CASI WORKING PAPER SERIES

Number 10-01

03/2010

REGULATING THE FINANCIAL SECTOR: INDIAN EXPERIENCE

YAGA VENUGOPAL REDDY
Emeritus Professor, University of Hyderabad

A Nand & Jeet Khemka Distinguished Lecture
Thursday, November 12, 2009

at the
Waldorf=Astoria Hotel, New York
The Duke of Windsor Suite
301 Park Avenue
New York, NY 10022

CENTER FOR THE ADVANCED STUDY OF INDIA
University of Pennsylvania
3600 Market Street, Suite 560
Philadelphia, PA 19104
http://casi.ssc.upenn.edu/index.htm

CENTER FOR THE ADVANCED STUDY OF INDIA

Penn Arts & Sciences

November 12, 2009

MARSHALL BOUTON: I'm Marshall Bouton, I have the privilege of chairing the International Advisory Board of the Center for the Advanced Study of India at the University of Pennsylvania (that's a mouthful!) CASI, I think known to many of you as its short name. We are really delighted to have Dr. Reddy – Dr. Y. Venugopal Reddy – here to speak to us this evening for the 2009 Annual Lecture of CASI. Dr. Reddy will be introduced to you shortly by Rajiv Sobti, but I would like to make a few comments, in particular because I know there are a number of people in the room who are not as familiar with CASI as perhaps others are, and it's important that, I think, you do. Let me say that – and this is my judgment, for what it's worth, but, I think, fairly said – that the Center for the Advanced Study of India is a *unique* resource in the United States. It is the only university-based education and research organization devoted to the study of contemporary India, in particular, India's contemporary political economy. It draws on the strengths of a great university – the University of Pennsylvania – but it does so in a way that relates outward to those of us who are interested in current developments in India in a broad context. The University of Pennsylvania, as many of you know, is one of the great centers for the study of India, and has been so for the last sixty years.

CASI was started by Francine Frankel, whom we all know had a great vision fifteen years ago to create this Center for the Advanced Study of India, and it has occupied this very important place. It does carry out academic research, organize conferences, sponsor fellows, produce publications, all of which are of the highest scholarly caliber, but all of which are also framed in terms of their relevance to what is happening in India today and, just as importantly, what is going to happen in the future. Now, we all know that, in the last decade especially, the India brand has appeared on the screens of many more Americans than were earlier focused on India, other than for reasons of cultural interest or tourism. But CASI preceded that development, and it has established a very important reach and reputation and relevance that has been growing under Devesh Kapur's leadership in recent years and I am confident will continue to grow. I want to add that CASI is not only a resource for the scholarly community broadly in the United States and overseas, and in India for that matter, but is also a great resource for Penn students and non-South Asia focused faculty. The center provides internships and some fellowship opportunities for Penn undergraduates; it provides opportunities for graduate students to work on issues in the course of their graduate study that are of interest to them, related to India's contemporary political economy; it also brings fellows and other visitors from India to the Penn campus and makes it available to them for their own research and writing but also makes them available to the Penn community. And Devesh has expanded that circle of CASI's activity in a short time – only three years since his arrival – to include many of the other professional schools and the key departments of the university.

And last but not least, CASI has maintained a quality of effort and autonomy and scholarly integrity amidst its focus on the contemporary issues in India that allows it to look beyond today's headlines and beyond conventional wisdom. There is, even now, in our more recent discovery of India, a certain faddishness, from time to time, as to where Americans look, what they seek, what they perceive about India, what they think is important about India. And yet, as many of you know from your own personal and professional experiences, it's a far more complicated picture than that. But to bring that understanding that scholars are able to develop and articulate to a broader audience is the special opportunity and the special responsibility of CASI, one that it has been carrying out very, very well.

Devesh Kapur has taken CASI to very exciting new levels of visibility and impact in the scope of what he has undertaken to do, in the intensity of what he is doing, and, frankly, in the imagination of his vision for what CASI could become. So, all of us who are interested in India and interested in its today and its future are fortunate to have Devesh at the helm of the center. We are going to try to do more activities under CASI's wing here in New York in the years to come, but we could not start on a better occasion than this evening with Dr. Reddy. And now I'd like to ask Rajiv Sobti to introduce Dr. Reddy.

RAJIV SOBTI: Good evening everybody and welcome to the Nand & Jeet Khemka Distinguished Lecture Series. It is my privilege to introduce this year's speaker who will provide the address, Dr. Venugopal Reddy, an individual who does not need an introduction – it makes my job a lot easier – so I will just highlight a couple of biographical points to highlight his contribution in the field of economic policy and academic thought at various points in his life.

Most recently, he retired as Governor of the RBI – Reserve Bank of India – in 2008, and over the five years, it's fair to say that he oversaw a transformational period in the Indian economy and, in fact, in October 2006 was recognized as one of the five original reformers for the Indian economy, along with Dr. Manmohan Singh, Mr. Chidambaram, Dr. Ahluwalia, and one of my former faculty members, Dr. Rangarajan, who a lot of us will know. So, clearly, he has been very well recognized for everything that he has done.

He has served at the World Bank and IMF and currently is a Professor Emeritus at Hyderabad University.

Today's address, I think, will serve as a valuable road map for policymakers all over the world. Of course, the basis is the Indian experience, but I think it will serve as a very important and valuable map all over the world. Dr. Reddy has kindly agreed to take some questions at the end of his address, and Devesh will serve as a moderator for that Question & Answer session. And with that, let me once again thank Dr. Reddy for being here and welcome him to the address.

DR. YV REDDY: Respected Mr. Marshall Bouton, Mr. Sobti, Dr. Devesh Kapur, and distinguished guests, I am grateful to the Center for the Advanced Study of India, University of Pennsylvania, for inviting me to deliver the annual lecture of the Center in New York. It is indeed a great honor. At the outset, I would like to thank the organizers for their very warm hospitality and courtesies extended to me by all, in particular Dr. Devesh Kapur and Ms. Tanya Carey.

There are many experts and scholars here on a variety of subjects and, in particular, in the areas of finance and money. Therefore, I am approaching the subject with a degree of humility. So what I will do now is just share with you my insights on the experience of financial sector regulation in India.

Incidentally, when I was being introduced, it was said that "Dr. Reddy needs no introduction." That's the standard opening line, but the standard unsaid line is, "He needs only a conclusion," because, very often, the financial markets used to say that I was not very clear and transparent. I used to tell them, "I must confess that I am very transparent in conveying my confusion, because the reality is complex."

