Contents

C. D. Deshmukh Memorial Lecture

L. K. Jha Memorial Lecture

Speeches

Contents

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C. D. Deshmukh Memorial Lecture

Fasten Your Seatbelts ! Monetary Policy
Challenges in Turbulent Times
T.T. Mboweni, Governor,
South African Reserve Bank

*Fasten Your Seatbelts ! Monetary Policy Challenges in Turbulent Times**

T.T. Mboweni

1. Introduction

Thank you for your kind invitation. I am delighted to be in India for the first time at this juncture as you celebrate the 60th anniversary of your independence and enjoy the international spotlight as the result of your splendid economic performance.

It is a great pleasure and privilege to deliver this address today for two main reasons. Firstly, this lecture is in honour of a truly great person, Mr Chintaman Deshmukh. The contribution of Mr Deshmukh to the Indian economy cannot be exaggerated as is borne out by his long service to this country as Governor of the Reserve Bank of India, Member of the Planning Commission of the Government of India, Minister of Finance, Vice-Chancellor of the University of Delhi and as President of the Indian Statistical Institute from 1945 to 1964, amongst others. Secondly, I understand that this lecture series has been graced with the presence of some truly remarkable speakers. I am indeed very grateful to be accorded the privilege to deliver this the 13th lecture in this series.

The relationship between South Africa and India is a very strong one today. This relationship, however, goes back a long way in history. President Nelson Mandela, the former President of the Republic of South Africa encapsulated this quite well when he said that "India and South Africa are two countries held so closely by bonds of sentiment, common values and shared experience, by affinity of cultures and traditions and by geography"[1]. The contribution of one of your and our

* Remarks by Mr T.T. Mboweni, Governor of the South African Reserve Bank at the 13th Chintaman Deshmukh Memorial Lecture, organised by the Reserve Bank of India, Mumbai, India on November 2, 2007.

[1] India Digest, Vol. 4, 1996.

favourite sons, Mohandas Karamchand (Mahatma) Gandhi, and the support received from the Indian authorities during the liberation struggle went a long way towards assisting South Africa to achieve democracy in 1994. The important role that India played in South Africa's transition to democracy is without question and highly appreciated back home.

Currently, strategic relationships on the bilateral and multilateral fronts hold promising opportunities of mutual benefit for both our countries. Already, bilateral trade between India and South Africa has increased by well over 100 per cent in the past four years and a Preferential Trade Agreement between South Africa and India aims to treble trade by 2010. In addition, South Africa has been benefiting from India's rich entrepreneurial and educational skills base, with many teachers and other skilled personnel being employed in various institutions in our country.

South Africa is currently India's biggest investment partner in sub-Saharan Africa, serving as an important entry point into the rest of Africa. Indian investments in our country have grown significantly over the years, and have become more diverse, ranging from vehicles (Tata, Mahindra), steel (Arcelor Mittal), telecommunications (Neotel) and pharmaceutical companies such as Ranbaxy. Investments from South Africa to India are also growing. South African Breweries acquired stakes in various Indian breweries. Other areas in which South African companies have invested include insurance, diamond exploration and infrastructure. In February 2006, the Airports Company of South Africa (ACSA) won the contract for upgrading the Mumbai Airport. I also gather that SASOL is interested in a coal-to-synthetic automotive fuel project in India and many other South African companies have signed up marketing contracts with Indian companies in the pharmaceutical sector.

On the multilateral front, initiatives such as that involving India, Brazil and South Africa (IBSA) and Brazil, Russia, India, China and South Africa (BRICSA) provide useful platforms for the strengthening of ties between our two countries and the South-South economic relations in general. In addition, over the last few years India, South Africa, Brazil and China have been recognised as systematically important countries to the extent that they have been regularly invited to the G-7 meetings in order to contribute to the discussion on global economic and financial matters. On the one hand, this participation has taken place usually on the fringes of the main G-7 meetings, thus raising the question about the seriousness with which the G-7 countries give to these meetings. On the other hand, these four countries have started to meet on a regular basis in order to strengthen co-operation on issues of common interest.

As you may well be aware, one of the burning issues at the moment relates to increasing the "voice" or representation of emerging-market economies in international financial institutions such as the IMF and World Bank. This issue, together with other matters relating to the reform of the Bretton Woods Institutions have also been key agenda items addressed this year during the preparatory meetings for the G-20 meeting of Ministers of Finance and Central Bank Governors. As we know, South Africa currently chairs the G-20 Forum and it will be our pleasure and privilege to welcome the Indian G-20 delegation in South Africa during November. There are many issues which are the centre of focus to the G-20 this year, but most prominently are the fiscal elements of growth and development and the impact of commodity prices on member countries. South Africa and India do not only share common policy positions on many of these issues, but have also been very active in advocating the interests of emerging-market economies in this new world order.

Both countries have benefited from the economic reforms implemented over the last decade or so. However, both countries have similar economic challenges which in the main relate to, inequality, poverty alleviation and the reduction of unemployment. As a central banker, I wish to dwell on some issues and challenges facing monetary policy in emerging markets.

2. The “Great Moderation“

One of the defining characteristics of global economic developments over the last three decades has been termed the “Great Moderation“ –the sustained decline in the volatility of output and inflation. This development has been due to the structural changes that many economies have undergone. Some have attributed these changes to the implementation of better policy options and others to simply good luck. Professor Kenneth Rogoff of Harvard University has argued on many occasions that improved competitiveness as a result of increased globalisation coupled with better policies has had a major positive impact on inflationary trends in many countries. The declining trend in inflation since 1990 is clearly evident in India and South Africa. Inflation in India has declined steadily from an average of 10,3 per cent between 1990–1994, to 8,9 per cent between 1995–1999 and to 4,3 per cent in this decade. Similarly in South Africa, inflation has declined from an average of 12,5 per cent, to 7,3 per cent and to 5,1 per cent over the same time periods.

The economic growth performance of both countries has also been quite impressive. Since 1990, India has experienced average growth rates of around 6 per cent per annum, increasing to an impressive 9 per cent in the last two years. It is now widely expected that the Indian economic growth rate trajectory would be very close to, if not, in double digit territory in the short to medium term. South Africa has not been performing badly either, with an average economic growth rate of about 3,4 per cent per year since the advent of democracy in 1994, compared to an average of below 1 per cent in the previous decade. Over the last three years, however, growth has averaged about 5 per cent and the current trend in the economic growth rate is the longest experienced in the country’s recorded history.

3. Improved macroeconomic performance: some side-effects

A side-effect of strong economic growth in many emerging market countries is the growing middle class. This has been particularly true for both India and South Africa. The rapid emergence of this middle class brings opportunities that will have a significant impact on future prosperity, but also poses a rather unique set of challenges for policymakers. With increasing affluence, there is bound to be a change in consumption levels and patterns. Related policy concerns centre on the implication of these changes on the demand for credit, the level of imports and the effect on asset markets.

Then, there is the added concern that the unequal distribution of wealth brings with it a tension between the haves and the have-nots. Under these circumstances, the broadening of access to financial services becomes an important policy objective. It is well recognised that the financial inclusion of the lower echelons of society into the financial sector is a powerful contributory factor to poverty alleviation through, for example, the provision of micro-finance. As the demand for consumer finance increases, a greater range of financial instruments are needed and the financial sector will need to adapt.

Over the past few decades, alongside financial deepening, household debt levels have been on the rise across a number of countries, both in developing and advanced countries. Rapid increases in household indebtedness have been associated with increases in asset prices, mainly house prices. These developments have indeed increased the probability of defaults, stemming in the main from adverse external shocks and rising interest rates.

Whilst household debt ratios in emerging-market countries like South Africa are low in comparison to developed countries, the rapid rise in household debt and credit levels has raised some concerns. In addition, high levels of inequality could mean that some groups are more affected than others. Hence, the close monitoring of lending practices and detailed reviews of credit standards can contribute towards the integrity and stability of the financial system. In the case of South Africa, an Act of Parliament (the National Credit Act) was introduced to address this issue. It is still too early to ascertain the impact that this Act has had on borrowing and lending practices in South Africa. There is little doubt that positive outcomes may be realised.

4. The role of monetary policy

Central bankers have more often than not found that the role of monetary policy in the economic growth process is not fully understood or appreciated by all stakeholders. Let me use the South African case to illustrate this difficulty. Monetary policy in South Africa is implemented within an inflation targeting framework – the target range being an inflation rate, namely CPIX (headline inflation less mortgage interest costs) of between 3 and 6 per cent. CPIX inflation in South Africa has been outside the upper end of the target range for the past six months. In addition, there has been a deterioration in the inflation outlook. This has mainly been (initially) as a result of higher international food and fuel prices as well as robust consumer spending. However, underlying pressures have also become more broad-based. Although credit growth has slowed somewhat in response to previous monetary policy tightening, persistently high food and fuel costs have meant that the risks to the outlook are on the upside. Inflation expectations have consequently risen to the top end of the target range, with possible adverse implications for wage and price-setting decisions.

These risks to the outlook have necessitated the tightening of monetary policy from 7 per cent in May 2006 to 10,5 per cent currently. The tightening of monetary policy has not gone down well in all parts of society. Not everyone appreciates that sacrifices – albeit short term sacrifices – are sometimes needed to secure medium to long term benefits. In general, due recognition is not always accorded to the role that price stability plays in securing sustainable economic activity. In our modern world where remote controls and microwave ovens are the order of the day, not everyone – market participants included – always comprehend or appreciate that monetary policy operates with a relatively long lag. So in essence, one of our primary challenges as central bankers relates to the issue of regular and consistent communication.

Communicating monetary policy has become complicated because the transmission channels have become somewhat clouded. Structural changes in the economy have had an impact on functional relationships, with the result that the transmission mechanism of monetary policy has become more complex. Advances in econometrics and economic theory have facilitated the construction of sophisticated structural models incorporating complex behavioural relationships. However, as Professor David Hendry argues, forecast errors are very often the result of unanticipated large changes or shocks within the forecast period[2]. Hence, anecdotal evidence that provides a better understanding of the risks to the inflation outlook is essential to monetary policy-making. As the Chairman of the Federal Reserve Board, Mr Ben Bernanke recently remarked, good economic forecasts “involve art as well as science’’[3].

The recent South African experience has shown that some of the conventional observations do not always hold in practice. For example, the South African currency (the Rand) has on more than one occasion weakened when interest rates were increased or appreciated when interest rates were lowered or when they remained unchanged.

Furthermore, emerging-market currencies in general are subject to extreme volatility resulting from shifts such as was the case with the USD recently, having an impact on domestic monetary conditions. An added challenge relates to the fact that many emerging-market countries have a relatively short track record of credible monetary policy. Credibility is earned over time and yet it is central to the anchoring of inflation expectations.

Communication is further complicated by the global context in which inflationary pressures occur. On the one hand, there are

[2] Clements, M.P. and Hendry, D.F. (2002), “Explaining Forecast Failure in Macroeconomics” in clements, M.P. and Hendry, D.F. (eds.) A companion to Economic Forecasting pp. 539-571, Oxford: Blackwells.

[3] Bernanke, B. S. (2007), “Inflation Expectations and Inflation Forecasting”, Monetary Economics Workshop of the National Bureau of Economic Research Summer Institute Cambridge, Massachu setts.

downward inflationary pressures as a result of lower-priced goods due to globalisation. On the other hand, increased trade protectionism, coupled with rising commodity prices due to robust world growth, pose risks to price stability.

China and India play a significant role in the global economy today. This assertion to many is without question. The disinflationary benefits of globalisation have been manifested in China's contribution to lower global inflation over the last decade, through lower import prices of manufactured goods, more specifically clothing and footwear. India has also played an important role through the supply of low-cost knowledge based services such as in the field of information and communications technology (ICT). However, the utopia of strong economic growth with low inflation may be reversed as China and India, because of their appetite for commodities, contribute to the surge in commodity prices, notably in base metals and minerals, especially oil prices. China and India have been the world's fastest growing energy markets with oil demand currently increasing at around 6 per cent for China and 5 per cent for India. As is not foreign to this gathering, oil prices have reached nominal record high levels recently, thus placing upward pressure on inflation and complicating the task of monetary policy, specifically in the anchoring of inflation expectations.

Regarding the commodity boom, South Africa is faced with a double-edged sword. Whilst the demand for commodities boosts export revenues, surging energy price increases have had a significant upward pressure on import costs and inflation in South Africa.

5. Global financial market integration

Global financial market integration has increased significantly in recent years, posing further challenges to the conduct of monetary policy. There are divided opinions on the advantages and disadvantages of global financial market integration, but to a large extent most would agree that globalisation has been positive insofar as it has imposed market discipline on policymakers. There are many who think that globalisation increases economic growth prospects and reduces volatility. In some respects, globalisation and financial market integration also make policymakers aware of the importance of independent central banks. Market participants are more comfortable in situations where central banks are seen (and actually are) going about their primary objectives without fear, favour or interference from not only the political executive, but all other stakeholders.

One of the main challenges of this new global environment relates to the so-called "contagion effect". The 1997/1998 global financial crisis is one example. Another more recent example relates to developments in the US sub-prime market. To begin with the 1997/1998 crisis, economies with relatively weak macroeconomic fundamentals were punished the most. South Africa, in particular, at the time suffered from capital outflows, a depreciation of the currency and subsequently inflationary pressures. As a result, monetary policy had to flow with the tide, and interest rates were increased by a full 7 percentage points between April and September 1998. However, as painful as the process was, not only for South Africa, but for most other emerging markets, lessons have been learnt and major reform of existing financial structures and adjustment in macroeconomic policies emerged.

The 1997/1998 crisis highlighted concerns surrounding debt sustainability. As a consequence, many emerging-market countries reduced their domestic and external debt, and in the process, reduced currency mismatches which in some respects rendered these emerging markets less vulnerable to currency depreciation. There have also been efforts to reduce the external vulnerability through debt buybacks, while reserves accumulation has also been gathering pace over the past few years. India's reserves are the world's seventh largest at over USD250 billion. While South Africa's are but a fraction of this, one needs to bear in mind that we have moved from a position of a negative net open forward position of almost USD26 billion at the end of 1998, to positive net reserves of US$28 billion currently, the result of which means that today the country boasts an investment grade rating.

Furthermore, central banks have shifted towards market-based instruments which enhance their ability to respond to shocks. India is one such example, with the increased use of repo and reverse repo operations since the early 2000s, increasing the role of interest rates in the transmission mechanism of monetary policy. In South Africa's case, we have come a long way in terms of the development of our own bond market, a process in which the South African Reserve Bank played a major role for a very long time. Today, we have a very deep and liquid bond market, if not the most liquid bond market in the emerging-market economies.

The positive impact of these financial market and macroeconomic developments have been put to the test on numerous occasions since the 1997/1998 crisis. The most recent event has been that of the US sub-prime mortgage market. This episode has been well documented and I shall therefore not spend time on its detail. As you are aware, it was a liquidity and credit crisis, emanating from financial institutions having exposure to the sub-prime market and thereby incurring huge losses as delinquencies and foreclosures increased in the wake of tighter monetary policy. Although the sub-prime mortgage market was an issue related to the US, the adverse developments were transmitted to other developed and emerging markets without much relation to domestic developments.

At the height of the crisis, developed and emerging-market equities were sold. Foreign exchange markets witnessed a significant increase in volatility as carry trades were rapidly unwound and emerging-market spreads rose significantly between late July and mid-August. However, the rise in emerging-market debt spreads was not quite as pronounced as that of credit markets in developed economies. Spread movements also reflected higher risk credits moving the market in either direction.

Although South African financial markets were affected by the events surrounding the sub-prime crisis, our money markets were relatively unaffected. Our banking system had very little exposure to the sub-prime market and liquidity conditions domestically remained healthy. As such, there was no need for the South African Reserve Bank to provide extra liquidity to markets. Throughout this turmoil, the principal challenge for the Monetary Policy Committee has been to address inflation concerns. Inflation developments in South Africa have been such that at a time when global monetary policy seems generally to have turned from a tightening bias to an easier or neutral stance, our MPC has had to tighten monetary policy.

Since the recent turmoil experienced in financial markets, money market conditions have eased considerably, most notably in the US, following the Fed's decision to cut interest rates by a cumulative 75 basis points. Money market conditions in Europe, however, remain a little more strained, probably partly due to the fact that a significant amount of the structured investment products were in fact purchased by European and other overseas investors. Up until the end of October, financial markets recovered, with equity markets in particular bouncing back to levels higher than at the time of the turmoil. However, experience has taught us that financial market gains could easily be reversed in times of uncertainty.

Emerging markets could still feel the impact of an abrupt and sustained change in global financial conditions and international investor appetite for risk. Such a scenario could play out in the event of a significant slowing in global growth and rapid reversal of capital inflows in spite of better macroeconomic fundamentals. In a more globalised world, emerging-market economies may be more vulnerable to shocks originating in developed economies than was the case previously. Under these circumstances, extreme vigilance on the part of policymakers remains the order of the day. The current uncertainties in global financial markets will remain fixed on the radar screens of policymakers for some time to come.

6. Conclusion

In an interdependent world, the effects of uncertainties will not only be exaggerated, but could also affect innocent third parties. We have to remain vigilant to global and domestic developments in order to ensure that prosperous outcomes are not unduly threatened. Under these circumstances, policymakers have to ensure that strong economic fundamentals are maintained. The role of monetary policy in this process should not be underestimated. For emerging economies, like India and South Africa, the challenge remains to reinforce and build on the achievements of the last decade or so.

Thank you very much, once again dear colleagues and Governor Reddy for inviting me to deliver this address. I will leave this remarkable country truly inspired and I am certain that this is not my last visit to this beautiful country.

L. K. Jha Memorial Lecture

The Growing Importance of Emerging Economies
in the Globalised World and its Implications for
the International Financial Architecture

Jean-Claude Trichet, President,
European Central Bank

*The Growing Importance of Emerging Economies in the Globalised World and its Implications for the International Financial Architecture**

Jean-Claude Trichet

I. Introduction

L.K. Jha was a man of many talents: a distinguished administrator, a diplomat and an eminent economist. He was the first Chairman of the General Agreement on Tariffs and Trade in the late 1950s and Governor of the Reserve Bank of India in the late 1960s. He held several important positions in the Government of India. In the course of his career, L. K. Jha also became a respected member of the Brandt Commission. As some of you perhaps remember, this commission advocated a new world economic order in which the developing countries, including India, would have a more equitable share. L. K. Jha sadly left us about 20 years ago. However, if he and other members of the Brandt Commission were to look at the world economy today, they would be probably surprised to see how much it has changed. And one of the most important of these changes is precisely the growing share of the rapidly developing economies, which we now term the emerging markets, in the global economy. India represents one striking example of this success. Together with other emerging markets, India is playing a crucial role in the process of globalisation of the world we live in.

Some might think that this is a new phenomenon. It is not. India has been at the core of globalisation since its very outset. Let us just remember how it all started. Globalisation did not start 20 years ago, when capital controls around the world began to be lifted. It did not start 50 years ago, when multilateral discussions on trade were launched. Nor did globalisation start 150 years ago, with the industrial revolution. Nor did it start 600 years ago, with the voyage of Christopher Columbus to America. Of course, this voyage marked the linking of two

* Speech by Jean-Claude Trichet, President of the European Central Bank delivered at the Tenth L. K. Jha Memorial Lecture, organised by Reserve Bank of India, Mumbai on November 26, 2007.

continents, Europe and America. But there is one thing which we tend to forget. Christopher Columbus did not want to travel to America. He wanted to reach India! His ambition was not to discover a new continent. It was to open an alternative route to India using knowledge about the spherical nature of the earth to sail directly west across the "Ocean Sea", *i.e.* the Atlantic. India was part of the globalisation process from its very historical outset, as much as it is part of it today.

In this lecture, I would like to share some of my thoughts on the growing importance of India and other emerging economies in the globalised world. This group of economies is not easy to define, I admit. The term "emerging markets" was coined by the World Bank more than a quarter of a century ago, but it only started to become popular in the mid-1990s[1]. From a handful of such economies, mostly in East Asia, the circle has gradually expanded to include several countries in Latin America, central and eastern Europe, and the Middle East, as well as a few countries in Africa[2]. India, alongside Brazil, China and Russia, is among the largest of the emerging markets, which are expected to become the giants of the twenty-first century. But I would also like to offer some reflections on the implications of these changes. Not only are emerging markets becoming larger players in the global economy. They will also need to assume growing responsibilities in a global context. This means that the rules of the game must develop accordingly. And this is notably reflected in important developments over recent years in the international financial architecture, the network of institutions and fora which are involved in the governance of the world economy in macroeconomic and financial matters.

I will therefore elaborate on these two aspects: first, the importance of the emerging markets, which is already significant and is likely to grow further; and second, on the implications of this growing role for the governance of the world economy in macroeconomic and financial matters.

II. The growing importance of the emerging markets in the global economy

The growing importance of the emerging markets is striking in several respects: in demographic terms, in economic terms – both at the macroeconomic level and at the microeconomic level – and, perhaps even more promising, in cultural and scientific terms.

Demographic importance

Consider first population. Emerging market countries are home to over half of the world's population. India, with a population of more than 1.1 billion, is evidently one of the world's two population giants, together with China. But it is also a young giant, which is still growing! Indeed, expected demographic trends suggest that

[1] The term was coined in 1981 by Antoine W. van Agtmael of the International Finance Corporation of the World Bank.

[2] For the purposes of this lecture, the term 'emerging markets' refers to a group of economies selected from the EU's neighbouring regions, Latin America and Asia, in line with the article entitled 'Financial flows to emerging market economies: changing patterns and recent developments' published in the January 2005 issue of the ECB's Monthly Bulletin (pp. 59-73). These economies comprise, on the European fringe, Russia and Turkey; in Latin America, Argentina, Brazil, Chile, Colombia, Mexico and Venezuela; and in Asia, China, Hong Kong SAR, India, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand. This definition may in some instances be slightly modified depending on data availability, however.

India could overtake China as the world's most populous country within the next two decades, according to projections by the United Nations[3]. Moreover, due to the profound economic transformations that are ongoing, many of the emerging markets are faced with rapid urbanisation and massive migrations from rural areas to cities. Cities in emerging markets have therefore grown in size considerably. At present, seven of the ten largest metropolitan areas in the world are located in emerging markets. Mumbai – where I have the privilege of speaking today – is the world's sixth largest city. Its population – about 18 million – compares with that of some industrial countries in their entirety; for instance, it is close to the population of Australia.

Economic importance: macro and micro evidence

The numbers are startling in terms of population, but they are also increasingly impressive in terms of economic size. Emerging markets account for almost 40% of world GDP at purchasing power parity, although still only 20% at market value. While these economies are already large, they continue to grow vigorously, at more than 7% per annum on average over the past six years, over 2% percentage points above the world average. India has been growing even more rapidly, at close to 8% per annum over this period. The emerging markets have therefore become one of the main engines of world growth, with a projected contribution of over a half this year[4]. The vigour of growth in emerging markets and its resilience are good news for all of us. It suggests that the world economy may be better able to rely on the dynamism of these economies, in particular should growth in other regions lose some momentum.

Emerging countries' citizens have reaped the benefits of such rapid development with higher standards of living. Over the last decade, GDP per capita has risen by 30% on average, to reach over USD 9,000. In India, the rise has been even faster, with a doubling of real GDP per capita in the last ten years. The integration of emerging economies into global markets for goods and services has been similarly swift. If you look at world exports of goods and services, the combined share of emerging markets doubled between the early 1990s and 2006, to reach roughly 30%. Again, the integration of India into global markets has been even faster. India's share in world exports of goods and services tripled between the early 1990s and 2006, to close to 1.5%, with a notable acceleration in the last three years, due to dynamic exports of services, of course including IT and IT-enabled services.

Let me turn now to the *microeconomic* evidence for the growing importance of the emerging markets, which is perhaps even more striking. Here are a few examples. Four companies among the world's 20 largest in terms of market value originate from emerging markets[5]. Two oil and gas firms, one Russian and one Chinese, rank in the

3 The period of 'demographic dividends' - characterised by faster labour force than population growth, a support to economic activity - is therefore expected to end in China, but not in India. See R. Cooper , 'How integrated are Chinese and Indian labour into the world economy?', mimeo, February 2006.

4 See IMF, 'World Economic Outlook', September 2007.

5 See Forbes' Global 2000 list (http://www.forbes.com/lists/2007/18/biz_07forbes2000_The-Global-2000_Rank.html).

top ten. Moreover, according to Forbes, seven of the 20 richest individuals in the world are from the emerging markets, with three from India alone[6]. The number of millionaires (in terms of US dollars or euro) is rapidly rising; Forbes estimates that there were some 80,000 in India in 2005[7]. Of course, that is not to say that the challenges posed by income distribution are not among the highest priorities of most emerging market countries, including India. Eliminating poverty is at the top of the agenda.

Long-term economic outlook

The present looks promising for emerging market economies, but the future seems even brighter. The projections for long-term growth, based on demographic trends and models of capital accumulation and productivity, tell us that emerging markets are likely to become even weightier in the world economy tomorrow than they are today. Of course, projections at very distant horizons are somewhat speculative, but they do offer an insight into possible secular developments. In this respect, one study found startling results regarding the growth prospects of emerging markets. India, together with Brazil, Russia and China, could be over half the size of today's six largest industrialised economies by 2025, and in less than 40 years they could overtake them[8]. Looking ahead to 2050, China would be the world's largest economy and India would be its third largest, behind the United States. A similar picture emerges from other studies, with some nuances[9].

If history is any guide, these developments are unsurprising. It suffices to recall how significant India's weight in the world economy was two millennia ago, when the Middle Kingdoms were ruling in India and the Roman empire was ruling in Europe and North Africa. At that time, India was by far the world's largest economic power, accounting alone for about a third of world output[10]. Moreover, at par with China, it subsequently remained the largest economy in the world for several centuries, until the eve of the industrial revolution. Seen from this long-run perspective, the rapidly growing importance of India in today's world economy seems to be a return to normality. The developments we observe today are therefore likely to be the precursor of a profound rebalancing in the distribution of world output tomorrow. These developments call for constant monitoring and cooperation in the international community, however. It cannot be excluded that this process of rebalancing might be "non-linear", with episodes of discontinuity, perhaps also including economic and financial crises somewhere down the line.

Cultural and scientific importance

But allow me to also consider the emerging markets from a different angle,

6 See Forbes' list of billionaires (http://www.forbes.com/lists/2007/10/07billionaires_The-Worlds-Billionaires_Rank.html).

7 See Merrill Lynch and Capgemini, 'World Wealth Report, 10th Anniversary', 1996-2006.

8 See D. Wilson and R. Purushothaman 'Dreaming with BRICs: the path to 2050', Global Economics Paper No 99, Goldman Sachs, 1 October 2003.

9 See *e.g.* J. Hawksworth 'The world in 2005: how big will the major emerging market economies get and how can the OECD compete?', Price Waterhouse Coopers, March 2006; S. Poncet 'The long-term growth prospects of the world economy: horizon 2050', CEPII Working Paper No 2006, October 16, 2006.

10 See A. Maddison *The World Economy: Historical Statistics*, OECD, 2003.

which you will perhaps find surprising for a central banker. We central bankers are known to look at countries through the unexciting lenses of numbers, facts and figures. This is entirely true. But we are convinced that economic figures are closely associated with the scientific overall level of one particular society and that cultural developments and influence are closely related to economic success. It is therefore not surprising that emerging countries are rapidly growing in influence, importance not only economically but also culturally.

Speaking of the cultural and scientific importance of a nation which has historically been at the source of European languages, literature and mathematics is paradoxical!

Turning to the present times, there are a vast array of indicators that underscore the growing influence of the contemporary culture and science of emerging economies in general and of India in particular. Being here in India, I am bound to mention film-making as a first example. As you will know, India is the largest world producer of films, with over 900 in 2005, ahead of the European Union, with about 800, and the United States, with about 700[11]. Of course, this is due to the success of "Bollywood", a label now well-known across the world. Other emerging markets, such as China and Russia, rank among the top ten film producers. Take the internet as a second example. The internet plays a crucial role in making the world more globalised, and here too the weight of emerging markets is already impressive. There are almost as many internet users in India (close to 40 million) as the entire population of a country such as Spain[12]. Asia is the region with the highest number of internet users, even when Japan is excluded, with over 310 million. It is ahead of North America, with 230 million users. Last, consider my final example: the number of Nobel prizes awarded. Here again, emerging market countries are rapidly growing in importance. In the ten years starting from 1980, 24 nationals from emerging market countries were awarded a Nobel prize. Within only six years of the new millennium, this figure is already almost as high (22). All in all, the growth in the economic weight of emerging market countries and the rise in their cultural importance are very much developing in a synchronised manner.

Euro area perspective

Before I move on to the implications of the growing importance of emerging countries for the governance of the world economy in macroeconomic and financial matters, let me briefly tell you how we in the European Central Bank see the growing role of the emerging markets. To us, the message is clear: the growing role of the emerging markets is good news for the euro area, the group of 13, soon to be 15, European countries, with 320 million fellow citizens, that share the euro as their single currency. In particular, vigorous growth in emerging markets increases the demand for those goods and tradable services where the euro area has comparative advantages. Emerging market competition

[11] See European Audiovisual Observatory, 'World film market trends - focus 2006' (http://www.obs.coe.int/oea_publ/market/focus.html).

[12] See Internet World Stats (http://www.internetworldstats.com/stats.htm).

also strengthens the incentives to make further progress in terms of structural reforms in our economies, which are, in any case, needed.

The euro area, in addition, has the potential to take advantage of the new opportunities that the development of the emerging markets creates. Our exports and imports of goods and services account for around one-fifth of GDP, more than in the United States or in Japan. In this respect, the euro area is also increasingly open to the emerging markets. Our trade relations with emerging Asia, Russia and with central and eastern European economies have strengthened noticeably over time. The share of emerging markets, taken together, in euro area trade has grown from about one-third, when the euro was introduced in 1999, to more than 40% today. Trade relations with India have equally strengthened over time. The euro area is also largely open financially. If I focus on emerging markets, perhaps one of the most interesting developments in recent years is that the euro area has become an increasingly attractive destination for foreign direct investment from the largest of these economies, although starting from very low levels. Indeed, between 1999 and 2005 the stock of foreign direct investment from Brazil, Russia, India and China in the euro area tripled, to reach around € 12 billion. This is good news, as these investments represent a new source of capital, with potentially beneficial effects on euro area growth. Moreover, they might help European firms access emerging markets more easily than on their own.

The bottom line of my brief overview is: emerging market countries are increasingly important global players in all dimensions, be they economic, financial, cultural or scientific. This is a welcome, systemic, development. In turn, this has important implications for the governance of the global economic and financial system. What are indeed these implications? This is the second issue I would like to address today.

III. Implications for the international financial architecture

It is evident that the systemic evolution we are witnessing in the global economic and financial system calls for systematic changes in the global policy framework. There are new players. They are gaining in importance. This means that they also have more responsibilities in the global arena and that the rules of the game need to adapt in order to keep pace.

But there is another reason. Globalisation has put all economies around the globe in the same boat. Something that happens in one economy is often no longer a mere domestic event. Its implications can sometimes extend to the entire global system. Remember how twelve years ago the Tesobonos crisis in Mexico developed from a local phenomenon into an issue for the international financial community[13]. Remember the Asian crisis[14]. Remember how the global system had to

[13] See, for instance, S. Edwards, 'On crisis prevention: lessons from Mexico and East Asia', NBER Working Paper, No. 7233, July 1999.

[14] For an overview of the lessons to be drawn from the Asian crisis, see T. Ito *et al.*, 'Ten Years After the Asian Crisis: What Have We Learned or Not Learned?', Editors' Overview, Asian Economic Policy Review, June 2007 - Vol. 2, issue 1, pp. 1-17.

digest crises in Russia and Argentina as well as the bursting of the technology bubble around the turn of the millennium[15]. All economies which have a systemic importance should therefore be involved in discussing and participating in the collegial response of the international community to issues of global relevance.

This is why the governance of the world economy in macroeconomic and financial matters has been changing rapidly in terms of both format and substance.

Implications for the format

Consider first format. The various international institutions and fora which are involved in international policy dialogue on macroeconomic and financial affairs have strived over the past ten years or so to better integrate emerging markets. Let me take three examples. One of the most important of these fora is the Group of Seven or G7, where finance ministers and central bank governors of the seven most important industrialised nations of the world meet several times a year to discuss issues of mutual interest. The G5, soon to become the G7, was created as an informal forum in the 1970s. It is sometimes criticised for not reflecting the political and economic realities of the twenty-first century. I have had the privilege of attending all its meetings over the past 18 years. My experience is that the G7 meetings have proven an invaluable forum for cooperation on macroeconomic policies and for giving, when appropriate, signals to market participants. The G7 is adapting to the new political and economic realities through what is termed "outreach". The G7 countries have acknowledged the necessity of involving other players in their discussions. In particular, it is now standard practice for finance ministers and governors from emerging economies – and sometimes also from developing countries – to be invited to join these discussions. This is the case for oil-producing countries, in particular. For instance, in spring 2006 finance ministers from certain oil-exporting countries joined the G7 in a discussion on global imbalances.

At the level of heads of state and government another important step was made a few months ago. A new form of informal cooperation between G8 members (*i.e.* the Group of Seven and Russia) and important emerging economies has been launched. Challenges have become global. Global challenges require global solutions. And global solutions cannot be found without the active participation of important players, from both mature and emerging market economies. India is of course part of these important emerging economies, as are Brazil, China, Mexico and South Africa. At their meeting in Heiligendamm last summer, the G8 countries and these important emerging economies committed to embark on a high-level dialogue on issues of global dimension, issues which will be at the top of the agenda in the years ahead. They include, for instance, cross-border investment, research and innovation, energy efficiency and development. The Heiligendamm process is a very welcome one.

The creation of the informal grouping of the G20 in 1999 is a major change in global governance, fully taking into account

[15] In particular, on the Russian crisis see e.g. B. Pinto, E. Gurvich and S. Ulatov, 'Lessons from the Russian Crisis of 1998 and Recovery, Managing Volatility and Crises: A Practitioner's Guide, 2004, draft.

the structural transformation associated with the growing importance of the emerging economies. It was created to examine major economic and financial global issues at the time of the Asian crisis, fully recognising that all economies that had a systemic influence should be partners at the global level.

