

Global Financial Crisis Questioning the Questions¹

By Duvvuri Subbarao

JRD Tata

Thank you for inviting me to deliver this year's JRD Tata Memorial Lecture. It is an honour to which I attach a lot of value. The man whose life this series of lectures commemorates, JRD Tata - or JRD, as he was known - left a great legacy as a visionary, as an industry leader, as a philanthropist, and above all as a humanist.

2. Two words capture JRD's lasting contribution, *nation builder*. His commitment to India's development was deep and abiding, and he was passionate about improving the lot of the less privileged. S.A. Sabavala, one of JRD's long-time associates, tells a story that illustrates this passion. After picking up Mother Teresa in Jamshedpur once, JRD spoke generally about poverty in India, how it upset him, when it would end and so on. Her reply, "Mr. Tata, your job is to open more industries, give more employment to people, and leave the rest to God."

3. JRD evidently took the Mother's advice to heart. Starting with 14 enterprises at the start of his business career, JRD retired in 1988 with a conglomerate of 95 enterprises that provided steady employment to hundreds of

¹ JRD Tata Memorial Lecture delivered at the meeting of The Associated Chambers of Commerce and Industry of India, New Delhi on July 31, 2009.

thousands. Tata businesses ranged from airlines to hotels, trucks to locomotives, heavy chemicals to pharmaceuticals and financial services, tea and air conditioning, becoming a household name.

4. We in the Reserve Bank of India (RBI) are proud of a special connection with JRD. He was a Director on the RBI's Central Board for three terms - from 1952 to 1964. There are countless stories about JRD's humanism, determination, old world charm and everyday courtesies. The Reserve Bank has its own share. I will share one quick anecdote that sums up the measure of this remarkable man. RBI board meetings at that time were held on the first floor in the old building. When meetings would break around lunch time, JRD would join the line of RBI staffers waiting to take the elevator. JRD always insisted that the staff go ahead of him, telling the lift man: "These boys are hungry, and they have to eat and then come back to work. Please drop them off first." Old timers of RBI, almost all of them now retired, recall several occasions when JRD showed unaffected empathy.

5. There is a similar fount of stories about JRD's visionary leadership in tough times, and his astute understanding of what could drive the future, and how to always keep ahead of the curve. He was a good listener, but he always asked penetrating and insightful questions, questioning even the questions that others asked.

6. Today we pay tribute to that amazing individual, a Bharat Ratna, and his rare capability to question the questions. Very often, asking the right question is even more important even than having the right answer. JRD's insights underpin

my speech today: I will question the questions that people are asking about the financial crisis, its impact and our approach to recovery.

The Global Crisis

7. We are going through what is by all accounts the deepest economic crisis of our time. Economic historians are comparing this crisis to the Great Depression of the 1930s. Both were global in scope, both were centred in the United States, and importantly both were preceded by mounting global imbalances, loose monetary policy and high levels of leverage.

8. Still, there are important differences between the Great Recession of today and the Great Depression and all the crises in between. A number of regions of the world - Latin America and Asia - and a number of individual countries such as Argentina, Mexico, Russia, Turkey - had all gone through crises, and these crises were essentially traditional retail banking and currency crises. During these crises richer countries buffered the fall bailing out the troubled regions. In contrast, the current crisis hit at the very heart of global finance with no buffer to fall back on. Some studies suggest that the net worth impact of this crisis, when measured by variables such as declines in output, trade volumes and stock markets, has arguably been more severe than that of the Great Depression.

9. Every country in every part of the world has been affected by the crisis, although through different channels and to different degrees. The United States and Europe, which had become dependent on the financial sector as their engine of growth, were at the very epicentre of the crisis. Export growth led Asia, which

managed its external sector cautiously after the Asian Crisis of a decade ago, saw its growth plummet through a sharp decline in the demand for exports. Over the years, Eastern Europe had become dependent on large-scale capital imports through banking channels and was therefore hit by the reversal of capital flows. African and South American economies suffered through the huge drop in commodity prices and deterioration in their terms of trade. In India, our financial markets continued to function normally, and our financial sector remained healthy. Even so, we too were hit by sudden capital flow reversals as part of the global deleveraging process and the liquidity hiccups transmitted mainly through the confidence channel.

