Central banks and central bankers have been at the heart of the global financial crisis. We have been blamed for policies and actions that got the world into the crisis; we are also being praised for leading from the front in getting the world out of the crisis. I believe this is fair critique – central banks have been a part of the problem and a part of the solution.

2. As we emerge out of the crisis, central banks have their task cut out for them: to distil the lessons of the crisis, translate them into concrete reform measures and get cracking on implementing them. I believe this involves central banks changing in important ways both in terms of what they do and how they do it. It is against this backdrop that the Reserve Bank of India thought it fit to organize this conference on the challenges for central banks in the context of the crisis as a flagship event of our Platinum Jubilee celebrations. I have great pleasure in welcoming all our invitees – colleague governors of central banks, leading international and domestic policy makers and experts – to this conference, the first international conference being organized by the Reserve Bank. I want to specially acknowledge noted economist and Nobel Laureate Prof. Michael Spence who will be delivering the keynote address in a short while.

3. I struggled quite a lot in defining what I should say in this opening address. Given the breadth and depth of expertise that you all collectively bring to this forum, it would be presumptuous on my part to lay out the agenda of deliberations over the next two days. I will attempt something much less ambitious – just by way of a curtain raiser, I will set out the major challenges to central banks in the wake of the crisis. In particular, I will put forward five challenges. My effort, as you will notice, will be to flag the issues rather than argue them out extensively.

First challenge: Managing monetary policy in a globalizing environment

4. The crisis has clearly demonstrated the challenges of macroeconomic management in a globalizing world. Even as governments and central banks acted with unusual show of policy force, they found that they were not able to get the situation under control because of the interconnectedness of the financial system and the positive and negative cross-border externalities to domestic policy actions. Most importantly, they found that sentiment and confidence were remarkably correlated across countries around the world. When the history of this crisis is written, the London G-20 summit in April 2009 will be marked as a clear turning point, showing that in the age of globalization, a financial crisis cannot be managed without global cooperation and global response.

5. The question is, with the benefit of that hindsight, how are central banks going to manage the challenges from globalization to their macroeconomic policies. Experience shows that external developments interact with domestic macro variables in complex, uncertain and even capricious ways, and central banks need to deepen their understanding of these interactions. Some of the channels through which cross border transmission occurs are quite familiar – global prices including commodity price movements, synchronization of business cycles, capital flows, strong co-movement of asset prices, not necessarily correlated with the degree of a country’s financial integration, exchange rates of key international currencies and interest rate policies of major central banks. Some of the
transmission channels are not so familiar. For example, we now know that even differences in regulatory regimes can trigger arbitrage based action and dilute the efficiency of domestic policies.

6. Is the challenge posed by globalization similar for all central banks? Obviously, the more open the economy, the greater the impact of globalization on domestic policies. Beyond that, it seems logical to conjecture that the broader the mandate of a central bank, the larger the influence of globalization on the effectiveness of its policies. There is a view that open economies can retain strong control over the medium and long term inflation trends even in the face of globalization. This is a debatable proposition, and at best true only in the case of pure inflation targeting central banks. Central banks with wider mandates need necessarily to factor in external developments into their domestic policy calculus.

7. Let me illustrate the challenge of globalization with the issue of managing capital flows. Emerging market economies (EMEs) saw “sudden stop” capital outflows during the crisis as a result of global deleveraging. Now the trend has reversed once again and many EMEs are seeing net inflows – a consequence of a global system awash with liquidity, the assurance of a low interest rate regime in advanced countries over an “extended period” and the promise of growth in EMEs.

8. One little known aspect of capital flows, what could perhaps be called the law of capital flows, is that they never come in at the precise time or in the exact quantity you want them. Managing these flows, especially if they are volatile, is going to test the effectiveness of central bank policies of semi-open EMEs. If central banks do not intervene in the foreign exchange market, they incur the cost of currency appreciation unrelated to fundamentals. If they intervene in the forex market to prevent appreciation, they will have additional systemic liquidity and potential inflationary pressures to contend with. If they sterilize the resultant liquidity, they will run the risk of pushing up interest rates which will hurt the growth prospects. Capital flows can also potentially impair financial stability. How EMEs manage the impossible trinity – the impossibility of having an open capital account, a fixed exchange rate and independent monetary policy – is going to have an impact on their prospects for growth, price stability and financial stability.

9. Globalization is not new; its risks and rewards are also not new. What is new, and what the crisis has revealed, is the ferocity with which the forces of globalization can strike and the diversity of channels through which they can transmit across borders. The challenge for central banks is to better understand the interplay of global factors and domestic variables, and factor that into their policy calculus.

