basel III. Moreover, our banks do not have re-securitisation exposures and their trading books are small. However, there may be some negative impact arising from shifting some deductions from Tier I and Tier II capital to common equity.
- 12. The proposed changes relating to the counterparty credit risk framework are likely to have capital adequacy implications for some Indian banks having large OTC bilateral derivatives positions. This underscores the importance of enlarging the derivatives transactions coming within the scope of a multilateral settlement mechanism through central counterparties (CCPs).

# II. Containment of financial leverage of banks: BCBS proposals

13. The severity of the downturn during the crisis was accentuated by the excessive financial leverage of large international banks, typically as high as 50:1. The Basel

Committee's response to containing this excess is the introduction of a leverage ratio which will be a simple, transparent, non-risk based measure calibrated to act as a credible supplement and backstop to the risk-based requirements.

# Containment of financial leverage of banks – impact on Indian banks

14. Estimates show that the leverage in the Indian banking system is quite moderate. In the BCBS deliberations, we argued that the SLR portfolio of our banks, which is a regulatory mandate, should be excluded from the calculation of the leverage ratio as this carries only a moderate risk (i.e. no credit risk and only market risk). However, BCBS took an in-principle position that no assets, including cash which obviously has the least risk, should be excluded from the measurement of the leverage ratio. Nevertheless, since the Tier 1 capital of many Indian banks is comfortable (more than 8%) and their derivatives activities are also not very large, we do not expect the leverage ratio to be a binding constraint for Indian banks.

# III. Reducing the pro-cyclicality of – financial sector regulation: BCBS proposals

- 15. Critics contend that a major flaw of the Basel II capital regulations is their inherent procyclicality. The procyclicality debate came into sharp focus during the crisis. Banks found themselves constrained in lending by already shrunk capital ratios owing to losses when more lending would, in fact, have helped in containing the downturn. To minimise the procyclical effects, BCBS has proposed to: (a) base the calculation of capital on more conservative estimates of default probabilities, (b) promote more forward looking provisions, (c) conserve capital to build capital buffers at individual banks and the banking sector that can be used under stress, and (d) manage system-wide risk by containing excess credit growth.
- 16. The concept of making countercyclical provisions and establishing capital buffers simply implies that banks should build up higher levels of provision and capital in good times which could be run down in times of economic contraction consistent with safety and soundness considerations. This will be done by defining buffer ranges above the regulatory minimum capital requirement. The concept has an intuitive appeal. Operationalizing it though is a complex task and poses many challenges.
- The *first* and foremost challenge is the difficulty of identifying the inflection point in 17. an economic cycle based on objective and observable criteria which would indicate when to begin building up a capital buffer and when to start using it. Second, what economic indicator do we use? It is difficult to identify a single macroeconomic variable that can be a reliable indicator of both good and bad times. For instance, credit growth could be a good indicator of the build up phase but credit contraction is usually a lagging indicator of emerging strains in the system. Third, any approach to creating a capital buffer whose size varies with the economic cycle poses the challenge of defining an economic cycle in a global setting as economic cycles are not globally synchronised. Fourth, experience shows that vulnerabilities build up gradually, often over several years, but distress emerges quite rapidly. Hence, the capital buffer may have to be released rather abruptly. Fifth, determining the right size of a capital buffer is both a difficult task and also a contentious issue; it will need to be large enough to absorb losses in a downturn and still enable banks to continue lending but not so large as to make the insurance against failure too expensive. Finally, any scheme of capital buffers needs to be simple and transparent, entail low implementation costs and be as rulebased as possible. Can we design a framework for reducing procyclicality that meets all these requirements?
- 18. BCBS is working on addressing all these issues. It must be recognised though that, given the different structures and stages of development of financial systems across countries, it will be absolutely essential to allow national discretion in applying the "framework".

# Reducing the pro-cyclicality of financial – sector regulation: Indian perspective

- 19. The proposed measures to contain the procyclicality of financial sector regulations through capital buffers and provisioning will impose additional costs on banks. Apart from the general concern in this regard, in India we have an additional concern about the variable used to calibrate the countercyclical capital buffer. The most widely discussed candidate for this is the credit to GDP ratio. Using the credit GDP ratio is, however, problematic. Unlike in advanced economies where this ratio is stable, in emerging economies such as India, it will likely go up for structural reasons enhanced credit intermediation owing to higher growth as well as efforts at deepening financial inclusion.
- 20. In fact, a study undertaken by the Reserve Bank shows that the credit to GDP ratio has not historically been a good indicator of build up of systemic risk in our banking system. Furthermore, some economic sectors such as real estate, housing, micro finance and consumer credit are relatively new in India, and banks have only recently begun financing them in a big way. The risk build up in such sectors cannot accurately be captured by the aggregate credit to GDP ratio. We have therefore used sectoral approaches to countercyclical policies, and I believe we need to continue to use them. To effectively deploy countercyclical measures, we also need to improve our capabilities to predict business cycles at the aggregate and sectoral levels, and identify them in real time. This will require better quality of economic and financial data as well as improved analytical capabilities.