10. The point here is that almost every country around the world has been impacted by this crisis.

11. Text book economics tells us that stresses in non-tradable sectors remain confined to economic boundaries. Many text books also cite housing as a quintessential example of a non-tradable good. It is paradoxical therefore that a problem that, at some level, traces its origins to pressures in the US sub-prime housing market should snowball into a crisis of such global dimensions. This only demonstrates the power of globalization, which is now increasingly encompassing sectors long considered non-tradable through growing communication linkages, capital flows and the depth of financial engineering - three aspects that lie at the heart of this crisis.

12. A lot is being written about how this crisis is too important to waste, how we should learn the lessons of this crisis and go forward with Schumpeterian creative destruction. Some people have, however, questioned the wisdom of drawing lessons when the immediate challenge is to pull the world economy out of its tailspin. When Chairman Mao was asked what he thought of the French Revolution, he said it was too early to say. People who take a long view of history as did Chairman Mao would say that it is too premature to talk about the lessons of the crisis. Of course, this crisis is by no means over. There may yet be surprises. So, is it too early to raise questions?

13. I believe it is not. The world is changing too rapidly to allow us the luxury of sitting back until after the crisis has passed to investigate its causes and draw key lessons. Indeed the situation is so complex, compelling and urgent that we cannot effectively resolve it unless we start looking at everything *de novo*.

14. This crisis has also been an intellectual challenge. It has thrown up a number of issues that we believed were behind us, reopened questions that we thought were answered, renewed debates that we had assumed were settled and attacked stereotype views that we had accepted without questioning. Out of all this churning, lessons are being drawn and applied to policy and institutional reform. While this earnestness is welcome, there is a risk that we may be learning the wrong lessons because we are asking the wrong questions. That we need to ask the right question to get the right answers is self evident, even tautological. What I

propose to do therefore in my lecture today is to question the questions in four crisis related areas addressing them in the global context and the Indian context.

Global Imbalances

15. The first issue relates to global imbalances. No crisis as complex as this has a simple or a single cause. In popular perception, the collapse of Lehman Brothers in mid-September 2008 will remain marked as the trigger of the crisis. At one level that may well be true. Indeed, I can visualize future text books in finance dividing the world into 'before Lehman' and 'after Lehman'. But if we probe deeper, we will learn that at the heart of the crisis were two root causes - the build up of global imbalances and developments in the financial markets over the last two decades. And received wisdom today is that these two root causes are interconnected, and that financial market developments were in a sense driven by the global imbalances.

16. Global macro imbalances got built up because of the large savings and current account surpluses in China and much of Asia in wake of the East Asian Crisis a decade ago. These were mirrored by large increases in leveraged consumption and current account deficits in the US. In short, Asia produced and America consumed. There is a raging debate on what was the cause, and what the effect - the US consumption boom and the Asian savings glut? Regardless, the bottom line is that one was simply the mirror of the other and the two share a symbiotic relationship.

17. And how did these imbalances build up? The answer lies in globalization - globalization of trade, of labour and of finance. The world witnessed a phenomenal expansion in global trade over the last 50 years; global trade as a proportion of global GDP more than doubled from 24 per cent in 1960 to 57 per cent in 2006, just before the crisis hit us. Globalization of finance was even more prolific, especially over the last decade. For the world taken together, the ratio of foreign assets and foreign liabilities to GDP rose from 45 per cent in 1970 to over 300 per cent in 2004.² The impact of globalization of labour was by far more striking. Emerging Asia added nearly three billion to the world's pool of labour as it integrated with the rest of the world over the last two decades thus hugely improving its comparative advantage. Together the three dimensions of globalization - trade, finance and labour - helped emerging Asia multiply by a factor its exports to the advanced economies. The result was large and persistent current account surpluses in the Asian economies and corresponding current account deficits in the importing advanced economies.

18. The chain of causation from these imbalances to the financial crisis is interesting although not obvious. As Asia accumulated savings and simultaneously maintained competitive exchange rates, the savings turned into central bank reserves. Central banks, in turn, invested these savings not in any large, diversified portfolio but in government bonds of the advanced economies. This in turn drove down risk free real interest rates to historically low levels triggering phenomenal

² Philip R. Lane and Gian Maria Milesi-Ferretti (2006), "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004", Working Paper WP/06/69, International Monetary Fund.

credit expansion and dropping of the guard on credit standards, erosion of credit quality and search for yield, all of which combined to brew the crisis to its explosive dimensions.