Second challenge: Redefining the mandate of central banks

10. Let me now move on to the second issue which is the challenge of redefining the mandate of central banks. The crisis has triggered a vigorous and wide ranging debate on the role and responsibilities of central banks. Let me focus on three main, and largely interrelated issues:

i. Should central banks persist with pure inflation targeting?

ii. What is the role of central banks in preventing asset price bubbles?

iii. Should central banks also be doing regulation and supervision of banks?

11. Let me take them up one by one.

(j) Should central banks persist with pure inflation targeting?

12. The first question is, should central banks persist with inflation targeting. The years before the crisis saw a powerful intellectual consensus building around inflation targeting. A growing number of central banks, starting with New Zealand in the late 1980s and currently numbering over 20, geared monetary policy almost exclusively to stabilizing inflation. Even
where central banks did not target a precise inflation rate, their policy objectives were informed, if not dominated, by price stability. This approach seemed successful. There was an extended period of price stability accompanied by stable growth and low unemployment. In the world that existed before the crisis, central bankers were a triumphant lot. They had discovered the holy grail.

13. The unravelling of the Great Moderation during the crisis has diluted, if not dissolved, the consensus around the minimalist formula of inflation targeting. The mainstream view before the crisis was that price stability and financial stability reinforce each other. The crisis has proved that wrong. We have seen that price stability does not necessarily ensure financial stability. Indeed there is an even stronger assertion – that there is a trade-off between price stability and financial stability and that the more successful a central bank is with price stability, the more likely it is to imperil financial stability.

14. All in all, the crisis has given fresh impetus to the “new environment hypothesis” that pure inflation targeting is inadvisable and that the mandate of central banks should extend beyond just price stability. Let me therefore turn to what the mandate should extend to.

(ii) What is the role of central banks in preventing asset price bubbles?

15. A dominant issue in the wake of the crisis has been the role of central banks in preventing asset price bubbles. The monetary stance of studied indifference to asset price inflation stemmed from the famous Greenspan orthodoxy which can be summarized as follows. First, asset price bubbles are hard to identify on a real time basis, and the fundamental factors that drive asset prices are not directly observable. A central bank should not therefore second guess the market. Second, monetary policy is too blunt an instrument to counteract asset price booms. And third, central banks can “clean up the mess” after the bubble bursts. The surmise therefore was that the cost-benefit calculus of a more activist monetary stance of “leaning against the wind” was clearly negative. In other words, it is not the job of central bankers to remove the punch bowl no matter that the party is getting wild.

16. The crisis has dented the credibility of the Greenspan orthodoxy. The emerging view post-crisis is that preventing an asset price build up should be within the remit of a central bank. Opinion is divided, however, on whether central banks should prevent asset bubbles through monetary policy action or through regulatory action. On one side, there is a purist view that the case for monetary tightening to check speculative bubbles is questionable. Opposed to this is the argument that a necessary condition for speculative excesses is abundant liquidity, and that controlling liquidity should be the first line of defence against “irrational exuberance”.

17. Some economists take a more granular position on this, and the argument goes as follows. It is important to differentiate between speculative excesses fuelled by bank lending and those that are not such as, for example, the IT bubble. Central banks have a role in preventing “bank centred” bubbles, but the instrument for this is not monetary policy but regulatory intervention.

18. No matter how this debate settles, if it will at all, what is beyond debate is that central banks’ efforts to check asset price bubbles demand not just analytical capability but mature judgement of the nature of the risk.

(iii) Should central banks also be doing bank regulation and supervision?

19. The third issue that I want to address in regard to the mandate of central banks is the question of whether central banks should also be doing bank regulation and supervision.

20. This is yet another issue on which the crisis has triggered a vigorous debate. There is a variety of regulatory models around including those where the central bank is a pure monetary authority with bank regulation and supervision vested with another agency. Post-crisis, the emerging view is that the crisis was caused, at least in part, by the lack of coordination and communication between the separate bodies and that it is optimal, in the
interest of financial stability, to entrust the function of regulation and supervision of banks also to central banks.

21. The case for this is made mainly on two arguments. The first argument is that regardless of the regulatory architecture, there is no dispute that the central bank has to remain the lender of last resort (LOLR) for the financial system. A central bank can discharge its LOLR function more efficiently if its mandate extends beyond merely monitoring financial institutions to taking preventive action. This becomes possible if the central bank also has responsibility for bank supervision.

22. The second and broader argument is that there is a natural synergy between monetary policy which is macro-prudential and bank supervision which is micro-prudential. The micro-level information coming from supervision of individual institutions can be a valuable input for shaping the macro perspective. Vice versa, a broad macro level understanding of trends can be effective in instituting prudential safeguards at the micro institutional level.

