Duvvuri Subbarao: Monetary policy dilemmas – some Reserve Bank of India perspectives

Comments by Dr Duvvuri Subbarao, Governor of the Reserve Bank of India, at the Stern School of Business, New York University, 26 September 2011.

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1. I value this opportunity of speaking at the Stern School to an academic community interested in central bank issues. Over the last decade, the profile of central banks has gone up. First, we had the Great Moderation – a period of extraordinary benign macroeconomic environment globally, characterized by steady growth in advanced economies and accelerated growth in emerging economies, and low and stable inflation all around. Central banks took credit for this, believed they had discovered the Holy Grail and declared victory.

2. That sense of triumph was dented by the crisis as central banks came to be blamed for policies and actions that got the world into the crisis. Even so, central banks battled the crisis from the frontlines and regained some of the lost reputation by acting quickly, decisively, and where required in concert, to stabilize the global economy which was hurtling towards collapse. Over the last few months, fears of a double-dip recession have resurfaced, and governments in advanced countries are locked in a policy logjam over the balance between short-term fiscal stimulus and long term fiscal consolidation. This has willy-nilly pushed central banks to the fore once again as monetary stimulus is having to bear the burden of being the first, and in some cases, possibly the only line of defence against recession.

3. The crisis has been an intellectual challenge in many ways. It has tested the armoury of instruments available to central banks and the limits of their policy force. It has also reopened questions that we thought had been answered and renewed debates that we thought had been settled. My own experience has been that real world problems are too complex to fit template solution of text books. I want to use this opportunity that you have provided me to communicate to you some of the complexities and dilemmas in real world policy making, and I will do so from the perspective of the Reserve Bank of India (RBI).

What is the appropriate monetary policy response to complex growth-inflation dynamics?

4. India recovered from the crisis sooner than even other emerging economies, but inflation too caught up with us sooner than elsewhere. Inflation, as measured by the wholesale price index (WPI), which actually went into negative territory for a brief period in mid-2009, started rising in late 2009, and it has remained around 9–10 per cent since January 2010 reflecting both supply and demand pressures. Supply pressures stemmed from elevated domestic food prices and rising global prices of oil and other commodities. The source of demand pressures was an economy with low per capita income which recovered sharply from the crisis. The supply pressures and demand pressures collided triggering a wider inflationary process.

5. In response to the inflationary pressures, the Reserve Bank began to reverse its accommodative monetary policy as early as October 2009. We have been criticized for our anti-inflationary stance, ironically from two different directions.

From one side, we have been criticized for being hawkish on inflation. The argument has been that our inflation is driven largely by supply shocks, particularly, since mid-2010, by high oil and other commodity prices, and that monetary policy should not respond to such inflation. We will only end up hurting growth. The criticism from the other side has been that the Reserve Bank has been soft on inflation, the baby step approach we followed – of increasing policy interest rates by 25 bp each time – was not deterrent enough, and that the persistence of inflation is a result of our delayed response. Both these critiques cannot obviously be right at the same time. Let me offer a response to them and in the process explain the rationale for our anti-inflationary stance.

Monetary policy too hawkish

6. My response to the doves is as follows. Admittedly, monetary policy is best suited to contain inflationary pressures stemming from the aggregate demand side. In that case, the policy prescription is clear. If inflation is high, tighten monetary policy; and if inflation is low, loosen monetary policy. Monetary policy options in the face of supply shocks are less straight forward. Whether monetary policy is effective in dealing with supply shocks is therefore a matter of both academic debate and policy contention.

7. The conventional wisdom is that if inflation expectations are well anchored, monetary policy need not react to supply shocks. This premise is based on two assumptions; first that the supply shocks are purely temporary, and second that supply shocks are the only ones driving inflation. These assumptions do not always hold. In the real world, oftentimes supply shocks lead to a permanent trend upward shift in prices. Also, sometimes, demand pressures combine with supply shocks to stoke inflationary pressures.