19. Where did India stand in all this? India did not contribute to global imbalances. Indeed we ran current account deficits for the last two decades except for a brief period during 2001-04. In other words, we imported savings, did not export them. However, India's integration with the rest of the world over the last decade has been remarkably rapid. First, let us look at trade integration. The two way trade (merchandise exports plus imports) as a proportion of GDP doubled from 20 per cent in 1998/99, just after the Asian crisis, to 41 per cent in 2008/09. Our financial integration was even deeper as measured by the proportion of total external transactions (gross current flows plus gross capital flows) to GDP. This ratio much more than doubled from 44 per cent in 1998/99 to 112 per cent in 2008/09. While the crisis transmitted to India through both the trade and finance channels, the latter was by far more significant in terms of the intensity of impact.

20. Notwithstanding reams being written about resolving the present crisis and preventing another like this, global imbalances are not on the radar screen of policy debate. This is both perplexing and disturbing. Indeed, once the immediacy of the crisis is behind us, it will not be surprising if we head for another round of destabilizing global imbalances.

21. How do we manage global imbalances? It is argued that if the US Fed had refused to supply the incipient demand for liquidity in the late 1990s and early

2000s, higher interest rates could have prevented the borrowing boom and the follow on widespread deterioration of financial standards and the subsequent melt down. But this also would have meant lower growth in the US and the rest of the world. The short point is that even as macroeconomic imbalances should not be allowed to proliferate, it is necessary to balance the need for global economic growth against the disruptions which follow the unwinding of such imbalances.

22. Resolving the problem of global imbalances does not mean eliminating them. As long as there is world trade, certain countries will have surpluses and certain others will run deficits. Global imbalances have been, are, and will continue to be inevitable.

23. So, to ask how we can eliminate global imbalances is clearly the wrong question. The right question is this: given that global imbalances are inevitable, how do we ensure that they do not build up to destabilizing levels?

Monetary & Fiscal Policy

24. The second issue on questioning the questions relates to monetary and fiscal policy. Unnerved by the scale and sweep of the crisis, governments and central banks around the world responded with an unprecedented show of policy force. The size and pace of monetary and fiscal expansion raised a paradoxical situation - even as governments and central banks coordinated and cooperated, many of their familiar conflicts got played out once again.

25. Central banks reduced policy rates ferociously, and in many advanced countries the rates are at or near zero. This is the standard tool of monetary policy whereby central banks expect to influence interest rates at the long end, and steer financial conditions and hence the entire economy by adjusting the short term rates. Even in normal times, monetary policy transmission is lagged. In the crisis situation, because of the fear and uncertainty in the financial markets, it almost totally lost traction. Central banks responded to this alarming impasse through a slew of measures variously described as quantitative and credit easing.

26. It soon became clear that even as monetary policy became the first line of defence and central banks turned lenders of first resort, credit markets were in no mood to revive soon. So, governments had to step in with huge fiscal packages to stimulate domestic demand and to recapitalize banks.

27. Fiscal deficits have ballooned around the world to levels never seen in peace time. In the US, the fiscal deficit (general government balance) is projected to rise from 2.2 per cent in 2006 to 13.6 per cent in 2009; in the UK, from 2.6 per cent (2006) to 10.9 per cent (2010); and, in the euro area, from 1.2 per cent (2006) to 6.1 per cent (2010). Public debt of the ten leading rich countries is projected to jump from 78 per cent in 2007 to 106 per cent in 2010 and further to 114 per cent in 2014. “We are all Keynesians now”, as President Nixon once remarked.

28. Financing these fiscal deficits has not been a problem so far. The extreme risk aversion in the wake of the crisis triggered ‘flight to safety’ and ‘flight to liquidity’ which, in turn, ensured that there was enough appetite for treasuries.

Even so, yields on treasuries have started firming up in recent weeks suggesting the return of some risk appetite. Central banks are showing extraordinary monetary accommodation by pumping in huge amounts of liquidity to support banks and financial institutions. This has willy-nilly helped governments raise borrowings.