Considering the enlightened audience, I will be concise and will elaborate, if required, during the question-and-answer session that is to follow. While being selective in coverage, I will certainly keep in view the major themes that are being considered in the ongoing global debates on the subject of the global financial crisis, and financial regulation. In particular, we have to note the Stiglitz Commission of the United Nations, the Warwick Commission Report, which is likely to be released in a couple weeks, the G-30 Report chaired by Paul Volcker of the US, the Turner Report chaired by the Chairman of the FSA, UK, the G-20 Working Group Report, Mr. J. de Larossier's report for the EU, and more recent proposals in the UK and the U.S. that you may have been reading in the news papers in the past few days.

There is a lot of debate about what the important issues are in financial regulation and, since there is no agreement on this point among them, I don't expect that there will be agreement on what we did in India either. We don't have any agreement on what is to be done with regard to financial regulation; therefore, we can't expect that there will be agreement on what has been done. But I think it is useful to see what has been done in different countries, and India is noteworthy for several reasons. Again, we have to be very clear that even in highly evolved market conditions and highly evolved financial markets, there are differences; these differences in the financial sector are even more glaring between developed and developing countries. So, the Indian experience may not be universally valid, but it is certainly relevant. After all, global finance has a large impact on all countries, and we cannot afford to ignore the differences among countries in the financial sector.

My presentation today is divided into three parts; the first part is on macro issues. Basically, I think, one of the things that is coming to light, but which has not been, perhaps, fully explained or appreciated in the popular debates, is that the current global financial crisis is not entirely a crisis of the financial sector or financial regulation; it has a lot to do with macro and monetary aspects. So I will cover these broader aspects to put the issues in perspective, and then move on to a description of our experience with the regulation of the financial sector in India. I will conclude with a very brief account of the way forward.

Macro Framework

India's major approach has been to avoid serious macro-economic imbalances. In debates on global economic imbalances, excess savings or excess consumption, India does not figure in the issue of imbalances. Persistent imbalances between saving and investment, consumption and investment demand, dependence on domestic or external demand, and a sustainable current account deficit (the lack of which has led many countries to the IMF) are the results of deliberate policy. In India, the consensus in public policy was that we should avoid such serious imbalances. Avoiding serious imbalances is very important for India in view of the country's vulnerability to four important sources of shocks.

The first and most important source of shock is fuel. The price of oil can vary and, since the country is very dependent on imported fuel, this has a huge impact on the whole management of the economy, in particular the balance of payments. The second source is food shock. We are broadly self-sufficient in food, but we are susceptible to drought and, on occasions, floods. So, whenever there is a deficiency, the deficiency may be small in relation to India's supply-demand position, but its impact on the global market is huge. The two shocks – on account of fuel and on account of food – are essentially current account shocks.

We also have a fiscal problem with a debt-to-GDP ratio of over 70 percent. As a result, the maneuverability for public policy in times of stress is restricted. In addition, we have an external finance problem that is now essentially in the quality of capital flows. It is not only the quantity but also the quality of capital flows that one needs to look at and, after the Asian crisis, one looks at the stability of the flows. So, India is perhaps one country that has maximum dependence on portfolio flows. Also, the numbers with regard to foreign direct investment should be taken with some understanding of the difference between investments in Greenfield and non-Greenfield ventures. Ventures that are not in Greenfield are mostly transfer of financial resources and, if there is already a capital account surplus, such flows merely add to the surplus of the capital account. By distinguishing between Greenfield and others in foreign direct investment, the differences in terms of the impacts on the real economy become clear.

On monetary policy, just as macroeconomic framework avoids imbalances, monetary policy in India is characterized by pragmatism and being proactive. The objectives of monetary are not explicit; the mandate is very vague in the Reserve Bank of India Act.

In fact, I must tell you that in 1935 when the Reserve Bank of India Act was passed, the preamble said that, in view of the very difficult and uncertain global conditions, as a temporary arrangement we are passing this law. That temporary arrangement is continuing until today. And you will be interested to know that in the preamble what was said then is being reinforced now. The uncertainty has been reinforced more recently, and this is the seventy-fifth year of the forming of the Reserve Bank!

However, the Reserve Bank interpreted the mandate, sort of by implication from time to time. This has been very well articulated by Dr. Rangarajan; it's the twin objectives of maintaining output growth as well as employment, and price stability; it's not the single objective of price stability. But, in the last four or five years, we in the Reserve Bank, announced the self-imposed objective of keeping inflation below 5 percent per annum and, over the medium term, to 3 percent, because over the medium term your inflation has to be broadly in alignment with global inflation if you want to have full global integration. A persistent large inflationary difference between India and global economy could be quite disruptive to our economy if we are integrated. So this was how price stability was articulated by the Reserve Bank; it was not a target in the normal sense but helped set inflation expectations. Second, the Reserve Bank announced, about five or six years ago, that financial stability is a specific objective; it is, in a way implicit, since we cannot think of output and price stability without financial stability. Financial stability transmits itself automatically to output and/or price stability. But this was articulated by the Reserve Bank as a self-declared objective; there was no waiting for a mandate for financial stability, as far as the Reserve Bank was concerned.

More important, in its articulation the Reserve Bank made it clear that the weight for financial and price stability has to be higher in India. When you take the relative weights between growth and stability, it is true that growth is important for a developing country; but when you have a large population and a large number of poor people who do not have hedges or social security, there is a serious problem with inflation. The problem is that growth trickles to the poor with some time lag, but instability impacts the poor immediately. The reform process is sustained if there is assured growth without instability. The popular support for reform itself will be undermined if there is even one serious event of instability. Therefore, we in the Reserve Bank went on emphasizing that at this stage of structural reform of the economy, to maintain public support we have to give a higher weight to price and financial stability when evaluating the risks. So policy inevitably became counter-cyclical, because you wanted to moderate the booms and busts. In fact, in 2002-2003, there was some criticism that we had lazy banking; after some actions were taken we were told that it had become crazy banking. But neither lazy nor crazy banking resulted in serious instability. That is the management of the policy: not that you eliminate, but that you contain volatility within acceptable limits.

While doing the counter-cyclical policy, the dominance of the domestic economy relative to the global economy was kept in view. The enthusiastic globalizers preferred Indian monetary policy to follow the monetary policy stance of the global economies, especially the US. In fact, the policy recognized the linkage with the global economy but gave greater weight to domestic considerations. In fact, for the first time, at least since independence in India, the words “early signs of over-heating” were used in the monetary policy. When you are growing at 9 percent, if you don't have enough roads, if you don't have adequate ports, if you don't have dependable power, it's clear for everybody to see that there are supply rigidities and there are early signs of over-heating. (After using the word once, I was persuaded not to use it again, but I continued to pursue the policy that responded to over-heating).