8. A good illustration of the first assumption – mean reverting supply shocks – not holding comes from the world prices of oil which have trended up on a long period basis. International crude oil prices recorded an annual average increase of around 17 per cent during the 2000s as against only a modest increase of 2 per cent during the 1990s and a decline of 3 per cent during the 1980s. This obviously is the outcome of structural changes in supply and demand for oil. Monetary policy has to recognize these underlying trends and respond to them. If it looks upon these trends as pure transient supply shocks and ignores them, it runs the risk of destabilizing inflation expectations.

9. And now about the second assumption – of supply shocks not usually acting alone to stoke inflation. The shifting drivers of inflation in India over the past year and a half offer a good illustration. The increase in global commodity prices coincided with rapidly rising demand at home. GDP grew at 8.5 per cent last year (2010/11), faster than the trend growth rate which is now estimated to be of the order of 8 per cent. In an environment of rapid growth and high capacity utilization, corporates regained pricing power and were able to pass through the increase in input prices to higher output prices thus fuelling generalized inflationary pressures.

10. Similar dynamics were at play on the food front. Rising incomes, especially in rural areas, have resulted in a shift in dietary habits away from cereals and toward protein-based foods. This is a structural change and monetary policy will be misled if it treats this as a one-off supply shock. Given the high share of food in the various consumer price indices (46%–70%), persistent supply pressures on the food front can fuel inflation expectations; and in the face of growing demand pressures, rising inflation expectations can trigger a wage-price spiral. Recent reports that real wages of rural labour have gone up markedly suggest that such a wage-price spiral may already be under way.

11. To summarize, the inflation that we have experienced over the last nearly twenty months is a result of a combination of supply shocks that had a trend impact on prices as well as demand pressures. Given the nature of the inflation drivers and their combined impact, clearly there is a significant role for monetary policy in combating inflation. Our monetary policy stance is guided by this understanding, and is aimed at restraining demand and anchoring inflation expectations. The argument of our critics that monetary policy has no role because inflation is a result of imported commodity prices would have been valid if the increase in commodity prices was a pure and transient supply shock or if there were no demand pressures. That clearly was not the case in India.

Monetary tightening hurts growth

12. Another argument made in this line of criticism is that monetary policy tightening is hurting growth. I believe a much more nuanced evaluation of our policy stance is necessary. Evidence from empirical research suggests that the relationship between growth and inflation is non-linear. At low inflation and stable inflation expectations, there is a trade-off between growth and inflation. But above a certain threshold level of inflation, this relationship reverses, the trade-off disappears, and high inflation actually starts taking a toll on growth. Estimates by the Reserve Bank using different methodologies put the threshold level of inflation in the range of 4%–6%. With WPI inflation ruling above 9 per cent, we are way past the threshold. At this high level, inflation is unambiguously inimical to growth; it saps investor confidence and erodes medium term growth prospects. The Reserve Bank's monetary tightening is accordingly geared towards safeguarding medium term growth even if it means some sacrifice in near term growth.

Monetary policy behind the curve

13. Now let me turn to the criticism from the opposite side – that the Reserve Bank was slow in closing the monetary spigots, that our "baby step" approach was inadequate to tame the inflationary pressures, and that we are having to tighten aggressively lately to make up for lost time.

14. This criticism fails to appreciate the context – the nature of domestic inflation and global uncertainty – in which we were operating. The calibration of our monetary tightening was guided by the changing drivers of inflation over the course of fiscal year 2010/11. Early on in the year, inflation pressures had their origin in food prices, and accordingly our monetary policy response was aimed at containing the spillover risk to non-food inflation. Note that policy rates had gone down to historically low levels during the crisis, and an abrupt adjustment would have disrupted the market. Our judgement, therefore, was that tightening should be done gradually, in small steps, so as to allow time for the banks and the private sector to adjust to a higher interest rate environment.

15. The inflation scenario changed starting August 2010 when global commodity prices surged higher than anticipated. Global oil prices came under further pressure starting January 2011 because of political developments in the Middle East and North-Africa. Also, as I had indicated earlier, because of the narrowing of the output gap, producers were able to pass on higher input prices to higher output prices leading to inflationary pressures getting generalized as evidenced by the increase in non-food manufactured product inflation from 5.3 per cent per cent in August 2010 to 8.5 per cent in March 2011. We responded to these changes in underlying drivers of inflation by tightening more aggressively starting May 2011.