# IV. Liquidity risk management: BCBS proposals

- 21. The financial turmoil highlighted the feedback loops through which institutional liquidity constraints cascade into systemic solvency crises because of interconnectedness. A typical chain reaction runs as follows. An institution gets into a liquidity problem, is unable to tide over that because of a hostile funding environment, indulges in fire sale of its assets to generate liquidity, incurs losses in the process which makes raising funding even more difficult and is then forced into further fire sales. This leads to a sharp drop in asset prices and the pressures transmit rapidly, and then explosively, to other banks and financial institutions pulling the whole system into a "death spiral".
- 22. The BCBS proposals involve two regulatory standards for managing liquidity risk: (i) a *Liquidity Coverage Ratio* to ensure resilience over the short term; and (ii) a *Net Stable Funding Ratio* to promote resilience over the longer term. Reckoning that there is wide diversity in the measures used by supervisors for monitoring the liquidity risk, the new proposals also include a set of common liquidity-risk monitoring tools.

#### Liquidity risk management: Indian perspective

- 23. The major challenge for banks in India in implementing the liquidity standards is to develop the capability to collect the relevant data accurately and granularly, and to formulate and predict the liquidity stress scenarios with reasonable accuracy and consistent with their own situation. Since our financial markets have not experienced the levels of stress that advanced country markets have, predicting the appropriate stress scenario is going to be a complex judgement call.
- 24. On the positive side, most of our banks follow a retail business model and also have a substantial amount of liquid assets which should enable them to meet the new standards. There is an issue about the extent to which statutory holdings of SLR are counted towards the proposed liquidity ratios. An argument could be made that they should not be counted at all as they are supposed to be maintained on an ongoing basis. However, it would be reasonable to treat at least a part of the SLR holdings in calculating the liquidity ratio under stressed conditions, particularly as these are government bonds against which RBI provides liquidity.

# V. Dealing with systemically important – financial institutions (SIFIs): BCBS proposals

- 25. BCBS is engaged in evolving an appropriate framework for dealing with systemically important banks and financial institutions in the international context. This involves a host of tasks: development of indicators of systemic risk, identification of systemically important financial institutions (SIFIs), differential systems for SIFIs by way of capital and liquidity surcharge and enhanced supervision, improving the capacity to resolve SIFIs without recourse to taxpayer money, reducing the probability and impact of a SIFI failure, strengthening the core financial market infrastructure to reduce contagion risks if failure occurs and improving the oversight of SIFIs.
- 26. Even if we accept that SIFIs should be subject to some additional regulation on top of the base level regulations, there are several issues that need to be addressed in fleshing out the necessary framework. The *first* issue is of evolving objective criteria for identifying systemically important institutions. *Second*, how do we apply the criteria since the systemic importance of an institution is likely to be time-varying and state-dependent as per the economic environment? *Finally*, drawing a sharp distinction between a SIFI and a non-SIFI requires considerable judgement and has a moral hazard downside.

# Containment of systemic risk: Indian perspective

- 27. The framework for identification of SIFIs that will evolve is expected to be applicable uniformly to all countries. India will also need to adopt that. The identification under the BCBS framework will happen from an international perspective, and we need to do a supplementary exercise to identify SIFIs in the domestic context even if they are not in the international list. In either case, if the proposal for levying systemic risk capital and liquidity charge is eventually agreed upon, a few Indian banks may be called upon to maintain additional capital and liquidity charges.
- 28. Then there is the issue of resolution of SIFIs in the event of failure. We also need to promote structures which make such resolutions smooth and orderly. The recent Reserve Bank initiative to constitute a working group to examine the suitability of financial holding companies in India is a step in this direction. RBI has also been constantly upgrading the regulatory and supervisory framework for financial conglomerates. Efforts are also under way to bring a larger number of financial transactions within the ambit of multilateral settlement through central counterparties.

# VI. Regulation of compensation practices of banks: BCBS proposals

29. It is now widely acknowledged that the flawed incentive framework underlying the compensation structures in the advanced country banking sectors fuelled the crisis. The performance-based compensation of bank executives is typically justified on the ground that banks need to acquire and retain talent. We now know, with the benefit of hindsight, that the compensation framework overlooked the perverse incentives it would engender. Bank executives focused too much on short-term profits and compromised long term interests with disastrous consequences. The Financial Stability Board has since evolved a set of principles to govern compensation practices and the Basel Committee has developed a methodology for assessing compliance with these principles. The proposed framework involves increasing the proportion of variable pay, aligning it with long-term value creation and instituting deferral and claw-back clauses to offset future losses caused by the executives.