29. Governments are likely to be forced to pay back for this support. Central banks' balance sheets have expanded at a furious pace. The US Fed balance sheet, for example, expanded from \$919 billion at end June 2008 to \$2 trillion by end June 2009. The reserves of banks with the Fed jumped twenty times from less than \$33 billion as at end June 2008 to \$661 billion by end June 2009. Should the central bank's interest income fall short of its interest payment obligations, it will have to fall back on fiscal support for interest payments, reversing the dependency equation between the government and the central bank.

30. Many believe that these tensions between fiscal and monetary policy are temporary, and will melt away once the crisis has passed. That is unlikely to be the case. On the contrary, fiscal deficits in advanced economies are likely to persist, and in fact, increase on the way forward for at least two reasons. First, since it will take some years for households to rebuild their balance sheets which got ruptured by the crisis, economic growth will likely be weak for some years necessitating big fiscal deficits. Even so, since this deficit will be of a cyclical nature, it can possibly be managed. However, the second and a bigger fiscal concern stems from the demographic profile of the advanced economies. As more people age, dependency ratios increase and social security payments mount, governments will have to resort

to big deficits on a long term basis to meet these obligations. Moreover if the surplus Asian economies make the necessary adjustment, they will move away from funding the fiscal deficits of advanced economies. In other words, monetary policy will have to be conducted in a regime of large and continuing structural fiscal deficits.

31. How are the tensions between fiscal and monetary policies playing out in India? Here, even as the Government and the Reserve Bank coordinated their crisis management efforts, there are dilemmas. Last year (2008/09), the government launched three fiscal stimulus packages which came on top of an already announced expanded safety-net programme for the rural poor, the farm loan waiver package and pay out following the implementation of the Sixth Pay Commission. Together all these commitments raised the fiscal deficit from 2.5 per cent estimated in the budget to 6.2 per cent (as per pre-actual figures) by the close of the year. The budget for 2009/10 projects a fiscal deficit of 6.8 per cent of GDP.

32. For its part, the Reserve Bank sharply reversed its monetary stance from tightening to easing following the full outbreak of the crisis in September 2008. The monetary stimulus came through a sharp reduction in the policy interest rates and the cash reserve ratio (CRR), reduced pre-emption of bank resources through the statutory liquidity ratio (SLR) and expansion of refinance facilities for banks some of which were sector specific. The potential liquidity made available by the Reserve Bank as a result of these measures amounted to Rs.560,000 crores, nearly 9 per cent of GDP.

33. The countercyclical spending by the government and the accommodative monetary policy of the Reserve Bank were both necessary in order to cushion the economy from the onslaught of the crisis. Nevertheless, the sudden and rapid expansion of government borrowing programme has impeded monetary transmission. Last year, the final net government borrowing was two and a half times the original budget estimate. This year's budgeted borrowing is going to be at least a third higher than that. The intent behind Reserve Bank's monetary easing was to encourage banks to reduce lending rates and maintain the flow of credit to the productive sectors. But government borrowing had resulted in firming up of yields, notwithstanding the substantial excess liquidity, militating against the low interest rate regime that we want.

34. The huge government borrowing programme demanded active liquidity management by the Reserve Bank, and we responded by way of open market operations (OMO). For the first time we put out the programme for the OMO along with the programme for borrowing so as to reduce uncertainty and infuse confidence in the market. This year again, the Reserve Bank will have to manage the delicate balance between government borrowing and maintaining ample liquidity to meet the demand for private credit as it picks up in the months ahead. We will follow the same open, transparent and consultative process as we did last year.

35. Going forward, we need to tread the balance between short term compulsions and medium term sustainability with care and good judgement. In the

short term, the countercyclical public spending was necessary; the important point here is to spend that money quickly, effectively and to create durable assets. On the monetary side, the increased fiscal deficit is going to pose more than a proportionate challenge. Creation of high power money in the face of large fiscal deficits, even if there is no direct primary financing, is not costless; it can sow the seeds of the next inflationary cycle. The challenge for the Reserve Bank is to maintain a comfortable liquidity situation while at the same time anchoring inflation expectations.

36. The current monetary and fiscal stance is, however, not the steady state. The Reserve Bank needs to roll back the special monetary accommodation. For this to happen, there are two necessary conditions. First, the government will have to show a firm and credible commitment to fiscal responsibility by fleshing out the road map for fiscal consolidation. Second, there will have to be more definite signs of recovery. The Reserve Bank will maintain an accommodative stance until demand conditions improve and credit flow takes hold, but reversing the expansionary policies is definitely on the agenda on the way forward.