16. The second factor relevant in the "behind the curve" debate is that we also had to contend with an uncertain global recovery. Even as there was some talk of spring shoots in April 2010, the optimism did not last; soon thereafter, the Greek sovereign debt crisis and unemployment concerns in the US revived concerns about the pace and shape of global recovery. These uncertainties increased both in nature and size as time passed with the euro area sovereign debt problem not only spreading but proving to be intractable, the US recovery stalling and the Japanese economy assaulted by an unprecedented natural disaster. Our "baby step" approach during 2010 was accordingly a delicate balancing act between supporting recovery at home amidst growing global uncertainty and containing inflation pressures.

17. If the above factors are reckoned with, the "behind-the-curve" argument loses potency. Starting in March 2010, we have so far raised policy interest rates (the repo rate) by 350 bp. The effective tightening has been even more, 500 bp, as the operational policy rate shifted from reverse repo rate (absorption mode) to repo rate (infusion mode).

18. In offering a response to the criticism of our monetary policy stance from both sides, my endeavour has been to communicate to you that every monetary policy action involves complex judgement. The supply shocks we confront in the real world are different from pure text book versions; oftentimes they coincide with rising demand pressures. We have to balance growth-inflation concerns. On top of that, monetary policy actions need to be forward looking even in the face of external uncertainty. This in essence is the dilemma of monetary policy decisions.

How do you justify liquidity injection in the midst of a tightening cycle?

19. The conventional tools of monetary policy are controls over the volume of money (liquidity) and the price of money (policy interest rate). Typically an expansionary stance would involve easing both the rate and volume, and conversely, a contractionary stance would involve tightening both of them. Occasionally, there arise situations when the price and volume instruments are deployed in opposite directions – for example, injecting liquidity amidst a rate tightening cycle – that call for both cautious judgement and extra effort at communication.

20. In understanding the motive force for liquidity adjustment by a central bank, it must be noted that a growing economy requires the central bank to inject primary liquidity to meet the requirement for currency and credit. This injection can come about only through an expansion of the reserve (base) money. In the first instance, liquidity injection happens through overnight borrowing by banks under the Liquidity Adjustment Facility (LAF). If the liquidity shortage is of a durable nature, the central bank needs to meet that need through outright open market operations (OMOs) by buying government securities.

21. As we progressed with monetary tightening through 2010, the LAF window shifted from a surplus (absorption) mode to a deficit (injection) mode. This was consistent with our anti-inflationary stance since a deficit liquidity situation would improve monetary transmission. We had also indicated clearly that it would be the endeavour of the Reserve Bank to maintain the absorption or injection through the LAF window at about ± 1 per cent of the net demand and time liabilities (NDTL) of banks. However, towards the second half of 2010, systemic liquidity tightened further pushing the injection through the LAF window beyond 1 per cent of NDTL. This was owing to a combination of structural and one-off factors. Recognizing that the deficit in systemic liquidity was of a durable nature, the Reserve Bank conducted outright OMOs to inject liquidity of a durable nature.

22. This liquidity injection through OMOs happened at a time when we were tightening policy rates to combat inflation. These were seemingly contrarian actions, and many observers may have seen them as being conflicting and incoherent. We realized that there was a communication challenge here – to explain to the market that we remained committed to bringing inflation down, that our action in injecting liquidity was not inconsistent with our anti-inflation stance, that we continued to hold that liquidity should be in a deficit mode in a monetary tightening cycle, but that we were injecting liquidity only to ease the "excessive deficit" in order to ensure that flow of credit for productive purposes was not choked.

23. Informed market participants did of course understand the rationale for our actions. But we recognized the importance of communicating the rationale to the larger public. If people got confused policy signals and believed thereby that the central bank's commitment to inflation control was not credible, inflation expectations would get unhinged and that would erode the effectiveness of our anti-inflation strategy. We, therefore, went the extra mile to communicate the rationale at a non-technical level.