Since 1999 the G20 has turned out to be a very important international policy forum for dialogue and consensus-building among systemically important economies, both industrialised and emerging. India held its presidency in 2002. I have a very vivid memory of this meeting in Delhi where, for the first time, the international community through the G20 endorsed the idea of the voluntary "Principles" for prevention and solution of sovereign crises, which I had myself suggested when it appeared that the "SDRM" was not workable. The G20 has facilitated consensus on crucial policy issues of the international reform agenda. It has organised several workshops to deepen the understanding of issues of global relevance and has engaged in a process of peer review to promote countries' implementation of market-based economic systems. In the early years of its existence, the G20 put special emphasis on financial stability and crisis prevention, including aspects such as prudent debt management, domestic financial deepening and exchange rate regimes. Its agenda has widened since then. It now includes also the global policy challenges ahead of us, such as development, energy and climate change. In my view, it is the format of the G20 which makes it a success. Not too large, not too small! Its composition and size strike a balance between giving the G20 a high degree of legitimacy while at the same time also allowing frank dialogue between the members. In recent years, the G20 has also played an active role in contributing to the reform of the Bretton Woods institutions, the International Monetary Fund (IMF) and the World Bank. It has been committed to strengthening their credibility, effectiveness and legitimacy. It has also followed closely the progress made with policy and internal governance issues.

Alongside the G7 and the G20, significant reform efforts are indeed under way at the IMF to adapt the institution to a new environment and a new set of players. This is my last example of the substantial developments that the governance of the world economy is experiencing in terms of format. The key issues here are quota and voice, two important elements defining the representation of Fund members[16]. In addition, the way the IMF carries out its policy work is changing. For instance, last year saw the launch of the first multilateral consultations, an innovative approach that aims to bring together countries with a shared responsibility for global issues. These first multilateral consultations were dedicated to one of the key risks weighing on the world economy, namely global imbalances. The consultations involved both mature and emerging economies, including the euro area, the United States, Japan, China and Saudi Arabia, again illustrating the fact that large current imbalances are no longer an issue for mature economies only, but a truly global issue. We at the ECB welcomed these

[16] See, for instance, M. Skala, C. Thimann and R. Wölfinger 'The search for Columbus' egg - finding a new formula to determine quotas at the IMF', ECB Occasional Paper, no. 70, August 2007.

discussions as a way to foster the implementation of the agreed strategy to address global imbalances. Evidently, these discussions are also of relevance to India. Large current account imbalances worldwide go hand-in-hand with sizeable cross-border capital flows. India has been confronted with challenges posed by strong capital inflows. This is why addressing imbalances is in the interest of the international community as a whole.

Implications for the substance

Not only the form but also the substance of the governance of the world economy in macroeconomic and financial matters is changing. This will be my last point. The macroeconomic and financial situation in emerging economies today looks strong. But we know it was not always so. We have seen both good and bad times. This is why many initiatives have been taken to strengthen the resilience of countries' macroeconomic and financial performance and policies following the string of crises of the 1980s and 1990s. Reforms can obviously take many forms. But there are three guiding principles which, in my view, should always be kept in mind: transparency, good practices and dialogue.

Allow me to take transparency first. Investors, borrowers, lenders and economic agents in general cannot make proper decisions without adequate information[17]. Easy access to information facilitates investment decisions, the management of risk and market discipline. This in turn gives appropriate incentives in the conduct of macroeconomic and structural policies. Easy access to information also allows investors to better differentiate across economies, borrowers and companies. Ultimately, this helps to lessen herding behaviour and contagion when market volatility increases. This is why transparency is so crucial. And in recent years, a lot of progress has been made to enhance transparency and to facilitate access to information as well as its dissemination to market participants. I give you one example. Ten years ago, the nature of economic and financial data and the way they were reported varied significantly across countries. Even simple concepts, such as debt, could be understood very differently around the world. This severely constrained our ability to compare financial vulnerability across countries. But thanks to work carried out at the IMF, the special standards for dissemination of economic and financial data have become a widely recognised benchmark to which a large and increasing number of countries adhere. Of course, there are still areas where more work needs to be done. One of them, for instance, is the reporting to the IMF on the currency composition of countries' foreign exchange reserves. But overall, things are moving in the right direction.

Adopting good practices is a second principle which should continue to guide our efforts in reforming the governance of the world economy in macroeconomic and financial matters. Here again, there have been a number of achievements. A large array of standards and codes for macroeconomic and data transparency,

[17] For recent - more formal - treatment of the role of information and transparency see, *e.g.*, D. Kahneman, 'Maps of Bounded Rationality: Psychology for Behavioral Economics', American Economic Review, 2003, 93 (5), pp. 1449-75 or S. Morris and H.S. Shin, 'Social value of public information'', American Economic Review, 2002, 92(5), pp. 1521-1534.

banking supervision, corporate governance, accounting, and payment and settlement systems have been subject to international agreements. Such standards bring together what is widely considered as good practice or guidelines in a particular domain. They enhance domestic and international stability. In this respect, the IMF and the Financial Stability Forum – the only forum for cooperation among national and international entities in charge of supervision – have singled out 12 of these standards as being of particular importance for a sound and stable economic and financial system. But the work of the international community has gone beyond standard-setting. It now also focuses on implementation. Progress has been made towards publicly examining countries' compliance with standards and codes. And there is one important lesson that we can draw from this experience. The international community does not always need to rely on rules and unilateral enforcement to make progress on certain fronts. Goodwill and, at times, peer pressure, can also work.

Closely related to this is the need to maintain a constant dialogue between the public and private sectors, the last principle to bear in mind in reforming the international financial architecture. Principles agreed by all relevant players on a voluntary basis can at times be preferable to rules decided and enforced unilaterally by public authorities. This proved to be particularly true for the "Principles for stable capital flows and fair debt restructuring in emerging markets" that – as I already mentioned – were endorsed by the G20 in Delhi in 2002. Following defaults on the part of several emerging market borrowers, the international community realised the need to resolve financial crises in a more orderly fashion and to improve sovereign debt restructuring mechanisms. Debtor countries and private investors agreed on best practices and guidelines for information-sharing, dialogue and close cooperation both in normal times and in periods of financial distress. Since I suggested myself such a voluntary code of conduct at the IMF Annual Meetings in 2001, I am glad to see that these principles are increasingly recognised as an important framework for cooperative action by debtors and creditors. But looking ahead, they might also serve as an example in other domains. One such domain, for instance, could be the sector of highly leveraged and non-regulated entities – which could develop as actively as possible voluntary benchmarks for good practices, as also recommended by the Financial Stability Forum.

IV. Concluding remarks

New continents are not discovered every day. When Christopher Columbus died in 1506 in Valladolid, he was still convinced that his journeys had taken him to the coasts of India, and not to America. It is indeed always difficult to identify change, especially when such change is systemic. What we have seen in the last 20 years since L. K. Jha left us is such systemic change. And we have learned that we have to be ready for it.

We have learned indeed that the world economy is changing constantly. The emerging economies, which played a relatively modest role in the global economy 20 years ago, occupy a far more important place today, but one which will be dwarfed in importance by their role in the future.

We have further learned that, since the world economy is evolving constantly, the rules of the game have to be continuously adapted. International institutions and fora are changing and adjusting. Many initiatives have been taken and implemented. Altogether this should help make the global economic and financial system more resilient.

But we have also learned that it is never time for complacency. The next crisis is always different from the previous one. Both industrialised and emerging countries have to continue to work to keep up with new developments and challenges. Efforts to ensure global stability and prevent crises have to be made constantly, by all of us, and should be guided by the principles of transparency, good practices and dialogue between relevant players.

In this context, I am confident that mature and emerging economies, among them India, will continue to work in close cooperation in the years ahead to ensure that these important goals are met.

Speeches

*Evolving role of the Reserve Bank of India: Recent Developments**

Y.V. Reddy

I am indeed thankful to the Institute of Development Studies and Professor Vyas for providing me this opportunity to share my thoughts with you today on the "Evolving role of the Reserve Bank of India: Recent Developments".

My association with Professor Vyas has been long, but it became closer since November 2000, when he was appointed as a director on the Central Board of the Reserve Bank of India. Professor Vyas was also the Chairman of the 'Advisory Committee on Flow of Credit to Agriculture and Related Activities from the Banking System', which was constituted by the Reserve Bank in December 2003. Many of the recommendations of the Committee have since been implemented with good results. Professor Vyas is easily among the most eminent agricultural economists of the world and had been associated with the Food and Agriculture Organisation of the United Nations, where he made a significant contribution. As a person, he is extremely soft spoken and very scholarly, but his scholarship and erudition sit very lightly on his shoulders. Humility is a trait which comes very naturally to him. It is my pleasure and honour to be here at his invitation.

The Institute of Development Studies, set up in 1981 at the initiative of a group of academic scholars and the Government of Rajasthan, has had the benefit of Professor Vyas' leadership. The Institute aims to contribute to the understanding of the development processes broadly defined, besides providing a forum for better understanding of the issues involved in resolving the problems unique to the State of Rajasthan. Given the track record of the Institute, I am confident that it will continue

* Speech delivered by Dr. Y V Reddy, Governor, Reserve Bank of India on the occasion of the Foundation Day of the Institute of Development Studies, Jaipur on June 30, 2007 (edited version). Dr. Reddy is thankful to Mr.Kanagasabapathy, Adviser-in-Charge (Retd.), Reserve Bank of India, for his valuable advice.

to make a meaningful contribution to the development process of the Indian economy in general and of Rajasthan in particular – especially those of bypassed sections.

I. Evolving Role of the Reserve Bank

The Reserve Bank, established through the Reserve Bank of India Act, 1934 commenced its operations in 1935. It draws its powers and responsibilities through other legislations also such as the Banking Regulation Act, 1949. The Reserve Bank has over the years been responding to changing economic circumstances and these organisational developments have been documented in a recent Report on Currency and Finance for the year 2004-05, the theme of which was "The Evolution of Central Banking in India". Today, I would like to highlight some recent developments and discuss certain issues of contemporary relevance relating to the evolving role of the Reserve Bank.

First, compared with several countries which introduced rapid reforms in central banking law and governance in the last about two decades, the Indian experience reflects an evolution or adaptation of central banking to new economic realities. These changes were brought about both through some legislative measures and changes in operating procedures.

Second, this evolution has *inter alia* contributed to imparting some autonomy to the central bank, *de facto*, particularly in the areas of monetary management and financial regulation.

Third, in sharp contrast to the situation before 1991, since then, apart from a transparent communications policy and a broad based consultative approach to policy making, Governors' speeches and appearances on the electronic media and the press have been substantial, having significant influence on markets and opinions. In the process, the Reserve Bank has gained reputational bonus and public credibility.

Fourth, thanks to related developments in the last 15 years, financial and external sectors in India have also become relatively more efficient and resilient.

Fifth, while the effectiveness of monetary policy has improved significantly to meet the evolving demands, some constraints are persisting, which impact the choice and effectiveness of our policy framework.

In reviewing the evolving role of the Reserve Bank, it is necessary to distinguish between an exclusive monetary authority and a generic central bank, which performs not only monetary functions, but also other functions, in particular, banking supervision. A recent survey by the Bank for International Settlements (BIS) has shown that over sixty per cent of central banks across developed and developing countries have banking supervisor's role exercised by a central bank. India has adopted a middle path. Banking Supervision continues to be with the Reserve Bank, but it has been accorded a distinct semi-independent status. A Board for Financial Supervision (BFS), a Committee of the Central Board of the Reserve Bank, was set up in 1994 and meets at least once a month to guide and oversee the Reserve Bank's supervisory functions. The BFS includes four independent members drawn from the Central Board of Directors of the

Reserve Bank with relevant professional background and experience.

While it is true that globally the general tendency recently has been to stress the independence or autonomy of central banks in general and monetary management in particular, this has been brought about by different countries in a variety of means: constitutional changes, legal amendments, treaty, obligations, policy reorientation or by changes in practices, procedures and overall environment of public policy. Evolution, thus, does not exclude legislative changes to meet the challenges of globalisation and new economic realities, though in India most changes have thus far been effected within the basic structure of the original legislation in terms of mandate, governance procedures and instruments. A notable legislative measure in the recent past (The Reserve Bank of India Amendment Act, 2006) nevertheless relates to greater flexibility to the Reserve Bank in regard to cash reserve requirements, deployment of forex reserves, and clarity in regulation over money, forex and government securities markets.

The independence of a central bank sometimes is rigidly associated with a single objective, such as price stability. But, in practice, there are many instances of dual or multiple objectives with equal or different weights and there are many cases of hierarchy of objectives for a central bank. In the overall context of its policy and operations, the Reserve Bank in practice is subject to the current legal framework and operates as a monetary authority with multiple objectives and multiple functions assigned to it. Within such a mandate, efforts are made to (a) articulate the hierarchy of objectives in a given context; (b) impart transparency through enhanced communication, emphasise participative nature of decision making in its activities, including monetary management, through advisory committees; and (c) move towards greater autonomy in operations relating to monetary policy while ensuring harmony in macro policies in coordination with the government.

II. The Reserve Bank Autonomy*: De jure versus De facto*

The Reserve Bank was established under the Reserve Bank of India Act, 1934 on April 1, 1935 as a private shareholders' bank, but since its nationalisation in 1949, is fully owned by the Government of India. The Reserve Bank is placed under the Entry 38 of List 1 of Schedule VII of the Constitution of India, which is the Union List.

The Preamble to the RBI Act describes the basic objective as "*to regulate the issue of Bank notes and keeping of reserves with a view to securing monetary stability in India and generally, to operate the currency and credit system of the country to its advantage*". Thus, there is no explicit mandate for price-stability or formal inflation targeting. The twin objectives of monetary policy in India have evolved over the years as those of maintaining price stability and ensuring adequate flow of credit to facilitate the growth process. The relative emphasis between the twin objectives is modulated as per the prevailing circumstances and is articulated in the policy statements. Consideration of macroeconomic and financial stability is also subsumed in the articulation of policy.

The Reserve Bank is also entrusted with the management of foreign exchange reserves, which are reflected in its balance sheet. While the Reserve Bank is essentially a monetary authority, its founding statute mandates it to be the manager of public debt of the Government of India and banker to the Government. In terms of Section 20 of the RBI Act 1934, the Reserve Bank has the obligation to undertake the receipts and payments of the Central Government and to carry out the exchange, remittance and other banking operations, including the management of the public debt of the Union. In the recent past, a functional separation of monetary and debt management was debated and the Union Budget for 2007-08 has announced a proposal to setting up of an autonomous Debt Management Office to keep the debt management distinct from monetary management. Further, as per Section 21 of the said Act, the Reserve Bank has the right to transact Government business of the Union in India.

While, as per statute, the Reserve Bank is the monetary authority of the country, the Reserve Bank has also been entrusted with the work relating to Banking Regulation and Supervision by an enactment in 1949. The Reserve Bank exercised a tight regime of exchange control particularly under the Foreign Exchange Regulation Act (FERA), 1973; but, a qualitative change was brought about in the legal framework to enable liberalisation by the enactment of the Foreign Exchange Management Act (FEMA) in June 2000 replacing the earlier FERA. With this, the objectives of regulation have been redefined as facilitating trade and payments as well as orderly development and functioning of foreign exchange market in India.

It is significant to note that the RBI Act, Section 19 precludes the Reserve Bank from performing certain business which protects the integrity of the institution, such as trading or taking any direct interest in commercial, industrial or other undertaking, purchasing shares or giving loans against shares, and advancing money on security of immovable property, drawing or accepting bills payable otherwise than on demand. Because of the last provision, the Reserve Bank evolved the Market Stabilisation Scheme through an MoU with the Government, for undertaking stabilisation operations.

On practical considerations, central bank independence may be viewed as related broadly to three areas, *viz.*, management including personnel matters; financial aspects; and conduct of policy. Managerial independence refers to the procedures for appointment, term of office and dismissal procedures of top central bank officials and the governing board. It also includes the extent and nature of representation of the Government in the governing body of the central bank and Government's powers to issue directions. Financial independence relates to the freedom of the central bank to decide the extent to which Government expenditure is either directly or indirectly financed *via* central bank credits. Direct or automatic access of the Government to central bank credits would naturally imply that monetary policy is subordinated to fiscal policy. Finally, policy independence is related to the flexibility given to the central bank in the formulation and execution of monetary policy, under a given mandate.

While the Central Government may give such directions to the Reserve Bank after consulting the Governor as it may consider necessary in the public interest, the overall management of the Bank's affairs and business rests with the Central Board of Directors. The Governor is appointed by the Central Government and may be removed from office without specifying any reason. All Deputy Governors are also appointed by the Central Government and may be similarly removed. All Directors of the Central Board are nominated by the Central Government with one Government official as a participant in the Board deliberations. The Directors hold office during the pleasure of the Central Government which can also supersede the Reserve Bank's Central Board.

The staffing pattern is left to the Reserve Bank, but rules governing their service conditions and compensation are not out of alignment with public sector in general and banking sector in particular. There is legal protection to the Bank and also to its officers for actions taken in good faith. There have been no noticeable changes in the recent past in the relationship between the Government and the Reserve Bank on managerial/personnel matters.

On financial aspects of the Reserve Bank *vis-à-vis* Government, however, there have been several positive developments. Since the 1990s, as the case for according greater operational flexibility to the Reserve Bank in the conduct of monetary policy and regulation of the financial system became stronger, the practice of automatic monetisation of the Government's fiscal deficit through the issue of *ad hoc* treasury bills came under severe criticism (Rangarajan, 1993). In subsequent years, the phasing out of automatic monetisation of fiscal deficits by 1997 and the enactment of FRBM legislation in 2003 are two important milestones in the direction of providing safeguards to monetary policy from the consequences of expansionary fiscal policy and ensuring a degree of *de facto* autonomy of the Reserve Bank.

It is interesting to note that the above autonomy in financial matters was obtained by the Reserve Bank through exchange of letters and agreements whereby automatic monetisation through *ad hoc* Treasury Bills was discontinued since April 1997. The Fiscal Responsibility and Budget Management (FRBM) Act, 2003, further strengthened the position by prohibiting the Reserve Bank from participating in primary issuances of all government securities.

The Reserve Bank has gradually withdrawn from the practice of providing concessional finance or refinance for specified sectors such as agriculture, industry and export, though the legal provisions continue to enable it. In the same view, as part of strengthening monetary management, only notional provisions are made out of the Reserve Bank profits for Agriculture, Industrial and Housing Credit Funds. No doubt, there are persistent demands on the Reserve Bank to reverse the process, but the Reserve Bank advocates direct fiscal support to development activities so as to be transparent, accountable and quantifiable rather than through monetary operations of the Reserve Bank, which would tantamount to quasi-fiscal operations.

Transfer of the balance of profits, after necessary provisions, to the Central Government has been rationalised as part of the reform process in 1997. The present arrangement is governed by the objective of reaching a stipulated level of reserves in the Reserve Bank's balance sheet over a period – though the timeframe to reach the level is extended by mutual consent to accommodate immediate fiscal compulsions.

In technical parlance, accountability of an institution like the Reserve Bank goes together with a specific mandate and operational independence or autonomy to achieve the said mandate. In the absence of these, in practice, the Reserve Bank is accountable indirectly to Parliament through the Ministry of Finance, Government of India. At times, it is summoned by Parliamentary Committees, and even in such cases, it generally plays only a supportive role to the executive wing of the government.

In a recent IMF Working Paper published in April 2007, where the indices of central bank autonomy have been calculated for 163 central banks as of end-2003, in a group of 32 emerging markets, India has scored 0.25 for political autonomy of the central bank as against the average score of 0.56 for the group of emerging markets and scored 0.75 for economic autonomy of the central bank which is the same as the average score for that group.

Dr. Bimal Jalan at the time of laying down office as Governor in 2003 remarked: "the autonomy of a central bank is best set by convention rather than by statute, especially in emerging countries. There should be harmony between the government and the central bank with shared objectives, though the instrumentalities in achieving the objectives may be different".

Harmonious relations between Government and the Reserve Bank have no doubt generally contributed to the successful policy outcomes thus far, but it would not be appropriate to conclude that there are no differences in analysis, approaches, judgements and instrumentalities. In the given legal and cultural context, while making every effort to give its views either informally or formally, but as unambiguously as possible, Reserve Bank generally respects the wishes and final inclination of the government. The Reserve Bank, however, has to accept the responsibility for all its decisions and actions, while being generally conscious of the impact of its articulation and actions on the credibility for central banks operations. The Government, for its part, recognises the dilemmas posed to the Reserve Bank, and accord significant weight to central bank's judgements.

In sum, *de jure,* the Reserve Bank has not been accorded autonomy on par with recent trends in some of the industrialised as well as emerging economies; but, *de facto,* the experience reflects a growing degree of autonomy. During the period of reform since 1991, there has been a gradual and mutually agreed progress towards greater autonomy in matters relating particularly to financial markets and, in the conduct of monetary policy.

III. Monetary Policy Framework

The preamble to the Reserve Bank of India Act, 1934 sets out in a way broadly the tone of the Reserve Bank's monetary policy objectives: "to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in

India and generally to operate the currency and credit system of the country to its advantage". I can do no better than quote one of my distinguished predecessor and current Chairman, Economic Advisory Council to the Prime Minister, Dr. C. Rangarajan on this subject:

''In a broad sense, the objectives of monetary policy can be no different from the overall objectives of economic policy. The broad objectives of monetary policy in India have been: (a) to maintain a reasonable degree of price stability; and (b) to help accelerate the rate of economic growth. The emphasis as between the two objectives has changed from year to year, depending upon the prevailing conditions." (1997)

Thus, although, unlike the current trend in many countries, there is no explicit mandate for price stability, the twin objectives of monetary policy in India have evolved as those of maintaining price stability and ensuring adequate flow of credit to the productive sectors of the economy. Of late, considerations of macroeconomic and financial stability have assumed an added importance in view of increasing openness of the Indian economy.

In India, the broad money (M3) emerged as the nominal anchor from the mid-1980s based on the premise of a stable relationship between money, output and prices. In the late 1990s, in view of the ongoing financial openness and increasing evidence of changes in the underlying transmission mechanism with interest rates and exchange rates gaining in importance *vis-à-vis* quantity variables, it was felt that monetary policy exclusively based on the demand function for money could lack precision. The Reserve Bank, therefore, formally adopted a multiple indicator approach in April 1998 whereby interest rates or rates of return in different financial markets along with data on currency, credit, trade, capital flows, fiscal position, inflation, exchange rate, *etc.*, are juxtaposed with the output data for drawing policy perspectives. Such a shift was gradual and a logical outcome of measures taken during the reform period since the early 1990s. The switchover to a multiple indicator approach provided necessary flexibility to respond more effectively to changes in domestic and international economic environment and financial market conditions.

In the context of monetary policy making, let me highlight some recent developments:

First, the availability of instruments to manage, in the context of large capital flows and sterilisation, has been strengthened with open market operations through Market Stabilisation Scheme (MSS), which was introduced in April 2004. Under the MSS, the Reserve Bank was allowed to issue government securities as part of liquidity sterilisation operations in the wake of large capital inflows and surplus liquidity conditions. While these issuances do not provide budgetary support, interest costs are borne by the fisc; as far as Government securities market is concerned, these securities are also traded in the secondary market, on par with the other government stock.

Second, another development in the recent period has been to fix a numeraire to inflation. The Reserve Bank's self-imposed medium-term ceiling on inflation at 5.0 per cent has had salutary effect on inflation expectations and the socially tolerable rate of inflation has come down. In recognition of India's evolving integration with the global economy and societal preferences in this regard, going forward, the resolve would be to condition policy and expectations for inflation in the range of 4.0-4.5 per cent. This would help in maintaining self accelerating growth, keeping in view the desirability of medium-term inflation at around 3 per cent to ensure India's smooth global integration.

Third, while the preferred instruments are indirect, and varied, there is no hesitation in taking recourse to direct instruments also, if circumstances so warrant. In fact, complex situations do warrant the dynamics of different combination of direct and indirect instruments, in multiple forms, to suit the conditions affecting transmission mechanism.

Fourth, there are occasions when the medium-term goals, say reduction in cash reserve ratio for banks, conflict with short-term compulsions of monetary management requiring actions in both directions. Such operations do warrant attention to appropriate articulation to ensure policy credibility. Drawing a distinction between medium-term reform goals and flexibility in short-term management is considered something critical in the current Indian policy environment.

Fifth, while there is considerable merit in maintaining a broad distinction between monetary and prudential policies of the central bank, the Reserve Bank did not hesitate, as a complement to monetary tightening, to enhance the provisioning requirements and risk weights for select categories of banking assets, namely real estate, housing and capital market exposures. These measures were needed to specifically address the issues of rapidly escalating asset prices and the possible impact on banks' balance sheets in a bank dominated financial sector. This combination, and more important, readiness of the Reserve Bank to use all instruments, has a credible impact, without undue restraint on growth impulses.

Sixth, some of the important factors that shaped the changes in monetary policy framework and operating procedures in India during the 1990s were the delinking of budget deficit from its automatic monetisation by the Reserve Bank, deregulation of interest rates, and development of the financial markets with reduced segmentation through better linkages and development of appropriate trading, payments and settlement systems along with technological infrastructure. With the enactment of the FRBM Act in 2003, the Reserve Bank has withdrawn from participating in the primary issues of the Central Government securities with effect from April 2006. The recent legislative amendments enable a flexible use of the CRR for monetary management, without being constrained by a statutory floor or ceiling on the level of the CRR. The amendments also removed the statutory floor of 25 per cent on the Statutory Liquidity Ratio (SLR) – which would further improve the scope for flexible liquidity management by the Reserve Bank.

IV. Major Issues in Analytics of Monetary Policies

Let me now discuss some major issues in the analytics of monetary policy in India. It is generally recognised that monetary policy framework, to be efficient and effective requires a reasonable assessment of potential output, a measure of unemployment, and above all a convincing measure of inflation. Monetary authorities are acutely aware of inherent and growing difficulties in regard to all these three but in India, perhaps the problems are less than fully appreciated.

First, the measurement of potential output, a key prerequisite for forward looking monetary policy, is generally difficult and more so in an increasingly globalising economies like India. Recent studies have shown that the measurement of potential output is extremely sensitive to the choice of methodology. In respect of India, empirical exercises have projected potential output in India in the range of 6 to 8 per cent, based on alternative approaches (Ranjan *et al*, 2007). Besides the wide range of estimates, which in itself is indicative of the uncertainties surrounding potential output, it needs to be noted that these estimates do not fully factor-in fast and significant structural changes of the more recent period which are expected to have a positive impact on potential output. Similarly, reliable estimates of inventories, unit labour costs, coefficient of capacity utilisation and the like, which can serve as proximate determinants of potential output, are not readily available. Thus, what would appear in standard analysis as an elegant formulation of the monetary policy operating rule is extremely difficult to estimate and fashion, in terms of policy formulation, in India.

Second, lack of an economy-wide measure of the rate of unemployment makes the conduct of monetary policy in India complex. While framing appropriate policy responses to trends in output and inflation, policymakers would like to make some assessment as to whether the economy is operating beyond or short of full employment. In the absence of comprehensive data on employment, any measure of the natural rate of unemployment (NRU) would be inadequate for policy formulation. Given that only a small part of the Indian labour force, say about 10 per cent, is employed in the organised sector and the greater majority is in the unorganised sector, estimation of unemployment is rendered difficult. Moreover, even within the organised sector, the process of gradual outsourcing of jobs compounds the problem of measurement.

A third set of issues which represents a gap in monetary policy analysis and, therefore, a constraint on operational autonomy, is the assessment of inflationary pressures in the economy. In terms of commodity prices, the issue relates to the choice of price index and the Reserve Bank has to depend on those which are readily available. In India, there are two sets of indices, *viz.*, wholesale price index (WPI) and consumer price indices (CPIs). The latter is based on occupational classification and category of residence (rural or urban). Four broad measures of CPIs are available at the national level to capture prices of a defined basket of goods and services consumed by a particular segment of the population : (i) CPI for Agricultural Labourers (CPI-AL); (ii) CPI for Rural Labourers (CPI-RL); (iii) CPI for Industrial Workers (CPI-IW); and (iv) CPI for Urban Non-Manual Employees (CPI-UNME). While these various measures of CPI do move together in the long run, significant variations are observed in the short-run. Moreover, food and fuel items together, having a weight of 52.6 per cent in CP-IW, are prone to supply shocks, both domestic and global, which contribute to sudden spikes in the inflation rate. As a result, this renders the assessment of inflationary pressures difficult which, in turn, complicates the process of monetary policy formulation. The recommendation of the National Statistical Commission (NSC) regarding the importance of developing an appropriate index is relevant in this regard and, when implemented, may alleviate the situation. The NSC has recommended:

"As the current CPI series does not provide changes in the prices for the entire rural and urban population since they are designed to measure the changes in the prices of goods and services consumed by specific segments of the population, there is a need to compile the CPI separately for the entire rural and urban population. TAC on SPCL should give a methodology for compilation of CPI of rural and urban areas separately using quinquennial NSS Consumer Expenditure Survey Data for the preparation of the weighting diagram. TAC should also give a procedure for compiling a combined index based on these two indices. The existing system of price data collection should be suitably streamlined and augmented so as to provide price data for compilation of CPI for rural and urban areas."

V. Instruments and Transmission of Monetary Policy: Dynamics

The instruments that the central bank uses in day-to-day implementation of monetary policy can be broadly classified into direct and indirect instruments. Typically, direct instruments include cash and/ or liquidity reserve ratios, directed credit and administered interest rates. The indirect instruments generally operate through price channel which cover repurchase (repos) and outright transactions in securities (open market operations), standing facilities (refinance) and market-based discount window. The Reserve Bank currently uses multiple instruments to ensure that appropriate liquidity is maintained in the system, consistent with the objective of price stability, so that all legitimate requirements of credit are met. Towards this end, the Reserve Bank pursues, *inter alia*, a policy of active management of liquidity through open market operations including liquidity adjustment facility (LAF), market stabilisation scheme and cash reserve ratio, and deploys the policy instruments at its disposal, flexibly, as warranted by the situation. Changes in fixed reverse repo/repo rates set by the RBI from time to time for the conduct of its LAF, under which the central bank conducts daily auctions for the banks, have emerged as the main instruments for interest rate signalling in the Indian economy. Institutional mechanisms have been evolved in parallel to improve transparency and communication of monetary policy.

Traditionally, four key channels of monetary policy transmission are identified, *viz.*, interest rate, credit aggregates, asset prices and exchange rate channels. The interest rate channel emerges as the dominant transmission mechanism of monetary policy. Nevertheless, it is fair to regard the credit channel as running alongside the interest rate channel to produce monetary effects on real activity. Changes in interest rates by the monetary authorities also induce movements in asset prices, which generate wealth effects in terms of market valuations of financial assets and liabilities. With the increasing integration of the Indian economy with the global economy the significance of exchange rate channel has increased. In the recent period, a fifth channel – expectations – has assumed prominence in the conduct of forward-looking monetary policy in view of its influence on the traditional four channels.

In a market-oriented economy, policy signals are transmitted through an integrated and efficient money, government securities and foreign exchange markets combined with a robust payments and settlement system. The Reserve Bank has therefore, been engaged in developing, widening and deepening of various markets and institutions. Development of these markets has been done in a calibrated, sequenced and careful manner such that these developments are in step with those in other markets in the real sector. The sequencing has also been informed by the need to develop market infrastructure, technology and capabilities of market participants and financial institutions in a consistent manner.

A wide range of regulatory and institutional reforms were introduced in a planned manner over a period to improve the efficiency of financial markets. These included development of market micro structure, removal of structural bottlenecks, introduction / diversification of new players / instruments, free pricing of financial assets, relaxation of quantitative restrictions, better regulatory systems, introduction of new technology, improvement in trading infrastructure, clearing and settlement practices and greater transparency. Prudential norms were introduced early in the reform phase, followed by interest rate deregulation and gradual lowering of statutory pre-emptions. These policies were supplemented by strengthening of institutions, encouraging good market practices, rationalised tax structures and enabling legislative and accounting framework.

Going forward, a judicious mix of appropriate policy, strong macro economy and a sound and resilient financial system would be necessary as the Indian economy moves up in the ladder from an emerging market economy towards a more mature economy. As development of financial markets is an ongoing process, initiatives to further deepen and widen the various segments of financial markets would have to be continuously pursued. As the economy ascends a higher growth path, with greater opening up and financial integration with the rest of the world, the financial sector development in all its aspects will need further scaling up along with corresponding measures to continue regulatory modernisation and strengthening. Since the overall objective of maintaining price stability in the context of economic growth and financial stability will remain, the effort will be to harmonise the deregulation and liberalisation of financial markets with the domestic developments in real as well as fiscal sectors and global developments in international financial architecture. The medium-term framework is to keep developing the financial markets, preserving the integrity of financial markets and thereby, improving the transmission of monetary policy impulses.

VI. Constraints on Conduct of Monetary Policy

The reform period in India is characterised by gradual but impressive improvements in effectiveness of monetary policy. High growth along with price and financial stability has been maintained while improving the sophistication and effectiveness of monetary policy. There have been three important constraints on conduct of monetary policy even within the existing legal framework but these are being gradually overcome.

First, the fiscal dominance which, no doubt, is getting reduced, impedes the efficient conduct of monetary policy. Progress in this regard is conducive to improved monetary management.

Second, the predominance of publicly-owned financial intermediaries as well as non-financial public enterprises has created a blurring of the demarcation between funding of and by the Government *vis-à-vis* public sector as a whole. The joint family approach to public sector still persists to a significant extent.

Third, despite significant progress, the maturation of financial markets is yet incomplete which also reduces, at least partly, the effectiveness of monetary policy instruments.