37. Having explained the Indian context in some detail, let me now return to the global scene. The seventy odd years since the Great Depression saw a famous rivalry between fiscal and monetary policies for influence. The crisis has shown that both are required, and that indeed both are critical for macroeconomic stabilization. It is unlikely that we will revert to status quo ante once the crisis has passed. On the contrary, there will need to be increasing coordination between

monetary and fiscal policies. Central banks will have to take into account fiscal compulsions in their monetary stance while governments will need to commit to strict fiscal responsibility. To ask therefore how monetary and fiscal policies can go their separate ways is the wrong question. What is the right question? I submit the right question is: how can we coordinate fiscal and monetary policies to achieve the planned outcomes?

Inflation Targetting

38. I will now move to the third issue - inflation targetting. In the years leading to the crisis, central bankers had nearly declared victory. They had found the holy grail of stable growth, low inflation and low unemployment through a rule based monetary policy that targeted inflation rather than monetary aggregates. The much celebrated Great Moderation had delivered.

39. The crisis at once hurt the central bankers' pride and shattered their confidence as the Great Moderation unravelled. Monetary policy was found wanting in delivering financial stability. The undoing was the reluctance or failure of central banks to acknowledge increasing asset prices.

40. The monetary stance of studied indifference to asset price inflation stemmed from the now notoriously famous Greenspan orthodoxy which can be summarized as follows. First, asset price bubbles are hard to identify on a real time basis, and the fundamental factors that drive asset prices are not directly observable. Second, monetary policy is too blunt an instrument to counteract asset price booms. And third, a central bank cannot presume to know more than the

market. The surmise therefore was that the cost-benefit calculus of a more activist monetary stance of “leaning against the wind” was clearly negative. It is more cost effective for monetary policy to wait for the bubble to burst and clean up afterwards rather than prick the bubble in advance.

41. The Great Unravelling has, however, shattered the intellectual consensus around both inflation targeting and the Greenspan orthodoxy on asset price build up. The crisis has made two things clear. First, the policy of benign neglect of asset price build up has failed. Second, price stability does not necessarily deliver financial stability.

42. Where do we in India stand on inflation targeting? Over the last few years, there has been an animated debate in India on inflation targeting fuelled by two influential studies, one by Percy Mistry and the other by Raghuram Rajan. While Mistry strongly urged that the gold standard for stabilizing monetary policy is a transparent, independent, inflation-targeting central bank, Rajan held that reorienting RBI towards inflation targeting will have to dovetail with the government’s commitment to maintain fiscal discipline and not hold the central bank accountable for either the level or the volatility of the nominal exchange rate.

43. The debate on inflation targeting in India has to some extent been overtaken by the learnings from the crisis. Nevertheless, it is worthwhile noting that inflation targeting is neither desirable nor practical in India for a variety of reasons. I will defer a detailed exposition on this issue to another forum; I will allude here only to the important reasons.

- First, it is inconceivable that in an emerging economy like India, the central bank can drive a single goal oblivious of the larger development context. The Reserve Bank must be guided simultaneously by the objectives of price stability, financial stability and growth.
- Second, food items which have a large weight (46 - 70 per cent) in the various consumer prices indices are vulnerable to large supply shocks, especially because of the vagaries of the monsoon, and are therefore beyond the pale of monetary policy. An inflation targeting RBI cannot do much to tame a supply driven inflation except as a line of defence in an extreme situation.
- Third, which inflation index do we target? In India, we have one wholesale price index and four consumer price indices. There are ongoing efforts at a technical level to reduce the number of consumer price indices, and I believe the technical issues are not insurmountable. But that still will not give us a single representative inflation rate for an emerging market economy with market imperfections, diverse geography and 1.1 billion people.
- Fourth, the monetary transmission mechanism in India is impeded because of the large fiscal deficits, persistence of administered interest rates and illiquid private bond markets. Inflation targeting can be

efficient and effective only after monetary transmission becomes streamlined.

- Finally, we need to manage the monetary fall-out of volatile capital flows that queer the pitch for a single focus monetary policy. A boom-bust pattern of capital flows can lead to large disorderly movements in exchange rates rendering both inflation targeting and financial stability vulnerable. Like other emerging economies, India too will have to navigate the impossible trinity as best as it can.