The indicators of macroeconomic conditions that determine monetary policy are supposed to be very clear, but in our situation we had to look at a number of indicators. First, part of the reason is that the burden of the counter-cyclical measure is more on monetary and financial sector policies if the fiscal headroom is less. If the fiscal deficit is already high and if there is a strong component of structural fiscal deficit, then the maneuverability for the fiscal policy to manage the cyclical features is less. Second, which is sort of unsaid, is that at this stage, for the first time since independence, we have seen a rate of growth that is respectable. So there is a huge political commitment to see that it is not derailed at any cost. Many people said "For heaven's sake, don't do anything, we can't take the risk! Never since independence have we had this rate of growth!" There was almost a fear that we were risking the growth with counter cyclical policy. Naturally, from a political angle, the time horizon is short, and the financial markets also have somewhat similar, if not shorter, horizons. And if they reinforce each other, life for a regulator or monetary authority is not easy.

In the multiple indicators approach that we adopted, one of the things which we were tracking was credit growth. When credit was expanding too fast by several indicators, there was a need to worry. If you looked at the loan-to-value ratio, you could easily find signs that people were betting on the asset prices increasing in the future.

The issue was whether we should expect the markets to correct or whether we should do something about it. Our approach was that if you allow the markets to correct, it may be smooth in the financial markets, but in the real sector, where the process will impact, it is not as smooth. For example, if you are an exporter, you go bankrupt if there is a have large appreciation of the currency for a while; after you go bankrupt, you can't become "un-bankrupt" and you can't start a factory again in three months. Such adjustments, which may be possible in the financial markets, may not happen smoothly in the corresponding real sector. In the real sector there are adjustment costs; if the bones are broken, they are never fixed perfectly in the real sector. That is real life. And therefore we had to take into account this whole issue of rapid credit growth and the need to look at bubbles in asset prices rather than expect these to correct smoothly if they are excessive. The issue was how painless the correction would be and their cost if we don't interfere with public policy.

We used multiple instruments of policies to intervene by looking at multiple indicators to achieve multiple objectives. The whole theory that there is a single objective and a single instrument and that they are very efficiently delivered is good; unfortunately the reality is more complex, particularly with regard to the institutional context in India. Perhaps other countries also recognize institutional complexities. So, it is not a question of either direct or indirect instruments — we had to use both. In particular, due to excess capital flows with the globalization of finance, there were serious problems. Actually we had anticipated a possible surge in capital flows even in 2004 and we said, "OK, we should be prepared if these large capital flows come." For that, we had to have a range of instruments. One of them is the Liquidity Adjustment Facility (LAF). Basically what the LAF does is that virtually every day, the Reserve Bank is prepared to take the money in from the system and, if need be, is prepared to take the money out of the system; there is a corridor of interests rates with which these operations are conducted. If there is great uncertainty in the markets, the spread increases and, sometimes, the Reserve Bank also increases the spread to show that there is uncertainty, and let the problem be managed by both the markets and the Reserve Bank. The Reserve Bank under these mechanisms, in a way, does not guarantee predetermined absolute interest rates at any cost, but tries to contain excesses in either direction.

We also introduced an innovative instrument called the Market Stabilization Scheme. As you know, when there is excess capital flows, you (I mean, Reserve Bank) intervene to buy dollars with rupees, and then you have to sterilize by sucking in the excess rupees used for the purpose. There is a cost of sterilization when you intervene but do not want excess rupees floating in the system. In this process of sterilization you are taking money out of the system; you can't use it but you have to pay interest on it. So the Reserve Bank told the government "Look, there's a sterilization cost. If you want, I may incur the cost and that's my discretion. But ultimately the cost is borne by the government, because it's a fiscal cost. It has to come out of the government budget, especially given the magnitude, which is not small." We expected early on that the cost would be huge and over a longer period. So we went to the government with a proposal and said, "Look, tell us for how much we can issue bonds on behalf of the government for sterilization purposes, with an assurance that that money will not be used." Under this proposal, the government issues bonds and takes over the liquidity; it's just kept in the government and can't be used. We release the liquidity if the conditions change, say if there is a reversal of capital flows. In such a case we reverse the process. When reversal of capital flows happens, we buy dollars; by unwinding the unused rupee balance with us, we give rupees to help the markets buy dollars. So, serious volatility in both the foreign exchange and rupee markets is avoided but these operations may at times involve costs. Our proposal was that government should indicate the limits to such operations. In the Ministry initially there was opposition to this proposal. Let me explain the Ministry's arguments against the Reserve Bank's proposal.

The Ministry said, "The exchange rate has to be managed at the Central Bank, and you must have independence to decide what you want to do." So I said, "I don't want independence because it's too expensive." The people of India have to pay for this, and it is only the government who can take a view on how much the people of India should pay for the combined excess capital inflows and the desire to maintain a particular exchange rate. These are the two related issues, and they are too important to be left to an independent Central Bank. Further, the government was deciding the extent of capital inflows and since they may affect costs of sterilization, only government should take a holistic view." I am glad to say that the political authorities agreed with me. So, from time to time, a ceiling is fixed on the amount to be sterilized through this scheme, and the ceiling keeps going up and down based on mutual agreement between the government and the Reserve Bank depending on the circumstances.

To manage liquidity conditions due to excess capital inflows, we also had to impose a burden on the banking system through Cash Reserve Ratios (CRR); the banks had to place the money with the Reserve Bank as CRR for which they were being remunerated till recently. But the Reserve Bank took the view that if you really want management of liquidity to be effective, the banks should not be remunerated for their deposit under the CRR. So, the Reserve Bank urged the government to pass a law in Parliament to the effect that if the cash reserve ratios were imposed, no remuneration would be paid to the banks by the Reserve Bank. Obviously, the banking industry was not very happy with about this, but it has served us well.

The whole set of instruments also have a time dimension and distribution of burden between various stakeholders, namely, the government, the Reserve Bank and the banking system.

Now, let me come to fiscal policy. In fiscal sphere, as you know, we have high public debt in India. We have continuing fiscal deficit. There are also informal items, such as oil bonds, which are off-budget. The quality of the fiscal deficit is also important. Technically, if you have fiscal deficit, if you invest in infrastructure and if you invest in productive assets, certainly it is good, but if borrowing is going toward financing revenue deficit or subsidies, then you don't know the return. Fortunately, during the five years that I was Governor, the fiscal deficit came down to 5 percent from 8 or 9 percent. Now it has gone back up, but this is part of the fiscal effort to manage the crisis stimulus. The more important thing I want to mention is that we were able to bring about the Fiscal Responsibility and Budget Management (FRBM) Act to make a commitment to bring transparency to the budget and manage the fiscal situation. This fiscal consolidation during the period helped the counter-cyclical policies of the Reserve Bank.