It is essential to recognise that there has been considerable alleviation on all fronts. Fiscal deficits are being progressively reduced though the total public debt as a proportion of GDP is still high by global standards. Share of wholly publicly owned financial intermediaries is reduced though share of institutions with public sector character remains high. The financial markets especially money, forex, government securities and equity markets, are noticeably well developed now. There is scope for further improvements in reform of financial markets but the progress in this regard is linked to improvement in fiscal management and the dominant public sector in financial intermediation especially their governance and risk management skills.

With progressive deregulation and development of financial markets, available empirical evidence suggests some improvement in the pass-through from policy rates to lending and deposit rates. Interest rates are emerging as a more potent instrument of monetary policy than before. In this context, however, the continued existence of administered interest rates distorts the interest rates structure and blunts its efficacy in monetary policy transmission. Currently, several of administered interest rates are prescribed over a range of deposit and lending activity, roughly accounting for a third of overall banking business in India. While bank term deposit rates stand deregulated, small savings and provident funds continue to be administered, thereby imparting a degree of rigidity to the interest rate structure. In recent times, there has been some tendency to widen the net of administered interest rates to cover bank loans for agriculture. While such a tendency may not be an unlikely outcome, given the predominance of publicly-owned financial intermediaries, it needs to be recognised that the current system of pricing of bank loans appears less than satisfactory. There is a public perception that banks' risk assessment and risk management processes are less than appropriate and sub-optimal and that there is under pricing of credit for corporates, while there could be overpricing of lending to agriculture and the small scale industries. In addition to formal prescription of interest rates, public sector banks which account for over 70 per cent of banking assets in a bank-dominated economy are called upon by the majority shareholder to discharge social obligations to reflect public policy priorities, through continuous interaction and periodical reviews with chief executives.

In a way, moral suasion, the traditionally potent weapon with a central bank may, on occasions, be exercised by the government to sub-serve public policy, broadly defined. While the initiatives in the public sector, in some cases, add to the effectiveness of monetary policy intent, they could operate in the opposite direction also, especially when the perceptions and relative weights accorded to credit expansion, price stability and financial stability by the government and the Reserve Bank significantly differ. In a financial system, where banks play a dominant role in non-banking activities also, the transmission of monetary policy through both credit and monetary channels is also impacted in this environment.

In brief, the operation of monetary policy in India has to be oriented around the predominantly public sector ownership of the banking system. This plays a critical role not only in the transmission of monetary policy signals but also in other public policy considerations which may overlap or even dominate monetary policy objectives.

VII. Concluding Remarks

To conclude, the role of the Reserve Bank has been redefined through gradual evolution and adaptation, along with some statutory changes, and not through any radical restructuring. Further, while assessing the autonomy of the Reserve Bank, one should recognise that the Reserve Bank is not a pure monetary authority but is responsible for several other functions also, as a central bank. The developments in the recent past lead one to the conclusion that, *de facto,* there has been enhancement of the autonomy of the Reserve Bank.

As regards monetary policy framework, the objectives remained the same but the framework has been changed from time to time in a gradual fashion in response to the evolving circumstances. Contextually, there are three important issues in the conduct of monetary policy, *viz.*, the assessment of potential output, the measurement of unemployment and appropriate measure of inflation.

While the policy tries to cope with these issues, a combination of instruments is necessarily used in a flexible manner to meet these complexities. Every effort has been made to improve the transmission channels especially through the financial markets, and through regulatory and institutional reforms. In addition, there are some constraints in the conduct of monetary policy, in particular, the fiscal impact, predominant public ownership, prevalence of administered interest rate, *etc.* While these challenges and dilemmas persist in the Indian context, every effort is made by the Reserve Bank to meet the broader objectives set forth, from time to time.

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Developing Debt Markets in India: Review and Prospects*

Y.V. Reddy

I am conscious of the fact that the conditions prevalent in our economies are varied, and yet the sharing of country experiences provides us valuable insights into the effectiveness of public policy as well as the functioning of financial markets.

The debt-market in India comprises of two segments, namely, government securities market and corporate debt market, but the size of the latter is currently very small, at about 14 per cent of the total debt market. This is reflective of both, the relatively high recurrent fiscal deficits and the underdeveloped status of the corporate debt market.

Foreign Institutional Investors (FIIs) are allowed to invest in the Indian debt markets subject to quantitative limits that are reviewed on an ongoing basis. Currently the ceiling is USD 2.6 billion[1] in government securities and USD 1.5 billion in corporate bonds. The access provided to the FIIs in the debt market is to facilitate liquidity management arising from their operations in the equity market since they have liberal access to equity markets in India. The sovereign has not issued any foreign currency denominated bonds.

Development of Government Securities Market

Before the 1990s,the government securities market was characterised by administered interest rates, high Statutory Liquidity Ratio (SLR) requirements that led to the existence of captive investors in banks, and the absence of a liquid and

* Remarks by Dr. Y.V. Reddy, Governor, Reserve Bank of India, at Washington, USA on October 18, 2007.

[1] RBI has already announced enhancement of this limit to USD 3.2 billion. SEBI is in the process of notifying the same.

transparent secondary market. The coupon rates offered on government securities were not market related.

Reforms in the government securities (G-Sec) market were undertaken as a part of the overall structural reform process that was initiated in 1991-92 and were aimed at redressing many of these infirmities. There are broad discernible phases before the recent initiatives in the development of the G-Sec market in India. The early initiatives in the reform of the G-Sec market were aimed at creating an enabling policy environment and included (i) the elimination of automatic monetisation; (ii) transition to market-related interest rates and (iii) reduction in SLR requirement to the then statutory minimum level of 25 per cent.

The second phase of reforms in the G-Sec market was directed towards institutional development to enhance market activity, settlement and safety. These reforms included (i) establishment of a Delivery versus Payment system to reduce settlement risk; (ii) institution of the system of Primary Dealers (PDs), and (iii) formation of market bodies such as Fixed Income Money Market and Derivatives Association of India (FIMMDA) and Primary Dealers Association of India (PDAI). Instrument persification was also seriously attempted during this phase of reforms. Prior to the 1990s, most of the government bond issuances were in the form of plain vanilla, fixed coupon securities. In order to meet the perse funding and hedging needs of participants, various types of instruments such as zero coupon bonds, capital indexed bonds, floating rate bonds and bonds with call and put options, were introduced. Floating Rate Bonds (FRBs) introduced during this phase did not evoke much response. Capital Indexed bonds (CIB) were first issued in 1997 but there were no further issuances mainly due to the lack of an enthusiastic response from the market participants, both in primary and secondary markets. Hence, plain vanilla bonds continue to be predominant in the issuances of government securities.

The third phase of reforms in the G-Sec market is aimed at enhancing liquidity and efficiency. Some of the important initiatives that were taken during this phase are: (a) introduction of repo/reverse repo operations in government securities to facilitate participants to manage short-term liquidity mismatches; (b) operationalisation of the Negotiated Dealing System (NDS), an automated electronic trading platform; (c) establishment of the Clearing Corporation of India Limited (CCIL) for providing an efficient and guaranteed settlement platform; (d) introduction of trading of G-secs in stock exchanges; (e) introduction of OTC and exchange-traded derivatives to facilitate hedging of interest rate risk; (f) introduction of Real Time Gross Settlement System (RTGS) which addresses settlement risk and facilitates liquidity management; (g) adoption of a modified Delivery-versus-Payment mode of settlement which provides for net settlement of both funds and securities legs; and (h) announcement of an indicative auction calendar for Treasury Bills and dated securities.

Recent Initiatives

Several initiatives have been taken in recent years. First, initiatives have been taken to widen the investor base for the government securities. Traditionally, commercial banks and insurance companies have been the largest holders of government securities. Major part of the holdings of these investors is generally in the nature of statutorily mandated investments. The entry of mutual funds and non-banking finance companies in recent years has broadened the base. In addition, the entry of 100 per cent Gilt Mutual Funds has broadened the potential for retail investor base. To enable small and medium sized investors to participate in the primary auction of government securities, a "Scheme of Non Competitive Bidding" was introduced in January 2002, which is open to any person including firms, companies, corporate bodies, institutions, provident funds, trusts, and any other entity prescribed by the Reserve Bank. The scheme provides for allocation of up to 5 per cent of the notified amount at the weighted average rate of accepted bids.

With a view to further promoting liquidity in the secondary market and to strengthen the emergence of a benchmark yield curve across maturities, re-issuances of benchmark securities have been in place for quite some time. In furtherance of the objective, a scheme of active consolidation of government securities through buy-backs was finalised. This is expected to be implemented during the current financial year.

The settlement system for transactions in government securities was standardised to T+1 cycle with a view to provide the participants with more processing time at their disposal and therefore, to enable better management of both funds as well as risk.

In order to provide banks and other institutions with a more advanced and more efficient trading platform, an anonymous order matching trading platform (NDS-OM) was introduced. The NDS-OM is an additional facility available to the participants and the participants continue to have the option of using the current telephone-trading platform. The settlements of both types of transactions are, however, integrated.

Recently, in 2006, short sale was permitted in dated government securities to provide an opportunity to market participants to manage their interest rate risk more effectively. This measure is expected to further improve liquidity in the secondary market. 'When issued' (WI) trading in Central government securities was also introduced in 2006. This is expected to contribute significantly to distributional efficiency in primary issuance, in addition to permitting PDs to manage their auction risk more effectively.

There is a fairly active interest rate derivative market in India. The market started with the Reserve Bank permitting interest rate swaps and forward rate agreements (IRS/FRA) in 1999. Average daily volumes in IRS are about two times that in the government securities market. A reporting platform for OTC derivatives has been set up recently. This will enhance transparency and price discovery in the market. Interest rate futures were permitted in 2003 but has not taken off. The Reserve Bank has now constituted a Group to suggest measures to activate the interest rate futures market.

Current status of Government Securities Market

As a result of the gradual reform process undertaken over the years, the Indian G-Sec market has now become increasingly broad-based, characterised by an efficient auction process, an active secondary market and a fairly liquid yield curve up to 30 years. An active Primary Dealer (PD) system and electronic trading and settlement technology that ensure safe settlement with Straight Through Processing (STP) and central counterparty guarantee support the market now.

The outstanding stock of G-Secs is about fourteen times the level in 1992. Outstanding stock of G-Secs as a ratio to GDP has nearly doubled to around 26 per cent over this period. Annual turnover of G-Secs has been placed at nearly 300 per cent of GDP in recent years as against 34 per cent in 1996.

The weighted average maturity of outstanding stock has increased consistently from 6.5 years in 1997-98 to 10.4 years in 2007-08. The elongation of maturity profile has been made possible largely on account of increase in market appetite from non-bank market participants, particularly insurance companies and provident funds and improved market maturity. It is notable that despite substantial increase in the weighted average maturity, between 1997-98 and 2003-04, the weighted average yield of the dated securities issued during the period declined from 12.01 per cent (1997-98) to 7.9 per cent (2006-07). However, in the subsequent years the weighted average yields have been increasing with increasing weighted average maturity. In 2006-07, the weighted average maturity of new loans was 14.7 years with a range of 4 to 30 years and the weighted average yield of new loans was 7.9 per cent.

The Reserve Bank's efforts to elongate the maturity profile resulted in a smooth and reliable yield curve, which acts as a benchmark for the other markets for pricing and valuation. Market liquidity today compares well with other emerging economies with bid-offer spreads in benchmark securities at 1-2 bps.

The holding of G-Secs among financial institutions has been more persified, particularly, with the emergence of insurance and pension funds as a 'durable' investor class for the long-term securities. This became possible due to the sustained efforts devoted to elongation of the maturity profile of government securities.

Corporate Debt Market

The development of a corporate bond market in India has lagged behind in comparison with other financial market segments owing to many structural factors. While primary issuances have been significant, most of these were accounted for by public sector financial institutions and were issued on a private placement basis to institutional investors. The secondary market, therefore, has not developed commensurately and market liquidity has been an issue.

The Government had constituted a High Level Committee on Corporate Bonds and Securitisation (Patil Committee) to identify the factors inhibiting the development of an active corporate debt market in India and recommend necessary policy actions. The Committee made a number of recommendations relating to rationalising the primary issuance procedure, facilitating exchange trading, increasing the disclosure and transparency standards and strengthening the clearing and settlement mechanism in secondary market. The recommendations have been accepted in principle by the Government, the Reserve Bank and SEBI and are under various stages of implementation.

The two stock exchanges, namely, the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE), as well as the industry body FIMMDA have since operationalised respective trade reporting platforms. While all the exchange trades in corporate bonds get captured by concerned exchange's reporting platform, OTC transactions can be reported on any of these platforms. The aggregated trade information across the platforms is being disseminated by FIMMDA on its website. BSE and NSE have also started order driven trading platforms in July 2007. In practice, however, trading still continues to be largely OTC.

SEBI has also implemented measures to streamline the activity in corporate bond markets by reducing the shut period in line with that of G-sec, reducing the size of standard lots to Rs. one lakh and standardising the day count convention. Further, to streamline the process of interest and redemption payments, Electronic Clearing Services (ECS), Real Time Gross Settlements (RTGS) or National Electronic Funds Transfer (NEFT) are required to be used by the issuers.

Further progress is anticipated in regard to rationalising the primary issuance procedures, which is a critical step for moving away from the pre-dominance of private placements.

To reduce the settlement risk and enhance efficiency, the Patil Committee has also proposed setting up of a robust clearing mechanism. The settlement was proposed to be initially on delivery versus payment (DvP) I basis (*i.e.,* trade by trade basis) to address the counterparty settlement risk and gradually migrate to DvP III (net settlement of funds as well as securities) to impart enhanced settlement efficiency. (The DvP modules can be broadly classified into three broad categories, *viz.,* DvP I, DvP II and DvP III. Under DvP I, the funds leg as well as the securities leg are settled simultaneously on a contract-by-contract basis. Under DvP II, while the securities leg is settled on a contract-by-contract basis, the funds leg is settled for the net amount. Under DvP III, both the funds and the securities legs are settled for the net amounts.)

Outlook for Development of Corporate Debt Market

Patil Committee has recommended two important measures to be initiated by the Government, namely rationalisation of stamp-duty, and abolition of tax deduction at source, as in the case of government securities. Hopefully, these would be acted upon soon.

As the corporate debt markets develop and the Reserve Bank is assured of availability of efficient price discovery through significant increases in public issues as well as secondary market trading, and an efficient and safe settlement system, based on DvP III and STP is in place, the Reserve Bank is committed to permitting market repos in corporate bonds.

In the medium term, considering the overall macroeconomic situation, the ceiling for foreign investment in both government securities and corporate debt will continue to be calibrated as an instrument of capital account management. In particular, a more liberalised access to foreign investment would be appropriate when, among other things, an efficient and safe settlement system is well entrenched, aggregate consolidated public debt to GDP ratio reaches a reasonable level, say less than 50 per cent, and the corporate debt market acquires depth and liquidity with significant role for insurance and pension funds in India.

In the past, the government securities dominated the debt market in India, partly on account of the fiscal dominance and the absence of contractual savings. In the absence of contractual savings only banks tended to deploy their funds in the corporate bond market, mainly through private placement. The Reserve Bank is hopeful that the recent slow but steady development of insurance sector, mutual funds, *etc*., coupled with the existence of a reliable government securities market and the availability of robust reporting, trading and settlement mechanisms would lead to a rapid development of a vibrant corporate debt market. A framework for the development is already available through the recommendations of the Patil Committee, the implementation of which has already been taken up by the various agencies.

In support of my optimism in this regard, let me quote from a recent Working Paper of OECD:

"…Well functioning government securities markets give public support to private fixed-income market (both cash and derivatives) in the form of pricing benchmark, while they also provide a tool for interest rate risk management.

For these reasons, the development of a well functioning government bond market will often precede, and very much facilitate, the development of a private-sector corporate bond market…"

(New Strategies for Emerging Domestic and Sovereign Bond Markets, Working Paper No.260, OECD Development Centre, April 2007).

As regards, policy challenges in India, they may be similar to those identified by a recent report of the Committee on Global Financial Stability (CGFS).

"Three important policy challenges that remain are: to improve market liquidity of the new markets; to encourage greater private sector issuance; and to spread the risks of bond investment more widely."

('Financial Stability and Local Currency Bond Markets, CGFS Paper No.28, Bank for International Settlements, June 2007)

Let me conclude with this optimistic note on the development of the corporate debt market also in India, sooner than the expectations of many in the financial markets.

Financial Sector Policies for Growth and Employment*

Y.V. Reddy

I am thankful to Governor Burhanuddin Abdullah for inviting me to participate in the Annual International Seminar 2007. We deeply appreciate the excellent arrangements, warmth and hospitality of Bank Indonesia. In particular, special thanks are due to Deputy Governor, Ms. Miranda Goeltom. I also sincerely appreciate the thoughtful selection of the topics for discussion during this Seminar, which are of significant contemporary relevance to all of us.

The role of financial sector policies in growth and employment would naturally have significant relationship with the institutional arrangements for overall public policy of the country concerned. The framework and conduct of policy would also be specific to the country or society concerned and would vary, over time, in response to changing economic developments, in general, and financial sector developments, in particular. My comments today would, therefore, be confined to the Indian experience and capture the changing role of financial sector policies of Reserve Bank of India (RBI) in the context of ongoing economic reforms.

Monetary Policy

In India, the objectives of monetary policy have been clearly enunciated as price stability along with provision of adequate credit for productive purposes. Thus, growth as one of the two objectives is part of our mandate, but the relative emphasis in policy operations would depend upon the circumstances and is articulated from time to time. It is often said that the best anti poverty programme in India is maintenance

* Speech delivered by Dr. Y V Reddy, Governor, Reserve Bank of India at Bali, Indonesia on November 8, 2007.

of price stability since a large part of the work force is in the unorganised sector, with little or no hedge against inflation. In recent years, the strong growth environment coupled with increases in prices of oil and food items have required added emphasis on price stability, especially inflation expectations.

As articulated in the recent monetary policy statements of the RBI, the poor tend to reap the benefits of high growth with a time lag while rises in prices affect them instantly. In the short term, the impacts of high growth and price rises are asymmetrical between the non-poor and the poor, warranting a greater emphasis on price stability at this juncture of high growth for maintaining social accord as well as securing popular mandate for the reform process itself. In his welcome address, Governor Abdullah mentioned about the issue of inequalities in the context of globalisation and importance of central banks' commitment to stability and conducive environment for business.

Similarly, in regard to financial stability also, we note that most of the active participants in financial markets are non-poor. To the extent there are externalities in terms of financial sector - both positive and, on occasions, negative - the weight for stability in our policies has been higher in view of limited capacity of the poor to bear risks that may occur in the real sector by virtue of developments in the financial sector. The lack of social security mechanisms and public safety nets in India are also relevant. The design and pace of liberalisation of financial sector in India thus takes into account the due weight for stability.

Regulation and Development of Financial Markets, Institutions, Technology, *etc.*

To enhance efficiency and stability of the financial system and thus contribute to growth and employment, several steps have been undertaken for widening, deepening and integrating financial markets although it is 'work in progress'. Simultaneously, new processes and institutional arrangements have been put in place in regard to the banking sector, deposit-taking non-banking financial companies and systemically important non-deposit-taking non-banking financial companies. By and large, these initiatives, in particular supervisory systems, are in alignment with the global best practices, but there are dynamic trade offs between public ownership of financial institutions, regulation, financial innovation, *etc.* Similarly, several steps have been taken to enhance use of technology and market micro-structures in the financial sector. The financial sector policies are continuously evolving, essentially in a proactive manner. Medium term frameworks or vision documents have been formulated in each of these areas since 2004 and are being implemented through a continuous process of consultations with market participants and industry associations (some of which were established with encouragement from RBI). The thinking as well as the progress in actions in this regard are articulated through RBI's Annual Policies and Mid Term Reviews.

Cost of Credit

In the past, as part of the pervasive regime of administered interest rates, banking and financial institutions were providing loans on concessional terms to certain sectors and also certain categories of borrowers, leading to significant cross-subsidisation. The credit allocation by banks was also directed to many such sectors/ borrowers through various prescriptions. The RBI had also been contributing regularly to Long-Term Operations (LTO) Funds to refinance industrial or agricultural development, generally on concessional terms. Combined with automatic monetisation of budget deficits of the Central Government, such contributions also caused significant increases in primary or reserve money. This practice has been gradually phased-out in the recent years as part of economic reform, on the ground that, in a liberalised environment, refinance institutions should expand the avenues of raising resources from the market. However, if any of their activities result in cross-subsidisation, we believe that the Government of India should rightfully bear the primary responsibility of providing the support. Hence, RBI support, if any, for such worthy causes should be through the Government of India by way of transfer of profits. Thus, while discontinuing contributions to the LTO Funds, net transfer of profits of the RBI as dividend has increased from about Rs.200 crore (Rs.2 billion) in 1992 to Rs.11,400 crore (Rs.114 billion) in 2007.

Financial sector reform has several dimensions and of particular relevance to the issue of output and employment is the cost of credit and its availability. Interest rates have been deregulated to a significant degree not only to aid movement of monetary policy to the use of more effective indirect instruments, but also because administered interest rate regime proved to be inefficient and costly, without necessarily ensuring flow of credit to the needy. The RBI's recommended approach, however, does not preclude subsidisation by the Government but, it disfavours excessive use of banking system to cross subsidise, especially if it were to favour non-poor. RBI favours a financial system that provides incentives to encourage flow of credit at justifiable terms and conditions and for purposes that ensure servicing of interest and principal, *i.e.*, bankability of schemes.

There has been broad agreement between the Government and the RBI on the above approach, and accordingly, subsidies on interest rates through the banking system to small farmers and small exporters are currently provided for a limited period. There are several Government-sponsored programmes intended for the vulnerable sections and these are small-sized loans for which Government provides subsidy, particularly for employment generation. Thus, the financial sector, in particular the banking system, is utilised as a conduit by the Government's fiscal policy, to subsidise select activities or vulnerable sections, and RBI plays a supporting role in enabling such measures while emphasising the longer term goals of a conducive credit culture. The overall objective remains growth with stability, but with elements of selective fiscal support for ensuring inclusive and equitable growth. Currently, the aggregate annual fiscal burden of subsidisation on account of the above measures, through the financial sector, is estimated to be about a quarter per cent of GDP.

Availability and Allocation of Credit

The pre-reform period was characterised by high pre-emptions, aggregating to well over fifty per cent of bank deposits, through the prescription of cash reserve ratios and statutory liquidity ratios for banks. As part of the reform process, these rates have been progressively brought down and are currently close to thirty per cent – partly reflecting the current policy of liquidity management. Accordingly, the proportion of resources available for credit to non-governmental purposes from the banking system have thus increased substantially since the commencement of the reform process. Further, with planned improvement in revenue accounts of Centre and States and more normal liquidity conditions in money markets, there should be significant further enhancement in the proportion of bank funds that are made available for financing growth and employment in private sector.

Selective credit controls, as a means of encouraging or discouraging credit flow to select sectors, was pervasive during the pre-reform period. These have since been dismantled. However, recently, it became necessary to enhance the risk weights and provisioning requirements for bank's exposure to capital market, real estate, housing and consumer loans in order to enhance the sensitivity of banks to the potential risks arising out of rapidly escalating asset prices. The measures, which are temporary, appear to be having desirable impact on credit allocation to these sensitive sectors.

The most important instrument for influencing allocation of credit in the banking system, keeping in view the compulsion of growth and employment, has been the stipulation regarding bank's lending to priority sector. The stipulation is that forty per cent of advances in the case of domestic banks (and thirty two per cent, inclusive of export advances, in the case of foreign banks) be lent to specified priority sectors such as agriculture, small industries *etc*. As a result of financial sector reforms, there has been expansion in lendable resources. However, during the reform process, the list of eligible sectors for treatment as 'priority sector' was expanded to include investments in specified bonds and also activities such as venture capital. Several dilutions and distortions in computation of the stipulation occurred in the process. As a result, there had been a growing perception of inadequate flow of credit to the traditionally preferred sub-sectors of priority sector, namely agriculture and small industries. In order to address these concerns, a consultative and comprehensive exercise of review was undertaken and new guidelines on priority sector were issued in April 2007. Consequently, priority sector is now restricted to advances to highly employment intensive sectors such as agriculture, small industry, educational loans for students and low cost housing. The shortfalls in lending to the priority sectors will have to be, as in the past, deposited with refinance institutions dealing with agriculture and small industries. Thus, sectoral focus in credit flow, with emphasis on employment, is ensured through stipulations relating to priority sector without necessarily undermining commercial considerations in banking activities.

Sub-targets under priority sector, along with other guidelines including those relating to Government sponsored programmes, are used to encourage flow of credit to the identified vulnerable sections of population such as scheduled castes, religious minorities and scheduled tribes.

The accelerated growth in the Indian economy has benefited several States, but there are few States where credit deposit ratios of the banking system are observed to be low. It has become necessary to identify unique problems for each State for expanding banking facilities to such lagging States and formulate area specific action plans for accelerated financial deepening. These plans are drawn up with full participation of State Governments, banks and other local developmental agencies. Such plans have already been drawn up for Uttaranchal, North Eastern States, Himachal, Jharkhand, Andaman & Nicobar and Bihar. There is enthusiasm among banks in view of expanding business opportunities and significant support from State Governments which see a synergy. RBI plays a catalyst, as well as a coordinating role, in these initiatives of growing co-operation between the States and the banking system. In fact, the RBI has played active role in States' debt management, treasury management, management of Consolidated Sinking Fund, transparency in budget, computerisation of Government accounts and enactment of legislation on fiscal responsibility. The relationship between the RBI and the States is based on mutual trust and is in recognition of the credibility of the RBI.

An important component of these state-specific action plans, in some cases, have been the scope for expanded role of non-governmental organisations and other microfinance agencies. Banks, under the overall guidance of NABARD, play an active role in promoting micro-finance, especially in view of the recently approved innovative approaches, such as business correspondence models.

An area of concern has been the concentration of bank branches in metropolitan areas to the detriment of semi urban and rural areas. To mitigate this problem, since 2006, opening of new branches for any bank is approved by RBI only on condition that at least half of such new branches are opened in under-banked areas as notified by RBI. Many banks now find that the branches in semi-urban and rural areas are also commercially viable.

It is useful to note that the policy preferences of RBI in the banking sector, which are aimed to address issues of targeted allocation of credit and penetration of banking services have not adversely affected the improvements in accounting practices, reduction in non-performing assets and improvements in profitability as well as capital adequacy. It is useful to note that the valuation of bank stocks, of both public and private sector, are improving while foreign banks gather a fast increasing proportion of their global profits from Indian operations.

Beyond Credit : Financial Inclusion

In the reform process that commenced in 1992, the reform of financial sector was early in the cycle. The first stage of the process concentrated on elimination of financial repression which was followed by greater marketisation of financial sector and changes in regulatory regime, consistent with global standards. The process strengthened financial sector, improved efficiency, imparted stability and facilitated impressive growth, withstanding several global and domestic shocks. The next phase clearly was to ensure what may be termed as democratisation of financial sector. The process which was commenced two years ago aimed at ensuring hundred per cent financial inclusion. The process of financial inclusion consists of seeking each household and offering their inclusion in the banking system. The main features of the approach involve 'connecting' people with the banking system and not just credit dispensation; and using multiple channels such as civil service organisations, NGOs, post offices, farmers' clubs, panchayats, MFIs (other than NBFCs), *etc.* as Business Facilitators / Correspondents to expand the outreach of banks. Further, a decentralised approach is adopted which is state / region specific, and has close involvement and cooperation between the respective State Governments and banks.

Information technology is critical to minimising transaction costs. The Government's on-going massive programme of rural employment and pension payments *etc.* can be implemented with minimal transaction costs by recourse to financial inclusion through Information Technology Several districts have already been covered under total financial inclusion and a process of evaluation and feedback is underway. RBI is encouraging and aiding the process.

The importance of financial inclusion for Emerging Market Economies (EMEs) was expressed eloquently by Governor Tito Mboweni in the 13th C.D. Deshmukh Memorial Lecture on 2nd November 2007 in the following words :

"Then, there is the added concern that the unequal distribution of wealth brings with it a tension between the haves and the have-nots. Under these circumstances, the broadening of access to financial services becomes an important policy objective. It is well recognised that the financial inclusion of the lower echelons of society into the financial sector is a powerful contributory factor to poverty alleviation through, for example, the provision of microfinance. As the demand for consumer finance increased, a greater range of financial instruments are needed and the financial sector will need to adapt."

A beginning has been made to enhance financial literacy and impart financial education to enable vast numbers of new entrants into employment and higher incomes to better manage their finances in a rapidly marketising fincancial sector. Informed choices are preferred in the interests of the individual customers as also the financial system as a whole. In view of the surge in retail loans, especially consumer durables, and attendant debt-servicing problems for many, a beginning has been made in the establishment of credit counselling centres as a non-profit activity, by some banks.

Institutional Reforms

There was no banking crisis or currency crisis since reforms commenced in 1992.

However, it was observed that some scheduled commercial banks had inadequate capital; several urban cooperative banks were bankrupted and rural cooperative credit system deteriorated significantly. Corrective steps have been taken in recent years. The institutional reform of scheduled commercial banks reinforced governance standards and witnessed the disappearance of all who could not meet the capital adequacy standards. But, the credit needs of vast section of population, especially of unorganised sector, traders, rural areas are best met by revival, restructuring and revamping of what may be termed as community based banks. Rural areas, particularly in backward regions, are sought to be better served by restructuring an institutional mechanism, namely Regional Rural Banks (RRBs). A special programme for the revival of rural cooperatives has been launched with close involvement of RBI, National Bank for Agriculture and Rural Development (NABARD), Government of India and State Governments with a possible fiscal support to the tune of about 0.50 per cent of GDP. These reforms are considered essential to cater to the gaps in services by scheduled commercial banks, not only in banking but in other related services including forex for current account, insurance products, *etc*.

Innovative mechanisms through Memorandum of Understanding between the RBI and the State Governments to overcome issues of dual control and ensure better co-ordination, which were found to be successful when adopted for re-vamping the urban co-operative banks, have also been adopted in the ongoing programme of revival of the rural cooperative system.

Beyond Deregulation and Competition

As the reform progressed, it was assumed that deregulation and competition would enhance efficiency and ensure better than before quality of service at reasonable but competitive cost to the customers. However, while many improvements have taken place, entirely as expected, several adverse features in regard to retail customers were noticed particularly in respect of a few banks. Apart from issues of appropriate pricing, instances of unequal contracts, unfair trade practices, non-transparent fees, intrusion into privacy, excessive penalties, delays in cheque-clearing, arbitrary revision of interest rates or equated monthly instalments, usurious interest charges in some cases and excesses by loan recovery agents have been noticed warranting several institutional, policy and procedural interventions by RBI. A delicate balance between competing considerations is needed but to the extent banks have special privileges, the regulator who has granted such privileges has a responsibility to ensure financial deepening and widening in an efficient, fair and equitable manner. RBI considers delicate balances of these considerations to be critical for both growth of financial sector and a meaningful contribution of financial sector to growth and employment.

Latest Initiatives

The RBI's Mid-Term Review of Annual Policy Statement, October 30, 2007, refers to some new initiatives that are worth noting. First, an internal working group has been constituted to consider recommendations made by a Committee on

Agricultural Indebtedness (Chairman : Dr. R. Radhakrishna). Second, recommendations of a Technical Group (Chairman : S.C. Gupta) on improving the legal and enforcement framework relating to money lenders was forwarded to State Governments for appropriate consideration. Third, the National Commission for Enterprises in the unorganised sector (Chairman : Dr. Arjun K. Sengupta) submitted a comprehensive report to the Central Government. A working group is being constituted to study those recommendations which relate to the Indian financial system. Fourth, it is proposed to review the working of lead bank scheme and related arrangements of coordination between RBI, banks, NABARD, State Government at the state and district levels. The review of these institutional arrangements for development oriented banking would help design a new framework reflecting not only the new orientation such as financial inclusion, financial literacy and credit counselling, but also increasing demands of rapidly growing economy led by domestic investment, domestic consumption and export demand.

Concluding Remarks

To conclude, our experience shows that financial sector policies and instruments need to be constantly rebalanced to respond not only to financial markets, prices and overall stability considerations but also to developments in real sector, in particular trends in growth across sectors, regions and sections of population. Such a comprehensive but dynamic approach to development of the financial sector enhances contribution of financial policies to growth and employment while maintaining stability.

*Global Developments and Indian Perspectives: Some Random Thoughts**

Y.V. Reddy

I am happy to be here with the banking fraternity to participate in the Bankers' Conference 2007. I find that there are several conference papers which are of high quality. In fact, they provoked me to think through some of the issues that emanate from the analysis and also some facets which might have escaped the attention of the authors. The result is an urge to share some consequential random thoughts on global developments and Indian perspectives as they interplay in a real world setting

Overall Approach to Reforms in the Financial Sector

The overall approach to reforms in the financial sector in our country, in the context of global developments is worth recalling here. First, we appreciate and analyse relevant theories. Second, we study international practices which are often divergent, even among advanced economies, and are far from being static. No doubt, it is convenient for analytical purposes to offer comments or presume what constitutes a best practice, but, for practical policy purposes, divergence in international practices is no less relevant than convergence. Third, the scope for, limits to and desirability of adoption of prevalent global practices are governed by the legal, institutional and overall socio-political conditions in our country. Fourth, the adoption, in our country, of what is considered an appropriate global practice is often a process that has to be managed carefully, sometimes gradually and often in a non-disruptive manner. Fifth, the desired reforms to align with what are considered appropriate global practices, in financial

* Valedictory address by Dr. Y.V. Reddy, Governor, Reserve Bank of India, at the Bankers' Conference 2007 on November 27, 2007, at Mumbai.

sector, in terms of timing and redesigning to suit our conditions must recognise the status and developments in the real sector, especially flexibilities, fiscal health and overall governance standards. Attempts to align the financial sector with global practices without similar alignment in the related areas mentioned above may invite avoidable risks. Hence, the pace of reform in the financial sector is governed not by assumed progress in reform in the related areas mentioned above but on a realistic assessment of the substantive movement towards global standards, in those areas.