Forward guidance: how transparent can/should a central bank be?

24. Received wisdom today is that successful monetary policy is not just a matter of effective calibration of overnight interest rates, but also of shaping market expectations of the way in which interest rates, inflation and income are likely to evolve on the way forward. Among the important instruments used by central banks for this purpose is the "forward guidance" they give in their monetary policy statements.

25. The practice of giving forward guidance varies across central banks. By far the most explicit has been the Bank of Canada which, given the uncertainty during the crisis, gave a definite timeframe until which it would keep overnight rate at the "current" level, subject of course to the outlook for inflation. The ECB has traditionally been less explicit on the ground that policy commitment is not possible in an uncertain macro environment. The US Fed has a more credible record of using forward guidance to shape and manage expectations. For over two years since the crisis, the Fed had guided the markets by saying that "economic conditions are likely to warrant exceptionally low levels for the federal funds rate for an extended period". In its most recent statement of August 9, 2011, the Fed quantified "extended period" as "at least up to mid-2013", thereby giving a more definitive time frame for market participants to plan. The Fed evidently expects that by reducing uncertainty, at least in one dimension (time dimension), the forward guidance will help stimulate demand.

26. Giving forward guidance is not always necessarily a positive sum game. Central banks face several dilemmas. The first is how exactly is the conditionality surrounding the guidance to be worded. It cannot be so vague as to lose all content value; on the other hand, it cannot be so precise that the central bank becomes a prisoner of its words and loses any flexibility to deviate from the guidance should the underlying circumstances change. A second, and related, dilemma is how to ensure that the market correctly appreciates the conditionality and does not interpret the guidance as an irrevocable commitment.

27. Starting early 2010, in keeping with the best practice, the Reserve Bank too has begun giving forward guidance. And as expected, we too have confronted the classic communication dilemma. Let me illustrate. In the First Quarter Review of July 2011, we said:

> *"Going forward, the monetary policy stance will depend on the evolving inflation trajectory, which in turn, will be determined by trends in domestic growth and global commodity prices. A change in stance will be motivated by signs of a sustainable downturn in inflation."*

28. Simultaneously, we also noted that the stance of monetary policy will be to *"manage the risk of growth falling significantly below trend".*

29. Reading the two statements together, some analysts have criticized the guidance for its lack of precision; more specifically, there were questions like, "what is the trend growth rate" and "how much deviation from trend would the RBI tolerate". This was valid criticism and these questions were relevant. With our trend growth rate, post-crisis, estimated at 8 per cent, the balance of policy stance would shift if growth fell consistently and substantially below that rate. But a shift in stance will also be a function of the behaviour of the external and internal drivers of inflation. What we said in response to the criticism therefore was that defining precisely "what significantly below trend" ex-ante was difficult, and that the ambiguity in the guidance was deliberate because it was unavoidable.

30. Central to this whole issue of forward guidance is that a central bank is handicapped by external uncertainty over which it has no control. The crisis has brought this dilemma into sharp focus. On the one hand, central banks want to use the instrumentality of forward guidance to manage expectations, and even outcomes; on the other hand, they cannot be precise enough because of external uncertainty. How to communicate monetary policy so that the benefit-cost balance is positive is yet another dilemma for central banks.

Should monetary policy respond to asset prices?

31. Among the many questions thrown up by the crisis is one about the role of central banks in dealing with asset price bubbles. The broadly accepted theology before the crisis – although not the only view – was the Greenspan orthodoxy which can be summarized as follows. First, asset price bubbles are hard to identify in real time, 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.

32. The crisis has dented the credibility of the Greenspan orthodoxy. The emerging view post-crisis is that central banks cannot remain indifferent to asset price bubbles. However, it has thrown up a debate over what should be the role of the central bank and how that role might affect its other responsibilities, and indeed its autonomy. The debate is still fluid and there are no conclusive answers. Nevertheless, it has helped in crystallizing some views to guide the way forward. Let me discuss some of them.