I must mention here an interesting provision which we proposed in the FRBM: since the Reserve Bank did the technical work of drafting the FRBM at the request of the government. We used to have automatic monetization, i.e. whenever the government wanted money, the Reserve Bank had to produce it, or that the Central Bank would participate in the primary markets for government banks through private placement to itself. This was abolished by the FRBM. But we introduced a provision saying that in extraordinary situations, the Reserve Bank may directly contribute to the government's borrowing program. Let me illustrate the importance of this enabling legal provision with the current situation, perhaps, in the US. The Central Bank is now providing money, say at 0.5 percent, to financial system and then the government has to borrow at 3.0 to 3.5 percent. The Fed is giving money to the financial markets, which are intermediates, at a low rate, and the government is getting sort of the same money at 3.5 percent. The rate may be justifiable in normal circumstance, but not if you accept that the whole market mechanism has broken down and that the government is giving a huge bailout program to the financial markets. If there were a similar situation in India, our FRBM permits not using the markets to intermediate through a provision for emergencies. In the US, direct lending with a plan to offload to markets when they are normal may not be possible, but we wanted to have that facility in India if needed. We have that provision at the instance of the Reserve Bank which shows foresight that markets are not eternally infallible.

In general, the public policy has several instruments at its command, and one of the basic principles of the reform has been the ability for public policy to intervene with some sense of accountability when it becomes necessary. As you know, a public policy instrument is a constraint on the market, and the freedom of the market is a constraint on the policy. So a dynamic balance is what we have to keep. What's done in normal times may have to be different in extraordinary times, and the innovation in Indian public policy is to provide legal mechanisms to meet extraordinary situations.

In India, the debt of the state governments is also managed by the Reserve Bank of India. The limits on borrowing by states are, in fact, set by the central government and the state governments cannot borrow in foreign currency. The Reserve Bank has managed to enable a fairly reasonable stability in state finances, and the debt default even by distressed states is very rare and, at best, temporary.

External Sector

Under the Foreign Exchange Management Act (FEMA) that was enacted as part of the reforms, the current account is free, except in extraordinary circumstances, but the capital account is managed. The most important policy consideration in the management of the current account is a sustainable current account deficit over the medium term. In other words, the current account deficit should be such that the capital flows will normally meet the current account deficit over the medium term. If somebody says that \$500 billion dollars is required for infrastructure for India, it gives the impression that we need foreign investment of \$500 billion dollars — which amounts to about 10 percent of the GDP per year, over the medium-term. Then our current account deficit should be 8 to 10 percent of GDP for each year only for infrastructure. My question is: Will the rest of the world be prepared to finance 10 percent of the current account deficit of India only for infrastructure and even more if other needs are added? Since Dr. Rangarajan's Committee, of which I was the member secretary, we have been insisting that we must make a judgment, but the current account deficit should be sustainable over the medium term by normal capital flows. In this connection, we introduced the concept of adjusted current account deficit for analytical purposes. The adjusted current account deficit deducts the remittances by non-resident Indians to compute the adjusted deficit, Remittances are like your brother-in-law or brother sending money to the family as regular gifts and do not reflect the strength of the resident household or the domestic economy. The gifts help us to better manage our households here or the external finances of the country, but they do not reflect the inherent strength. When we take the adjusted current account deficit, the relationship of the domestic economy with the exchange rate and its impact on the economy is better appreciated. We must remember that India had a trade deficit in recent years on average of around 7 percent of the GDP, and a current account deficit of around one percent. While the adjusted current account deficit has been around 4 percent. The difference between the large trade deficit and the modest current account deficit may be attributed largely to remittances from non- resident Indians and the export of services. In fact some comment that, while the export of services shows in sourcing of services, trade deficit reflects outsourcing of manufacturing by the Indian economy.

Calibrated liberalization of the external sector has been India's approach to managing the capital account. In this regard, we make a distinction between households, corporates, and financial intermediaries. As far as households are concerned, the major issue has been that the flexible exchange rate, etc, should not only be among the markets but should also be in the minds of people; and that comes when there is a two-way movement in exchange rate for a reasonably long period. If there is only a one-way movement, say depreciation of rupee for a long time, people simply hold on to dollars in preference to rupees. Once it was possible to demonstrate two-way movement, we were able to liberalize household outflows also. In the case of corporates, there is normally an underlying real economic activity. Once there is an underlying real economic activity, then you don't have a multiplier problem, in the sense that you don't excessively leverage. So, significant liberalization for corporates was possible both in regard to inflows and outflows. In the past four or five years, there has been considerable liberalization of outflows and Indian corporates have acquired overseas entities or expanded their operations externally. But as regards financial intermediaries, there is a greater caution in the policy. Financial intermediaries are (a) leveraged, (b) the relationship with the real activity is not very clear, and (c) most important, a currency mismatch is introduced. Therefore, you do not know what the border is, or the differentiation between prudential regulation and capital controls. So, it was the financial sector which was subjected to significant constraints in capital account relative to others , though there was gradual liberalization during this period. In brief, you can understand why the pressure for more rapid capital account liberalization in India has been only from the financial sector.

The exchange rate in India is not managed formally, but the Reserve Bank intervenes in the forex markets as and when needed to avoid excess volatility. When we started the policy, many people said that only corner solutions (i.e., either fixed or floating) are right; now they say that what we are trying to do (intermediate regimes) is right. The Reserve Bank does not keep in view a fixed exchange rate or band, but we do have to keep in view the broad alignment of exchange rate with the fundamentals. When I was

Governor, someone asked me, “What is excess volatility? Do you mean to say that the current exchange rate is right or wrong? And how do you intervene if you cannot say what is right or wrong?” I replied, “I’m sorry, I cannot define God, but I can recognize the devil and I will fight it when I see it.” My view on the deregulation of the financial sector has been that the real sector should be marketized significantly, because the marketized financial sector is supposed to allocate resources in the real sector efficiently. If the real sector markets are distorted – if there are restrictions on trade, if there are controls, etc. – then the financial sector also will misallocate the resources. That is the only way in which the financial sector can make money in distorted markets. So, in a way, there should be harmonization between the extent of reform in the real sector and the extent of reform in the financial sector. The idea that the financial sector by itself will stimulate real sector competition and the real sector efficiency was what I questioned. We still have restrictions on agriculture, restrictions on commodity movement, especially important commodities, and also rigidities in infrastructure.

In fact, in India, a lot of the financial sector is used by the government to administer policies and programs for development. To illustrate, 25 percent of a bank’s deposit should be invested in government securities and 40 percent in the priority sector; what is left for real traditional market-based banking? And much of the administered lending is subject to prescribed interest rate. The interest rates on savings schemes are also prescribed. I am not including in these measures other types of moral suasions by the government Now, if this is the policy framework, and if we imagine that we have to marketize everything, we are really creating problems. So we have to recognize the requirement of balancing a variety of considerations in the financial and in the real sectors in a harmonious way.