Benchmarking with Global Best Practices

An important feature of the reform of the Indian financial system has been the intent of the authorities to align the regulatory framework with international best practices keeping in view the developmental needs of the country and domestic factors. Hence, periodic assessments of the Indian financial sector have been undertaken by the Reserve Bank.

The Reserve Bank had undertaken a self assessment with regard to the Core Principle for Effective Banking Supervision in 1998 which served as a basis for several regulatory initiatives towards alignment with the international best practices.

A Standing Committee on International Financial Standards and Codes was constituted in 1999 by the Reserve Bank in consultation with the Government of India to identify and monitor developments in global standards and codes being evolved in the context of international developments; consider the applicability of these standards and codes to the Indian financial system; and chalk out a roadmap for aligning India's standards and practices to the evolving international standards. The Standing Committee set up ten Advisory Groups in key areas of the financial sector comprising non-official experts. The recommendations contained in these reports have either been implemented or are in the process of implementation.

In 2004, a review of the recommendations of the Advisory Groups was undertaken to assess the progress on the implementation of the 2002 Report, monitor new developments in the field of international financial standards and codes and provide a future agenda in this area. The Report provided an assessment of the professional staff of the RBI engaged in monitoring the implementation of recommendations and benefited from the views of several inside and outside experts.

The World Bank and the International Monetary Fund jointly brought out, in September 2005, a comprehensive *Handbook on Financial Sector Assessment*. The Handbook is designed for use in financial sector assessments, conducted by country authorities themselves and by the World Bank and IMF teams. The Handbook, available to the public, is intended to serve as an authoritative source on the objectives, analytical framework, and methodologies of financial sector assessment as well as a comprehensive reference book on the techniques of such assessments.

Following the publication of the Handbook by the IMF-World Bank, it was decided to undertake a self-assessment of financial sector stability and development using the new Handbook as the base as also any other pertinent documents for financial sector assessment. Accordingly, the Government of India decided, in consultation with the RBI, to constitute a 'Committee on Financial Sector Assessment' (CFSA).

The central plank of the self-assessment by the CFSA is based on three mutually reinforcing factors, *namely*, financial stability assessment and stress testing; developmental issues and, assessment of the status and progress in implementation of international financial standards and codes. To assist in the process of assessment, the CFSA has constituted four Advisory Panels. These are on Financial Stability Assessment and Stress Testing, on Financial Regulation and Supervision, on Institutions and Market Structure and on Transparency Standards. In order to enhance the credibility of this self-assessment, the Committee has decided that the reports of the Advisory Panels would be peer reviewed by a panel of international experts. These are expected to be available for public debate by March / April 2008. I would urge all analysts to refer to the previous reports and comment extensively on the CFSA report in April to guide us on further policy initiatives.

Country Context

We do recognise that the pace and context of globalisation is generally influenced by three factors, namely technological progress, inherent desire of people to be free to move and overall public policies of the relevant countries. Globalisation of financial sector is one element of this process and related public policies are one of the many elements that impact the process. RBI's policies are one, though important, part of the overall public policy relevant to financial sector. In this background, it may be useful to put before you the current dominant considerations in the RBI's policy relating to financial sector.

First, as articulated in the recent monetary policy statements of the RBI, the poor tend to reap the benefits of high growth with a time lag while rises in prices affect them instantly. In the short term, the impacts of high growth and price rises are asymmetrical between the non-poor and the poor, warranting a greater emphasis on price stability at this juncture of high growth for maintaining social accord as well as securing popular mandate for the reform process itself.

Second, to the extent there are externalities in terms of financial sector - both positive and, on occasions, negative - the weight for stability in our policies has been higher in view of limited capacity of the poor to bear risks that may occur in the real sector by virtue of developments in the financial sector. The lack of social security mechanisms and public safety nets in India are also relevant. The design and pace of liberalisation of financial sector in India thus takes into account the due weight for stability.

Third, to enhance efficiency and stability of the financial system and thus contribute to growth and employment, several steps have been undertaken for widening, deepening and integrating financial markets although it is 'work in progress'.

Fourth, the overall objective remains growth with stability, but provides for elements of selective fiscal support for ensuring inclusive and equitable growth. Currently, the aggregate annual fiscal burden of subsidisation on account of the above measures, through the financial sector, is estimated to be about a quarter of one per cent of GDP. The RBI's recommended approach does not preclude subsidisation by the Government but, it disfavours excessive use of banking system to cross subsidise, especially if it were to favour non-poor. RBI favours a financial system that provides incentives to encourage flow of credit at justifiable terms and conditions and for purposes that ensure servicing of interest and principal, *i.e.*, bankability of schemes.

Fifth, an important instrument for influencing allocation of credit in the banking system, keeping in view the compulsion of growth and employment, has been the stipulation regarding bank's lending to priority sector. The definition of priority sector has been reviewed from time to time to match with the contemporary requirements.

Sixth, in the reform process that commenced in 1992, the reform of the financial sector was early in the cycle. The first stage of the process concentrated on elimination of financial repression which was followed by greater marketisation of financial sector and changes in regulatory regime, consistent with global standards. The process strengthened the financial sector, improved its efficiency, imparted stability, facilitated impressive growth and withstood several global and domestic shocks. The next phase clearly has been to ensure, what may be termed as, 'democratisation' of financial sector. The process which was initiated two years ago aimed at ensuring hundred per cent financial inclusion. The process of financial inclusion consists of seeking each household and offering them options for inclusion in the banking system. A beginning has been made to enhance financial literacy and impart financial education to enable vast numbers of new entrants into employment and higher incomes, to better manage their finances in a rapidly marketising financial sector.

Seventh, the institutional reform of scheduled commercial banks reinforced governance standards and witnessed the disappearance of all who could not meet the capital adequacy standards. But, the credit needs of vast section of population, especially of unorganised sector, traders and rural areas are best met by revival, restructuring and revamping of what may be termed as community based banks. These include Urban Cooperative Banks, Regional Rural Banks and rural cooperative credit system.

Eighth, as the reform progressed, it was assumed that deregulation and competition would enhance efficiency and ensure better-than-before quality of service at reasonable, but competitive, cost to the customers. However, while many improvements have taken place, entirely as expected, several adverse features in regard to retail customers were noticed particularly in respect of a few banks. Apart from issues of appropriate pricing, instances of unequal contracts, unfair trade practices, non-transparent fees, intrusion into privacy, excessive penalties, delays in cheque-clearing, arbitrary revision of interest rates or equated monthly installments, usurious interest charges in some cases and excesses by loan recovery agents have been noticed warranting several institutional, policy and procedural interventions by the Reserve Bank. A delicate balance between competing considerations is needed. To the extent banks have special privileges, the regulator, who has granted such privileges, has a responsibility to ensure financial deepening and widening in an efficient, fair and equitable manner.

Finally, our experience shows that financial sector policies and instruments need to be constantly rebalanced to respond not only to financial markets, prices and overall stability considerations but also to developments in real sector, in particular, trends in growth across sectors, regions and sections of population. Such a comprehensive, but dynamic, approach to development of the financial sector enhances contribution of financial policies to growth and employment while maintaining stability.

Likely Impact of Recent Global Developments

Monetary policy statements and other messages from the Reserve Bank have been, since 2005, drawing attention to global imbalances, under-pricing of risks, excess volatilities, dispersion of risks to unidentifiable sources *etc.* During this period, every effort has been made by the RBI to take advantage of favourable global financial environment, while being guarded against the evolving risks. In this background, the recent turbulence in the global financial markets was not a total surprise to us, though the manner in which it has visited was not anticipated. There was special focus on financial stability in recent Policy Statements. The Mid-Term Review of the Annual Policy for 2007-08 issued on October 30, 2007 stated, among other things, that the overall stance of the monetary policy is to be in readiness to take recourse to all possible options for maintaining stability and growth momentum in the economy in view of the unusual heightened global uncertainties and the unconventional international policy responses to the developments in those financial markets.

Subsequent developments have shown that there are continuing elements of uncertainties in the global environment which are unlikely to be clarified or resolved in the very near future. While the overall analysis, including the assessments of likely impact, made in Mid-Term Review remains valid, I would like to add a few words on what factors we are monitoring now and why we feel that extraordinary vigilance of the factors mentioned are warranted by RBI.

We are monitoring (a) the process of restoration of full normalcy in global financial markets; (b) the evolving financial contagion; and (c) the possible spill over to the real sector after accounting for the possible extent of 'decoupling'. The major reason for extraordinary vigilance by RBI is what I would describe as simultaneous volatilities in several globally significant markets, namely, money, credit and currency markets; asset prices; and commodity prices, especially oil and food items. The current phenomenon of simultaneous volatilities should be viewed in the context of possible repositioning of the world's dominant reserve currency, involving significant wealth, income and terms of trade effects.

Similar Stresses Unlikely in India

Our banks with overseas presence have confirmed that they have insignificant exposure to the US sub prime mortgage market.

Some analysts have flagged the prospect of a sort of sub prime lending problem within India also. Though there are reports of accelerated emergence of non-performing assets in regard to consumer credit, housing and real estate in a few banks, our preliminary assessment, on the basis of information provided, is that these do not have systemic implications either in terms of solvency or liquidity. There are several reasons why Indian banking system may not invite disturbances akin to sub prime. First, pre-emptive monetary policy actions have been taken to address evolving monetary, credit and inflation environment. Second, several prudential measures have been taken which include higher risk weights and higher provisioning in respect of sensitive sectors, namely capital market, housing, real estate, *etc*. Third, the initial exposure of most banks to the sensitive sectors mentioned above has been very modest. Fourth, intensive supervisory review of select banks was undertaken when it was observed that their off balance sheet exposures appeared large or were rapidly accelerating. Finally, as part of our regulatory regime in regard to banks and financial markets, there has been what may be termed as 'focus on liquidity'. Recent turbulence in global financial markets was characterised by liquidity issues and there is currently a global debate on the need to focus on liquidity. Hence, a more detailed account of our regulatory focus on liquidity is appropriate.

Regulatory Focus on Liquidity

As you are aware, the overall liquidity in the system is actively managed by the Reserve Bank mainly through the operation of LAF on a daily basis. However, there are challenges in this regard due to volatility in capital flows and governments' balances.

In terms of the evolving global prudential framework, the emphasis has generally been more on capital, as a means of reducing vulnerability to risks, than on prudential requirements for liquidity risk. The issue of liquidity has not been generally addressed in as structured a manner as the issue of capital requirement. Aspects relating to liquidity have been largely left to each regulator to assess and prescribe a suitable framework under Pillar II of Basel II.

In the Indian context, the Reserve Bank had issued broad guidelines for asset liability management and banks have flexibility in devising their own risk management strategies as per Board approved policy. However, in regard to liquidity risks at the very short-end, the Reserve Bank has taken steps to mitigate risks at the systemic level and at the institution level as well.

First, the Reserve Bank had, early on, recognised the risks of allowing access to the unsecured overnight market funds to all entities and therefore restricted the overnight unsecured market for funds only to banks and primary dealers (PD). To enable this phase-out of all non-bank / non-PD participants from the uncollateralised money market, the repo markets – both bilateral repos and collateralised borrowing and lending obligations (a form of tripartite repos), were developed. Since 2005, the overnight call market is a pure inter-bank market. The impact of this has been that the volumes have shifted from the overnight unsecured market to the collateralised market.

Second, greater inter-linkages and excessive reliance on call money borrowings by banks could cause systemic problems in two ways. One, if a bank is not able to repay the loan on the due date or the market perceives that the bank is having funding problems it may not be able to continue borrowing in the inter-bank market. If this results in non-payment, the bank which has lent the funds could itself face liquidity problems if it has also borrowed on an overnight basis to lend to this bank. The risk of financial contagion could also arise if other banks in the system that are similarly placed become affected by such concerns. The external costs of failure – the costs that are not borne by the bank and are, therefore, unlikely to be taken into account in its own planning – are therefore greater. The Reserve Bank has therefore introduced prudential measures to address the extent to which banks can borrow and lend in the call money market in relation to the net worth. On a fortnightly average basis, call market borrowings outstanding should not exceed 100 per cent of capital funds (*i.e.*, sum of Tier I and Tier II capital) of latest audited balance sheet. However, banks are allowed to borrow a maximum of 125 per cent of their capital funds on any day, during a fortnight. Similarly on a fortnightly average basis, lending in the call market should not exceed 25 per cent of their capital funds; however, banks are allowed to lend a maximum of 50 per cent of their capital funds on any day, during a fortnight.

Third, recognising the potential of 'purchased inter-bank liabilities' (IBL) to create systemic problems, the Reserve Bank had issued guidelines in March 2007 prescribing that IBL of a bank should not exceed 200 per cent of its net worth (300 per cent for banks with a Capital to Risk Assets Ratio (CRAR) more than 11.25 per cent).

Fourth, like other supervisors, the Reserve Bank has issued asset liability management guidelines for dealing with overall asset-liability mismatches taking into account both on and off balance sheet items. While prudential limits were prescribed for the first two time-buckets of 1-14 days and 15-28 days, the mismatches in the other time-buckets are determined by the banks themselves. These guidelines have been recently revised to provide more granularity to measurement of liquidity risk by splitting the first time bucket (1-14 days at present) in three time buckets *viz.* next day, 2-7 days and 8-14 days. The net cumulative negative mismatches in the three time buckets have been capped at 5 per cent, 10 per cent, 15 per cent of the cumulative cash outflows.

The Reserve Bank, in its supervisory oversight of banks' activities, also monitors the incremental credit deposit ratio of banks. Although banks may implement sophisticated risk management strategies, this single ratio with a minimum lag indicates the extent to which banks are funding credit with borrowings from wholesale markets or what is now known as purchased funds. As part of supervisory review, the Reserve Bank engages in a discussion with the banks which have high incremental credit deposit ratios. However, we have also raised these concerns in the monetary policy and encouraged banks to increase deposit mobilisation for funding credit. As early as April 2006, the annual policy had stated that '*It is, therefore, necessary to reiterate the need for banks to review their policies in this regard (funding sources) and make sustained efforts towards mobilising stable retail deposits by providing wider access to better quality of banking services. This would sustain prudent business expansion without facing undue asset-liability mismatches.'* In April 2007 it was again reiterated that *'While buoyant deposit growth has, to an extent, alleviated the financial constraints on banks, incremental non-food credit deposit ratios remain high … These developments are likely to pose challenges to banks in managing liquidity.'*

The Reserve Bank guidelines on securitisation of standard assets had laid down detailed policy on provision of liquidity support to Special Purpose Vehicles (SPVs). While the policy enabled a liquidity facility, by the originator or a third party, to help smoothen the timing differences faced by the SPV between the receipt of cash flows from the underlying assets and the payments to be made to investors, it was subject to certain conditions to ensure that the liquidity support was only temporary and got invoked to meet cash flow mismatches. Any commitment to provide such liquidity facility, is to be treated as an off- balance sheet item and attracts 100 per cent credit conversion factor as well as 100 per cent risk weight. The facility was specifically proscribed for the purposes of a) providing credit enhancement; b) covering losses of the SPV; c) serving as a permanent revolving funding; and d) covering any losses incurred in the underlying pool of exposures prior to a draw down.

Concluding remarks

Let me hasten to reiterate that India cannot be immune to global developments but we, in the Reserve Bank, are actively monitoring the global developments, articulating our assessments as well as responses in regard to impact on India and are in a state of readiness to act, as appropriate, in a timely manner. The Reserve Bank appreciates the understanding shown and cooperation extended by the banking community. In particular, I appreciate collaboration between the Reserve Bank and Indian Banks' Association.

*Urbanisation and Globalisation in the Twenty First Century: Emerging Challenges**

Rakesh Mohan

I. Background

Let me first say how honoured I am to have been invited here to deliver this opening address.

When I received the invitation I was rather surprised – what do central bankers have to do with issues related to urbanisation and urban problems? I thought that since the first week is devoted to financing water, shelter and sanitation, there must be a case of mistaken identity – I do have a namesake who was Chairman of the Delhi Water Board. But since this invitation was to this lovely Bellagio Conference Centre – I was careful not to let him know that I was masquerading in his place!

Mistaken identity or not, I am delighted to be here and let me thank at the outset, Darren Walker of the Rockefeller Foundation and Elliott Sclar and Nicole Volavka for persisting in getting me here.

I did spend the first 15 years of my professional life thinking about and working on urban issues; it is now almost as long since I had occasion to work directly on the urban problematic. So I am pleased to have the opportunity to think back and reflect again.

Although the first week of this summit is devoted to issues of financing water, sanitation and shelter, I thought that my comparative advantage lies in reflecting on the overall prospects of urban growth over the next 30 years or so, and what are the new issues that face us.

Let me also, at the outset, congratulate the authors of the background papers: they have covered the areas of their concern very

* Plenary Address by Dr. Rakesh Mohan, Deputy Governor, Reserve Bank of India on July 2, 2007 at the Rockefeller Foundation's Urban Summit at Bellagio, Italy.

comprehensively, and you may find some of their ideas being reflected here.

I would also like to draw your attention to the excellent report on "Unleashing the Potential of Urban Growth" released just last week by the UN Population Fund (United Nations Population Fund, 2007). I have drawn much from it for this address. It is a thoroughly refreshing report and I commend it to you as excellent background material as we contemplate what will happen to the urban world in the coming decade.

II. Urban Growth in the Next 30 Years

Let me start with a quote from this Report:

"People intuitively perceive the advantages of urban life. This explains why millions flock to the cities every year. Yet many planners and policy makers in rapidly urbanising nations want to prevent urban growth".

The truth in this observation is borne out by the truly epochal change that we are going through today. As you know, for the first time in human history, it is around now that more people live in urban areas than in rural. Since this urban summit is being held now, we may as well claim that it is being held to mark this historic event, which is perhaps happening as we talk. Apart from the statistical, demographic aspect, I would presume that as the majority of the world begins to live in cities, attitude to cities will indeed change.

The best contribution that this summit can make is indeed to change the views of academics, analysts, policy makers, donors, NGOs, and the like, towards a more positive welcoming attitude to urbanisation and urban growth: it is only if this attitudinal change takes place can we begin to think constructively about all the serious problems that we are likely to face and to then have a chance of solving them. We must change our attitude from being afraid of urbanisation to preparing for it.

The starting point for justifying this point of view must be the realisation that, despite unprecedented urbanisation over the last 50 years, and indeed the whole century, overall welfare has actually increased in almost every dimension that we can think of:

- income growth
- reduction in poverty
- access to services
  - electricity
  - telecom
  - water
  - sanitation
  - education
  - health

Never before have as many people had the kind of access to services as they have today. For example, even Mumbai's pavement dwellers have access to the city's municipal schools. And they certainly have better access than where they came from.

But, of course, we have a long way to go.

Let me just take a brief detour into the history of urbanisation. Widespread all pervading urbanisation is a truly twentieth century phenomenon. Although we have evidence of cities in antiquity, such as Memphis, Babylon, Thebes, Athens, Sparta Mohenjodaro, Anuradhapura, among others, there is little evidence of widespread urbanisation in the early years of civilisation. Rome was perhaps the first city to reach a population of 1 million around the time of Christ. Only in 1800 did London become the second city to reach this size. In 1800, only 2 per cent of the world's population was urbanised. By the year 1900, only about 15 per cent of the population, about 250 million, lived and worked in urban areas, a number lower than the total urban population of India today, which itself is a tad less than 30 per cent of India's population. Over the next 100 years, the 250 million became 2.8 billion, almost 49 per cent of total population: so the pace of urbanisation in the twentieth century was truly unprecedented and it is a wonder that the world has coped as well as it has. The last 50 years have been truly remarkable in terms of the number of people who were absorbed by the world's cities. In the first half of the twentieth century, the total accretion to urban population in the world was only 500 million. During the next 50 years, from 1950 to 2000, as many as 2.1 billion people were added to the world's urban areas. The important point that I want to make through this brief historical sketch is that the first 30 years (2000-2030) of this century will witness a similar addition of 2.1 billion people or thereabouts so the pace of addition in terms of magnitude is again totally unprecedented. The staggering change that took place over the last 50 years is now likely to be compressed in the next 30.

Geographically, the focus of change will now be Asia and Africa. Europe experienced rapid urbanisation in the nineteenth century and in the early twentieth century. North America followed with some lag; and Latin America followed suit in the second half of the twentieth century. The twenty first century will truly be Asia's urban century. By 2030, about 55 per cent of the world's urban population will be in Asia. What is also interesting is that about 16 per cent will be in Africa, about equal to Europe and North America combined.

So the focus of our deliberations in relation to shelter, water, sanitation, and everything else connected with urbanisation will have to be on Asia and Africa: and these two regions themselves contain great complexity as well as heterogeneity.

Now that we have a grasp of the magnitudes:

- The next 30 years will add another 2.1 billion people to the urban coffers;
- And two thirds of these will be in Asia;

we can go forward to speculate on what will be the new challenges that we will face.

III. Globalisation

Let me begin with the changes brought about by globalisation. With free trade and globalisation, along with the death of distance, prices of traded products have got almost equalised across the world. The price of most goods is not dissimilar across most of the world. What then provides the source of advantage to any country? It is the relative productivity of cities that will provide the key source of comparative advantage to each country. Thus globalisation has added further focus to the importance of city level efficiency. Those countries that are not able to make their cities efficient and productive will lag behind. What can we learn from Asia from the developments that have taken place over the last 30 years or so? Who would have thought that North Americans and Europeans will begin to fear the juggernaut of Asian productivity and efficiency? How has this efficiency been achieved? A key feature of this rapid gain in economic efficiency in Asia that is little appreciated is that this efficiency has been achieved mainly through the efficiency of its leading cities.

The rapid economic growth of Asia in the last half century must be among the most spectacular periods of development in recorded human history. What have been the characteristics of this growth? Starting with Japan, a common feature of Asian economic strategy has been the heavy concentration of economic activity in and around coastal regions. In Japan, infrastructure investment was concentrated in the Tokkaido region – the Tokyo-Nagoya-Osaka Corridor. More than 60 per cent of its urban population got concentrated in this region by 1970. In South Korea, there was similar concentration of urban infrastructure and transportation investment in the Seoul/Pusan regions. By the mid 1970s, 70 per cent of the South Korean urban population resided here. In Taiwan, a similar strategy was adopted in the development of Taipei / Kaohsing. This was followed by Singapore and Hong Kong as city states, Jabotabek (the Jakarta region) in Indonesia, Bangkok in Thailand, Kuala Lumpur and environs in Malaysia, and finally in the coastal regions in China. The result is a mega urban corridor stretching from Tokyo to Sydney through Seoul, Taipei, Shanghai, Hong Kong, Kuala Lumpur, Singapore and Jakarta.

Why do I mention this? Through this strategy of concentration, contrary to popular wisdom, it is probably the case that these countries achieved great economies of scale in the provision of urban infrastructure and services. Great economic efficiency was achieved through the proximity of many activities: agglomeration economies and scale economies. Distance got killed – both within the respective countries with regard to economic activity and across borders. Thus the great manufacturing engines of South East Asia got intertwined with each other and across the Pacific with America. This contributed to flattening of the world. Those of you who have read Tom Friedman's **"The World is Flat" (2005)** will see how the world is inextricably intertwined through this concentrated urbanisation: a good deal of offshoring of production is concentrated in Asia. India has carried this concept further through concentration of its service activities in a few inland cities: it has turned the concept on its head by killing distance through satellites and jumping inland. One consequence of this emerging urban pattern is that the traditional notions of a city deriving from and servicing its hinterland have become obsolete. Now, with low transportation and communication costs, cities are more likely to be linked with their counterparts across borders, than with their own hinterlands. The source of their comparative advantage is to be found within, and not resources or materials in their hinterlands. This is not dissimilar to the thriving city states around the Mediterranean in medieval times.

IV. New Challenges of Globalisation for Cities

The lesson that we learn from Asia is that we must focus on city efficiency. Our traditional notions of city efficiency are focused on the provision of efficient infrastructure, such as, water, sanitation, sewerage, urban transportation, power and communication. This focus will indeed have to continue. What Asia has shown is that we can economise on this through concentration of economic activity. I will return to some financing implications of this investment in hard, physical infrastructure a little later. What then is new about globalisation with respect to cities? I believe that now we will have to focus as much at the city level on what might be called softer areas of infrastructure. What are these softer areas? And what do we need to do?

Knowledge: With a good deal of world output having become disembodied – witness the increasing share of services in world output – the key to city efficiency and comparative advantage will be the generation of knowledge. It is no accident that cities have been the cradles of civilisation. Face to face interaction, argumentation and debate form the sinews of knowledge generation. Tokyo is now reported to host 113 universities, and Beijing 59. Similarly, Hong Kong, Singapore, Seoul, Kuala Lumpur, Bangkok – are all attempting to ramp up their higher education and research activities. Similarly, it is no accident that the Indian cities that have prospered over the last decade and a half, such as Bangalore, Hyderabad, Pune, Chandigarh, Chennai, and Delhi all happen to be well endowed with educational institutions and research facilities. So conscious generation of knowledge activities will be crucial to the welfare of cities. Such knowledge activities encompass the location of colleges and universities, research laboratories, art and cultural institutions, alike.

Vocational Education: But it is not just tertiary level education that is important. Both service and manufacturing activity need a great deal of technical support. With machines now being increasingly embodied with information technology (IT), and service activities of all kinds also dependent on IT, the days of unskilled labour are numbered. Thus, tertiary education and research and development themselves need a solid base in facilities for active vocational education. Bismarck in the nineteenth century recognised this and began the famed German vocational education system – which helped greatly in enabling Germany to catch up in the latter part of nineteenth century and then set new standards for productivity growth. So cities that actively provide a focus on vocational education will win: public private partnerships here are a must and provide huge opportunities for innovation. The generation of employment activity in cities is a must: but this will increasingly be skill based.

Secondary/Primary Schooling: Needless to say, vocational education and higher education cannot thrive without a solid base in secondary and primary schooling. Once again, the key to success will be the ramping up of quality in school systems from the bottom to the top. With great progress having been made over the past half century in increases in literacy, it is now time to turn to quality enhancement. In developed countries, with their demographic transition to increasingly ageing societies, existing schools will get fewer customers. In developing countries, it will be the opposite for some time.

Health: Despite the ravages wrought by high densities of urban population, it is still true that the health of even the urban poor is better than that of their rural counterparts. With more than half of the world's population in urban areas, it is now that much easier to provide better quality of health services in a concentrated manner. With Asian urban population expected to double in the next 30 years, here is a great opportunity to improve overall health – and in Africa too. We will need to focus on the provision of both public health and curative services.

I mention these education and health issues in particular, because concentration of population in cities is highly conducive to the delivery of these services. Furthermore, the consequence of globalisation and technical change is rendering the unskilled obsolete. Hence, the need for a specific city focus.

Urban Amenities: One issue that has received little attention in the accelerated urban growth of the past 50 years is that of the provision of urban amenities. This is what sets apart the great cities of Europe – London, Paris, Rome – from those elsewhere, especially those in the developing world. One consequence of globalisation is that there is now vastly increased trans-border mobility of the professional classes. Among others, this is resulting in two important consequences. One, they are demanding international salaries wherever they are, thus probably leading to higher inequality. And second, they are also demanding recreational amenities, cleanliness of environment, efficient and comfortable transportation, and international level communication services. Thus, there is great pressure to invest, possibly prematurely, in world class facilities at much lower average income levels. We are also witnessing the emergence of an increasing number of gated communities isolating the elite from the rest.

Urban authorities must think of these issues carefully and turn this trend on its head by providing better amenities for all. Enrique Peñalosa, the great innovative former Mayor of Bogota, did much to address this issue and looked at public space as the great equaliser. He believed that if the best urban amenities are provided for common consumption in public spaces, there would be much less incentive for the elite to segregate themselves in gated communities in order to enjoy the kind of urban amenities they aspire for. Accordingly, as Mayor of Bogota, he transformed the city by concentrating on the improvement of public spaces and public provision of urban amenities. Bogota was characterised by what looked like a noisy chaotic and polluting private urban transportation system. He innovated by instituting the new famous high quality high capacity bus system known as the Trans Millenio. He favoured investment in mass transit over expressways for cars. Unlike other cities, where roads for cars are typically widened and pavements for pedestrians narrowed, he did the opposite. Public pedestrian space has been widened and roads narrowed. Consequently, many more people are seen on the streets, rendering the city safer. Another remarkable innovation, perhaps one of a kind, that he did was the provision of international quality public libraries all over the city – from poor areas to richer ones. Finally, he also improved many of the available green spaces. The consequence of all this is that Bogota is now much more liveable; the poor have increased dignity; and the city has become much more vibrant.

I have dwelt at some length on Peñalosa's exploits since I worked extensively on Bogota in the late 1970s: I could never have imagined such a turn around in that city. There are many lessons for all of us in such counter-intuitive innovative thinking.

Summary of Globalisation

So, the advent of globalisation is reinforcing the need for cities to become more consciously knowledge based. Cities are also becoming more inter connected across borders: thus a successful city or network of cities needs efficient airports, ports, other transportation and communication. Unskilled labour is obsolete; so much more attention has to be given to all levels of education. The provision of urban amenities for all is a must to prevent accelerating trends of increasing polarisation of the rich and poor. That this is not a pipedream is being demonstrated in Bogota.

V. Some Demographic Changes

One big change that we will witness over the next few decades is that the weight of natural population growth in urban growth will become higher relative to rural-urban migration: whereas this will make life easier in some respects, it may be more difficult in others. This will raise social issues related to ageing: with continued improvements in health, sanitation, water supply, and the like, people will live longer and longer, even at low income levels. At the other end, depending where a country is in the demographic cycle, either there will be increasing demand for schooling – and increasingly so for secondary and higher education, as retention rates improve and as demand for skills increases; or, there will be need for shutting down schools. The demand for space in crowded cities for schooling will need to be addressed, and also what kind of schooling.

Another demographic phenomenon is that the largest cities begin to slow down in growth after some size level, and other cities start to grow faster. Again different kinds of problems will arise. The older larger cities will need renewal of old infrastructure. This is difficult to do physically and is expensive – and will need financing. Much greater growth will take place in the next level of size – both in terms of population and size. To the extent that these cities will be growing in a new era, it is likely that they will have lower densities, and will grow faster in physical size. This will undoubtedly lead to new tensions at the urban periphery between the existing landowners and the putative new ones. It will also raise issues with regard to transportation investment: how much for public transit and how much for private modes. With the real cost of private transportation coming down, will it be a losing battle against the ravages of the automobile. This issue goes back to the Peñalosa philosophy: can we leapfrog and provide public transit of a quality that will attract the better off? This is a very difficult issue: I don't pretend to have answers, but I do believe that it poses great challenges for the future.

The fastest growing cities in the coming decade will also probably be the poorest: Dhaka, Ho Chi Minh City, Lagos, and others in Africa. Will they cope as well as their predecessors? Do we need to give them special attention? Where will the resources come from? Or will they raise new problems that we have not yet seen: social, political and economic. With ageing and increasing incomes, household sizes will fall; more health facilities will be needed; absence of adequate social security will lead to hitherto unforeseen problems. Have we thought of these problems; what will we do?

VI. Cities and the Poor

I have said little about the poor. This is not accidental, since I have little to offer. The background papers to this conference have provided a myriad of very interesting and innovative approaches from all over the world. Some have worked well and some had not. What can clearly be said is that there are no clear answers.

I have a rather simplistic but somewhat different view. Most approaches to the urban poverty issue have concentrated on the issue of slums and shelter for the poor. I believe that we need to separate out the issues of income generation and the provision of living environments. The issue of income generation is I believe addressed by overall macro management and strategies to encourage overall economic growth. This can be helped at the city level by city level policies that do not discourage entrepreneurship and growth. Education, skill generation and health facilities are of the utmost importance, but also policies that do not discourage the use of cities as incubators of entrepreneurship. Elitist tendencies towards banishing the informal sector are clearly antithetical to entrepreneurship and growth. If a city grows, peoples' incomes grow, then it is bound to attract more migrants.

At the lowest level of income, we need to understand that **no** level of "formal" housing is affordable. The poor basically have to squat. But no public policy can encourage squatting transparently. Squatting can't be planned for. Initial squatting cannot, in general, be condoned, but can often be followed by eventual legalisation. This needs creative and constructive tension. What is also less understood is that the poorest, apart from squatting, are generally renters from the next level of households in terms of income.

I find that the excellent background papers have this one missing link. They have no mention of the poor as renters and financiers. Much of the financing of incremental housing is done by poor renters. Typically, these renters would be from the extended family, or from the extended community back home. May I suggest that more work be done on this to understand this aspect of shelter for the poor. If one solution for shelter for the poor is increasing recognition of rentals, much greater understanding is also needed of the renters actually acting as financiers of the house owners.

To summarise: provision of shelter for the poor will remain chaotic; the best we can do is to expand their access to land, and not be too nasty to them. I do believe that the best strategy for helping the urban poor is:

- Make the city economy vibrant
- Promote employment growth
- Take care of education
- Take care of health
- Take care of clean water
- Take care of sanitation
- Reduce barriers to entrepreneurial entry
- Promote mobility
- Provide security of tenure
- Equalise public spaces.

VII. Governance and Financing

I would like to conclude by making a few comments on urban financing and governance, the key theme of this summit. Once again, the background papers have provided a wealth of information on a whole host of innovative financing mechanisms. I will not comment on these mechanisms, except to say: let a thousand flowers bloom. I only want to address a few general issues.

There are basically two kinds of financing needs.

- Financing for public goods and services
- Financing for private goods and services.

In the first case, the provision of public goods and services has to be paid for by a tax cash flow and in the second case, the provision of private goods has to be financed by a flow of user charges. In between, there is scope for public private partnerships.

The solutions are relatively simple, their implementation is not.

Let me first deal with urban taxes. A well conceived and implemented property tax can finance most public goods. This has always been actually very difficult to implement, but with the advent of information technology, the maintenance of property registers, regular updation, *etc.,* has now become very easy in principle. With increasing urbanisation, property values will keep rising and hence this can be a very buoyant flow. Once cash flow is ensured, any amount of financial engineering can be achieved.