#### Regulation of compensation practices of banks: Indian perspective

30. Since 70 per cent of our banking sector is accounted for by public sector banks where compensation is determined by the government, and where the variable component is

very limited, the proposed reform to compensation structures is relevant in India only to the remaining 30 per cent of the non-public sector industry segment. Private, foreign and local area banks in India are statutorily required to obtain RBI's regulatory approval for the remuneration of their whole time directors and chief executive officers. In evaluating these proposals in respect of Indian banks, Reserve Bank has historically ensured that the compensation is not excessive, is consistent with industry norms, is aligned to the size of the bank's business and that the variable pay component is limited. In respect of foreign banks, the Reserve Bank has largely gone by the recommendation of the bank's head office.

- 31. However, reflecting the spirit of the global initiative on compensation structures, we determined that there is need for reform in India too towards aligning compensation structures to FSB principles. Accordingly, in July 2010, RBI issued draft guidelines on Compensation of Whole Time Directors/Chief Executive Officers /Risk Takers and Control Staff inviting public comments. The intent behind the guidelines is to encourage banks to ensure effective governance of compensation, align the compensation with prudent risk taking, improve supervisory oversight of compensation and facilitate constructive engagement by all stakeholders. The guidelines require banks' boards to formulate and adopt a comprehensive compensation policy covering all employees (risk takers and control/compliance staff). We have advised that variable pay should be risk aligned, but we have not proposed any limit on the variable components. As regards foreign banks, we will require them to submit an annual declaration that their compensation structure in India is in conformity with FSB principles and standards.
- 32. As I have said earlier, the remuneration and incentive structure of public sector bank executives are determined by the Government. The executive compensation in the public sector, as is well known, is lower than that in the private sector. Notwithstanding the historical reasons for this, there is perhaps a good reason to revisit this. If public sector banks are required to compete with private banks on a level playing field, there is a good case for compensating them too on a competitive base. There is also the risk that if the public sector bank compensation is not improved, the public sector may lose talent to the private sector.

# VII. International financial reporting standards (IFRS): reform proposals

33. In the wake of the crisis, fair value accounting has come in for criticism for its inadequacy to deal with the typical features of a financial crisis: illiquid markets and distress sale of assets. It is argued that fair value accounting, no matter that it has logical appeal, is too rigid for a crisis situation and that it, in fact, fuels a downturn. The *G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency* recommended that the accounting standards setters and prudential supervisors should work together to identify solutions that are consistent with the complementary objectives of promoting the stability of the financial sector and improving the transparency of results in the financial reports. Accordingly, the IASB has initiated appropriate modifications to the relevant accounting standards.

# International financial reporting standards (IFRS) – Indian perspective

34. For banks in India, the Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI) together with the prudential regulations of the Reserve Bank constitute the framework of the "Indian GAAP" (Generally Accepted Accounting Principles). Given India's growing global integration, the ICAI recognized the need for Indian companies to converge to global standards in presenting their financial results. The Core Group appointed by the Ministry of Corporate Affairs (MCA) has since put out phased road maps for convergence of Indian corporates and banks with IFRSs. Accordingly, scheduled commercial banks in India will have to adopt the converged Indian Accounting Standards for preparing their opening balance sheets as at April 1, 2013.

- 35. In moving towards convergence with the IFRSs, there will be challenges for Indian banks. First, the Accounting Standard IFRS 9 relating to financial instruments, which is the crucial standard for banks, is itself still evolving and thus convergence with IFRS becomes a moving target. Second, the IT systems of banks which are programmed to producing financial results as per Indian GAAP will need to be modified. Third, as for any other new venture, banks will need to build capacity for making a seamless transition to the new standards and for the adoption of the expected-loss approach to loan loss provisioning.
- 36. The Reserve Bank has constituted a Working Group to address the implementation issues and to formulate operational guidelines to facilitate the convergence of the Indian banking system with the IFRS. The members of the Group include representatives from the Indian Banks' Association (IBA), the Institute of Chartered Accountants of India (ICAI) and various regulatory and market related departments of the Reserve Bank. Besides, professionals with core competence, expertise and experience in IFRS implementation have been drafted in as special invitees.