44. In a more global context, given the fall out from the crisis, to ask how central banks should revert to their sole inflation targeting mandate is the wrong question. The right question is this: what are the specific roles and responsibilities of governments and central banks in ensuring price stability, financial stability and macroeconomic stability?

Real Sector and Financial Sector

45. Finally, I want to address questions around the interplay between the real sector and the financial sector. One of the silent, albeit influential, developments leading to the crisis was the hubris that came to surround the financial sector. There were two factors behind the financial sector's growth in size, importance, and influence. The first was the ferocious search for yield, engendered by the easy liquidity in the global system that triggered a wave of financial innovation. Complex financial products were created by slicing and dicing, structuring and hedging, originating and distributing, all under the belief that real value could be

created by sheer financial engineering. The second factor was the razzle dazzle of sophisticated maths applied to financial modelling. The premium was not on models that captured the structural properties of the market but rather on models that best fitted market prices, never mind if those prices were way out of line on any fundamental analysis.

46. In the world that existed before the crisis - a benign global environment of easy liquidity, stable growth and low inflation - profits kept coming, and everyone got lulled into a false sense of security in the firm belief that profits will keep rolling in forever. Herb Stein, an economist, pointed out the truism that, "if something cannot go on for ever, it will eventually stop." But no one paid attention. Indeed, as Chuck Prince, the former Chief of Citigroup said, it was necessary to keep dancing as long as the music was on. The magic of the financial sector gave it such a larger than life profile that we began to believe that for every real life problem, no matter how complex, there is a financial sector solution. Now, of course, we know better – for every real life problem, no matter how complex, there is a financial sector solution, which is wrong.

47. Take the case of the United States. Over the last 50 years, the share of value added from manufacturing in GDP shrank by more than half from 25.3 per cent to 11.5 per cent while the share of financial sector more than doubled from 3.6 per cent to 7.5 per cent. The job share of the manufacturing sector declined by more than half from 28.5 per cent to 10.5 per cent while the job share of the financial sector increased by over a third from 3.5 per cent to 4.6 per cent. The same trend is

reflected in profits too. Over the last 50 years, the share of manufacturing sector profits in total profits declined by more than half from 49.3 per cent to 20.6 per cent while the share of profits of the financial sector increased by more than half from 17.4 per cent to 26.6 per cent. Clearly, the excessive risk-taking behaviour of the financial sector raised the value-added of the sector beyond a sustainable level making the melt down, in retrospect, inevitable.

48. Forgotten in the euphoria of financial alchemy is the basic tenet that the financial sector has no standing of its own; it derives its strength and resilience from the real economy. It is the real sector that should drive the financial sector, not the other way round.

49. This thought is also a convenient place to introduce my last point, namely financial sector regulations. In the coming months and years, how the world regulates the financial sector will change dramatically. The US, for example, has already put out a framework that charts significant changes from the existing model of financial regulation.

50. In India, we too will have to address this issue sooner or later. However, our problem is a little different since we must regulate markets in a way that does not hamper development. But whose development do we focus on? As I have argued, what is important is the development of the real sectors not of the financial sector. To the extent that the financial sector helps deliver stronger and more secure long-term growth, its development is important. And our regulatory framework should be premised on this underlying argument. So, as we change or review our

regulatory framework, the question we need to answer is whether an existing practice or a change in rule delivers higher and more secure real economy growth; not whether it develops the financial sector or accelerates its expansion.

51. All in all, this crisis has dealt a harsh blow to our confidence in the financial sector. But are we asking the right question? The question we are asking is how to put the financial sector back on the high growth trajectory. I believe we must be asking a different question, so that we can come up with effective and lasting solutions. That question is: how can we keep real sector growth on a high trajectory? And only in this connection, should we ask what the financial sector can do to help.

Conclusion

52. That brings me to the conclusion of my lecture. To summarize, I have argued that in order to learn and apply the right lessons from the crisis we must, in the spirit of the man whose legacy we honour today, question the questions. I am conscious that the list of issues I have chosen is by no means comprehensive. Expanding that list and extending our collective understanding of the right questions to ask is a shared task for all of us. Finally, I want to thank the ASSOCHAM once again for inviting me to deliver the JRD Tata Memorial Lecture. It has meant a lot to me.