The key issue that arises is that as urbanisation and city growth accelerates, the urban infrastructure investment has to be front loaded, and which then provides services over a very long period of time: the basic sewerage systems of Mumbai (Bombay) and Kolkata (Calcutta), for example, are over a hundred years old but still continue to function. Thus, property tax cash flows have to be leveraged to generate the upfront finances for investment in infrastructure. The servicing of these leveraged funds has to be over and above the needs for maintenance expenditures. Life would be easy if financing sources were such that civic authorities could raise resources in such a manner that the repayment schedule matched the benefit schedule.

A scan of urban financing systems across the world does not reveal any uniformity in pattern. Germany has used its mortgage banks to sell Pfandbrief bonds that enjoy high credit quality next only to the Bund. These mortgage banks issue the Pfandbriefs and then intermediate the funds to states and municipal authorities for infrastructure investment. There is a complex system of credit enhancements that makes it feasible to raise long term funds. But this credit quality has been earned over more than a century over which the municipal authorities have made sure that their tax and user charges systems are such that they can redeem the resources raised. In the United States, it is the decentralised municipal bond system that has largely financed urban infrastructure. Here also, since the ability to raise resources depends on the retention of healthy credit ratings, municipal authorities have a very strong incentive to stay solvent and service their bond holders. In principle, therefore, such systems have been successful since they have ensured that towns and cities face an incentive structure that encourages them to remain creditworthy and are essentially self-financing.

In Asian countries, financial markets have not been sophisticated enough to allow for such financing methods yet. Financing for urban infrastructure has usually come from higher tier governments who raise resources from taxes, or from banks and financial institutions that have been typically government owned or sponsored. Such systems are not well designed to avoid moral hazard: the recipient towns and cities do not have as strong an incentive to be essentially self financing. The 1990s have seen increasing attempts to privatise the provision of urban infrastructure, but this has met limited success at best. Given the magnitude of urban population accretion expected over the next thirty years, I see little choice. If Asian and other cities are to thrive and prosper, they will have to develop self sustaining local taxation and user charge systems so that they can tap national and international financial markets for their financing needs.

Utilities

Most utility services are in the nature of private services, in the sense that their consumers can be identified and who can pay for these services. The Latin American experience of the 1960s and 1970s shows that it is indeed feasible to improve services through user charges. Again, once the cash flow is there, any financial engineering can be done to raise funds. User charges are resisted in the name of the poor. The biggest beneficiaries were the rich. In principle, all activities should be charged for: the poor who cannot pay for such services should indeed be subsidised. They tend to be self selected and can be identified without too much difficulty.

For example, the poorest do not have taps in their homes – self selection can be achieved by making public taps free, while charging fully for water supplied to all who have a tap in their homes. The rapid expansion of mobile phones in urban areas in India suggests that even the poor can pay for services that they value.

Much needs to be done here to show that subsidies generally go to the rich and that utilities need to be paid for.

The basic message is that we need to look for and ensure cash flows. They are usually there but often go in the wrong direction. As long as there is cash flow, the activity can be financed. Where the cash flow is from local taxes, the activity being financed is essentially a public good, and where it is from user charges, it is essentially a private good. The former has to be supplied by the public sector, whereas the latter is susceptible to privatisation. Activities in between can be supplied by public private partnerships (PPPs).

The task before us is to improve local municipal governments and utilities (public or private) so that they can be creditworthy. If domestic bond markets are developed enough, bond financing can be raised for such activities. One caveat is important: since cash flows arising from the consumption of urban services are basically in local currency, foreign financing of such services should generally be avoided, unless adequate risk mitigation is feasible to compensate for currency risk.

Governance

A rising tide lifts all boats. Economic growth is the key. The contribution that this conference can make is to propagate the message that urban growth is welcome and that all we need to do is to prepare for it. We need to rid policy makers, academics, analysts, NGOs and donors of what we in India call the "Third class train compartment mentality". Those who succeed in boarding a crowded train then do not want others to come in. Existing city residents tend to want to discourage new city entrants. Urban growth must be more inclusive. Everything I have talked about needs more innovative, thoughtful planning. Thus the major thrust has to be on training for urban governance:

An enduring puzzle for me is how we treat urban governments and those who work in them. Cities are among the most complex and exciting mechanisms to manage. Large metropolitan cities also have large budgets. Yet city managers generally have low prestige, are paid poorly, and hence often lack in competence to manage modern growing cities, especially in developing countries. The largest cities are bigger than most countries. Yet urban management, urban planning and the like are not sexy occupations. Schools of urban management, urban financial management and urban planning are few and far between, particularly in developing countries. Yet cities are crying out loud for innovation, for flexibility, for forward looking strategies, for greater participation by the people, and for modern financial management. We need to make urban management professional, exciting and sexy for cities of the twenty first century.

A concrete outcome of this conference would be a programme of funding to start top class urban planning schools in a dozen locations in developing countries and to make the profession sexy.

VIII. Concluding Remarks

Let me attempt to summarise my key observations. Our approach to the future of urbanisation in the next thirty years has to be informed by the realisation that more urban population will be added during this period than any comparable period in history. This growth will be concentrated in Asia and Africa, so the best global thinking on urban management has to be brought to bear in these regions.

The ongoing process of globalisation and technical change will bring many new challenges, including many that cannot be foreseen today. We will certainly have many more large concentrations in Asia and Africa and we will need to learn how to manage their infrastructure needs, both physical and social. We will need to focus more than even before on the "soft" parts of urban needs connected with health, education and the provision of urban amenities. Approaching public space as the great equaliser will have to be part of this approach.

The demographic transitions of this century will be different from those of the last century with overall rates of population growth falling everywhere, and with the weight of urban population increasing, there will be much more organic urban population growth than from rural urban migration. With increasing longevity everywhere, cities will get more aged everywhere: social security will be an issue, and providing appropriate facilities for the aged will be an issue, including special arrangements for their transportation.

There will certainly be many poor people in the growing Asian and African cities. With increasing globalisation and concomitant growth in income inequality, we will have to be careful to forestall natural processes by which the rich try to segregate themselves in urban enclaves. Encouraging growth of entrepreneurship and urban employment opportunities in our cities must be pursued and not discouraged. There are often many impulses to thwart such growth: they must be resisted. The provision of urban services needs to be done on a sound financial basis for them to be sustainable, but the approach has to be inclusive to engender healthy city growth.

As we cope with the kind of urban growth expected, it is of the utmost importance that city governance and management is made much innovative, flexible and responsive. We need intelligent urban governance since problems keep changing and need dynamic responses. Urban management needs to become much professional and attractive so that the next generation of urban managers are the best and brightest. This urban summit can make a specific contribution to this by clearly recommending the development of at least a dozen international class schools of urban planning and management in Asia and Africa over the next 5 years.

This brings me to the international dimension of urban infrastructure financing. It is usually the case that, when a country begins its rapid urban growth phase and its financial markets are yet to develop, the only way to tap long term funds is to take recourse to external savings, which are then to be repaid over a long period of time. The typical historical experience has been that the regions undergoing intensive urbanisation had to mobilise external savings intensively: followed by periods of balance of payments crises and debt defaults. In Asia, too, the 1997 financial crisis was also partially reflective of large external resource flows earlier that suddenly got reversed, as was the Latin American debt crisis of the 1980s. Since then, however, it is puzzling that the region as a whole is exhibiting financial surpluses that are being invested in Europe and North America. In the great current debate on global imbalances, the assumption seems to be that these imbalances seem to be of a relative durable nature, partly reflecting the favourable economic demographics of Asia and the converse in the West.

I remain somewhat puzzled by this financial turn of events. I would have expected that, the demands of infrastructure investment, particularly that of urban infrastructure, would be such that regional domestic savings will not be adequate to finance the required investment. Perhaps the explanation really lies in the Asian reaction to the 1997 financial crisis and that we may expect higher investment levels in the years to come. The magnitude of urban population growth expected in China, India, Indonesia, Pakistan and Bangladesh over the next 30 years is such that pressures on international resource mobilisation are bound to arise. Urban infrastructure investment would then exceed available savings in these countries and the current alleged savings glut will disappear over a period of time. Will there then be enhanced competition among Asian countries from available international savings? With the emerging adverse demographics in the West, and hence low savings rates there, will this competition lead to the emergence of higher real interest rates in the years to come: the exact converse of the current situation of excess world liquidity and low interest rates? If that happens, the task of urban policy makers and central bankers alike will become that much more difficult. The efficient intermediation of financial savings within countries, and across countries, will therefore be as important for urban development as for financial market development *per se* and for monetary policy makers in the years to come.

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*India's Financial Sector Reforms: Fostering Growth While Containing Risk**

Rakesh Mohan

I am honoured to be back at Yale where I got my basic economics grounding from James Tobin, Bill Nordhaus, and Robert Evenson, among others. In all these years, this is my first lecture at Yale, so I am particularly pleased to have this opportunity. Thank you Professor Srinivasan.

The turmoil in international financial markets since late July this year and the increased uncertainty that financial markets are currently experiencing have brought issues relating to financial sector stability to the fore. In some ways, the recent developments are unprecedented in their occurrence and in terms of the emerging magnitude of financial sector losses. The sudden loss of confidence among traditional counterparties reflects extreme information asymmetry arising from the complex layering of risk diffusion and high leveraging; and the breakdown of risk assessment by reputed rating agencies and the like. The speed of contagion and the extensive involvement of large, reputed and regulated financial institutions are indicative of regulatory shortcomings, which has then necessitated unconventional responses of central banks. All this has raised serious concerns relating to the ability and flexibility of national financial systems to withstand shocks emanating from such unusual developments. It has also spurred some reconsideration on some aspects of monetary policy and of financial regulation, particularly as they relate to the maintenance of financial stability.

India has so far remained relatively insulated from these developments and our impact analyses suggest that our exposure to troubled sub-prime assets and related

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derivatives is negligible in comparison to many other economies. Whereas this may be regarded by some as fortuitous, it is perhaps our nuanced approach to financial sector reform and development that has served us well; our approach has been marked by conscious gradualism with the implementation of coordinated and sequenced moves on several fronts that are predicated on the preparedness for change of the financial system in particular, and of the economy in general. We have also built in appropriate safeguards to ensure stability, while taking account of the prevailing governance standards, risk management systems and incentive frameworks in financial institutions in the country. Overall, these progressive but cautious policies have contributed to efficiency of the financial system while sustaining the growth momentum in an environment of macroeconomic and financial stability. Nevertheless, we in the Reserve Bank are maintaining enhanced vigilance to be able to respond appropriately to the prevailing heightened uncertainties in global financial conditions. The policy challenge is to continue to ensure financial stability in India during this period of international financial turbulence, while maintaining the momentum of high growth accompanied by price stability.

Against this backdrop, I thought I would take this opportunity to review India's approach to financial sector reforms, the path we have traversed for over almost two decades from a restrictive, even repressed past, the nuances of our somewhat unorthodox approach to instituting competition and efficiency in financial intermediation and the challenges we face in the development of our financial sector in the years ahead.

II. Financial Sector Reforms and Outcomes

In retrospect, the key success of financial sector reforms in India since they were instituted in the early 1990s has been the maintenance of financial stability through a period marked by repeated financial crises across the world. The process of reforms is noteworthy not only for the turbulence around its path but also for the sheer dimensions of the change achieved from the position where we started.

Until the beginning of the 1990s, the state of the financial sector in India could be described as a classic example of "financial repression" (MacKinnon 1973; Shaw 1973). The sector was characterised, *inter alia*, by administered interest rates, large pre-emption of resources by the authorities, extensive micro-regulations directing the major portion of the flow of funds to and from financial intermediaries, relatively opaque accounting norms and limited disclosure, and dominant public ownership. Compartmentalisation of activities of different types of financial intermediaries and strong entry barriers thwarted competition resulting in low levels of efficiency and productivity and severe credit constraints on the private sector, especially in the absence of any access to external finance. Capitalisation levels were low due to lack of commercial considerations in credit planning and weak recovery culture which also resulted in large accumulation of non-performing loans. The predominance of

Government securities in the fixed-income securities market of India mainly reflected the captive nature of this market as most financial intermediaries were mandated to invest a sizeable portion of funds mobilised by them in such securities to finance high Government borrowings at administered/concessional interest rates. In the capital market, new equity issues were governed by a plethora of complex regulations and extensive restrictions with very little transparency and depth in the secondary market trading of such securities. Comprehensive exchange control resulted in little depth in the foreign exchange market with most external transactions governed by inflexible/low limits and prior approval requirements. Monetary policy was subservient to the fisc. The provision of fiscal accommodation through ad hoc treasury bills led to high levels of monetisation of fiscal deficit during the major part of the 1980s. The expansionary effects of fiscal spending were sought to be curbed through interest rate regulations, credit rationing and high reserve requirements, effectively preventing the development of financial markets.

Elsewhere, I have attempted to document the various facets of India's experience with financial sector reforms – the guiding objectives and intellectual/analytical underpinnings; the choice of pace and sequencing; specific aspects of policy measures for the banking sector, non-bank financial companies, term lending institutions and other financial intermediaries; development of financial markets; and changes in the monetary policy framework (Mohan, 2004; Mohan, 2006c). Today, I propose to undertake an evaluation of the financial sector reforms in terms of actual outcomes.

II.1 Monetary Policy

While assessing monetary policy, it would be reasonable to assert that it has been largely successful in meeting its key objectives in the post-reforms period since the early 1990s. Inflation has averaged close to five per cent per annum in the decade gone by, notably lower than the average of 7-8 per cent in the previous four decades. Structural reforms from the early 1990s coupled with improved monetary-fiscal interface and reforms in the Government securities market enabled better monetary management from the second half of the 1990s onwards. A number of other factors such as increased competition, productivity gains and strong corporate balance sheets have also contributed to this low and stable inflation environment, but it appears that calibrated monetary measures had a substantial role to play as well. More importantly, the regime of low and stable inflation has, in turn, stabilised inflation expectations and the threshold level of inflation tolerance in the economy has come down significantly (Table 1).

It is encouraging to note that despite the high international crude oil prices, other commodity prices and elevated food prices, inflation remains low and inflation expectations appear to be consistent and stable. Consequently, both nominal and real interest rates have fallen. Due to both financial restructuring and low interest rates in recent years, the growth rate in interest expenses of the corporates has declined consistently since 1995-96; such decline has significant implications for the

Table 1: Growth and Inflation in India – A Historical Record

(Per cent)

Period (Averages)	GDP Growth Rate	WPI Inflation Rate
1	2	3
1951-52 to 1959-60	3.6	1.2
1960-61 to 1969-70	4.0	6.4
1970-71 to 1979-80	2.9	9.0
1980-81 to 1990-91	5.6	8.2
1991-92 (Crisis Year)	1.4	13.7
1992-93 to 1999-00	6.3	7.2
2000-01 to 2006-07	6.9	5.1
2003-04 to 2006-07	8.6	4.9

Source: Reddy (2007).

improvement in bottom lines of the corporate sector as a whole and their resilience to financial shocks.

In terms of the monetary policy framework, India's approach has been somewhat unorthodox. Traditionally, central banks have pursued the twin objectives of price stability and growth or employment, while in recent years, greater attention has been given to the maintenance of price stability through inflation targeting regimes. Although there is no explicit mandate for price stability in the Indian context, the objectives of monetary policy in India have evolved as those of maintaining a judicious balance between price stability and ensuring adequate flow of credit to the productive sectors of the economy. Considerations of financial stability, however, have ascended the hierarchy of monetary policy objectives in recent years in view of the increasing openness of the Indian economy, financial integration and the possibility of cross border contagion. Accordingly, we believe that regulation, supervision and development of the financial system remain within the legitimate ambit of overall monetary policy broadly interpreted.

In the wake of financial sector reforms and opening up of the economy in the 1990s, the Reserve Bank switched over in 1998-99 to a multiple indicator approach whereby macroeconomic and financial market data on both quantum and rate variables are all examined, along with output, in framing monetary policy. We believe that the specific features of the Indian economy, including its socio-economic characteristics, make it necessary for the monetary authority to operate with multiple objectives and indicators for some time to come. A single objective for monetary policy, as is usually advocated, particularly in an inflation targeting (IT) framework, is a luxury that India cannot afford, at least over the medium term. As regards IT, even though there has been an increase in the number of central banks adopting IT since the early 1990s, a number of central banks, notably the Federal Reserve, retain multiple objectives.

Internationally, there is no unique or even best way of monetary policy making and different approaches or frameworks can lead to successful policies by adapting appropriately to diverse institutional, economic and social environments (Issing, 2004). Moreover, some evidence suggests that average inflation as well as its volatility in prominent non-IT industrial countries has, in fact, been somewhat lower than that in prominent IT industrial countries. IT is not found to have any beneficial effect on the level of long-term interest rates either (Gramlich, 2003; Ball and Sheridan, 2003). Furthermore, an IT framework reduces the flexibility available to a central bank in reacting to shocks (Kohn, 2003). Emerging Market Economies (EMEs) face additional problems in an IT regime. These economies are typically more open and it exposes them to large exchange rate shocks which can have a significant influence on short-run inflation. A boom-bust pattern of capital flows can lead to substantial movements in exchange rates. EMEs may have to manage exchange rates more heavily since they are more commodity-price sensitive than advanced economies and commodity price fluctuations can wreak havoc with the forecastability of consumer price inflation (Eichengreen, 2002). An empirical evaluation of the experience of EMEs that have adopted IT confirms that IT is a more challenging task in such economies compared to developed economies that have adopted IT. While inflation in EMEs was indeed lower after they adopted IT, their performance was not as good as that experienced in developed IT countries. Deviation of inflation from its targets is found to be larger and more common in EMEs (Fraga, Minella and Goldfaj, 2003). Inflation targeting by itself is not a sufficient condition for success. In view of the above, the characterisation of inflation targeting as "the gold standard for stabilising monetary policy" is misleading. Indeed, in the recent episode of financial market turmoil, even central banks with explicit inflation targeting or price stability as the predominant objective were forced to scale down the emphasis on price stability, notwithstanding continued inflationary pressures. Such central banks had to inject liquidity and reduce policy rates – in some cases, holding back the earlier expectations of tightening – as they had to lay greater emphasis on financial stability and growth.

The overall macroeconomic record of the Indian economy since the early 1990s indicates an acceleration in growth and a significant reduction in inflation. Inflation has averaged below 5 per cent in the current decade so far, substantially lower than that of around 8 per cent in the preceding two and a half decades. Pre-emptive monetary and prudential measures have led to this welcome situation of a reduction in inflation and acceleration in growth while ensuring financial stability. Indeed, a cross-country comparison of major EMEs that have adopted IT indicates that growth in India has been amongst the highest while inflation remains relatively low (Table 2). Amongst the sample of G-20 and major Asian countries, growth in India during 2000-2007 was the second highest after China. Inflation in India during the current decade has halved from that prevailing during the 1990s and is, at present, lower than many developing economies. A recent survey by McKinsey and Company of CEOs across the world, in both developed countries and EMEs, found that among all the countries surveyed, India had the highest proportion of CEOs, 40 per cent, who did not expect inflation to increase in coming years (McKinsey Quarterly, 2007). Thus, it would appear that, at least, among business leaders, inflation expectations are well-anchored in India. Although there has been above average growth in monetary and credit aggregates in the past 3-4 years, financial stability has been maintained through a judicious use of monetary and prudential measures. Thus, the recent record of macroeconomic management in India is exemplary, even amongst the EMEs that target inflation. The challenge

Table 2: Real GDP Growth and Consumer Price Inflation: Cross-Country Comparison

(Annual Averages, per cent)

	Real GDP Growth			Consumer Price Inflation		
Country	**1990-1999**	**2000-2007**	**2003-2007**	**1990-1999**	**2000-2007**	**2003-2007**
1	2	3	4	5	6	7
Developing Economies						
Argentina	4.3	3.4	8.6	253.7	9.0	9.6
Brazil	1.7	3.3	3.6	854.8	7.3	7.2
China	10.0	9.9	10.6	7.8	1.7	2.6
India	**5.7**	**7.0**	**8.5**	**9.6**	**4.5**	**4.8**
Indonesia	4.3	5.1	5.4	14.4	8.7	8.6
Korea	6.3	5.1	4.4	5.7	3.0	2.9
Malaysia	7.2	5.4	5.9	3.7	2.0	2.2
Mexico	3.4	2.9	3.2	20.4	5.2	4.1
Philippines	2.8	5.0	5.6	9.7	5.0	5.3
Russia	-3.8	6.8	6.9	222.2	14.2	11.0
South Africa	1.4	4.2	4.5	9.9	5.3	4.4
Thailand	5.3	4.9	5.4	5.0	2.5	3.1
Turkey	3.9	5.1	6.6	76.7	26.8	12.0
Developed Economies						
Australia	3.3	3.3	3.3	2.5	3.2	2.7
Canada	2.4	2.9	2.7	2.2	2.3	2.2
France	1.9	2.0	1.8	1.9	1.9	2.0
Germany	2.3	1.4	1.4	2.4	1.7	1.7
Italy	1.4	1.3	1.0	4.1	2.4	2.3
Japan	1.5	1.7	2.0	1.2	-0.3	-0.1
United Kingdom	2.1	2.8	2.8	3.3	1.6	1.9
United States	3.1	2.5	2.8	3.0	2.8	2.9

Source: World Economic Outlook Database, IMF.

for monetary policy now is to reduce inflation further in the medium term towards international levels, while maintaining the momentum of high growth and preserving financial stability.

II.2 Banking Sector

In the post-reform period, banks have experienced strong balance sheet growth in an environment of operational flexibility. Concomitantly, the financial health of banks has improved significantly, both in terms of capital adequacy and asset quality. Moreover, this progress has been achieved while setting the groundwork for the adoption of international best practices in prudential and accounting norms. Increased competitiveness and productivity gains have also been enabled by proactive technological deepening and flexible human resource management. These significant gains have been achieved even while renewing our commitment to social banking *viz.*, maintaining the wide reach of the banking system and directing credit towards important but disadvantaged sectors of society. The banking system's wide reach, judged in terms of expansion of branches and the growth of credit and deposits indicates continued financial deepening (Mohan, 2006a).

On the liability side, deposits continue to account for about 80 per cent of the total liabilities while on the asset side, the shares of loans and advances and investments have seen marked cycles, reflecting banks' portfolio preferences as well as growth cycles in the economy. In this regard, while the share of loans and advances declined in the second half of 1990s on account of the industrial slowdown as well as tightening of prudential norms, banks' credit portfolio has witnessed sharp growth in the period 2003-07.

The overall capital position of commercial banks has witnessed a marked improvement during the reform period (Table 3). Illustratively, as at end-March 2007, all 81 scheduled commercial banks operating in India maintained CRAR at or above 9 per cent relative to the Basel I norm of 8 per cent. For the Indian banking system, the ratio of capital to risk weighted assets works out to 13 per cent currently. While improved capitalisation of public sector banks was initially brought through infusion of funds by government to recapitalise these banks, subsequently, public sector banks were allowed to raise funds from the market through equity issuance subject to the maintenance of 51 per cent public ownership. As a result, ownership in public sector banks is now well diversified.

Despite tightening prudential norms in terms of classification of non-performing assets, the resulting measured asset quality of banks has improved considerably as the share of non-performing loans (NPLs) (as ratios of both total advances and assets) have declined substantially and consistently since the mid-1990s. In fact, the ratio of net NPLs to net advances at 1.0 per cent in India is now comparable to that of several advanced economies (Table 4). Improvement in the credit appraisal process, upturn of the business cycle, new initiatives for resolution of NPLs (including promulgation of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act), and greater provisioning and write-off of NPLs enabled by greater profitability, have contributed to the reduction in incremental NPLs.

Table 3: Distribution of Commercial Banks According to Risk-weighted Capital Adequacy

(Number of banks)

End-March	Capital Adequacy				
	Below 4 per cent	Between 4-9 per cent*	Between 9-10 per cent @	Above 10 per cent	Total
1	2	3	4	5	6
1996	8	9	33	42	92
2001	3	2	11	84	100
2007	–	–	2	79	81

* : Relates to 4-8 per cent before 1999-2000,
@ : Relates to 8-10 per cent before 1999-2000.
Source: Reserve Bank of India.

Table 4: Non-Performing Loans (NPL) of Scheduled Commercial Banks

(Per cent)

End-March	Gross NPL/ Gross Advances	Gross NPL/ Assets	Net NPL/ Net Advances	Net NPL/ Assets
1	2	3	4	5
1996-97	15.7	7	8.1	3.3
1997-98	14.4	6.4	7.3	3.0
1998-99	14.7	6.2	7.6	2.9
1999-00	12.7	5.5	6.8	2.7
2000-01	11.4	4.9	6.2	2.5
2001-02	10.4	4.6	5.5	2.3
2002-03	8.8	4.0	4.4	1.9
2003-04	7.2	3.3	2.8	1.2
2004-05	5.2	2.5	2.0	0.9
2005-06	3.1	1.8	1.2	0.7
2006-07	2.4	1.5	1.0	0.6

Source : Reserve Bank of India.

Efficiency gains are reflected in containment of the operating expenditure as a proportion of total assets (Table 5). This has been achieved in spite of large expenditures incurred by Indian banks in installation and upgradation of information technology and, in the case of public sector banks, large expenditures under voluntary pre-mature retirement of nearly 12 per cent of their total staff strength.

Table 5: Earnings and Expenses of Scheduled Commercial Banks

(Rs. billion)

Year	Total Assets	Total Earnings	Interest Earnings	Total Expenses	Interest Expenses	Establish-ment Expenses	Net Interest Earnings
1	2	3	4	5	7	8	9
1969	68	4	4	4	2	1	2
		(6.2)	(5.3)	(5.5)	(2.8)	(2.1)	(2.5)
1980	582	42	38	42	27	10	10
		(7.3)	(6.4)	(7.2)	(4.7)	(1.7)	(1.8)
1991	3,275	304	275	297	190	76	86
		(9.3)	(8.4)	(9.1)	(5.8)	(2.3)	(2.6)
2000	11,055	1,149	992	1,077	690	276	301
		(10.4)	(9.0)	(9.7)	(6.2)	(2.5)	(2.7)
2005	22,746	1,902	1,558	1,693	891	501	667
		(8.1)	(6.6)	(7.2)	(3.8)	(2.1)	(2.8)
2006	25,865	2,208	1,854	1,962	1,072	592	783
		(7.9)	(6.7)	(7.0)	(3.9)	(2.1)	(2.8)
2007	31,854	2,762	2,373	2,450	1,440	663	933
		(8.0)	(6.9)	(7.1)	(4.2)	(1.9)	(2.7)

Note : Figures in brackets are ratios to total assets.
Source : Reserve Bank of India.

In consonance with the objective of enhancing efficiency and productivity of banks through greater competition, there has been a consistent decline in the share of public sector banks in total assets of commercial banks. Nevertheless, public sector banks appear to have responded to the new challenges of competition, as reflected in their increased share in the overall profit of the banking sector. This suggests that, with operational flexibility, public sector banks are competing relatively effectively with private sector and foreign banks. Shares of Indian private sector banks, especially new private sector banks established in the 1990s, in the total income and assets of the banking system have increased considerably since the mid-1990s (Table 6).

Indian private sector banks, particularly new private sector banks, have made rapid progress in terms of increasing their income and asset size since the mid-1990s. In terms of branch expansion, the compound growth rate of private sector banks over the period 2002-07 was almost three times that of all scheduled commercial banks and more than four times that of public sector banks (Table 7). Among the private sector banks, the four big banks *viz.*, Centurion Bank of Punjab, HDFC Bank, ICICI Bank and UTI/Axis bank have experienced rapid branch expansion in the range of 16-46 per cent per annum in terms of compound growth rates. While private sector banks, as a group, have recorded a compound growth of 24 per cent per annum in their staff, public sector banks have witnessed a decline in the staff strength

Table 6: Bank Group-wise Shares: Select Indicators

(Per cent)

Item	1995-96	2000-01	2004-05	2005-06	2006-07
1	2	3	4	5	6
Public Sector Banks					
Income	82.5	78.4	75.6	72.4	68.4
Expenditure	84.2	78.9	75.8	73.0	68.9
Total Assets	84.4	79.5	74.4	72.3	70.5
Net Profit	-39.1@	67.4	73.3	67.3	64.6
Gross Profit	74.3	69.9	75.9	69.8	64.1
New Private Sector Banks					
Income	1.5	5.7	11.8	14.4	17.8
Expenditure	1.3	5.5	11.4	14.1	17.9
Total Assets	1.5	6.1	12.9	15.1	16.9
Net Profit	17.8	10.0	15.0	16.7	17.1
Gross Profit	2.5	6.9	10.7	13.8	16.7
Foreign Banks					
Income	9.4	9.1	7.0	8.0	9.0
Expenditure	8.3	8.8	6.6	7.4	8.3
Total Assets	7.9	7.9	6.8	7.2	8.0
Net Profit	79.8	14.8	9.7	12.5	14.7
Gross Profit	15.6	15.7	9.0	12.2	14.6

@ : Public sector banks, as a group, had recorded net losses during 1995-96.
Source : Reserve Bank of India.

Table 7: Operations of Private Sector Banks: Progress

Item	2002-03	2003-04	2004-05	2005-06	2006-07	Compound growth (per cent per annum) (2006-07/ 2002-03)
1	2	3	4	5	6	7
No. of branches						
Centurion Bank of Punjab	62	63	77	242	279	45.6
HDFC Bank	215	295	446	515	638	31.2
ICICI Bank	392	419	515	569	713	16.1
UTI Bank/Axis Bank	137	185	250	352	501	38.3
All Private Sector Banks	5,592	5,950	6,453	6,813	7,363	7.1
All Public Sector Banks	47,963	48,299	48,970	49,817	51,392	1.7
All Scheduled Commercial Banks	53,768	54,474	55,669	56,893	59,031	2.4
No. of employees						
Centurion Bank of Punjab	945	1112	1,374	4,471	14,458	97.8
HDFC Bank	4,791	5673	9,030	14,878	21,477	45.5
ICICI Bank	11,544	13,609	18,029	25,384	33,321	30.3
UTI Bank/Axis Bank	2,338	3,447	4,761	6,553	9,980	43.7
All Private Sector Banks	59,374	81,120	90,530	110,505	139,285	23.8
All Public Sector Banks	757,251	752,627	738,110	744,333	729,172	-0.9
All Scheduled Commercial Banks	828,328	847,945	856,671	876,955	896,307	2.0
Net profits (Rupees billion)						
Centurion Bank of Punjab	-0	-1	0	1	1	—
HDFC Bank	4	5	7	9	11	31.0
ICICI Bank	12	16	20	25	31	26.7
UTI Bank/Axis Bank	2	3	3	5	7	36.1
All Private Sector Banks	29	35	35	50	65	22.1
All Public Sector Banks	123	16	154	165	201	13.1
All Scheduled Commercial Banks	170	223	210	246	312	16.4
Deposits (Rupees billion)						
Centurion Bank of Punjab	28	30	35	94	149	51.3
HDFC Bank	224	304	434	558	683	32.2
ICICI Bank	482	681	998	1,651	2,305	47.9
UTI Bank/Axis Bank	170	210	317	401	588	36.4
All Private Sector Banks	2069	2,686	3,146	4,285	5,520	27.8
All Public Sector Banks	10,794	12,268	14,365	16,225	19,942	16.6
All Scheduled Commercial Banks	14,045	15,755	18,376	21,647	26,970	17.7
Advances (Rupees billion)						
Centurion Bank of Punjab	13	16	22	65	1,122	70.9
HDFC Bank	118	178	256	351	470	41.4
ICICI Bank	533	627	914	1,462	1,959	38.5
UTI Bank/Axis Bank	72	94	156	223	369	50.5
All Private Sector Banks	1,377	1,704	2,213	3,130	4,148	31.7
All Public Sector Banks	5,493	6,327	8,542	11,063	14,401	27.2
All Scheduled Commercial Banks	7,600	8,636	11,508	15,168	19,812	27.1

Note : Centurion Bank of Punjab was formed in October 2005 as a result of the merger of Centurion Bank with Bank of Punjab. Data for Centurion Bank of Punjab for 2005-06 and 2006-07 reflect the data of the combined entity, while that for the prior period pertain only to the Centurion Bank.

Sources : 1. Annual Accounts of Scheduled Commercial Banks, 1979-2004, Reserve Bank of India.
2. A Profile of Banks, 2006-07, Reserve Bank of India.

over the same period reflecting, *inter alia*, restructuring facilitated by greater use of technology and computerisation. In terms of growth of capital and reserves and surplus, the new private sector banks experienced annual growth in the range of 30-68 per cent, while deposits and advances have increased by 32-51 per cent and 39-71 per cent, respectively. Net profits recorded a compound annual growth of 27-36 per cent. In terms of all these parameters, new private sector banks grew much faster than the existing private sector banks, as might be expected.

There has been some discussion in recent times on the policy of branch licensing of banks by the Reserve Bank of India: that it could have restricted competition and growth of new banks. These data exhibit the very high growth experienced by the leading private sector banks and it is arguable whether there could have been much faster expansion without impairing their prudential quality and integrity of their balance sheets.

What is most encouraging is the very significant improvement in the productivity of the Indian banking system in terms of various productivity indicators (Mohan, 2006a). These improvements could be driven by two factors: *technological improvement*, which expands the range of production possibilities and a *catching up effect*, as peer pressure amongst banks compels them to raise productivity levels. Here, the role of new business practices, new approaches and expansion of the business introduced by the new private banks have been of the utmost importance.

To sum up, significant improvement in the performance of public sector banks has been witnessed over the past decade or so, facilitated by the phased introduction of wide-ranging financial sector reforms since the early 1990s. Gradual introduction of best international practices and norms, refinements in the supervisory practices, tightening of risk weights/provisioning norms in regard to sectors witnessing high credit growth, greater market discipline brought about by raising of capital from the capital markets and listing on the stock exchanges, interest rate deregulation, and scaling down of statutory pre-emptions are amongst the key factors that have led to better performance. Concomitantly, greater competition has been induced in the domestic banking sector by successful introduction of new generation private sector banks. Despite strong growth in balance sheets of the new banks, the banking system has exhibited remarkable stability. Although there have been a few instances of weaknesses in a few new private sector banks, pre-emptive measures in the form of the mergers of such banks with stronger banks, or infusion of new capital and change in ownership, on a voluntary or involuntary basis, have contributed to the strength of the domestic banking system, engendered confidence in the depositors and enabled maintenance of overall financial stability. Notwithstanding the substantial improvement, the domestic banking system will need to be further strengthened to face greater external competition and introduction of financial innovations and fuller capital account convertibility.