Financial Sector

Now I come to issues in the financial sector. Two things to which we gave importance in the financial sector were precautionary and developmental dimensions. Because of the large stake for the poor in stability, we want to take precautionary measures so that instability does not derail development. Second, we want to see how development happens, and that development is not merely accumulation of capital but also enhancement and enlargement of opportunities through the financial sector.

One of the first things we had to do in 2003, about five years ago, was to get rid of weak banks that had been allowed to operate, even when their capital adequacy was low. Eliminating weak banks is not exactly a pleasant task, and that is how my life started in the Reserve Bank as Governor. The first bank that we had to tackle was a small but high-profile commercial bank that was endowed with all modern financial instruments and technology. It was systemically important, but it had weaknesses in the balance sheet that, with the connivance of the auditors, were initially not disclosed. After exploring with the major stakeholders the possibility of obtaining additional capital from acceptable sources, the bank's operations were frozen and it was compulsorily merged with another bank at the instance of the Reserve Bank. The operations commenced on Friday evening, were done over the weekend, and completed before noon on Monday.. At that time, the whole world fell on us saying that we were non-transparent because the operations were conducted over the weekend. The Reserve

Bank was questioned in the courts right up to the Supreme Court, but we won the case. I am happy to see that now such things are done in the financial sector over the weekend all over the world. And, we didn't inject any money, no public money, at all. It was a merger where shareholders of the weak bank lost out.

There were a number of weak banks that we either merged or we closed, but it was the first move on a high-profile bank that made us effective. In one particular case, the bank's ownership went to the court and said that the Reserve Bank prepared the order of moratorium with the approval of the government in advance because it was dated so-and-so and that it could not have come from the government through the post. They held that there was no way it could have been delivered to them overnight by other means, as no officer of the Reserve Bank of India had traveled by any of the airlines according to the records; they had obtained the full list of passengers of all aircraft that flew from Delhi to Mumbai on that day. What they did not know was that there was an Air India international flight around midnight between Delhi and Mumbai and an RBI officer traveled on that flight. So, it is not only the weekend, but also midnight also that is important in dealing effectively with troublesome banks.

We have, in India, Regional Rural Banks, which are not known here, but these are banks that serve a number of rural people. They had to be recapitalized and revitalized, and some of them had to be merged. The rural corporative sector was another weak sector. All this cleaning up had to be done. Removing weaknesses in the banking system and eliminating weak banks was the first step in our effort to strengthen the banking system and that was not pleasant. We did it in five years, and there was virtually no bank with capital adequacy of less than 9 percent.

We adopted a counter-cyclical policy in the regulation of the financial sector, which is now widely recommended in discussions after the global crisis. Why did we do it? Our logic was fairly simple. When does the risk arise? The risk does not arise after a loan becomes a non-performing asset; the risk arises, basically, when you extend the loan. And, therefore, we said we will watch the credit growth, and whenever there was too much credit growth in some sectors, that's the time when the risk is being generated and that's the time when we have to start assessing how the risks were being generated and were likely to be managed. Second, the risk is not necessarily uni-dimensional; there are many dimensions to risks, both micro and macro. Third, as I mentioned, risk is very difficult to assess in a country where there significant structural transformation is happening. Fourth, risk could vary between different sectors depending on the extent of efficiency of each of the sectoral markets. Whether the relevant markets are liquid or not is also important. For example, in India the housing markets are not very liquid and transaction costs such as taxes and duties are well over 10 percent; tenancy laws are rigid. Depending on the changing assessment of these multiple factors, we had to have both general and sector prescription of capital charge. I must admit that judgments are involved and they are complex. In our view complexity by itself does not absolve the regulator of responsibility assigned.

Basically, risks in the banking system have serious consequences, and that is where the "precautionary" motive comes in. Therefore, we used several instruments. We adopted a supervisory view of select banks if needed and bank-specific restraints were imposed. In 2002, we asked for the creation of an Investment Fluctuation Reserve. We prescribed limits on investment in risky assets associated with specific activities, such as consumer lending, stock markets, and real estate. Universal banking was acceptable, but universal banking in a constrained sense. Retail banking had to be the main core and universal banking in a constrained sense — that has been the approach in India. Some people, especially the new private sector banks, argued that counter-cyclical policy was not warranted and that in any case we in the Reserve Bank did not have a formula-based approach for the counter-cyclical policy. We responded by saying, "We cannot afford to wait for formulas; we have to do something when in our view a problem likely to arise."

Along with counter-cyclical regulatory policy there is another area which is now discussed in global fora, namely, off-balance sheet items among banks. We have been very particular about monitoring off-balance sheet items of individual banks and we believed in identifying where the excessive growth was. For this, a credit conversion factor is critical. Credit conversion factor is, simply stated, arriving at a ratio between credit equivalence of off-balance sheet items for regulatory purposes. In computing a credit conversion factor for off-balance sheet items, we have been cautious. Further, many banks want some borrowed money to be treated as capital; Tier 2, Tier 3 and so on. We adopted international norms but with a little more caution. The argument against many of these actions was that our regulation was burdensome, and I tried to explain that obviously our actions could not be burdensome if the share values of the banks were increasing–their share prices were increasing manifold. So obviously the regulation was not burdensome. When share values and bonuses are up across the board in the industry as a whole, you cannot with good conscience say that there is an excess burden, except as an assertion.

The scope of regulation is another issue that has come up in recent debates. It is now argued in global discussions that the investment banks were not deposit-taking institutions and thus ended up being unregulated. Now in global debates, it is held that, all systemically important financial companies ought to be monitored and regulated and their leverage prescribed to assure financial stability. I must tell you a real-life story here. In 2004, there was a proposal before the government to amend the existing law — to remove the powers of the Reserve Bank to regulate non-public deposit-taking institutions on the grounds that such regulations are intrusive and not common in most countries. I met the Finance Minister and explained to him that it is not that we wanted to simply exercise power but that we wanted to monitor the systemically important non-banking financial companies and, if and when required, we should have the power to regulate them. I requested the Minister not to carry through the proposal that had been sent. And he said, "How did the people anticipate your views? There is already pressure on me to pass an Ordinance to remove the power of the Reserve Bank." Fortunately the Finance Minister agreed to drop the proposal and, hence, we, in the Reserve Bank, were in a position to monitor and take some corrective actions. We supervised well-defined — defined on the basis of the size of the balance sheets —systematically important non-banking financial companies; not enough, perhaps, but some corrective actions, I believe, were taken.

Another issue which is coming up for discussion after the global crisis is the remuneration of Chief Executive Officers (CEOs), As far as the banks are concerned, the CEO's remuneration have to be approved by the Reserve Bank under the law. To my knowledge, the Reserve Bank had not approved either a signing-in bonus or a signing-out bonus; you have just the salary and shares options which you can take.