33. As much as the pre-crisis orthodoxy about not deploying monetary policy in aid of asset price management has now lost its potency, reservations persist about its efficacy. The essence of the argument is that the typical monetary policy action of raising policy interest rate in small steps of 25–50 basis points will not help contain the surge in asset prices. On the other hand, monetary policy action aggressive enough to deter asset price build up will take a heavy toll on the real economy. A consensus is building around the view that the most appropriate way of addressing asset prices is through macroprudential instruments, either independently or in conjunction with monetary policy. Indeed, macroprudential instruments are at the heart of the Basel 3 package which was agreed upon last year.

34. Macroprudential policies are neat in concept but throw up a host of problems in operation. The tools of macroprudential policy such as capital norms, countercyclical buffers and risk weights fall within the domain of regulation. But there also has to be consistency between the monetary stance and macroprudential policy. Does this then mean that the central bank should also have responsibility for bank regulation? If on the other hand, the responsibilities are distributed across different agencies, what should be the platform and protocol for coordination? What should be the role of the government?

35. Indeed, the post-crisis trend has been to entrust macroprudential supervision to central banks, and where central banks already have this responsibility, to define it more explicitly. While there could be some synergies in that, there are also questions about potential conflicts of interest such as when, for example, the macroeconomic situation may require a tight monetary policy, but the central bank may demur because such tightening may raise concerns about the stability of the banking system. Some people argue though that potential conflicts between monetary policy and macroprudential policy are being exaggerated. In entrusting responsibility for macroprudential supervision, and more broadly for financial stability, to central banks, there are concerns also about how this responsibility, might impact the prized autonomy of central banks. This apprehension arises because macroprudential decisions entail a greater element of subjective judgement than do monetary policy decisions, and if that be the case, it opens up scope for interference from the outside.

36. My attempt as above has been only to give you a flavour of the many complex questions thrown up by this issue of central bank responsibility for asset price management, indeed more broadly for financial stability. The scope of this lecture does not permit a detailed assessment of the debate. But let me give you the Reserve Bank perspective on this.

37. The Reserve Bank has traditionally had a much broader mandate, including responsibility for some development functions, than is typical of advanced economy central banks. Our experience in regard to simultaneously managing both monetary policy and macroprudential policy has been positive, indeed synergistic. Asset price trends are one of the many variables we take into account in monetary policy calibration. We have used conventional monetary policy instruments such as policy interest rates if demand pressures are across board. On the other hand, if demand pressures are confined to specific sectors, we have found it more efficient to use macroprudential instruments such as risk weights and provisioning norms so as to put sand in the wheels of credit flowing to those sectors. We have also used macroprudential instruments symmetrically – tightening in times of excess demand as, for example, in the years before the crisis, and easing in times of slackening demand, for example, as part of the crisis response.

38. Even as macroprudential policies have become the talk of the town post-crisis, deploying them requires careful judgement. In order to make a judgement, a central bank has to ascertain if the asset price build up is driven by "excessive leverage" and if the price build up is across board or confined to specific sectors. By far the most important thing to remember in deploying macroprudential policies is that, with the benefit of hindsight, all conservative policies look safe. But excessive conservatism in order to be prepared to ride out a potential crisis could thwart financial innovation and progress. It is this balance between preventing instability and promoting innovation that central banks have to learn to manage. And this is especially important in an emerging market economy like India where the responsibility of the central bank for market development, though not explicit, is nonetheless quite important.

How should monetary policy manage the interface with fiscal policy?

39. The seventy odd years since the Great Depression saw a famous rivalry between fiscal and monetary policies for influence. For much of this period, almost across the developed world, Keynesian theology ruled, fiscal policy dominated and monetary policy remained subservient to that. The stagflation of the 1970s, the influential monetarist views of Friedman *et al* and the apparent success of supply side policies to tame inflation prompted a shift in thinking away from full bodied Keynesianism. Also important were the theoretical analysis of discretion vs. rules in setting monetary policy. Together, the theoretical advances and empirical evidence allowed monetary policy to wean itself away from fiscal dominance and central banks started asserting their autonomy.