# Macroeconomic impact of the proposed BCBS reforms

- 37. The benefits of the reform package arise from reducing the frequency, severity and public costs of financial crises and minimizing the consequent output losses. The costs arise by way of possible higher lending rates and lower overall lending. Will the benefits of more stringent regulation and supervision outweigh the potential costs? Will the result be the same in the short-run as well as in the long-run? These are the questions uppermost in everyone's mind, most of all in the minds of governments and regulators. Three recent studies have addressed this question two by the Bank for International Settlements (BIS) and the third by the Institute for Industrial Finance (IIF), a Washington based private sector body which articulates the banks' point of view.
- 38. The BIS studies report that if the new requirements are phased in over four years, each percentage point increase in capital would reduce annual growth by 0.04 to 0.05 percentage points during the implementation period or about 0.2 per cent over the four year period. However, as the financial system makes the required adjustment, these costs will dissipate and then reverse in the medium term, and the growth path will revert to its original trajectory. To summarize, the cost-benefit calculus will possibly be negative in the short-term, albeit modestly, but will be distinctly positive in the medium to long term.
- 39. The IIF study estimates significantly higher sacrifice ratios. According to this study, the G3 (US, Euro Area and Japan) will, if they implement the reform package in full, lose growth of up to 0.6 percentage points over the five-year period 2011–15 and 0.3 percentage points over the ten-year period 2011–20. The differences between the two sets of studies stem obviously from differing assumptions. Notably, the IIF study assumes a much larger increase in lending rates but does not take into account the putative benefits arising from improvements in operational efficiency, a more resilient financial system and an executive incentive structure aligned to sustainable profitability.
- 40. Such significant differences in the projection of the macroeconomic impact of the reform package should not be surprising given the weak database as also the fact that many of the relationships are non-linear. What is significant though is that notwithstanding the differences in projected outcomes, all studies agree that the benefits of a stronger and healthier financial system will be there for years to come.
- 41. The Reserve Bank has also made a preliminary assessment of the impact of increased capital requirements on our GDP growth path. We will calibrate the phase in of the new standards to ensure that the sacrifice ratio is within acceptable limits.

# Implementation of Basel III in India

- 42. Basel III reflects the lessons of the crisis, and I believe it is going to be quite game changing. However, as I indicated, not all the reform measures are going to be binding constraints for us. Nevertheless, we should not underestimate the challenge of implementing Basel III. It will demand greater capacity on the part of both banks and the regulators. I urge this conference to flesh out the specifics in this regard.
- 43. As is well known, India's prudential regulations are ownership neutral. They will be applicable uniformly to public sector banks, private banks and foreign banks. The impact of the measures will of course vary and will depend on the business model and risk profile of the banks and their domestic and overseas balance sheets. The buffers built into the reform package are expected to provide automatic stabilizers obviating the need for external support during a downturn. Also, as the buffers will be built-up over time and during the upturn of the business cycle, the system should not be unduly stretched.
- 44. In the case of public sector banks, Government, as the owner, will have to contribute to building the capital buffers so as to maintain the floor of 51 per cent in the ownership. This is unlikely to put undue pressure on the Government's fiscal position as it will happen during the cyclical upturn when banks' profits and Government's revenues would be buoyant. Consequently, public sector banks should anticipate no problem in building the buffers contemplated under Basel III.

#### Conclusion

- 45. Let me now conclude. My attempt in this address has been to highlight the important components of the global reform package on bank supervision and regulation and to evaluate them from an Indian perspective. I have also given an assessment of the estimates made at the global level of the macroeconomic impact of these reform proposals.
- 46. Several concerns persist some immediate and some long-term. By far the most pressing immediate concern is about the calibration of the standards and their phasing in. The BCBS and the regulators are sensitive to these concerns, and are mindful of the need to facilitate a smooth transition to the new norms, and in particular, to ensure that the more stringent capital and liquidity requirements do not impede as yet fragile recovery process.
- 47. Two features of the reform package warrant special mention because of the communication effort they require. First, banks across the world are apprehensive that even as they incur the cost of building the capital buffers they will not be able to use them during a downturn, because ironically that is when markets would expect and demand higher capital. Second, some components of the reform package may have a "comply or explain" framework which allows individual jurisdictions to deviate from any specific provision of the package by explaining why it has made deviations. There is a risk though that even well reasoned and perfectly justifiable deviations may be interpreted as wilful non-compliance, or worse still as unwarranted regulatory forbearance, and markets may penalize such jurisdictions. What these problems basically highlight is the need for effective and timely communication to explain the rationale for opting for deviations. Central banks have traditionally attached considerable importance to communication regarding monetary policy to guide market expectations. Now regulators too need to hone their communication skills.
- 48. There are many reasons cited for India having moved up to a higher growth trajectory. Most of the reasons are familiar. But one of the big unacknowledged drivers of India's growth has been the impressive improvement in the quality and quantum of financial intermediation over the last decade. The Indian financial sector in general, and Indian banks in particular, can be proud of this very credible achievement. As you contemplate, during this conference and beyond, the challenge of delivering on your promise over the next decade, I urge you to think global and act local.