In India, the banking system is dominated by public sector banks, though with a mix of private share holders, and some private sector banks. The prudential regulation is absolutely common to both. Of course, the private sector is a little more innovative in minimizing the burden of regulation, if I may put it politely. In terms of regulatory standards I should say that we had absolutely no interference from the government as far as public sector banks are concerned. But on the governance side, matters relating to the governance of the private sector are with the Reserve Bank, but governance matters of the public sector are with the government. So, when we had a concern on governance in public sector banks, we took up the matter with the government. In regard to governance in private sector banks, the Reserve Bank has jurisdiction. The Reserve Bank evolved and announced guidelines on ownership and governance of private sector banks in 2004. The justification for these guidelines was that deregulation of banks should be accompanied by enhanced comfort on their governance standards. The Reserve Bank tried to enforce these, within some constraints, and within the limits set by law on the Reserve Bank's powers.

Consolidation of banks is another that issue had come up in India. The Reserve Bank's view has been that consolidation in terms of efficiency scope and resilience should be a priority and mergers should be instruments and not ends, while being mainly market-led. The government was enthusiastic as a policy priority, towards consolidation in the public sector to merge and create large-sized banks, but none would really take place. On mergers the Reserve Bank wanted to be assured of the benefits of the idea that "bigger is better"; the Reserve Bank's view was in favor of consolidation in terms of improving the health, and not necessarily mergers and acquisitions. As a result, a number of mergers and acquisitions in the private sector took place as a process of eliminating weak private sector banks.

The banks are licensed to accept non-collateralized retail deposits and are highly leveraged**.** They are essential for the life of the community. Economic systems, like water and power, require a payment system and, more important, some place where people can keep their money safely, especially poor people. In India, for most people, especially women of the villages, more than loans, they want a place to keep money especially safe from their husbands. The deposit-taking and payment system is a basic necessity and we felt that was what we, the regulators, have to spread as part of the process of development. That is why we went into the whole issue of financial inclusion and pioneered it, in a way. It was not the credit-pushing that we considered to be important; it was the financial inclusion that was emphasized. Financial inclusion means effective access to the whole range of financial services, especially the payment system.

On financial innovations, there are proposals now in several countries to constitute authorities for the safety of financial products, but in the Reserve Bank, the responsibility for regulating financial innovations in which banks participate, was assumed as part of bank regulation and regulation of money, government securities and forex markets. In fact, in regard to derivatives, we put the onus on the banks to assess the capacity of clients to undertake it. The Reserve Bank took a relatively cautious approach and has been keen on identifying the link of the derivative with the underlying original transaction.

For consumer protection, we introduced and strengthened a scheme of Ombudsmen. We also introduced a standards board along the UK model in which the banks themselves indicate the consumer rights and standards they practice. The main problem is that often some banks say, “These are our standards,” but nobody knows whether the standards announced have been followed. So the Board was conceived as a voluntary body promoted by the Reserve Bank in collaboration with the Indian Banks’ Association to evaluate the services with reference to standards set by the banks themselves. While the Reserve Bank promoted it, the roadmap is for the Reserve Bank to divest the role, as happened with earlier refinance and trading institutions.

Finally, on the regulatory structure: there is a lot of debate in the U.S. and to some extent in the UK also on the appropriateness of regulatory structures that are prevalent. The stand that has been taken by many in this debate is that coordination is important, whether it is a system of multiple or single regulators. You can have a single regulation but different departments quarreling, or you can have multiple different regulators cooperating. In India, the dominant view has been that coordination is important and it is done though administrative arrangements. We in India have a high-level committee on financial markets, presided over by the Governor, with all the heads of financial regulators and the finance ministry as members. This has been working fairly well, and now there is a proposal to make it legally binding, but it is quite good even when it is not legally binding.

The Way Forward

On the way forward, there are several challenges, I believe, for India and let me list some that occur to me. One, financial inclusion; not many people are included in the financial system. Second, customer service and protection is still poor. Third, credit penetration is low since a large, very large, number of people and activities that are eligible do not get credit and certainly not on appropriate terms. Fourth, the credit “culture”: in India is generally poor. People are in a particular business and individuals repay a loan to the bank out of moral compulsion, but there is no real legal necessity at all in an enforceable manner.

Let me hasten to add that in Indian financial systems we have no serious vulnerabilities. There are, however, three or four basic issues which we have to consider urgently.

First is the appropriateness of incentives in the financial sector. The whole concept of a mutual fund is that there are individuals who come together and ask somebody else to manage it – to assess risks and returns – since they are small investors. In India, mutual funds are dominated in reality by the corporates and the banks. So, the incentive for the funds is to attend to the interests of the corporates and the banks, who account for a major share of their resources, rather than the individual investors. Second, the conflicts of interest are troubling in the financial sector: particularly between mutual funds, non-banking financial companies, and corporates who promote them, apart from some banks also. Third, there may be excessive financialization in India. To give an example, you find a refinancing body which will issue bonds. The refinancing body takes money from the banks through the bonds with a guarantee by the government. Then the refinancing body refinances the banks up to 70 percent. The risk underlying the credit continues to be with the bank or government as it was before the whole process. These are just multiplications of the financial transactions, and there is an understandable interest in the financial sector for multiple transactions because that is where the margins are for the players.. Fourth, there are the beginnings of irresponsible lending, like sub-prime. We may have our own sub-prime, mainly through for-profit microfinance institutions.

Conclusion

There is a new global consensus, I believe, on issues relevant for regulation of the financial sector and related macro aspects. The consensus is not on the solutions, but there is a consensus on the issues that are important. Looking at the trends, I believe that there should be both re-regulation of finance and recalibration of globalization of finance. Going forward, for India, caution in public policy is extremely important in the financial and external sectors because there are a lot of uncertainties in the financial world. But there are other areas where urgent action is needed and these relate to the real sector, infrastructure, and the fiscal sector.

DEVESH KAPUR: Thank you Dr. Reddy. I think the passion and the integrity with which he took his job is so self-evident in his talk. You'll take a few questions?

QUESTION: Dr. Reddy, the Central Bank in India recently made a big purchase of gold, and it seems other Central Banks around the world are going to follow suit. What is your take of that decision? What are the factors leading to that decision, and what does it imply for the global outlook?