II.3 Financial Markets

The most notable impact of financial sector reforms is clearly discernible in the development of various segments of financial markets in India. The reforms since the early 1990s have led to a regime characterised by market-determined interest and exchange rates, price-based instruments of monetary policy, current account convertibility, substantial capital account liberalisation and vibrant government securities and capital markets. Derivative instruments have been cautiously introduced in a phased manner, both for product diversity and, more importantly, as a risk management tool. All these developments have facilitated the process of price discovery in various financial market segments.

There has been a significant increase in trading volumes and market liquidity (Table 8). Illustratively, average daily turnover in the money market has increased from Rs.427 billion in 1997-98 to over Rs.888 billion by 2006-07. The operations under the liquidity adjustment facility (LAF) have largely been able to steer overnight rates within the corridor set by the policy rates. Under the LAF, the Reserve Bank absorbs (reverse repo) as well as injects (repo) liquidity, depending upon the liquidity conditions and consistent with the overall monetary policy stance. Changes in fixed reverse repo/repo rates set by the Reserve Bank from time to time for the conduct of LAF, under which the central bank conducts daily auctions for the banks, have emerged as the main instruments for interest rate signalling in the Indian economy.

Inter-bank turnover in the foreign exchange market has nearly quadrupled between 2000-01 and 2006-07 to Rs. 840 billion. Average daily turnover in the foreign exchange market (inter-bank as well as merchant) has increased from US $ 5 billion in 1997-98 to US $ 23 billion by 2006-07. The exchange rate of the Indian rupee has exhibited significant two-way movements in the recent years. Efficiency in the foreign

Table 8: Depth of Financial Markets in India – Average Daily Turnover

(Rs. billion)

Year	Money Market*	Government Securities Market	Foreign Exchange Market #	Equity Market (Cash Segment) **	Equity Market (Derivative Segment—NSE)
1	2	3	4	5	6
1991-92@	66	4	n.a	n.a.	n.a.
2000-01	427	28	212	93	0.1
2001-02	655	63	232	33	4
2002-03	768	71	242	37	18
2003-04	287	84	307	63	84
2004-05	385	48	400	66	101
2005-06	600	36	564	95	192
2006-07	888	49	840	118	298

* : Includes the call money, the notice money, the term money, the CBLO and the repo markets.
# : Inter-bank turnover only.
@ : Data for G-Sec and equity market relate to 1995-96.
** : Include both BSE and NSE.
n.a.: not available

exchange market has also improved as reflected in the decline in bid-ask spreads.

In the government securities market, the issuance of long-term securities has enabled the development of yield curve across 30-year maturity. In the government securities market, the drop in turnover in 2004-05 and 2005-06 could be attributed to factors such as 'buy and hold' tendency of the participants such as insurance companies, which now hold a substantial portion of government securities, particularly those of longer maturities. Furthermore, certain regulatory changes introduced in late 2004 allowing banks to hold a larger proportion of their investment portfolio in the "held to maturity" (HTM) category reduced the proportion of portfolio used for trading, thereby affecting the magnitude of G-sec trading. The decline could also be attributed to the increase in interest rates over the period, which prompted banks and other players to hold rather than trade, so as to avoid trading losses. To keep the markets liquid and active, the Reserve Bank has recently allowed short selling in government securities among eligible participants, and trading in the 'when issued' segment, but these facilities have not seen much activity yet. Efforts are also on to increase liquidity through the active consolidation of existing securities.

The derivatives market has also gained vibrancy during the last couple of years. The total notional principal amount outstanding has more than trebled between March 2005 and June 2007 led by a significant jump in interest rate related contracts. Over this period, while the notional amount under interest rate related contracts quadrupled, that in foreign exchange contracts nearly trebled (Table 9). Certain legislative changes in 2006 provided clear legal legitimacy to OTC derivative contracts, which was somewhat ambiguous earlier.

The Government and the Securities and Exchange Board of India along with the Reserve Bank are taking steps to activate the corporate debt market. As has been experienced elsewhere, among the various financial markets, the corporate debt market is indeed the most difficult to develop for a variety of reasons. The expansion of the pension fund and insurance industries will progressively result in the presence of a larger financial investor base, which will help in the overall expansion of financial markets and in particular the corporate debt market.

Table 9: Outstanding Derivatives: Notional Principal Amount

(Rupees billion)

S. No	Description	March 2005	March 2006	March 2007	June 2007
1	**Foreign exchange contracts (outstanding)**	**13,013**	**17,285**	**29,254**	**37,625**
2	Forward forex contracts	12,487	15,286	24,653	32,044
3	Currency options purchased	526	1,998	4,601	5,581
4	**Futures**	**732**	**1,430**	**2,290**	**2,068**
5	**Interest rate related contracts**	**13,119**	**21,842**	**41,958**	**54,998**
6	Of which: single currency interest rate swaps	12,817	21,530	41,597	54,590
7	**Total -Contracts/Derivatives**	**26,864**	**40,558**	**73,502**	**94,691**

Note: Data pertain to scheduled commercial banks.

It is quite apparent that there exist well-functioning, deep, liquid, and well-integrated markets for bonds, currency and derivatives in India, contrary to what is often asserted. The trading volumes have generally witnessed significant growth in the various segments of the financial market. It is noteworthy that the increase in foreign exchange market turnover in India between April 2004 and April 2007 was the highest amongst the 54 countries covered in the latest Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity conducted by the Bank for International Settlements (BIS). According to the survey, daily average turnover in India jumped almost 5-fold from US $ 7 billion in April 2004 to US $ 34 billion in April 2007; global turnover over the same period rose by only 66 per cent from US $ 2.4 trillion to US $ 4.0 trillion. Reflecting these trends, the share of India in global foreign exchange market turnover trebled from 0.3 per cent in April 2004 to 0.9 per cent in April 2007. In view of the above, comments that are often made regarding missing financial markets are rather misleading. Moreover, empirical evidence points towards greater market integration (Mohan, 2007c). A good deal of development has indeed taken place in the government securities market, the forex market, OTC interest rate derivatives and the like. The corporate bond market is indeed in its infancy; and, more efforts have to be made to develop various exchange traded derivative markets.

It, however, needs to be recognised that financial markets are often governed by herd behaviour and contagion. Deregulation, liberalisation, emergence of financial conglomerates and globalisation of financial markets pose growing risks to financial stability. In this regard, it needs to be stressed that volatility in currency and bond markets can have significantly more adverse employment, output and distributional consequences compared to volatility in equity markets. Premature liberalisation of money and bond markets can lead to large and volatile capital inflows, which could potentially exacerbate complications for macroeconomic and monetary management. Furthermore, excessive fluctuations and volatility in financial markets can mask the underlying value and give confusing signals, as has happened in developed markets, thereby hindering efficient price discovery (Mohan, 2006c). As large segments of economic agents in India may not have adequate resilience to withstand volatility in currency and money markets, the Reserve Bank's policy approach has been to be increasingly vigilant and proactive to any incipient signs of volatility in financial markets.

Notwithstanding the progress made since the early 1990s, the Reserve Bank recognises that domestic financial markets need to develop much further, especially in order to support the recent acceleration in growth momentum of the Indian economy and in the context of the envisaged move towards fuller capital account convertibility. The Indian experience demonstrates that development of markets is an arduous and time consuming task that requires conscious policy actions and effective implementation. Without real sector development in terms of the physical infrastructure and improvement in supply elasticities, the financial sector can misallocate resources, potentially generate bubbles and possibly amplify the risks. Hence, financial sector reforms have complementarity with the pace and process of reforms in the real sector in India.

Given the large weight on stability, especially in view of low income levels for a large segment of the population, the careful and cautious approach to development of financial markets followed so far would need to be pursued in the coming years. The pace of further progress would depend upon the development of the necessary expertise in the public sector banks, further expansion of private sector banks and foreign banks. We recognise the need to develop further various segments of the domestic financial market to help in better risk management by various market participants. The demand for various risk management tools could be expected to increase, especially in the presence of potentially larger fluctuations in exchange rate and interest rates in the future. In recognition of the need to widen the range of instruments available to market participants, the Reserve Bank has placed draft guidelines on introduction of credit derivatives in the country. More recently, a draft report on the introduction of currency futures in India has also been put in the public domain for comments and feedback; and work is in progress on the introduction of interest rate futures.

Summing up, it is widely recognised that the Indian financial sector over the last decade has been transformed into a reasonably sophisticated, diverse and resilient system delivering a wide variety of financial services efficiently and profitably, with a spectrum of financial market segments in which financial institutions are able to participate with operational and functional autonomy in an environment of increasing deregulation and international competition. The acceleration of growth in the real economy suggests that the financial system has served well the overall needs of the economy. During this period, while the global financial environment has become more risky in the wake of new instruments and participants and the rapid advance in communication technology integrating markets worldwide, a unique feature of the Indian reform process is that it has been instituted and carried forward with the objective of sustaining and accelerating the growth momentum while containing risk and entrenching financial stability.

III. Indian Reform Outcomes in the International Context

Some commentators have criticised the Indian approach to financial sector reforms as unclear, timid and conservative in the context of the cross-country experience and have advocated more bold and drastic measures so as to speed up the transition to higher growth. There is also some discomfort with our approach to foreign banks, although even in this regard, we are ahead of WTO norms and we have set up roadmaps and review deadlines conditional upon broader consensus on international commerce in financial services. Admittedly, we have been cautious and somewhat conservative in our approach to financial sector reforms relative to some other EMEs. In this regard, it is important to note that not only has there been a steady upward shift in India's growth path, but this has also been accompanied by enduring stability. A remarkable feature of India's growth experience has been its resilience to both global and domestic shocks. In this regard, while the broad objectives of financial sector reforms were to enhance efficiency and productivity, the process of reforms was initiated in a gradual and properly sequenced manner so as to have a reinforcing effect. The approach has been to consistently upgrade the financial sector by adopting the international best practices through a consultative process.

With increased deregulation of financial markets and increased integration of the global economy, the 1990s were turbulent for global financial markets: 63 countries suffered from systemic banking crises in that decade, and 45 in the 1980s. Among countries that experienced such crises, the direct cost of reconstructing the financial system was typically very high: for example, recapitalisation of banks had cost 55 per cent of GDP in Argentina, 42 per cent in Thailand, 35 per cent in Korea and 10 per cent in Turkey. There were high indirect costs of lost opportunities and slow economic growth in addition (McKinsey & Co., 2005). It is therefore particularly noteworthy that India could pursue its process of financial deregulation and opening of the economy without suffering financial crises during this turbulent period in world financial markets. The cost of recapitalisation of public sector banks at less than 1 per cent of GDP is therefore low in comparison.

In our own assessment, the gradualist approach has been appropriate, particularly in the context of democratic polity, and given the multi-ethnic and linguistic composition of the country. The steady pace of reforms has borne fruit, including larger sections of society within the reform process. What is remarkable is the sheer magnitude and quality of the reform effort as evident in actual outcomes. The banking system in India has undergone significant changes during the last 16 years. A cross-country survey of crucial banking indicators reveals that the Indian banking system is now comparable to those of developed economies in terms of key indicators (Table 10). The capital adequacy ratio at 12.4 per cent for the system as a whole at end March 2006 is comparable to that of most advanced economies. Similarly, banks' non-performing loans to total loans have steadily declined and are lower than many emerging economies. In terms of return on assets, the Indian banking system's performance is comparable to that of advanced economies such as Germany and the U.K.

Cross-country comparisons indicate that many other countries have also achieved considerable progress in strengthening their banking sector. However, a noteworthy aspect of the Indian experience is that we have been able to strengthen our banking system without any crisis and with negligible cost to the fisc, while simultaneously achieving acceleration in growth, price stability and consistent development of financial markets. Our banking sector reform has been unique in the world in that it combines a comprehensive reorientation of competition, regulation and ownership in a non-disruptive and cost-effective manner. Indeed, our banking reform is a good illustration of the dynamism of the public

Table 10: Cross-Country Select Banking Indictors – A comparison

(Per cent)

Country	Regulatory Capital to Risk-Weighted Assets (CRAR)		Nonperforming Loans to Total Loans		Provisions to Non-performing Loans		Return on Assets (ROA)	
	2002	2006	2002	2006	2002	2006	2002	2006
1	2	3	4	5	6	7	8	9
Developing Economies								
Argentina	-	-	18.1	3.4	73.8	130.2	-8.9	2.0
Brazil	16.6	18.9	4.5	4.1	155.9	152.8	2.1	2.5
China	-	-	26.0	7.5	-	-	-	0.9
India	12.0	12.4	10.4	3.5	-	58.9	0.8	0.9
Indonesia	20.1	21.3	24.0	13.1	130.0	99.7	1.4	2.6
Korea	11.2	12.8	2.4	0.8	89.6	175.2	0.6	1.1
Malaysia	13.2	13.5	15.9	8.5	38.1	50.7	1.3	1.3
Mexico	15.7	16.3	3.7	2.1	138.1	207.4	0.7	3.1
Philippines	16.9	-	26.5	18.6	30.1	37.4	0.8	1.3
Russia	19.1	14.9	5.6	2.6	112.5	159.3	2.6	3.2
South Africa	12.6	12.3	2.8	1.2	46.0	-	0.4	1.4
Thailand	13.0	13.8	15.7	7.5	62.9	79.4	-	2.3
Turkey	24.4	21.1	12.7	3.2	64.2	90.8	1.2	2.4
Developed Economies								
Australia	9.6	10.4	0.4	0.2	106.2	204.5	1.4	-
Canada	12.4	12.5	1.6	0.4	41.1	55.3	0.4	1.0
France	11.5	-	4.2	3.2	58.4	58.7	0.5	-
Germany	12.7	-	5.0	4.0	-	-	0.1	0.5
Italy	11.2	10.7	6.5	5.3	-	46.0	0.5	0.8
Japan	9.4	13.1	7.4	2.5	-	30.3	-0.7	0.4
United Kingdom	13.1	12.9	2.6	0.9	75.0	-	0.4	0.5
United States	13.0	13.0	1.4	0.8	123.7	137.2	1.3	1.3

Source : Global Financial Stability Report, 2007, IMF.

sector in managing the overhang problems and the pragmatism of public policy in enabling the domestic and foreign private sectors to compete and expand (Reddy, 2007).

The overall stability that has been imparted to a system undergoing reforms has served us well so far in the face of the recent financial developments. To exemplify the argument, I thought I would spend some time on the recent financial developments, possible causes and likely consequences so as to better appreciate the conduct of India's financial sector reforms.

IV. Recent International Financial Developers: Issues in Monetary Policy and Financial Sector Regulation

In contrast to earlier crises, the cause-and-effect sequences are blurred in the current turmoil in view of the extreme information asymmetry. Some defining features of the global economy which could have a direct bearing on the current crises are: the 'Great Moderation' – i.e., the sustained decline in inflation/inflation volatility and consequently, a secular lowering of nominal and real interest rates across the world which could have enhanced the appetite for risk; significant monetary accommodation by the major economies – the US, Euro area and Japan – since 2000 reflected in abundant liquidity in financial markets, macro imbalances between the US and Asia, sizeable currency misalignments and carry trades, compression of risk spreads, mispricing of widely diffused risks and even real sector implications for several emerging economies; and the strong macroeconomic performance of Asia which has contributed to the relentless search for yields and the increasing appetite for risk (Mohan, 2007e).

The combination of sustained low inflation accompanied by accommodative monetary policy worldwide could have generated excessive confidence in the ability of central banks and monetary policy to keep inflation rates and interest rates low indefinitely, leading to under pricing of risk and hence excessive risk taking. This result is analogous to the excessive foreign borrowing undertaken by private sector borrowers and banks in East Asian countries in the 1990s when exchange rates were seen as relatively fixed, and hence their risk perceptions were low, and hence risk was under priced. It may be ironic that the perceived success of central banks and increased credibility of monetary policy, giving rise to enhanced expectations with regard to stability in both inflation and interest rates, could have led to the mispricing of risk and hence enhanced risk taking. Yet another view is that more than success or failure of central banks, the repeated assurances of stability and guidance to markets about the future path of interest rates, coupled with the availability of ample liquidity were an invitation to markets to underprice risks. This view, consequently, puts the blame on those central banks that failed to give space to markets to assess risks by eschewing surprise elements in policy. It is possible that with increased globalisation resulting in the containment of prices of tradable goods during this period and hence of measured inflation, the excess liquidity has shown up in elevated asset prices worldwide, along with increased cross border capital flows in search of yields.

As some withdrawal of monetary accommodation commenced in response to perceived or visible inflationary pressures, the sub-prime crisis revealed these vulnerabilities starkly as confidence plunged, markets froze and triggered off panic among investors and lenders regarding their inability to value complex risky assets and structured derivative products. According to some estimates, total losses related to sub-prime could exceed US $ 200 billion (The Economist, 2007), over a fifth of India's GDP measured at market exchange rates**.** According to the OECD estimates, losses could amount to US $ 300 billion. With the deterioration in credit confidence, banks have been forced to advance loans to their off-balance sheet "special investment vehicles (SIVs)" which used up their capital thereby rendering other borrowers credit constrained. Thus, it can be argued that the sub-prime is a symptom rather than a cause. Arguably, the outcome could have been quite different if, for instance, interest rates declined on the back of ebbing inflation but there was no accommodation in monetary policy and therefore no excess liquidity. There is also a persuasive opposite view, as best articulated by Alan Greenspan, that the great moderation in inflation could be attributed to real economy phenomena: the long run of productivity growth in the US; and the impact of new workers in China and India in dampening wage growth worldwide and hence inflation.

It is widely understood that the credit market is characterised by information asymmetry. First, the availability of information technology has reduced the cost of information collection and maintenance considerably. Thus, a widespread belief has arisen that information on credit quality of small borrowers who may be widely dispersed across jurisdictions can be made impersonal, packaged, processed, and sold. Second, with the availability of such technology, and the belief that such information was available on a structured basis, a great deal of financial innovation could take place which essentially enabled the investor or risk taker to become progressively remote from the ultimate borrowers where the actual risks lay. A whole host of intermediaries in the form of mortgage brokers, mortgage companies, societies and the like were then able to package their mortgage assets including non conforming loans and sell down to different categories of investors, including Special Investment Vehicles (SIVs), hedge funds and the like, most of whom were not regulated. The guiding principle behind this activity was that it is feasible for credit rating agencies to have enough information on a continuous basis to rate the instruments that had been packaged. It can certainly be argued that this is not a new development since mortgage backed securities (MBS) and asset backed securities (ABS) have been with us for some time and have been successful in providing liquidity to credit markets on a continuous basis without any accidents. The difference perhaps is that MBS packaged by the government sponsored entities (GSEs) were subject to certain relatively well enforced norms that presumably reduced the potential risk embedded in these instruments.

These considerations lead to the third set of issues that relate to the role of effective financial regulation and supervision. Has the recent crisis underscored the need for strengthening of oversight of financial markets in advanced countries? Traditionally, financial surveillance has placed relatively more emphasis on banking regulation. Banks are leveraged financial entities who are also effective trustees of public money by virtue of holding deposits. Hence, they have to be effectively regulated and supervised in order to maintain public confidence in the banking system and depositors have to be protected from excessive risk-taking by banks. On the other hand, investors in hedge funds are high net worth individuals who do not need such protection. They are informed investors who are able to exploit the information efficiency of markets and, therefore, should be able to understand the risks implied by information asymmetry. The current crisis was, however, triggered by the difficulties encountered by these investors who had taken large exposures to sub-prime mortgage investments without having accounted for the potential risks embedded in these instruments.

What has been our approach to these issues? Although there is a current move in some jurisdictions, particularly in the U.K., to move towards "principles-based" regulation, from the traditional "rules-based" regulation, we are continuing with the traditional rules-based regulatory approach for now. While progressively providing greater flexibility to banks in their portfolio decisions, relative to the situation before the reforms, we have kept a close eye on the risk exposure of regulated financial institutions. We have therefore been cautious about derivatives and are introducing them gradually, based on our perception of the risk management capabilities of the various regulated institutions. Admittedly, this does cause impatience in those institutions that believe their risk management capacities to be of a high order. However, the issue that we have to consider is the reality of the large variance between different institutions in such capabilities. It is true that financial markets cannot be held hostage to the most laggard institutions. So, we have adopted a measured approach to the introduction of modern financial innovations.

Second, we do monitor the exposures of banks to risky sectors and seek to limit their exposure to such sectors through prudential regulations. Banks exposure to capital markets in all forms (both fund based and non-fund based) cannot exceed 40 per cent of their net worth. Similarly, as we observed very high credit growth in certain segments such as real estate, housing, non banking finance companies (NBFCs) and other retail credit, risk weights were increased, along with provisioning norms for standard assets.

Third, in terms of the evolving global prudential framework, the emphasis has generally been more on capital, as a means of reducing vulnerability to risks, than on prudential requirements for liquidity risk. Aspects relating to liquidity have been largely left to each regulator to assess and prescribe a suitable framework under Pillar II of Basel II. In the Indian context, while banks have flexibility in devising their own risk management strategies as per Board approved policy, the Reserve Bank has taken steps to mitigate liquidity risks at the very short-end, risks at the systemic level and at the institution level as well (Reddy, 2007c). Some of the important measures in this regard are:

- Overnight unsecured market for funds is restricted only to banks and primary dealers (PD). Repo markets - both bilateral repos and collateralised borrowing and lending obligations (a form of tripartite repos) were developed. As a result, volumes have shifted from the overnight unsecured market to the collateralised market.

- As greater inter-linkages and excessive reliance on call money borrowings by banks could cause systemic problems, prudential measures have been introduced to address the extent to which banks can borrow and lend in the call money market. On a fortnightly average basis, call market borrowings outstanding should not exceed 100 per cent of capital funds (i.e., sum of Tier I and Tier II capital) of latest audited balance sheet. However, banks are allowed to borrow a maximum of 125 per cent of their capital funds on any day, during a fortnight. Similarly, on a fortnightly average basis, lending in the call market should not exceed 25 per cent of their capital funds; however, banks are allowed to lend a maximum of 50 per cent of their capital funds on any day, during a fortnight.

- 'Purchased inter-bank liabilities' (IBL) of a bank should not exceed 200 per cent of its net worth (300 per cent for banks with CRAR more than 11.25 per cent).
- Like other supervisors, the Reserve Bank has issued asset liability management guidelines for dealing with overall asset-liability mismatches taking into account both on and off balance sheet items.
- The Reserve Bank, in its supervisory oversight of banks' activities, also monitors the incremental credit deposit ratio of banks. Although banks may implement sophisticated risk management strategies, this single ratio with a minimum lag indicates the extent to which banks are funding credit with borrowings from wholesale markets or what is now known as purchased funds.
- The Reserve Bank guidelines on securitisation of standard assets have laid down detailed policy on provision of liquidity support to Special Purpose Vehicles (SPVs). The liquidity provision is subject to conditions to ensure that the liquidity support is only temporary and invoked to meet cash flow mismatches. Any commitment to provide such liquidity facility is to be treated as an off-balance sheet item and attracts 100 per cent credit conversion factor as well as 100 per cent risk weight.

Fourth, since the Reserve Bank also has regulatory responsibility for NBFCs, we have also acted to introduce various prudential norms in their activities where we believe there could be systemic effects. The regulatory interventions are graded: higher in deposit taking institutions and lower in non-deposit taking institutions. The recent crises in developed financial markets have also illustrated how thin these lines of separation are: difficulties experienced by non-deposit intermediaries such as the SIVs are eventually falling on the deposit taking regulated institution such as banks.

Thus, we do feel that judicious prudential regulation and supervision and heightened market surveillance and anticipation are necessary for the healthy governance of financial markets. We have, of course, to be careful to not stifle entrepreneurship and financial innovation. But we do need to constantly ask the question: "Financial innovation towards what objective?" As long as financial innovation is seen to promote price discovery, greater intermediation efficiency, and hence, overall efficiency and growth, it must be encouraged, but with appropriate safeguards to maintain financial stability.

The lessons from the current financial market crisis go both ways. On the one hand, market innovation has indeed helped in bringing financial markets closer to those who need credit and did not have access to it earlier. Despite all the problems associated with sub-prime borrowers, it must be recognised that almost 10 million borrowers benefited from this market and were enabled access to housing finance, which had not been deemed possible earlier. With about 20 per cent of these borrowers reported to be delinquent, and in difficulty, it still means that about 8 million people clearly benefited from this market. On the other hand, the difficulties encountered draw attention to the kind of issues that can arise when the speed of innovation and incentive structures are flawed such that malpractices occur, and intrinsic difficulties arise in capturing and commoditising information that is perhaps not yet susceptible to such commoditisation.

A key question that has emerged from the current developments in financial markets relates to the role of monetary authorities in the context of such a crisis. This issue is of concern to all of us in central banking. Over the last decade or two, it would appear that the focus of central banks has been narrowing, relative to the more complex responsibilities that they have traditionally shouldered. A great deal has been written on this issue, a great deal has changed in terms of practices and, in some countries, the regulatory structure itself has been altered to move central banks to being relatively pure monetary authorities. According to this view, central banks should focus largely on keeping inflation low and stable, and in doing this also contribute to financial stability. To quote Harvard economist Kenneth Rogoff: "Indeed many economists believe that central bankers could perfectly well be replaced with a computer programmed to implement a simple rule that adjusts interest rates in response to output and inflation. But while [this] view is theoretically rigorous, reality is not" (Businessworld, September 17, 2007). Although some central banks, such as the US Federal Reserve, have an explicit mandate to also promote growth, a good deal of thinking in recent times tends to argue that inflation control by itself would promote growth and that central banks would be better off to concentrate on this objective alone.

It is instructive to examine what central banks have done in the current context. The responses of the central banks to the recent events in financial markets have shown that concerns for financial stability can assume overriding importance, irrespective of the legislative mandate handed down to central banks as part of ongoing reforms. This is evident in the fact that central banks initially reacted through the injection of liquidity, including through special facilities and the expansion of list of eligible collateral. Discussions involving central bankers in various fora indicate their willingness to consider other courses of action in favour of protecting growth. As we all know, the US Federal Reserve has gone further in cutting interest rates to promote both growth and in the interest of financial stability; the U.K. authorities have had to provide liquidity to a specific institution, while giving a blanket guarantee to depositors on the safety of their deposits. Accordingly, it is becoming evident that central banks do have a role beyond inflation targeting. Evidently, both growth and financial stability matter for central banks.

When it comes to the crunch, in their roles as lenders of last resort (LOLR), and in discharging their responsibilities as the guardians of financial stability, central banks do need to perform functions that are more complex. Should central banks be lenders of last resort to the system as a whole by injecting systemic liquidity through open market operations only, or should they also provide liquidity to individual financial institutions that are judged to be solvent but illiquid? How do they arrive at such judgments if they do not have adequate information on individual institutions? Can they have such detailed information without ongoing responsibilities for regulation and supervision? This issue is not dissimilar, in terms of the existence of asymmetric information, to that of the problem of adequate transparency of information related to the value of collateral underlying asset backed securities.

Banks and financial institutions are typically leveraged institutions: thus judgements related to their solvency depend on the valuation of their assets at the time when difficulties arise. In the current case, banks have invested through a chain of vehicles in securities whose values are in doubt. Banks also have commitments to vehicles whose liquidity and/or viability are in doubt. When providing LOLR liquidity support, how is the central bank to make a judgement on the solvency of institutions to whom it is providing liquidity? As a greater recognition and appreciation of the appropriate role of central banks gains ground, it is possible that this will result in further rethinking on the functioning of central banks. A case in point is the separation of financial regulation and supervision from monetary policy which could have contributed to ineffective and inadequate surveillance in the context of the current crisis. There is a view that problems of information asymmetry might have got further aggravated with banks reporting both to the monetary authority and the regulatory body in charge of banking supervision.

Since the Reserve Bank of India is also the banking regulator and supervisor, we receive continuing information on the banking activities; moreover, in times such as the current turmoil, we can also obtain information quickly from leading systematically important institutions on exposures of relevance. Thus, there is a high scope for prompt corrective action.

V. Challenges for the Future

Let me conclude by turning to the emerging challenges facing the financial sector in India that could shape the path of the next generation of reforms. The sustained acceleration in growth, supported by a range of anecdotal indications, is resulting in the movement of large numbers of households into higher income and consumption categories, with enhanced demand for financial services. Alongside, industrial production and export growth have remained buoyant and the rising prominence of services in the economy is generating a surge in demand for financial intermediation. A lead indicator is the sizeable expansion already underway in domestic bank lending to households and small and medium industrial and service enterprises which are poised to emerge as the new growth drivers of financial sector activity. For the Indian financial system, the biggest challenge is how to extend itself and innovate to meet these new demands for financial inclusion and respond adequately to new opportunities and risks. Innovative channels for credit delivery for serving the new credit needs have to be developed, perhaps with greater use of information technology and intensified skills development in human capital.

Acceleration in growth over the past few years has brightened medium-term prospects for growth of the Indian economy. As in the past, domestic savings are expected to finance the bulk of the investment requirements. In this context, the banking system will continue to be an important source of financing and there could be strong demand for bank credit. Although bank credit has witnessed sharp growth since 2003-04 onwards, it needs to be recognised that the credit-GDP ratio still remains relatively low. Moreover, a significant segment of the population remains excluded from banking services. As the growth process strengthens and becomes more inclusive, it is expected that demand for financial products could continue to witness high growth in the coming years. Thus, it is likely that growth in bank credit and monetary aggregates could be higher than what might be expected from historical relationships and elasticities in view of ongoing structural changes. This, however, raises critical issues for the central bank such as the appropriate order of monetary/credit expansion. In the absence of a yardstick, excessive growth in money supply could potentially show up in inflationary pressures over course of time, given the monetary lags. Indeed, recent inflationary pressures across the globe are attributable, in part, to global liquidity glut. In the absence of inflationary pressures as conventionally measured, excessive money and credit growth could also lead to asset price bubbles, with adverse implications for banking sector stability and lagged conventional inflation. Thus, the Reserve Bank will have to face ongoing challenges to provide appropriate liquidity to the system so as to ensure growth in non-inflationary environment.

Demand for housing finance has emerged as a key driver of bank credit in the past few years. As incomes grow further and the pace of urbanisation picks up, and, in view of the substantial backlog, demand for housing and housing finance can be expected to record continuous high growth over the next few years. In view of the expected high demand, pressure on real estate prices may continue. Moreover, real estate markets are characterised by opacity and other imperfections in developing countries, and certainly in India. Such developments can easily generate bubbles in the real estate market, because of problems in the elasticity of supply, and information asymmetries. Strong demand for housing and buoyancy in real estate prices in an environment of non-transparency, thus, could potentially pose risks to the banking system. In conjunction with interest rate cycles, the banking system as well as the regulator would need to be vigilant to future NPAs and the US-like sub-prime woes.

Higher investment needs of the growing economy will depend heavily upon the ability of the financial markets to raise resources from savers and allocate them efficiently for the most productive purposes. In view of the acceleration in growth as well as the focus on inclusive growth, financial markets will have to play a greater role in efficient allocation of resources. Further development of financial markets will also be needed in view of the growing openness and the envisaged move towards fuller capital account convertibility. The Reserve Bank will therefore continue to take measures to further deepen, widen and integrate the financial markets. While permitting a wider range of instruments and players in the financial markets, it will need to be ensured that development takes place in an orderly manner so as to avoid sub-prime like accidents and ensure stability. There is a premium on ensuring stability in low-income countries like India, with a significant share of population not in a position to withstand large changes in interest rates and exchange rates. Prudential exposure norms on exposures of banks and NBFCs will need to be fine-tuned so as to protect the balance sheets of banks and interests of depositors. The formation of credit information bureaus is expected to provide credit histories of borrowers and this could allow greater flow of bank credit to the relatively neglected sectors, while also imparting stability to the financial sector.

So far, financial sector reforms have been calibrated with a progressive integration into the world economy. A key consideration in the choice of pace and sequencing has been the management of volatility in financial markets and implications for the conduct of monetary operations. Fuller capital account openness will inevitably lead up to the challenge of managing the impossible trinity of independent monetary policy, open capital account, and managed exchange rate. In the context of the ongoing financial sector reforms, it needs to be recognised that the impact of financial fluctuations on the real sector in developing economies is significantly different from mature economies which specialise in technology intensive products in which the degree of exchange rate pass through is low, enabling exporters and importers to ignore temporary shocks and set stable product prices to maintain monopolistic positions, despite large currency fluctuations. Mature and well developed financial markets in these countries absorb the risks associated with exchange rate fluctuations with negligible spillover on real activity. On the other hand, for the majority of developing countries which specialise in labour-intensive and low and intermediate technology products vulnerable to pricing power by large retail chains, exchange rate and financial price volatility has significant employment, output and distributional consequences which in turn, have implications for financial sector stability and soundness.

A further challenge for policy in the context of fuller capital account openness will be to preserve the financial stability of different markets as greater deregulation of capital outflows and debt inflows occurs. The vulnerability of financial intermediaries can perhaps be addressed through prudential regulations and their supervision; risk management of non-financial entities will have to be through further developments in both the corporate debt market and the forex market, which enable them to manage their risks through the use of newer market instruments. This will require market development, enhancement of regulatory capacity in these areas, as well as human resource development in both financial intermediaries and non-financial entities. Given the volatility of capital flows, it remains to be seen whether financial market development in a country like India can be such that this volatility does not result in unacceptable disruption in exchange rate determination with inevitable real sector consequences, and in domestic monetary conditions.