40. Even as the advantages of having an apolitical monetary authority as an effective counterpoise to politically driven fiscal policies were becoming evident, democratic compulsions made fiscal discipline increasingly difficult. To get around this, starting 1990s, several countries voluntarily enacted fiscal responsibility laws. The laws imposed limits on fiscal deficits/public debt on the one hand and prohibited primary financing of the fiscal deficit by the central bank on the other. This institutional framework allowed operational independence to the central bank in its conduct of monetary policy within a rule-based regime and was successful in keeping inflation low.

41. The rule based fiscal regimes unravelled during the crisis as both governments and central banks implemented expansionary policies in close coordination. While such coordination during the crisis was not questioned except by extreme purists, now in the recovery period, several fundamental concerns are resurfacing. At the heart of these concerns is whether monetary policy is once again becoming hostage to fiscal compulsions? The specifics of the debate vary but the basic issues are similar. In the US, the debate is over the trade-off between short-term fiscal stimulus and long-term fiscal consolidation. In the euro area, the question is about the shared benefits of a monetary union without the shared responsibilities of a fiscal union. The questions all around are: Are central banks being forced beyond their comfort zone to maintain expansionary monetary stances to compensate for

fiscal laxity? Aren't the so called unconventional monetary actions thinly veiled fiscal measures? Aren't central banks, in the process, compromising their basic commitment to price stability? Are central banks becoming vulnerable to political pressures? Is their autonomy at risk? The answers to these questions will be shaped by how the current big issues are settled.

42. As in many economies, in India too, monetary policy was dominated by fiscal considerations during the 1970s and the 1980s. Large and growing fiscal deficits ended up being financed by the Reserve Bank. This led to more than desired growth in base money and money supply which ultimately reflected in high inflation. Like other economies, we too put in place a fiscal responsibility legislation – the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 – with ceilings on deficit and debt ratios and provisions prohibiting primary financing of government debt by the central bank. These provisions facilitated fiscal consolidation during 2003–08 and afforded the Reserve Bank the necessary flexibility to implement monetary policy aimed at low and stable inflation.

43. Like elsewhere in the world, both monetary and fiscal policies were eased in India too in response to the crisis. In particular, this meant interrupting the fiscal consolidation process enjoined by the FRBM Act. As India emerged from the crisis, the Government adopted a revised road map for fiscal consolidation as recommended by the Thirteenth Finance Commission. Nevertheless, meeting the road map targets is going to be a formidable challenge. The quantum of non-discretionary expenditure (salaries, pensions, interest payments) is large and this cannot be adjusted easily, at any rate in the short-term. By far the largest component of discretionary expenditure is on subsidies – on food, fertilizer and petroleum products. In reducing these subsidies, there is inevitably a tension between democratic compulsions and economic virtue. Even as the Government pursues a quantitative target, it also has to be mindful of the quality of fiscal adjustment – that is to prune unproductive expenditure and increase productive expenditure which is necessary for raising the potential output of the economy.

44. As I said, the Reserve Bank has been battling inflation for the last twenty months. Monetary tightening, as is well known, works by restraining demand. In as much as the fiscal stance is supportive of demand, the monetary stance has had to be more aggressive than otherwise. For monetary policy to be more supportive of growth, it will be necessary for fiscal consolidation to take root more firmly.

45. The dilemma for monetary policy in India is thus somewhat different from that of the advanced economies. The dilemma for advanced economy central banks is whether monetary policy is having to be kept more accommodative than necessary to offset fiscal contraction. In contrast, the dilemma for the Reserve Bank is whether monetary policy is having to be tightened that much more because of fiscal demand.

Conclusion

46. In my remarks today, I have tried to present to you some of the dilemmas we confront in monetary policy management. All central banks confront these, with differences in the extent and timing. I have tried to give you the Reserve Bank perspective on these. The message I tried to convey is that there are no template answers to real life policy issues. Analysis is important, but judgement is crucial. I believe a two way communication between central practitioners and central bank scholars will help in sharpening both our analysis and judgement.