23. Admittedly, there are strong arguments to the contrary, in support of keeping bank regulation and supervision away from central banks. By far the most persuasive argument stems from the moral hazard perspective. There is a risk that a central bank may extend regulatory forbearance to a weak bank instead of allowing it to fail since a failed bank could aggravate instability. Such action becomes more likely if the overall macroeconomic situation is weak. In an extreme case, it is possible that the monetary stance of the central bank may be dominated by concerns about protecting weak banks since central banks may view a “failed bank” as a blot on their reputation.

24. Whether central banks should also be regulating and supervising banks is an issue that has frowned on moderation. Evidently, there is no one size fits all answer as indeed evidenced by the variety of regulatory models around. Going forward, every country and every central bank has to confront and resolve this issue in light of their specific circumstances.

Third challenge: Responsibility of central banks towards financial stability

25. Let me move on to the third challenge on my list concerning what responsibility, if any, should central banks have towards financial stability. Although this question belongs to the mandate of central banks that I have just spoken about, I have decided to address financial stability as a separate and distinct challenge because post-crisis, financial stability has become the elephant in the room.

26. While there is broad agreement that financial stability is neither automatic nor inevitable, there is less agreement on whether it should be explicitly included in the mandate of central banks. There is an argument that explicit inclusion would be redundant since financial stability is a necessary, although not sufficient, condition for achieving the conventional central bank objectives relating to inflation, output and employment. On the other hand, post-crisis, there is a growing view that unless financial stability is explicitly included in the mandate of central banks, it is likely to fall through the cracks.

27. But how does one define financial stability in a precise, comprehensive and measurable manner? This is something that is proving to be quite intractable. Be that as it may, we now know that two attributes of financial instability are: (i) excessive volatility of macro variables such as interest rates and exchange rates which have a direct impact on the real economy; and (ii) financial institutions and markets threatened by illiquidity to the extent of jeopardizing systemic stability.

28. One clear instrument available to central banks for preserving financial stability is the lender of last resort or LOLR function. Over the years we have come to believe that LOLR is a fairly robust instrument for combating threats of illiquidity. Note that one of the
important ways in which this crisis has been different from past financial crises is that this one arose from the asset side of banks’ balance sheets whereas past crises had all arisen from the liability side. This crisis hence has shown that the LOLR instrument loses much of its potency in a “bank run” from the asset side.

29. Let me explain. During the crisis, central banks pumped in enormous amounts of liquidity to defreeze the system through the LOLR window. While this made individual institutions liquid, the market still remained illiquid, thereby showing up the limitation of the LOLR instrument in combating illiquidity. Much like taking a horse to water, a central bank can infuse liquidity, but how can it ensure that the cheap and abundant money thus available is used to purchase assets whose value is rapidly eroding? The only option then is for the central bank itself to buy the assets. This means that in addition to being the Lender of Last Resort, a central bank also has to be the Market Maker of Last Resort (MMLR).

30. To sum up, the main issues surrounding the role of central banks in financial stability are the following.

- How does one define financial stability?
- Should central bank mandates include financial stability as an explicit objective?
- Should this be an exclusive or shared responsibility?
- Do central banks have the instruments to address the mandate of financial stability?
- In what ways does responsibility for financial stability encroach on the independence of central banks?

31. All of these issues are yet to be clearly defined, let alone resolved. Given that the lessons of the crisis relating to financial stability have been forceful, it is important that governments and central banks resolve these questions soon.

Fourth challenge: Managing the costs and benefits of regulation

32. Nearly everyone now has her or his own list of causes for the crisis; and almost every list includes the failure of regulation as a leading cause. Quite unsurprisingly, the post-crisis reform agenda is dominated by regulatory reforms at macro and micro levels. Admittedly, these reforms are being thought through carefully through international consultative processes. Even so, there is a risk of going overboard on the rebound and getting the balance between costs and benefits wrong.

33. In order to safeguard financial stability, in the Reserve Bank, we have traditionally used a variety of prudential measures such as specifying exposure norms and pre-emptive tightening of risk weights and provisioning requirements. But these measures are not always costless. For instance, tightening of risk weights arguably tempers the flow of credit to certain sectors, but excessive, premature or unnecessary tightening could blunt growth. Similarly, exposure norms offer protection against concentration risks; however, such limits could restrict the availability of credit for important growth sectors. Thus, as in the case of price stability, central banks face the challenge of managing the trade off between financial stability and growth.