Going forward, there will be a continuous need to adapt the strategy of liquidity management as well as exchange rate management for effective monetary management and short-term interest rate smoothening. The key questions we continue to face with are what should be the instruments and modes of management of liquidity in the interest of growth and financial stability and how much should capital flows affect exchange rate. These issues become even more relevant under a freer regime of capital flows. Global developments are expected to have an increasing role in determining the conduct of monetary and exchange rate policies in our country. In an environment of global convergence, retaining independence of monetary policy may become increasingly difficult, calling for hard choices in terms of goals and instruments.

In India, we have not favoured the adoption of inflation targeting, while keeping the attainment of low inflation as a central objective of monetary policy, along with that of high and sustained growth that is so important for a developing economy. Apart from the legitimate concern regarding growth as a key objective, there are other factors that suggest that inflation targeting may not be appropriate for India. First, unlike many other developing countries we have had a record of moderate inflation, with double digit inflation being the exception, and which is largely socially unacceptable. Second, adoption of inflation targeting requires the existence of an efficient monetary transmission mechanism through the operation of efficient financial markets and absence of interest rate distortions. Third, inflationary pressures still often emanate from significant supply shocks related to the effect of the monsoon on agriculture, where monetary policy action may have little role. Finally, in an economy as large as that of India, with various regional differences, and continued existence of market imperfections in factor and product markets between regions, the choice of a universally acceptable measure of inflation is also difficult.

As regards banking regulation and supervision, there is no unique theoretical model or just one practical approach to the regulation and supervision of a financial system. India has traditionally followed an institution-based system of regulation. In India, the current model of regulation with the Reserve Bank exchanging relevant information with other regulators in a synchronised manner is functioning effectively. The supervisory activities of the Reserve Bank have benefited from its price stability objective, and it is recognised that safety and soundness of banks must be evaluated jointly with its responsibility to ensuring stability and growth in the economy. In this regard, the Reserve Bank with joint responsibilities for monetary policy and supervision has both the insight and the authority to use techniques that are less blunt and more precisely calibrated to the problem at hand. Such tools improve its ability to manage crises and, more importantly, to avoid them. In this backdrop, the recommendations of separating banking sector regulation from the conduct of monetary policy by some observers appear to be independent of the history, legacy and efficiency of the current regulatory system in India. Such recommendations are essentially based on the UK experience – which itself has now been subject to severe criticism in the episode involving the Northern Rock – and completely ignore the huge diversity of the regulatory system in other countries including those prevailing in successful international financial centres such as the US.

As noted in several policy statements in the Indian context, the principal challenge for public policy is to ensure a smooth transition to higher growth path, accompanied by low and stable inflation and well anchored inflation expectations. From a central banking perspective, the new challenges facing us are many. First, if the Indian banking system is to attain international excellence, it will require action on several fronts like introduction of greater competition; convergence of activities and supervision of financial conglomerates; induction of new technology; improvement in credit risk appraisal; encouragement of financial innovations; improvement in internal controls; and establishment of an appropriate legal framework. The role of the Reserve Bank in this context amounts to promoting safety and soundness while allowing the banking system to compete and innovate. Second, as a central bank, the Reserve Bank would further need to develop the financial markets, especially the money, government securities and foreign exchange markets to enhance the efficiency of the transmission mechanism, along with the corporate debt market. Third, price stability and financial stability would continue to be of concern with expected increase in credit expansion and global integration.

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The Evolution of Banking Regulation in India – A Retrospect on Some Aspects*

V. Leeladhar

It is my pleasure to be here with you this afternoon on the occasion of the Bankers' Conference, which has become a landmark annual event in the Indian banking industry. I am indeed grateful to the organisers for their kind invitation, which provided me an opportunity to share my thoughts on the evolutionary path of the banking regulation in India over the past several decades. The topic, to my mind, appears particularly relevant today when India has completed 60 years of its Independence this year. While during the last six decades, the Indian banking system has indeed come a long way traversing an arduous and tortuous path, it would perhaps be appropriate to assess in retrospect and take stock of how far we have come from where we started and what more remains to be achieved. I would, therefore, like to briefly present a bird's eye view of the salient milestones crossed in the long journey of our banking system and to take stock of the current status of the industry. I would also like to take this opportunity to briefly touch upon certain doubts, which somehow seem to have crept in, about certain aspects of the current regulatory dispensation for the Indian banking sector.

Institutional Evolution of the Indian Banking

As most of you would, no doubt, be aware, the indigenous system of banking had existed in India for many centuries, and catered to the credit needs of the economy of that time. The famous *Kautilya Arthashastra*, which is ascribed to be dating back to the 4th century BC, contains references to creditors and lending. For instance, it says "*If anyone became bankrupt, debts owed to the state had priority over*

* The Special Address delivered by Shri V Leeladhar, Deputy Governor, Reserve Bank of India at the Bankers' Conference (BANCON) 2007 on November 26, 2007 at Hotel Taj Lands End, Mumbai.

other creditors". Similarly, there is also a reference to "*Interest on commodities loaned*" *(PRAYOG PRATYADANAM)* to be accounted as revenue of the state. Thus, it appears that lending activities were not entirely unknown in the medieval India and the concepts such as 'priority of claims of creditors' and 'commodity lending' were established business practices.

During the period of modern history, however, the roots of commercial banking in India can be traced back to the early eighteenth century when the Bank of Calcutta was established in June 1806 – which was renamed as Bank of Bengal in January 1809 – mainly to fund General Wellesley's wars. This was followed by the establishment of the Bank of Madras in July 1843, as a joint stock company, through the reorganisation and amalgamation of four banks *viz.*, Madras Bank, Carnatic Bank, Bank of Madras and the Asiatic Bank. This bank brought about major innovations in banking such as use of joint stock system, conferring of limited liability on shareholders, acceptance of deposits from the general public, *etc.* The Bank of Bombay, the last bank to be set up under the British Raj pursuant to the Charter of the then British East India Company, was established in 1868, about a decade after the India's first war of independence. The three Presidency Banks, as these were then known, were amalgamated in January 1921 to form the Imperial Bank of India, which acquired the three-fold role: of a commercial bank, of a banker's bank and of a banker to the government. It is interesting to note here that merger of banks and consolidation in the banking system in India, is not as recent a phenomenon as is often thought to be, and dates back to at least 1843 – and the process, of course, still continues. With the formation of the Reserve Bank of India in 1935, some of the central banking functions of the Imperial Bank were taken over by the Reserve Bank and subsequently, the State Bank of India, set up in July 1955, assumed the other functions of the Imperial Bank and became the successor to the Imperial Bank of India.

Evolution of Legislative Regulation of Banking in India

In the very early phase of commercial banking in India, the regulatory framework was somewhat diffused and the Presidency Banks were regulated and governed by their Royal Charter, the East India Company and the Government of India of that time. Though the Company law was introduced in India way back in 1850, it did not apply to the banking companies. The banking crisis of 1913, however, had revealed several weaknesses in the Indian banking system, such as the low proportion of liquid assets of the banks and connected lending practices, resulting in large-scale bank failures. The recommendations of the Indian Central Banking Enquiry Committee (1929-31), which looked into the issue of bank failures, paved the way for a legislation for banking regulation in the country.

Though the Reserve Bank, as part of its monetary management mandate, had, from the very beginning, been vested with the powers, under the Reserve Bank Act, 1934, to regulate the volume and cost of bank credit in the economy through the instruments of general credit control, it was not until 1949 that a comprehensive enactment, applicable only to the banking sector, came into existence. Prior to 1949, the banking companies, in common with other companies, were governed by the Indian Companies Act, 1913, which itself was a comprehensive re-enactment of the earlier company law of 1850. This Act, however, contained a few provisions specially applicable to banks. There were also a few *ad hoc* enactments, such as the Banking Companies (Inspection) Ordinance, 1946, and the Banking Companies (Restriction of Branches) Act, 1946, covering specific regulatory aspects. In this backdrop, in March 1949, a special legislation, called the Banking Companies Act, 1949, applicable exclusively to the banking companies, was passed; this Act was renamed as the Banking Regulation Act from March 1966. The Act vested in the Reserve Bank the responsibility relating to licensing of banks, branch expansion, liquidity of their assets, management and methods of working, amalgamation, reconstruction and liquidation. Important changes in several provisions of the Act were made from time to time, designed to enlarge or amplify the responsibilities of the Reserve Bank or to impart flexibility to the relative provisions, commensurate with the imperatives of the banking sector developments.

It is interesting to note that till March 1966, the Reserve Bank had practically no role in relation to the functioning of the urban co-operative banks. However, by the enactment of the Banking Laws (Application to Co-operative Societies) Act, 1965, certain provisions of the Banking Regulation Act, regarding the matters *relating to banking business*, were extended to the urban co-operative banks also. Thus, for the first time in 1966, the urban co-operative banks too came within the regulatory purview of the Reserve Bank.

Prudential Policy Framework for Banking Regulation and Supervision

The basic rationale for exercising fairly close regulation and supervision of banking institutions, all over the world, is premised on the fact that the banks are "special" – for several reasons. The banks accept uncollateralised public deposits, are part of the payment and settlement system, enjoy the safety net of deposit insurance funded by the public money, and are an important channel for monetary policy transmission. Thus, the banks become a keystone in the edifice of financial stability of the system – which is a 'public good' that the public authorities are committed to provide. Preventing the spread of contagion through the banking system, therefore, becomes an obvious corollary of regulating the banks to pre-empt any systemic crisis, which can entail enormous costs for the economy as a whole. This is particularly so on account of the inevitable linkages that the banks have by virtue of the nature of their role in the financial system. Ensuring safety and soundness of the banking system, therefore, becomes a predominant objective of the financial regulators. While the modalities of exercising regulation and supervision over banks have evolved over the decades, in tandem with the market and technological developments, the fundamental objective underlying the exercise has hardly changed. Of course, a well-regulated and efficient banking sector also enhances the allocative efficiency of the financial system, thereby facilitating economic growth.

In this backdrop, as the functions of the Reserve Bank evolved over the years, the focus of its role as a regulator and supervisor of the banking system has shifted gradually from micro regulation to macro prudential supervision. A journey through the major landmarks in the evolution of the Reserve Bank's role *vis-à-vis* the commercial banks provide interesting insights. Allow me to very briefly dwell on the salient aspects of this evolutionary process.

As regard the prudential regulatory framework for the banking system, we have come a long way from the administered interest rate regime to deregulated interest rates, from the system of Health Codes for an eight-fold judgmental loan classification to the prudential asset classification based on objective criteria, from the concept of simple statutory minimum capital and capital-deposit ratio to the risk-sensitive capital adequacy norms – initially under Basel I framework and now under the Basel II regime. There is much greater focus now on improving the corporate governance set up through "fit and proper" criteria, on encouraging integrated risk management systems in the banks and on promoting market discipline through more transparent disclosure standards. The policy endeavor has all along been to benchmark our regulatory norms with the international best practices, of course, keeping in view the domestic imperatives and the country context. The consultative approach of the the Reserve Bank in formulating the prudential regulations has been the hallmark of the current regulatory regime which enables taking account of a wide diversity of views on the issues at hand.

On the supervisory side, we have traversed vast territory in progressively refining our supervisory focus to ensure a safe and sound banking system, comparable with the best in the world. Thus, we have continually graduated from the system of on-site Annual Appraisal of the banks by the Reserve Bank followed in the 1970s to the system of Annual Financial Review during the 1980s, then on to the Annual Financial Inspection of stand-alone banks during the 1990s and further on to the consolidated supervision of financial conglomerates so as to address the supervisory concerns on a group-wide basis. The off-site monitoring of the banking system was also introduced in 1995 as a part of the supervisory strategy of ongoing supervision of the banks, so as to supplement the periodical full-scope on-site bank examinations. The supervisory rating models (CAMELS and CACS), based on crucial prudential parameters, were also developed by the Reserve Bank to provide a summary view of the overall health of the banks. The Prompt Corrective Action (PCA) Framework was put in place to enable timely intervention in case of any incipient stress in a bank. The latest supervisory initiative has been the introduction of risk-based supervision of the banks so as to move away from transaction audit and to enable the modulation of the supervisory efforts in tune with the risk profile of the banks and to achieve optimal deployment of the scarce supervisory resources. Last but not the least, the Board for Financial Supervision, constituted in 1994 under the Chairmanship of the Governor, the Reserve Bank has been the guiding force in securing the transformation in the regulatory and supervisory apparatus of the banking system.

While the multi-dimensional regulatory and supervisory measures are justifiably reflected in the significantly improved prudential parameters of the Indian banking system, be it the level of NPAs or the capital adequacy ratios, there is hardly any room for complacence. In the era of ever-increasing financial globalisation and in the face of rapid financial innovations, all of us will continually need to remain on a steep learning curve and upgrade our skills and knowledge to be able to meet the emerging challenges in the financial world.

Some Elucidation Regarding the Regulatory Environment

Let me now digress a little to address a somewhat different aspect of our regulatory environment. The Reserve Bank of India has earned, in the service of our country, a proven track record of professionalism, which has lent it considerable credibility – both domestically and globally. This credibility enables the Reserve Bank to confidently carry on with the reform process to be able to maintain price and financial stability, while enabling a self-accelerating equitable growth at elevated levels. However, as I mentioned earlier, in certain quarters, there seem to be some misunderstandings, regarding certain dimensions of the extant prudential regulatory framework of the Reserve Bank. I would like to briefly address some of the salient ones and explain as to how the perceptions and the reality may not often converge.

Branch Authorisation Policy

As you are aware, the Reserve Bank announced a new Branch Authorisation Policy in September 2005 under which certain changes were brought about in the authorisation process adopted by the Reserve Bank for the bank branches in the country. As against the earlier system, where the banks approached the Reserve Bank, piece meal, through out the year for branch authorisation, the revised system provides for a holistic and streamlined approach for the purpose, by granting a bank-wise, annual aggregated authorisation, in consultation and interaction with each applicant bank. The objective is to ensure that the banks take an integrated view of their branch- network needs, including branch relocations, mergers, conversions and closures as well as setting up of the ATMs, over a one-year time horizon, in tune with their own business strategy, and then approach the Reserve Bank for consolidated annual authorisations accordingly.

There seems to be some misunderstanding in some quarters that, under the new policy, the banks have to wait for the annual authorisation exercise and are constrained in approaching the Reserve Bank for any emergent authorisation in between. Since the branch expansion planning of the banks is expected to be a well thought out, Board-approved annual process, normally, there should be no need for any emergent or urgent authorisation being required by the banks, in the interim. However, I would like to emphasise that the new policy does not preclude the possibility of any urgent proposals for opening bank branches being considered by the Reserve Bank even outside the annual plan, specially in the rural / under-banked areas, anytime during the year. This flexibility has been clearly articulated in our policy guidelines as contained in the Master Circular of July 2007 but somehow, it seems to have got overlooked.

There also seems to be a feeling among some banks that under the new authorisation policy, the process adopted is more cumbersome and, as a result, there have been delays in issuing authorisations. Since the banks are required to approach the Reserve Bank only after obtaining the approval of their respective Boards for their annual branch expansion plan, it is possible that the preparatory time required for filing their annual plan with the Reserve Bank might be a little longer. The processing time at the end of the Reserve Bank, however, has been generally in the range of one to two months – which I consider to be reasonable, given the element of consultation with the banks built into the process. However, the actual number of authorisations issued by the Reserve Bank under the new policy has been much higher than before. For instance, as against the a total of 881, 1125 and 1259 authorisations given by the Reserve Bank under the old policy regime during 2003-04, 2004-05 and 2005-06, respectively, the number of authorisations issued under the new policy during 2006-07 was 2028. Thus, as against the general perception that the new policy has been more restrictive in granting authorisations, the fact is that there has been a sharp increase of about 61 per cent in the total number of authorisations granted last year.

I am afraid, however, that similar improvements can not be said about the performance of the banks in utilising the authorisations received. Even though the banks were granted authorisations to the extent of 97 per cent and 62 per cent of the authorisations sought by them for the years 2004-05 (April-March) and 2005-06, respectively, as at end-March 2007, as much as 30 per cent and 38 per cent of the authorisations granted for those years had still not been utilised, even after more than a year or two of grant of the authorisations. As on that date, the extent of non-utilisation for the year 2006-07 was much higher at 61 per cent when only 69 per cent of the authorisations sought had been granted. Though I presume that many more licences would have been utilised since March 2007, I would, nonetheless, like to urge the banks present here to ensure expeditious and fullest utilisation of the authorisations granted.

You would recall that under the old authorisation policy, the banks were free to install off-site ATMs, at the places of their choice, without the prior approval of the Reserve Bank but only needed a licence from the concerned Regional Office of the Reserve Bank before operationalising the ATM, so as to ensure compliance with the provisions of Section 23 of the B R Act. Under the revised authorisation policy, however, the banks are required to obtain prior approval of the Reserve Bank even for the off-site ATMs. Some, therefore, expressed a view that the requirement of prior authorisation of the ATMs in the new policy is not quite justified, as an ATM is not a full-fledged place of business for the banks. Let me hasten to mention here the Reserve Bank has been liberal in authorising setting up of the ATMs and all the requests received by the Reserve Bank for establishing as many as 7443 ATMs were fully acceded to for the year 2006-07.

As we know, the ATMs, in the format they are used today in India, already provide for deposit and withdrawal of cash, balance enquiry, account statements, *etc.* However, as seen in some of the advanced countries, the technology permits and can be leveraged to deploy the ATMs for delivering a much wider variety of banking services to the banks' customers and thus, have the potential of becoming a much fuller place of banking business. In any case, since the ATMs constitute an important channel for delivery of banking services, it is only logical that the network planning of the banks also captures the plan for setting up their ATMs and reflects it in their annual plan furnished to the Reserve Bank for authorisation. Besides, in India's WTO commitments in regard to banking services, the Market Access limitations provide for specific licensing of the ATMs of the foreign banks, though the ATM licences are not counted within the ceiling of 12 licences per year, as committed by India. In the emerging global context, therefore, it is only appropriate that the ATMs continue to be kept within the purview of regulatory authorisation policy.

Operations of Foreign Banks in India

At present, there are 29 foreign banks operating in India with a network of 273 branches and 871 off-site ATMs. Among some circles, a doubt is sometimes expressed as to whether the regulatory environment in India is liberal in regard to the functioning of the foreign banks and whether the regulatory approach towards foreign participation in the Indian banking system is consistent with liberalised environment. Undoubtedly, the facts indicate that regulatory regime followed by the Reserve Bank in respect of foreign banks is non-discriminatory, and is, in fact, very liberal by global standards. Here are a few facts which bear out the contention;

- India issues a single class of banking licence to foreign banks and does not require them to graduate from a lower to a higher category of banking licence over a number of years, as is the practice followed in certain other jurisdictions.
- This single class of licence places them virtually on the same footing as an Indian bank and does not place any restrictions on the scope of their operations. Thus, a foreign bank can undertake, from the very first day of its operations, any or all of the activities permitted to an Indian bank and all foreign banks can carry on both retail as well as wholesale banking business. This is in contrast with practices in many other countries.
- No restrictions have been placed on establishment of non-banking financial subsidiaries in India by the foreign banks or of their group companies.
- Deposit insurance cover is uniformly available to all foreign banks at a non-discriminatory rate of premium. In many other countries there is a discriminatory regime.
- The prudential norms applicable to the foreign banks for capital adequacy, income recognition and asset classification, *etc.*, are, by and large, the same as for the Indian banks. Other prudential norms such as those for the exposure limits, investment valuation, *etc.*, are the same as those applicable to the Indian banks.

- Unlike some of the countries where overall exposure limits have been placed on the foreign-country related business, India has not placed any restriction on the kind of business that can be routed through the branches of foreign banks. This has been advantageous to the foreign bank branches as the entire home-country business is generally routed through these branches. Substantial FII business is also handled exclusively by the foreign banks.

- In fact, some Indian banks contend that certain amount of positive discrimination exists in favour of foreign banks by way of lower Priority Sector lending requirement at 32 per cent of the adjusted net bank credit as against a level of 40 per cent required for the Indian banks. Unlike in the case of Indian banks, the sub-ceiling in respect of agricultural advances is also not applicable to foreign banks whereas export credit granted by the foreign banks can be reckoned towards priority sector lending obligation, which is not permitted for the Indian banks.

- Notably, in terms of our WTO commitment, licences for new foreign banks may be denied when the share of foreign banks' assets in India, including both on- as well as off-balance-sheet items, in the total assets (including both on- and off-balance-sheet items) of the banking system exceeds 15 per cent. However, we have autonomously not invoked this limitation so far to deny licences to the new foreign banks even though the actual share of foreign banks in the total assets of the banking system, including both on- and off-balance-sheet items (on Notional Principal basis), has been far above the limit. This share of foreign banks stood at 49 per cent, as at end-January 2007, as mentioned in the India's Trade Policy Review, 2007.

It is thus very obvious that the Indian regulatory regime is essentially non-discriminatory as between branches of foreign banks and domestic banks, in regard to their authorisation or the scope of their operations, though some hold that there is some positive discrimination in favour of the foreign banks. As explained, Indian regulatory regime is in fact much more equitable and provides a far more level playing field to the foreign banks, than in many other jurisdictions both developed and emerging economies.

As regards the **market share** of the foreign banks in the Indian commercial banking system, the share, as at end-June 2007, in the deposits and advances stood at 6.11 and 6.83 per cent, respectively. However, the foreign banks were far more dominant in the off-balance sheet business with a market share of as high as 72.66 per cent. Besides the foreign banks, there are also two large Indian private sector banks in which the non-resident ownership is very close to 74 per cent permitted, which could, therefore, be considered as incorporated in India but predominantly foreign owned banks. These banks together with the foreign banks, have a combined market share in the country in the deposits, advances and off-balance-sheet business of 17.46, 18.65 and 76.63 per cent, respectively, which, by no means, are insignificant levels. Moreover, there are also about 10 large listed public sector banks in which the non-resident / FII shareholding was close to the permitted ceiling of 20 per cent, as at March-end 2007. In these public sector banks, resident private shareholding would thus be close to thirty per cent only.

Furthermore, the share of the foreign banks in the foreign exchange market in India was also significant and had registered a rising trend. For instance, as against their share of 41 per cent in the total foreign exchange turnover during 2005-06, their share during the first half of 2007-08 stood at 52 per cent.

Thus, viewed in totality, it would be extremely difficult to justify the notion that the foreign and non-resident participation in the Indian banking markets is insignificant or restricted and that the policy or regulatory environment is not conducive to it.

Another dimension of the foreign banks' functioning in India is the returns generated from their Indian operations. Let me mention a few interesting facts here. The net profit per branch for the foreign banks in India for the year 2005-06 was Rs. 11.99 crore as against the corresponding figure of Rs. 0.33 crore for the public sector banks (PSBs). Further, for the year 2006-07, the Return on Assets (ROA) of the foreign banks was 1.65 per cent while the Return on Equity (ROE) was 14.02 per cent, as against the corresponding figures of 0.82 per cent and 13.62 per cent for the PSBs. These returns need to be viewed in the context of the international benchmarks for these parameters, which are generally considerably lower. Thus, the Indian operations of the foreign banks are very remunerative and the returns are notably higher than that of their domestic counterparts as also the customary international levels. While this could be attributed, to an extent, to the level of domestic market development and lack of contestability in the Indian markets, this is also, in no small measure, on account of their business mix and a dominant share in the off-balance business, which is more regulatory-capital efficient, and the pattern of their branch presence, which is so far largely confined to the major cities of the country.

Yet another aspect of the foreign banks' operations is the authorisation of their branches in India. As you might be aware, as per India's existing WTO commitments, which came into effect from 1997-98, our obligation is to permit to foreign banks only 12 licences per year, including both – the new entrants and the existing banks. As per the commitment made by India, this obligation of 12 licences does not include the ATMs that might be permitted by the Reserve Bank. The Reserve Bank has, however, consistently been granting authorisations at levels higher than our obligation, not counting the numbers of ATMs set up by the foreign banks. Thus, during the period 2003 to October 2007, Reserve Bank had authorised as many as 75 branches of the foreign banks in India, excluding the off-site ATMs set up by them. Thus, branch authorisation policy for the foreign banks in India may even be described as quite generous, and not merely liberal.

Notwithstanding the WTO obligations, permitting foreign banks' presence in a country is in some senses also guided by the extent of reciprocity amongst the nations – which simply means that there should be some defensible proportionality in the authorisations granted for the banks of each other's countries. In this context, an illustration would be revealing of the ground realities. During the period 2003 to October 2007, India had granted 19 authorisations to the USA-based banks, most of which also stand utilised. However, during the same period of five years, USA did not authorise any office of the Indian banks in the US territory, *vis-à-vis* the requests from the Indian banks for setting up three branches, two subsidiaries and nine representative offices. Some of the requests have been pending with the US authorities for more than five years.

Yet another aspect of the foreign participation in the Indian financial sector is the **foreign ownership of the non-banking finance companies** (NBFCs) operating in India, quite a few of which are the subsidiaries of the foreign banks. It is interesting to note that, as of August 2007, in the category non-deposit-taking systemically important (ND-SI) NBFCs, the NBFCs with some element of foreign ownership had an asset base of Rs. 87,542 crore and accounted for more than 26 per cent of the total assets of this class of NBFCs. Of these, the NBFCs with majority foreign ownership had an asset base of Rs.34,095 crore accounting for 9.2 per cent of the total assets of this class of companies – a level which could not be considered to be insignificant. The ND-SI NBFCs, which are not closely regulated by the RBI, therefore, provide, in certain ways, a means of expanding the reach of the foreign banks in India. Thus, the current policy environment enables a fair level of foreign participation even in the non-banking financial sector of the country.

Securitisation Guidelines of the Reserve Bank

As you are well aware, the Reserve Bank had first issued the draft guidelines for securitisation of standard assets in April 2005, for public comments and after an extensive consultative process, the final guidelines were issued in February 2006, in order to facilitate an orderly development of this market. In certain quarters, however, a view has been expressed that these guidelines, tend to negate the benefits envisaged in the very concept of securitisation, and thus, are hindering the growth of securitisation market in the country. Let me attempt to briefly present today the international perspective *vis-à-vis* the Reserve Bank guidelines and the thinking and rationale underlying our formulation.

The Reserve Bank's guidelines are broadly in tune with the stipulations of several regulators in other jurisdictions. For instance, concept of "true sale" and the independence of the Special Purpose Vehicle (SPV) from the originator of the assets, prescribed in our guidelines is also embedded, in one form or the other, in the regulatory guidelines obtaining in Australia, Malaysia, Singapore, the UK and the USA. Similarly, the prudential treatment of the credit enhancement provided to the SPVs and the requirement of capital charge thereagainst, as prescribed in our guidelines, is also echoed in the regulatory framework in Australia, the United Kingdom and Singapore. Likewise, the provisions relating to the 'Clean up Calls", or repurchase of the residual performing assets from the SPV by the originator, also figure in the regulations in Australia, the United Kingdom and Singapore. The restrictions placed by us on purchase of securities issued by the SPV by the originator are also found in other jurisdictions such as Australia, Singapore and the UK. Similarly, the restrictions in regard to the provision of liquidity facility to the SPV, underwriting of the securities issued by the SPV and the servicing of the securitised assets are also found in several other jurisdictions, with variations in details and in the degree of stringency. I am citing all this at some length to point out that the Reserve Bank's guidelines on securitisation are broadly in line with the practices obtaining in several other jurisdictions, though they have some unique features.

The accounting treatment prescribed in our guidelines provides for upfront recognition of any loss incurred on sale of assets to the SPV but the profit arising from such sale is required to be amortised over the life of the securities issued / to be issued by the SPV. Thus, we have not permitted the banks to recognise the profit upfront, on sale of assets to the SPVs. As you are aware, the main considerations for the originator in undertaking a securitisation transaction are obtaining the regulatory-capital relief and generating liquidity from an otherwise illiquid loan book, and not the profit, *per se*. In this background, the Reserve Bank's guidelines have justifiably adopted such an approach in order to ensure that profit-booking does not become the primary motive for undertaking securitisation transactions – which could perhaps lead to profit smoothening, possibly through inappropriate valuations, and the consequent window dressing of the financial statements – none of which is prudentially desirable. In brief, the restrictions in our guidelines on upfront recognition of profit on sale of assets by the banks seek to create the right incentive framework for the banks so that the basic objective underlying the concept of securitisation does not get negated.

In the aftermath of the recent sub-prime episode in some of the developed countries, caused also by wide dispersal of credit risk throughout the system through complex structured transactions, I am sure, you would appreciate the merit of adopting an appropriate incentive-compatible prudential approach towards securitisation. We need to squarely recognise that securitisation, after all, is also a credit-risk-transfer instrument and has the potential of dispersing the risks from the originating banks to those parts of the system which might not necessarily be best equipped to manage that risk. Hence, the Reserve Bank's stand in creating the right incentive framework through prudential restrictions would seem to be an approach which has much to commend itself.

Migration to Principles-Based Regulation (PBR)

A view has been expressed in certain quarters that the Indian regulatory framework should migrate to principles-based regulation from the current rules-based approach. The merits of a principles-based approach are that in a dynamic market context, where the product innovation is the order of the day, the principles-based approach to regulation provides a more enduring regulatory option since the underlying principles would not need to change with every new product whereas the detailed rules may have to be constantly modified to address the unique features of market and product developments. However, despite the stated superiority of the principles-based approach, so far very few countries have adopted this model in a big-bang or comprehensive manner. The FSA of the UK which is one of the forerunners in adoption of principles-based regulation has a rule book which has over 8000 pages. So, the PBR is not as simple to operationalise as it is to advocate.

Thus, in any regulatory regime, complete reliance on a principles-based approach would rarely be a feasible option since the high-level principles would need to be underpinned by the detailed rules at the operational level, to achieve the regulatory objectives. To illustrate, it might be easy to enunciate the principle that "Treat your customer fairly" but ensuring it at the ground level would invariably require specific rules and prescriptions to achieve the objective underlying the principle. Besides, a PBR approach also pre-supposes greater reliance on the discretion and judgment of the supervisors and regulators in interpreting the broad principles – an aspect with which the market players might not be very comfortable. On the other hand, the regulated entities too, in the absence of detailed regulatory prescriptions, would need to develop a certain level of maturity of outlook to correctly understand the spirit of the principles while implementing them at the operational level. This approach would, therefore, also require a good deal of skill up gradation on the part of the regulator as well as the regulated entities.

Moreover, in any jurisdiction, there could be certain areas of regulation which would be more amenable to a PBR approach while certain other areas might inevitably require detailed prescriptive rules. Thus, the rules-based and principles-based approaches to regulation are not mutually exclusive options but could very well co-exist and complement each other. To illustrate, the Pillar 1 of the Basel II framework is essentially rule-based prescription while the Pillar 2 is more oriented towards principles-based regime. Within the Reserve Bank, we too are in the process of exploring the feasibility of adopting a principles-based approach to banking regulation but it may be quite some time before we could be ready for adoption of the PBR approach on a significant scale in the Indian context.

Conclusion

To sum up, I would only say that the Indian regulatory regime for the banking sector has come a long way over the past six decades. The current regulatory dispensation is ownership neutral, non-discriminatory and provides a level playing field for the market participants. In my presentation today, I have also tried to present some facts, with a view to dispel certain ill informed apprehensions about the regulatory environment for the Indian banking system. Let me assure you that there is considerable scope for improvements in the regulatory systems in India and we have been pursuing a policy of constant improvements through a participative and consultative approach with market participants. The policy outcomes so far, in terms of contribution to growth, price stability, financial stability, efficiency and robustness of banking sector have been significant by all standards of measurements, but the search of excellence, in the Reserve Bank's mission, is an unending journey. I would urge banking community to join us in this great adventure of serving a billion people, with passion as well as positive and broader set of values.

Articles

India's Foreign Trade: 2007-08 (April-September)

*India's Foreign Trade: 2007-08 (April-September)**

Provisional data on India's merchandise trade for April-September, 2007 and commodity-wise details for April-June, 2007 have been recently released by Directorate General of Commercial Intelligence and Statistics (DGCI&S). On the basis of these data the review has been prepared.

Highlights

- During September, 2007 India's merchandise exports recorded a growth of 19.3 per cent, marginal improvement over 18.9 per cent in the previous month (August, 2007) but lower than 26.9 per cent in September, 2006. Exports during April-September, 2007 at 18.3 per cent showed a moderation compared with 27.1 per cent in April-September, 2006.

- Imports during September, 2007 showed a sharp deceleration at 2.3 per cent as compared with 30.5 per cent a year ago. During April-September, 2007, imports growth was marginally higher at 25.4 per cent than 23.1 per cent a year ago.

- Non-oil imports during the first half of 2007-08 (April-September) recorded a substantial increase at 35.4 per cent (15.4 per cent a year ago) and contributed to about 92 per cent of the growth in overall imports during this period.

- Oil imports during April-September, 2007 showed a sharp deceleration in growth at 6.1 per cent as against 41.2 per cent a year ago, mainly due to moderation in the growth of oil prices during April-September, 2007, while

* Prepared in the Division of International Trade, Department of Economic Analysis and Policy. Previous issue of the article was published in RBI Bulletin, November 2007.

growth in volume of imports recorded higher growth.

- During April-September, 2007, the average price of the Indian basket of crude oil stood higher at US $ 69.2 per barrel as against US $ 67.1 per barrel a year ago.
- Trade deficit during the first half of 2007-08 (April-September) stood at US $ 37.0 billion, higher by US $ 11 billion than previous year (US $ 26.0 billion).

Exports

During the month of September, 2007 India's merchandise exports witnessed a marginal improvement recording a growth of 19.3 per cent over the previous month of August, 2007 (18.9 per cent). This increase was, however, lower than the growth witnessed during September, 2006 (26.9 per cent) [Chart 1, Statement 1].

The overall exports, during the first half of 2007-08 (April-September, 2007) at US $ 72.2 billion showed a growth of 18.3 per cent, lower than 27.1 per cent during April-September, 2006 (Table A and Statement 2). Exports realization during the first six months formed around 45 per cent of the target fixed by the Ministry of Commerce and Industries for the year 2007-08 (US $ 160 billion) as compared with 49 per cent in the previous year (US $ 125 billion).