DR. Y V REDDY: I think my views on economic policy should be basically history. But I can give you my view as an academic now, wearing my hat as an academic. As you know, the foreign exchange reserves of a country have two components: foreign currency and gold (and sometimes silver). So, gold is a recognized component of the foreign exchange reserves. Second, how much gold should you hold? If everything else is the same, the policy may be to have a particular percentage of your forex reserves as gold. That percentage has fallen for India because the foreign currency reserves have grown. In the normal course you have to increase gold holdings over a period. Third, given the sensitivities of gold and the gold market in India, ideally the Central Bank should prefer to buy gold from a public institution and not through markets. The IMF is a public institution and, therefore, in a direct transaction between them there is no issue of impact on the market in terms of actual supply or demand in the market. I am aware that the market interpretation is different, but from India's point of view, academically, the deal is ideal. If, still, the markets make the interpretation that India was taking a view on U.S. dollars, I cannot add anything more.

QUESTION: Dr. Reddy, you highlighted the importance of price stability as a policy imperative, and, in that context, what are your views on a strong rupee versus a weak rupee? From time to time there are all these tactical pressures from exporters and the software sector and whatnot in terms of weaker rupee or managing the rupee. What's your view, say medium to long term, on how the rupee should be managed?

DR. Y V REDDY: As I said, I can't define God, but there is no Devil around at the moment.

QUESTION: Dr. Reddy, during the financial meltdown in the U.S. and Europe, you navigated the system very well, so congratulations to you on that. I'm going to move away from the Reserve Bank scene, and I was at a seminar at Columbia University yesterday and two well-acknowledged professors were telling the audience, which I think was about one hundred people, and the subject of the discussion was ending poverty in the world, and India was cited as an example, along with several African countries. The conclusion of these two authors was that the only way to end poverty in India is economic growth, when it happens in metropolitan areas, and not necessarily inclusive growth, as Manmohan Singh and his Planning Commission talk about it. In that context, when I raised the question, they said India is still a kind of closed economy, and when I probed that and said that India is no longer a closed economy except for probably the insurance sector, maybe the financial sector also to some extent, other sectors are pretty well opened, but people still have an impression here that India is a closed economy, and it's mainly coming from the restrictions on increasing the foreign insurance sector and the finance sector and retail. Would you like to comment on that for the purpose of changing that image for the context of attracting more FDI to India?

DR. Y V REDDY: I think on any issue perceptions can vary and perceptions can also be related to the objectives, if I may put it that way. First, let us accept the facts. In the G-20, the lowest per capita income is that of India. There are more poor people in India than perhaps in most of the rest of the world, almost. So we have to accept, whatever the achievements or whatever the reform, poverty *is* the biggest issue for us. When I was appointed, someone in the Board of the IMF said to me: “You are going back to India of one billion people; you have to manage the growth and stability, for a billion.” I said, “No, the main issue is: how do we make our policies relevant to poor people?” One view is that allow growth and then, with that growth, poverty will be eliminated. Perhaps it is possible. Equally possible: there is growth and there are a lot of poor people who don’t see much happening to them and then they can disrupt society to an extent that there will be no growth for the next one generation. So the issue is that real life depends on societies also, not only on economies. Finally, for some of us, the world is getting globalized, but for most people, life is local. And, if I may quote, Dr. Mervyn King said, “Banks are global in life, but they are national in death.” So, ultimately, it is the government which is responsible for the welfare of its people. And, yes, some people believe that if you open the insurance sector, poverty will be reduced; it may be possible. But I think that if you bring a bit more drinking water to the poor that helps more. Not that they are mutually exclusive – but if the public sector is looking at priorities, then you have to see the extent of the relationship between the issue and the quality of life, also. So there are a variety of situations.

It would be very simplistic, having recognized the problem, to say that growth at any cost and opening up the financial sector will solve the problem of the poor by increasing growth. Let me just put it this way. There are two ways: you have empirical evidence and you have got counterfactuals. The empirical evidence is that two countries, China and India, have done well in poverty reduction. In fact, if you remove the progress of poverty reduction in these two countries, there has not been much poverty reduction in the developing world. The whole developing world, most of it that exists in Europe or Africa or Latin America which believed in enthusiastic financial globalization, has not done so well. The two countries that have well-calibrated and well-managed economies in terms of external and financial sectors have produced higher growth. As a counterfactual you might say that growth might still be higher in these two countries if they were more globalized, but if you look at the capital output ratios, normal requirements of technology, productivity, etc., the growth could not be much higher. So, I think we should be careful in assertions and beliefs. These are different opinions that are possible, but we should be careful in looking at both the empirical evidence and the type of social and economic factors which are involved in the decision making. Opening of finance to the external world is not an end in itself. In fact, opening is not practiced as universally as it is proclaimed even by developed countries. In the ultimate analysis, as I always tell people who try to be protectionist; to many of my leftist friends I say, "Look, if you want to have an exciting cricket match, finally it has to be test cricket, not just country or Ranji Trophy, but it has to be global cricket, otherwise there is no excitement." So I said, in the ultimate analysis what applies to cricket must apply to the economy; as simple as that. But, the question is one of context, rules of the game, transaction, etc. Thank you.

QUESTION: Dr. Reddy, my question was about quantitative easing. Could you talk a little bit about how you see the theory of quantitative easing, as well as the practice of quantitative easing, both in India as well as other countries that you have studied?

DR. Y V REDDY: Again, I'll try to be very general, not because I want to be diplomatic but simply because I don't have real depth of knowledge in that. We didn't have that type of quantitative easing. But, as far as the Indian situation is concerned, when the crisis hit, India didn't have the financial crisis but only temporary disruption for a very short time in financial markets. There was some disruption, not for too long. But that was very marginal, and the smooth functioning could be revived very quickly. The financial institutions were, by and large, strong. There were two areas – non-banking financial companies and mutual funds – that had a problem. The Reserve Bank opened a window, and that window was only for them, and that window was providing only liquidity support and took no solvency risks. The solvency risks had to be taken by the bank, which had to assess, or the government, if it wanted to do that. But, actually, in many of these cases, assurance of liquidity serves the purpose half the time, especially if it is a real liquidity problem. If it is a solvency problem, such assurance may not solve the problem. So the best test of whether it is liquidity or solvency is to assure liquidity, and if much of the liquidity is not absorbed, then you withdraw the excess liquidity, and that is exactly what the Reserve Bank of India has done. I don't know the exact numbers, but very much less than 50 percent of the total liquidity assured by the Reserve Bank was absorbed by the markets. The Reserve Bank had the mechanisms to take the assured liquidity back and so it took back the money to avoid excesses. It injected the money, assured the money, and every day it takes the money back at a slightly lower interest rate. With all these operations it was able to calibrate liquidity efficiently. So, quantitative easing is not an ideological instrument but only an operational instrument. There is another problem, in my view, at least for countries like India: How does the quantitative easing for a prolonged period affect the domestic savings over the medium to long term? If it hurts, is it good for the country; is it good for the economy? Apart from the problems of inflation expectations, you could get into problems if you do too much quantitative easing

QUESTION: Dr. Reddy, this might be an unfair question, but I wanted to get your thoughts on what the U.S. Federal Reserve is pushing right now. Clearly the U.S. has got a problem that is similar to the emerging market in the sense that we are trying to solve a problem by printing money at this particular point. So, do you have a view on the policies that have been pursued so far? And if you look ahead, do you see this having a happy ending or a sad ending? And I wanted to get your thoughts as an academic, so you don't have to be diplomatic.