34. It needs to be recognized that after a crisis, with the benefit of hindsight, all conservative policies appear safe. But is there a risk of throwing away the baby with the bathwater? Excessive conservatism in order to be prepared to ride out a potential crisis could thwart growth and stifle innovation. The question is what price are we willing to pay, or put another way, what potential benefits are we willing to give up, in order to cope with a black swan event? Experience shows that managing this challenge, that is balancing the costs and benefits of regulation, is more a question of good judgement rather than analytical skill. This judgement skill is the one that central banks, especially those of developing countries such
as India, need to hone as they simultaneously pursue the objectives of growth and financial stability.

**Fifth challenge: Managing the balance between the autonomy and accountability of central banks**

35. Finally, let me turn to the fifth challenge, as I see, which is to do with managing the balance between the autonomy and accountability of central banks. This is a broad spectrum topic that draws from several issues that I have touched upon earlier.

36. The seventy odd years since the Great Depression saw a famous rivalry between fiscal and monetary policies for influence. Historically central banks suffered from fiscal dominance since they had to acquiesce in governments “borrowing as much as required at as low a cost as possible”. This state of affairs started changing in the 1980s with a wave of support for central bank independence. The support was largely in response to the damage inflicted by the stagflation of the 1970s and the clear lesson that high inflation is detrimental to sustainable growth. So, fiscal dominance gradually yielded to independent central banks targeting largely, and in some cases exclusively, price stability, free of short term political imperatives. Empirical work shows that in the two decades during which central bank independence gained ascendancy, there was a negative correlation between inflation and the degree of independence of the central bank across both developed and developing economies. In some cases though, reverse causality – low inflation performance leading to central bank independence – cannot be ruled out.

37. Notwithstanding their record on price stability, the crisis has dented the credibility of central banks. The blame on central banks is wide ranging – loose monetary policies coupled with neglect of asset price developments, exclusive focus on inflation to the detriment of financial stability and lax and inept regulation that failed to keep pace with innovation. There is resentment, if not outrage, against the famed independence of central banks; and there is an outcry for clipping their mandates and tightening the accountability mechanisms.

38. Beyond the short-term, the threat to the independence of central banks emanates from factors apart from public anger. Notably, the crisis saw unprecedented expansionary fiscal and monetary policies launched by governments and central banks in coordination. As countries contemplate exit from these expansionary policies, the familiar tensions between monetary and fiscal policies are showing up again. Many believe that these tensions are temporary, and will melt away once recovery takes root.

39. That may not well be the case. There is wide spread apprehension that many advanced country governments will not be able to wind down borrowing because of demographic factors and consequent growing social security payments. IMF studies estimate that even if the governments in the advanced economies reverse the crisis induced fiscal stimulus, these economies will still end up with a structural primary deficit of 2 per cent of GDP. Government debt in the advanced economies is projected to jump from the pre-crisis level of 78 per cent of GDP in 2007 to 118 per cent by 2014 assuming some discretionary tightening beginning this year. In such a scenario, what are now seen as cyclical fiscal deficits may, in fact, morph into structural fiscal deficits. We may then see the return of fiscal dominance and undermining of the independence of central banks.

40. I spoke earlier about the role of central banks in preserving financial stability, and in particular, about how the responsibility for financial stability may be delineated. By its very nature, the responsibility for financial stability has to be shared by the government, the central bank and other regulators. In and of itself, that sharing is no problem. But there are two related concerns. The first is that rescuing financial institutions is an inherently political act and getting involved in such decisions may compromise the technocratic credentials of central banks. The second concern is the risk that coordination with governments in the area
of financial stability may spill over into other areas within central bank purview thereby undermining their independence.

41. All in all, the case for central bank independence is coming under increasing assault as a result of crisis led developments. The challenge for central banks is to make the case for independence not through weighty arguments but through more vigorous and voluntary efforts to be transparent, responsive and accountable.

Conclusion

42. Let me now conclude. I have raised, what are in my view, five challenges that central banks will have to address. They are the following:

i. Managing monetary policy in a globalizing environment
ii. Redefining the mandate of central banks
iii. Responsibility of central banks towards financial stability
iv. Managing the costs and benefits of regulation
v. Managing the balance between the autonomy and accountability of central banks

43. This listing of challenges is by no means exhaustive. And many different nuances are possible. I hope that our deliberations over the next two days will give us greater clarity on the challenges that we face collectively and individually, and a better understanding of how to begin addressing them.

44. A final thought. In his recent best seller, “The Ascent of Money”, Niall Ferguson says that sometimes the most important historical events are the non-events: the things that did not occur. The spectacular non-event of this crisis is that the Great Recession did not turn into the second Great Depression as we had feared. For this central banks should get a part of the credit. But they cannot rest on their laurels – they have big challenges ahead as the crisis winds down. Their biggest challenge by far is to regain their credibility.