DR. Y V REDDY: No, no, I don't have to be diplomatic. You are really asking my opinion about the future; generally in India we are very strong in astrology, and my particular province, Andhra Pradesh, is superb in astrology. But, even so, I wouldn't venture, because it is a very complex situation. Very simply stated, every short-term action taken to reduce the impact of the crisis adds to the original problem, and that is a trade-off. So, if you extend that logic in a philosophical sense, the more you do for quick recovery, the more you may have problems later. So, whether it is more, whether it is quick, only God knows. But this is only a philosophical statement one can make. Thank you.

QUESTION: Dr. Reddy, thank you very much for an enlightening lecture. I have a question on one of the topics you brought up, which is, for example, if you take infrastructure investment in India, there is obviously, let's say, a bottleneck, everybody understands that, and there is a lot of emphasis on moving that bottleneck and improving efficiency and improving the GDP in general. But again, as you said, there is roughly half a billion dollars investment required as projected. Looking at that from a current account angle, where you talked about if you have $100 billion dollars investment coming in that would create a problem in terms of current account deficit, it is very similar even in the stock market – if there is a capital of foreign direct investment coming in, in terms of ten, fifteen, twenty billion dollars, it kind of creates a bubble. So how do you manage this conundrum and what are the options to alleviate that? Thank you.

DR. Y V REDDY: Very simply stated, at a micro level, most of infrastructure does not require foreign currency. Roads, quite a bit of ports do not need foreign currency but the country as a whole may need it to some extent. So, first, let us be clear, we're really talking macro. Currently, there is no macro problem. You have excess rupee liquidity, you have excess dollar liquidity and they are adding to reserves. There is no problem with dollars, there is no problem with foreign currency, there is no problem with rupees and so obviously there is a problem of policy and implementation with regard to infrastructure. It is not a financing problem; it is a public policy problem. So you have to make things happen, and there is no financial resource constraint for that. Thirdly, there is still headroom to increase the current account deficit to a sustainable level by improving the absorptive capacity. Our current account deficit is one percent and so we have got headroom of another 2 percent of the current account deficit. The year before last, the surplus in capital account in 2007 was 9 percent of GDP – that was the extent of excess capital flows. So, if there is absorption capacity, it is fine; but otherwise capital flows are a problem and not a solution. Now you can say that the absorption capacity should be increased and I agree, but the absorption capacity can be increased only to the extent that there is a reasonably assured level of flows over the medium term. If the capital flows are volatile, can the absorption capacity be volatile? Is it possible for any policy maker to make an absorption capacity go up and down depending on the money coming in and going out in a volatile way? Basically, you must get the macro right, and as long as the macro is what it is in India, there is sufficient headroom in terms of financial resources and in terms of financial intermediation for financing infrastructure.

The important issue is public policy on infrastructure. Except to some extent in the U.S. and UK, in almost all parts of the world it was essentially public investment or banking sector investment that helped the growth of infrastructure. What happened in Europe? What happened in China? What happened in Asia? The financing of infrastructure by bond markets is more or less a sort of an Anglo-Saxon phenomenon rather than a global phenomenon. It may be good or it may be bad; that is different. So we have to take a more historical, a more global, a more macro view also on how to fund development of infrastructure. I'm not excluding anything, since it's important, but to think that foreign private investment will solve the problem of infrastructure in India and that more of it will solve it quicker; that is where I believe we have to take a more realistic view.

DEVESH KAPUR: One thing which we see in universities, and I see it with my friends who teach in India, is that bright young people from the IITs and IIMs in India, very few want to join the public sector. Do you see this problem of hemorrhaging of talent, in which the public sector in India thirty years ago was able to attract? Now when you look at the various regulatory institutions, you look at the Reserve Bank, is the problem of being able to attract talent, does that pose any serious long-term issues? Or there is enough of a depth of a talent pool out there?

DR. Y V REDDY: My own personal view is that the problem is not so much lack of talent coming into the public sector. I mean, even now about 20 percent of people in the IAS are from IIMs, IITs, etc. In any case, each IIT, IIM takes only a few hundreds; and so if you take the intake to civil services as a proportion, it is still good. Maybe compared to earlier times the talent getting into the public sector is less but the proportion of the private sector, especially in terms of growth, is huge now and they also need talent. But more than the talent, my feeling is, and I want to be honest, the private sector has not realized the importance of the public sector. I must say this now; day in and day out we find the private sector complaining about corruption or bureaucratic delays. Are there suggestions to improve, or are they, in the private sector, contributing to this state of affairs, in their own ways, in non-transparent ways? In fact, in a number of my speeches, I have said that the private sector should be funding mechanisms by which the public sector improves its efficiency. By undermining the public sector, private business is not adding to our own prospects. India can never, never become a middle-income country unless the public sector improves its efficiency and it is not a question of remuneration alone; it is an attitude, and I can be very frank. I tell my children, "No, you do not go to the public sector. We were prepared to join this field for rendering service – not for money, but for respect. Now, you don't get money, you don't get respect, you only get abuse. Why don't you be on the other side, make more money, and give abuses..." It does not make sense to be in public service in India now! So I think, to be very honest, the solution is not just material gains but having a sense of the importance of the rule of law and of public institutions. I'm not joking; you can see the editorials in the papers: when you follow the law, a law laid down by Parliament, you are bureaucratic, if it doesn't suit somebody influential in financial sector. So I think the whole culture of undermining public service, undermining public enterprises, is wrong. We may criticize but the approach should be constructive, to improve. Incidentally, I must also share an incident with you. I was on a search committee for a top job. We offered it to people in the private sector, we offered to people who were once in the government sector, and no one was willing to head a regulatory body, though they find fault with it and say that only bureaucrats were being appointed. Finally the Finance Minister asked me, "What is this, why can't you get anybody? You get only bureaucrats." So I said, "Sir, this is the problem. They in private sector can make money and sometimes abuse, whereas these people in regulatory bodies don't make money and they have to receive the abuse. So what do you expect?" Then he said, "Then why are you here working in this sector, in the public service?" So I said, "Sir, addiction, addiction, and addiction." Thank you.

DEVESH KAPUR: Thank you so much, Dr. Reddy. I think that your sense of humor, given that you have worked with the Indian government, I think you said since 1964, and I think you needed a lot of that to survive so well. Thank you again for joining us.