Chart 1: Growth in India's Exports

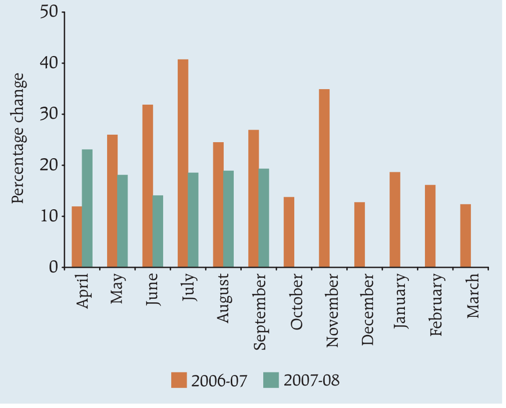


Table A: India's Merchandise Trade : April-September

(US $ million)

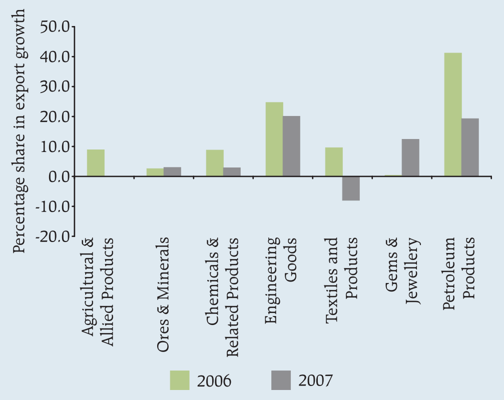
Items	2006-07 R	2007-08 P
Exports	61,035	72,220
	(27.1)	(18.3)
Oil exports*	4,430	5,589
	(106.7)	(26.2)
Non-Oil exports*	24,652	29,499
	(15.3)	(19.7)
Imports	87,067	1,09,204
	(23.1)	(25.4)
Oil Imports	29,576	31,372
	(41.2)	(6.1)
Non-Oil Imports	57,491	77,832
	(15.4)	(35.4)
Trade Balance	-26,032	-36,984

* : Figures pertain to the April-June.
P : Provisional. R : Revised.
Note : Figures in parentheses show percentage change over the previous year.
Source : DGCI&S.

Commodity-wise data available for April-June, 2007 showed deceleration in exports growth across all the major commodity groups, excepting gems and jewellery.

Petroleum products, engineering goods, and gems and jewellery together contributed to 52 per cent of the overall export growth (Statement 3). While agriculture and allied products as also textiles and related products recorded decline in exports, chemicals and related products showed deceleration in exports growth. Reflecting this, their shares in

Chart 2: Contribution of select commodities to export growth (April-June)



contribution to the overall export growth were lower than the corresponding period of the previous year (Chart 2).

Exports of agriculture and allied products declined by 0.2 per cent during April-June, 2007 as compared with an increase of 21.6 per cent recorded a year ago, due to decline in exports of major items such as sugar and molasses, marine products, cashew, cotton, tea and coffee. The decline in exports of agriculture and allied products during the current year is in sharp contrast with the growth trend witnessed in the recent years consistent with the global trend in agricultural trade (Box).

Exports of manufactured goods also exhibited deceleration in growth at 8.6 per cent (14.6 per cent a year ago) mainly due to decline in the exports of textiles and textile products and moderation in chemicals and related products and engineering goods. The deceleration in engineering goods exports (18.5 per cent as against 26.7 per cent a year ago) was on account of moderation in the exports of machinery and instruments, manufactures of metals and electronic goods. Chemicals and related products decelerated to 4.5 per cent (14.4 per cent a year ago) during April-June, 2007.

Exports of textiles and textile products showed a decline of 11.1 per cent as against an increase of 14.1 per cent a year ago. The continued slide in textile exports during the current year was triggered by decline in the exports of major items like readymade garments, cotton yarn, fabrics and made-ups. Exports to major markets like the US, Italy and Bangladesh also showed decline during this period. According to the US Department of Commerce, Office of Textiles and Apparel, during April-September, 2007, the US imports of textiles and apparel from India decelerated to 2.6 per cent in value terms (9.5 per cent in the corresponding period of the previous year) and 1.5 per cent in quantity terms (16.5 per cent a year ago).

Gems and jewellery exports showed a significant increase at 21.0 per cent during April-June, 2007 as against 0.7 per cent a year ago, with higher exports to major markets (USA and Hong Kong). The latest data available from the Gem and Jewellery Export Promotion Council (GJEPC) for the period April-October, 2007 showed a 25.3 per cent growth in the exports of gems and jewellery over the corresponding period of the previous year.

During April-June, 2007, exports of petroleum products recorded a growth of 26.2 per cent, a sharp decline from 106.7 per cent a year ago. Petroleum products exports which recorded 60.5 per cent growth in 2006-07 showed a deceleration

Box: Trade in Agricultural Products and Commodity Prices

The world agricultural trade which is susceptible to wide cyclical fluctuations, has witnessed a sharp upswing in recent years. The recent surge in agricultural exports benefitted mainly from the high commodity prices, while the agricultural production suffered steady decline in growth especially since 2004 (Table 1). The strong demand stemmed mainly from global economic growth, especially from emerging economies, such as China and a slow supply response are the generally attributed reasons for the price rise. Exports of agricultural products, including food registered an annual average growth of about 13 per cent during 2003 to 2006.

During the latter part of the twentieth century, prices of many of the agricultural products slumped, affecting the export earnings of several commodity-dependent developing countries. However, agricultural commodity prices staged a recovery since 2002, with the last two years witnessing consolidation (Chart 1). Among the primary commodities, prices of minerals, ores and metals were the major beneficiaries of price boom. Prices of copper, nickel, tungsten ore and zinc more than doubled during the period 2002-06. The current phase of price rise in primary products is also attributed to the expansion in demand for biofuels, which is closely linked to developments in energy prices (UNCTAD, 2007). Increased demand was experienced for commodities like maize and sugar which are used for the production of ethanol and vegetable oils for bio-diesel as well.

India's agricultural exports also exhibited a similar pattern as witnessed at the global level. Exports of agricultural products from India in value terms more than doubled from US $ 6.0 billion in 2000-01 to US $ 12.5 billion in 2006-07. Exports in value terms and prices measured in terms of unit value have shown steady rise since 2003-04 (Chart 2). However, the share of agriculture and allied products in the overall exports of India has been stagnated at about 10 per cent emanating from wide fluctuations in the exports of traditional items like tea, coffee, spices, etc.

Chart 1: Trends in World Commodity Prices and Agricultural Exports

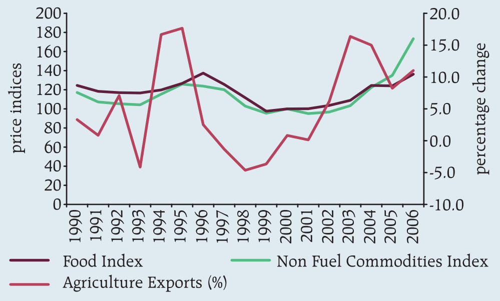


Chart 2: Trends in India's Agricultural Exports and Exports Prices

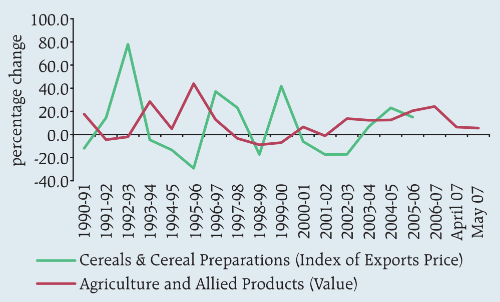


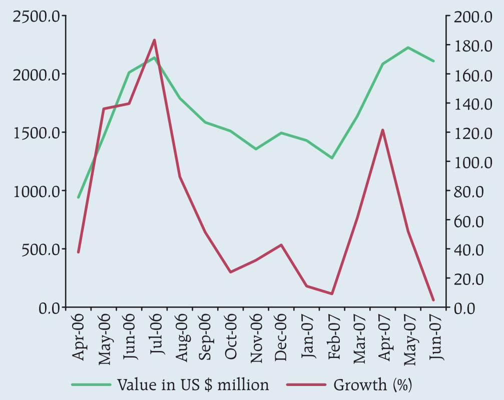
Table 1: Trends in World Agricultural Production and Trade

(Annual percentage change)

	2002	2003	2004	2005	2006
(1) Agricultural Production (Volume terms)	1.5	2.5	5.0	1.5	1.0
(2) Agricultural Exports (Volume terms)	3.5	3.5	3.5	6.0	6.0
(3) Agricultural Exports (Value terms)	6.1	16.4	15.0	8.2	11.0
(4) Prices (a) Food	-0.5	1.9	13.9	7.2	19.0
(b) Vegetable oil seeds and oils	24.9	17.4	13.2	-9.5	5.0
(c) Minerals, ores and metals	-2.7	12.4	40.7	26.2	60.3

Source: WTO International Trade Statistics, various issues; UNCTAD Trade and Development Report, 2006 and 2007

Chart 3: Trends in Exports of Petroleum Products



during the current year (Chart 3). Exports to principal markets like UAE have shown decline during April-June 2007 compared with the previous year.

Destination wise, India's exports to European Union (EU), Eastern Europe and Africa showed accelerated growth, while exports to North America, OPEC and developing countries showed moderation during April-June, 2007 (Statement 4).

Imports

During April-September, 2007 India's merchandise imports amounted to US $ 109.2 billion, recording a growth of 25.4 per cent (23.1 per cent a year ago). Non-oil imports at US $ 77.8 billion, contributed about 92 per cent of the overall growth in imports during the period, while oil imports showed sharp deceleration.

Imports of POL decelerated during April-September, 2007 (6.1 per cent as against 41.2 per cent a year ago) mainly due to moderated growth in crude oil prices, while quantity of imports remained higher than the previous year. The average price of Indian basket of crude oil at US $ 69.2 per barrel during April-September, 2007 was marginally higher by 3.1 per cent as compared with corresponding period of previous year (25.2 per cent) [(Table B)]. Quantity of POL imports during April-June, 2007 was higher by 17.9 per cent as compared with 16.7 per cent during the same period last year.

Non-oil imports recorded a growth of 35.4 per cent during April-September, 2007 (15.4 per cent a year ago). Commodity-wise details available for April-June, 2007 revealed that gold and silver was the major contributor to the growth (32.7 per cent) in non-oil imports followed by the capital goods (21.2 per cent). During the period, while the share of capital goods, coal, coke

Table B: Trends in Crude Oil Prices

(US $/barrel)

	Dubai	**UK Brent**	**US-WTI**	**Indian Basket***
1995-96	16.2	17.5	18.8	16.7
2000-01	25.9	28.1	30.3	26.8
2001-02	21.8	23.2	24.1	22.4
2002-03	25.9	27.6	29.2	26.6
2003-04	26.9	29.0	31.4	27.8
2004-05	36.4	42.2	45.0	38.9
2005-06	53.4	58.0	59.9	55.3
2006-07	60.9	64.4	64.7	62.3
2006-07 (April-September)	65.3	69.9	70.4	67.1
2007-08 (April-September)	67.3	71.9	70.2	69.2
September 2006	59. 8	62.8	63.8	61.0
September 2007	73.3	77.1	79.9	74.8

* : Indian basket comprises 59.8 per cent 'sour' variety benchmarked by Dubai crude and 40.2 per cent of 'sweet' variety benchmarked by UK Brent crude.

Source : International Monetary Fund, *International Financial Statistics*, World Bank's Commodity Price Pink sheet September, 2007 .

Chart 4: Contribution of select commodities to non-oil imports growth (April-June)

and briquettes, chemicals and metalliferrous ores and metal scrap in imports growth declined, the contribution of gold and silver, pearls, precious and semi-precious stones and iron and steel showed increase (Statement 5 and Chart 4).

Source-wise, China was the major source of imports (oil plus non-oil imports) during April-June, 2007, accounting for 10.7 per cent of total imports followed by Switzerland (7.0 per cent), UAE (6.0 per cent), Saudi Arabia (5.8 per cent), the US (4.9 per cent), Australia (4.6 per cent), Iran (4.3 per cent) and Germany (3.9 per cent) [Statement 6].

Trade Deficit

Trade deficit in September 2007 at US $ 4.4 billion was lower than US $ 6.1 billion a year ago facilitated by slower growth in imports. The overall trade deficit during April-September, 2007 at US $ 37.0 billion was higher by US $ 11.0 billion than the previous year (US $ 26.0 billion) [Statement 2]. The trade deficit on the oil account increased by US $ 2.1 billion during April-June, 2007 to reach US $ 11.4 billion, while the non-oil trade deficit increased by US $ 7.5 billion to US $ 10.1 billion.

Global Developments

Based on IMF, International Financial Statistics data, world exports registered a growth of 14.0 per cent (13.9 per cent a year ago) in the first seven months of 2007 (January-July). Exports from industrialized countries posted a higher growth of 13.1 per cent (10.4 per cent a year ago) while developing countries showed a moderation in growth at 15.2 per cent (18.6 per cent).

According to the US Bureau of Economic Analysis (BEA), during January-September, 2007, the US exports posted a higher growth (12.0 per cent growth) than imports (4.0 per cent). In the case of European Union, according to Euro Stat, trade showed a deceleration with exports showing a growth of 7.1 per cent during January-September, 2007 (11.3 per cent a year ago), and imports registering a growth of 4.0 per cent (18.0 per cent a year ago). Japan's exports posted a growth of 13.6 per cent during January-September, 2007 (13.3 per cent a year ago) and imports grew by 8.4 per cent (16.9 per cent a year ago).

Among the emerging markets, China's exports, according to Ministry of Commerce of the People's Republic of China, during January-September, 2007 increased by 27.1 per cent while imports grew by 19.1 per cent. Malaysia's exports, according to the Department of Statistics, Malaysia, during the same period posted a growth of 0.1 per cent, while imports grew by 2.9 per cent. Thailand's exports during January-September, 2007 increased by 16.1 per cent as compared with 16.0 per cent a year ago.

Statement 1 : India's Foreign Trade - Sept. 2007

Year	Export			Import			Trade Balance		
	Total	Oil	Non-Oil	Total	Oil	Non-Oil	Total	Oil	Non-Oil
1	2	3	4	5	6	7	8	9	10
Rupees crore									
2005-06	37,138	4,596	32,542	56,632	17,778	38,854	-19,494	-13,182	-6,312
	(16.4)	(55.2)	(12.5)	(30.4)	(49.8)	(23.1)			
2006-07 R	49,486	7,307	42,179	77,611	23,808	53,803	-28,125	-16,501	-11,624
	(33.3)	(59.0)	(29.6)	(37.0)	(33.9)	(38.5)			
2007-08 P	51,622	..	..	69,456	22,179	47,277	-17,834		
	(4.3)			(-10.5)	(-6.8)	(-12.1)			
US dollar million									
2005-06	8,457	1,046	7,410	12,896	4,048	8,902	-4,439	-3,002	-1,491
	(22.2)	(62.9)	(18.1)	(36.9)	(57.2)	(30.1)			
2006-07 R	10,730	1,584	9,146	16,829	5,162	11,666	-6,098	-3,578	-2,521
	(26.9)	(51.4)	(23.4)	(30.5)	(27.5)	(31.1)			
2007-08 P	12,797	..	..	17,218	5,498	11,720	-4,421		
	(19.3)			(2.3)	(6.5)	(0.5)			
SDR million									
2005-06	5,768	714	5,054	8,795	2,761	6,034	-3,027	-2,047	-980
	(22.1)	(62.7)	(17.9)	(36.7)	(57.0)	(29.1)			
2006-07 R	7,242	1,069	6,215	11,358	3,484	7,874	-4,116	-2,415	-1,658
	(25.6)	(49.8)	(23.0)	(29.1)	(26.2)	(30.5)			
2007-08P	8,290	..	..	11,154	3,562	7,592	-2,864		
	(14.5)			(-1.8)	(2.2)	(-3.6)			

P : Provisional. R : Revised. .. : Not available.

Note : Figures in brackets relate to percentage variation over the corresponding previous period.

Source : DGCI & S.

Statement 2 : India's Foreign Trade

Year	Export			Import			Trade Balance		
	Total	Oil	Non-Oil	Total	Oil	Non-Oil	Total	Oil	Non-Oil
1	2	3	4	5	6	7	8	9	10
April-March									
Rupees crore									
2004-2005	375,340 (27.9)	31,404 (91.5)	343,935 (24.2)	501,065 (39.5)	134,094 (41.9)	366,971 (38.7)	-125,725	-102,690	-23,035
2005-2006 R	456,418 (21.6)	51,533 (64.1)	404,885 (17.7)	660,409 (31.8)	194,640 (45.2)	465,769 (26.9)	-203,991	-143,107	-60,884
2006-2007 P	571,779 (25.3)	84,520 (64.0)	487,259 (20.3)	840,506 (27.3)	258,572 (32.8)	581,935 (24.9)	-268,727	-174,052	-94,675
US dollar million									
2004-2005	83,536 (30.8)	6,989 (95.9)	76,547 (27.0)	111,517 (42.7)	29,844 (45.1)	81,673 (41.8)	-27,981	-22,855	-5,127
2005-2006 R	103,091 (23.4)	11,640 (66.5)	91,451 (19.5)	149,166 (33.8)	43,963 (47.3)	105,203 (28.8)	-46,075	-32,323	-13,752
2006-2007 P	126,361 (22.6)	18,679 (60.5)	107,683 (17.7)	185,749 (24.5)	57,144 (30.0)	128,606 (22.2)	-59,388	-38,465	-20,923
SDR million									
2004-2005	56,081 (25.6)	4,692 (88.0)	51,389 (21.9)	74,866 (36.9)	20,036 (39.2)	54,830 (36.1)	-18,785	-15,343	-3,442
2005-2006 R	70,774 (26.2)	7,991 (70.3)	62,783 (22.2)	102,405 (36.8)	30,182 (50.6)	72,224 (31.7)	-31,632	-22,191	-9,441
2006-2007 P	85,018 (20.1)	12,567 (57.3)	72,451 (15.4)	124,975 (22.0)	38,447 (27.4)	86,528 (19.8)	-39,957	-25,880	-14,077
April-Sept.									
Rupees crore									
2005-2006	209,656	21,354	188,302	308,816	91,452	217,364	-99,160	-70,098	-29,062
2006-2007 R	280,275 (33.7)	45,719 (114.1)	234,556 (24.6)	399,815 (29.5)	135,815 (48.5)	264,000 (21.5)	-119,540	-90,096	-29,444
2007-2008 P	295,233 (5.3)	..	..	446,421 (11.7)	128,247 (-5.6)	318,174 (20.5)	-151,188		
US dollar million									
2005-2006	48,033 (33.4)	4,892 (67.2)	43,141 (30.5)	70,751 (47.0)	20,952 (43.7)	49,799 (48.5)	-22,718	-16,060	-6,658
2006-2007 R	61,035 (27.1)	9,956 (103.5)	51,079 (18.4)	87,067 (23.1)	29,576 (41.2)	57,491 (15.4)	-26,032	-19,620	-6,412
2007-2008 P	72,220 (18.3)	5589 * (26.2)	29499 * (19.7)	109,204 (25.4)	31,372 (6.1)	77,832 (35.4)	-36,984		
SDR million									
2005-2006	32,534 (32.2)	3,314 (65.7)	29,220 (29.3)	47,921 (45.7)	14,191 (42.4)	33,730 (47.1)	-15,387	-10,878	-4,510
2006-2007 R	41,300 (26.9)	6,737 (103.3)	34,563 (18.3)	58,915 (22.9)	20,013 (41.0)	38,902 (15.3)	-17,615	-13,276	-4,339
2007-2008 P	47,341 (14.6)	..	..	71,584 (21.5)	20,564 (2.8)	51,019 (31.1)	-24,243		

P : Provisional. R : Revised. .. : Not available. * : Figures pertain to the month of April-June

Note : 1. Figures in brackets relate to percentage variation over the corresponding period of the previous year.
2. Data conversion has been done using period average exchange rates.

Source : DGCI & S.

Statement 3 : India's Exports of Principal Commodities

(US $ million)

Commodity Group	April-June			Percentage Variation	
	2005-06	2006-07	2007-08 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. Primary Products	**3,729.3**	**4,366.8**	**4,543.9**	**17.1**	**4.1**
	(15.9)	**(15.0)**	**(12.9)**		
A. Agricultural & Allied Products	**2,280.6**	**2,773.6**	**2,768.3**	**21.6**	**-0.2**
of which:	**(9.7)**	**(9.5)**	**(7.9)**		
1. Tea	83.0	87.8	71.6	5.8	-18.4
2. Coffee	110.1	127.2	115.7	15.5	-9.1
3. Rice	363.9	274.3	504.5	-24.6	84.0
4. Wheat	73.1	4.9	0.1	-93.3	-98.4
5. Cotton Raw incl. Waste	86.6	244.6	113.6	182.5	-53.6
6. Tobacco	65.2	88.0	104.8	35.1	19.0
7. Cashew incl. CNSL	171.6	135.8	125.4	-20.9	-7.7
8. Spices	112.6	141.9	211.8	26.0	49.3
9. Oil Meal	166.7	167.3	193.9	0.4	15.9
10. Marine Products	314.2	307.1	270.0	-2.3	-12.1
11. Sugar & Mollases	10.0	376.3	295.1	3676.7	-21.6
B. Ores & Minerals	**1,448.6**	**1,593.2**	**1,775.6**	**10.0**	**11.4**
of which:	**(6.2)**	**(5.5)**	**(5.1)**		
1. Iron Ore	909.4	858.4	981.2	-5.6	14.3
2. Processed Minerals	238.4	363.6	302.6	52.5	-16.8
II. Manufactured Goods	**16,838.7**	**19,291.4**	**20,941.6**	**14.6**	**8.6**
of which:	**(71.6)**	**(66.3)**	**(59.7)**		
A. Leather & Manufactures	**627.6**	**644.4**	**659.7**	**2.7**	**2.4**
B. Chemicals & Related Products	**3,406.1**	**3,896.2**	**4,072.0**	**14.4**	**4.5**
1. Basic Chemicals, Pharmaceuticals & Cosmetics	2,020.3	2,463.8	2,622.3	22.0	6.4
2. Plastic & Linoleum	771.7	710.1	691.7	-8.0	-2.6
3. Rubber, Glass, Paints & Enamels, *etc.*,	463.6	552.0	586.4	19.1	6.2
4. Residual Chemicals & Allied Products	150.5	170.4	171.6	13.2	0.7
C. Engineering Goods	**5,141.0**	**6,515.1**	**7,720.5**	**26.7**	**18.5**
of which:					
1. Manufactures of metals	952.5	1,116.0	1,265.9	17.2	13.4
2. Machinery & Instruments	1,129.2	1,575.6	1,794.3	39.5	13.9
3. Transport equipments	1,265.2	1,336.1	1,688.8	5.6	26.4
4. Iron & steel	897.4	1,018.9	1,194.7	13.5	17.3
5. Electronic goods	449.2	638.1	647.9	42.0	1.5
D. Textiles and Textile Products	**3,786.1**	**4,318.5**	**3,839.0**	**14.1**	**-11.1**
1. Cotton Yarn, Fabrics, Made-ups, *etc.*	907.6	1,023.5	853.4	12.8	-16.6
2. Natural Silk Yarn, Fabrics Madeups, *etc.* (incl.silk waste)	110.2	105.3	100.1	-4.4	-5.0
3. Manmade Yarn, Fabrics, Made-ups, *etc.*	440.8	495.7	522.4	12.4	5.4
4. Manmade Staple Fibre	18.6	29.8	60.0	60.6	101.1
5. Woolen Yarn, Fabrics, Madeups, *etc.*	22.2	21.4	21.0	-3.5	-2.1
6. Readymade Garments	1,999.8	2,324.3	2,020.8	16.2	-13.1
7. Jute & Jute Manufactures	71.0	66.8	64.7	-5.8	-3.1
8. Coir & Coir Manufactures	28.9	30.8	30.2	6.8	-1.9
9. Carpets	187.0	220.7	166.3	18.0	-24.7
(a) Carpet Handmade	183.3	216.7	163.8	18.2	-24.4
(b) Carpet Millmade	0.0	0.0	0.0		
(c) Silk Carpets	3.7	4.0	2.5	7.7	-37.6
E. Gems & Jewellery	**3,524.4**	**3,549.1**	**4,293.8**	**0.7**	**21.0**
F. Handicrafts	**117.7**	**110.3**	**62.3**	**-6.2**	**-43.5**
III. Petroleum Products	**2,143.5**	**4,429.5**	**5,588.6**	**106.7**	**26.2**
	(9.1)	**(15.2)**	**(15.9)**		
IV. Others	**816.3**	**993.5**	**4,013.9**	**21.7**	**304.0**
	(3.5)	**(3.4)**	**(11.4)**		
Total Exports	**23,527.7**	**29,081.3**	**35,088.0**	**23.6**	**20.7**

P : Provisional.
Note : Figures in brackets relate to percentage to total exports for the period.
Source : DGCI & S.

Statement 4 : Direction of India's Foreign Trade- Exports

(US $ million)

Group/Country	April-June			Percentage Variation	
	2005-06	2006-07	2007-08 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. O E C D Countries	**10,305.3**	**11,767.8**	**13,493.7**	**14.2**	**14.7**
A. E U	**5,262.8**	**5,760.9**	**6,952.9**	**9.5**	**20.7**
of which:					
1. Belgium	642.4	710.6	1,022.3	10.6	43.9
2. France	659.1	614.1	555.7	-6.8	-9.5
3. Germany	801.4	940.8	1,093.9	17.4	16.3
4. Italy	603.5	762.0	923.2	26.3	21.2
5. Netherland	505.8	466.5	784.9	-7.8	68.3
6. U K	1,185.2	1,280.2	1,465.0	8.0	14.4
B. North America	**3,874.9**	**4,643.3**	**4,950.2**	**19.8**	**6.6**
1. Canada	240.3	269.6	278.0	12.2	3.1
2. U S A	3,634.6	4,373.7	4,672.1	20.3	6.8
C. Asia and Oceania	**836.6**	**986.1**	**1,039.4**	**17.9**	**5.4**
of which:					
1. Australia	183.3	202.5	202.7	10.5	0.1
2. Japan	597.7	567.6	803.4	-5.0	41.6
D. Other O E C D Countries	**331.0**	**377.5**	**551.2**	**14.0**	**46.0**
of which:					
1. Switzerland	114.2	104.4	146.5	-8.6	40.3
II. O P E C	**3,278.4**	**4,922.3**	**6,390.8**	**50.1**	**29.8**
of which:					
1. Indonesia	289.2	467.4	420.9	61.6	-9.9
2. Iran	176.0	438.1	674.2	148.9	53.9
3. Iraq	25.5	61.6	55.7	141.4	-9.6
4. Kuwait	128.1	150.3	153.2	17.3	1.9
5. Saudi Arabia	422.3	511.8	826.5	21.2	61.5
6. U A E	1,871.4	2,913.6	3,807.1	55.7	30.7
III. Eastern Europe	**450.6**	**530.0**	**746.0**	**17.6**	**40.8**
of which:					
1. Romania	26.9	35.7	63.7	32.9	78.2
2. Russia	179.0	181.8	192.5	1.6	5.9
IV. Developing Countries	**9,445.4**	**11,809.1**	**14,342.4**	**25.0**	**21.5**
of which:					
A. Asia	**7,435.1**	**9,142.5**	**10,300.3**	**23.0**	**12.7**
a) S A A R C	**1,328.1**	**1,777.6**	**1,927.3**	**33.8**	**8.4**
1. Bangladesh	408.0	419.8	475.1	2.9	13.2
2. Bhutan	28.9	14.2	18.3	-	28.4
3. Maldives	14.6	14.0	17.4	-4.3	24.3
4. Nepal	195.2	222.1	317.9	13.8	43.1
5. Pakistan	166.7	428.2	406.5	156.9	-5.1
6. Sri Lanka	489.3	644.1	644.6	31.6	0.1
7. Afghanistan	25.5	35.2	47.7	38.1	35.6
b) Other Asian Developing Countries	**6,107.0**	**7,364.9**	**8,373.0**	**20.6**	**13.7**
of which:					
1. People's Rep of China	1,514.5	1,816.9	1,926.4	20.0	6.0
2. Hong Kong	1,060.9	1,036.4	1,288.7	-2.3	24.3
3. South Korea	382.9	392.5	515.1	2.5	31.2
4. Malaysia	234.8	269.6	377.5	14.8	40.0
5. Singapore	1,567.8	1,852.2	1,640.5	18.1	-11.4
6. Thailand	248.8	325.0	300.7	30.6	-7.5
B. Africa	**1,286.8**	**1,811.5**	**3,224.0**	**40.8**	**78.0**
of which:					
1. Benin	22.9	23.9	48.9	4.2	104.7
2. Egypt Arab Republic	173.8	149.8	283.7	-13.8	89.4
3. Kenya	150.4	314.8	299.7	109.3	-4.8
4. South Africa	316.5	502.9	751.0	58.9	49.3
5. Sudan	89.9	107.3	78.8	19.4	-26.6
6. Tanzania	45.1	52.9	105.7	17.1	100.0
7. Zambia	16.4	19.4	40.6	18.0	109.8
C. Latin American Countries	**723.5**	**855.2**	**818.0**	**18.2**	**-4.3**
V. Others	**26.7**	**20.7**	**24.9**	**-22.6**	**20.6**
VI. Unspecified	**21.2**	**31.4**	**90.2**	**48.5**	**186.7**
Total Exports	**23,527.7**	**29,081.3**	**35,088.0**	**23.6**	**20.7**

P : Provisional.
Source : DGCI & S.

Statement 5 : India's Imports of Principal Commodities

(US $ million)

Commodity Group	April-June			Percentage Variation	
	2005-06	2006-07	2007-08 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. Bulk Imports	**13,503.2**	**19,045.7**	**24,860.2**	**41.0**	**30.5**
	(39.3)	**(46.5)**	**(43.9)**		
A. Petroleum, Petroleum Products	**9,444.9**	**13,717.2**	**16,982.3**	**45.2**	**23.8**
& Related Material	**(27.5)**	**(33.5)**	**(30.0)**		
B. Bulk Consumption Goods	**609.7**	**679.2**	**955.9**	**11.4**	**40.7**
1. Wheat	0.0	0.0	12.0	–	–
2. Cereals & Cereal Preparations	9.0	9.4	8.6	4.8	-8.6
3. Edible Oil	462.2	529.8	682.8	14.6	28.9
4. Pulses	92.6	139.7	252.3	50.9	80.6
5. Sugar	45.9	0.2	0.2	–	–
C. Other Bulk Items	**3,448.6**	**4,649.3**	**6,922.0**	**34.8**	**48.9**
1. Fertilisers	412.2	500.5	697.3	21.4	39.3
a) Crude	80.4	85.9	126.8	6.8	47.7
b) Sulphur & Unroasted Iron Pyrites	37.4	24.4	39.4	-34.6	61.1
c) Manufactured	294.4	390.2	531.1	32.5	36.1
2. Non-Ferrous Metals	432.6	608.8	765.9	40.7	25.8
3. Paper, Paperboard & Mgfd. incl. Newsprint	251.8	313.1	334.3	24.3	6.8
4. Crude Rubber, incl. Synthetic & Reclaimed	120.9	139.7	180.7	15.5	29.4
5. Pulp & Waste Paper	144.5	151.9	176.5	5.1	16.2
6. Metalliferrous Ores & Metal Scrap	879.0	1,603.6	2,486.4	82.4	55.1
7. Iron & Steel	1,207.7	1,331.8	2,280.8	10.3	71.3
II. Non-Bulk Imports	**20,898.4**	**21,889.4**	**31,764.8**	**4.7**	**45.1**
	(60.7)	**(53.5)**	**(56.1)**		
A. Capital Goods	**6,919.5**	**9,545.1**	**12,184.7**	**37.9**	**27.7**
1. Manufactures of Metals	301.0	343.2	461.1	14.0	34.3
2. Machine Tools	228.5	282.9	404.3	23.9	42.9
3. Machinery except Electrical & Electronics	2,225.6	2,969.8	4,018.1	33.4	35.3
4. Electrical Machinery except Electronics	347.7	455.1	571.4	30.9	25.5
5. Electronic Goods incl. Computer Software	2,890.5	3,938.8	4,930.4	36.3	25.2
6. Transport Equipments	696.5	1,010.3	1,493.8	45.0	47.9
7. Project Goods	229.8	545.0	305.6	137.1	-43.9
B. Mainly Export Related Items	**5,036.8**	**4,259.7**	**5,309.5**	**-15.4**	**24.6**
1. Pearls, Precious & Semi-Precious Stones	2,746.7	1,811.5	2,312.2	-34.0	27.6
2. Chemicals, Organic & Inorganic	1,670.2	1,806.8	2,346.1	8.2	29.8
3. Textile Yarn, Fabric, *etc.*	489.2	541.5	558.8	10.7	3.2
4. Cashew Nuts, raw	130.8	100.0	92.5	-23.6	-7.5
C. Others	**8,942.0**	**8,084.5**	**14,270.6**	**-9.6**	**76.5**
of which:					
1. Gold & Silver	4,268.7	2,974.7	7,043.7	-30.3	136.8
2. Artificial Resins & Plastic Materials	505.1	617.7	847.0	22.3	37.1
3. Professional Instruments, *etc.,* except electrical	470.0	556.1	729.4	18.3	31.2
4. Coal, Coke & Briquittes, *etc.*	958.4	1,069.7	1,481.3	11.6	38.5
5. Medicinal & Pharmaceutical Products	217.2	282.1	373.8	29.9	32.5
6. Chemical Materials & Products	251.4	355.7	352.9	41.5	-0.8
7. Non-Metallic Mineral Manufactures	143.9	181.6	206.3	26.2	13.6
Total Imports	**34,401.6**	**40,935.1**	**56,625.0**	**19.0**	**38.3**
Memo Items					
Non-Oil Imports	**24,956.7**	**27,217.8**	**39,642.7**	**9.1**	**45.6**
Non-Oil Imports excl. Gold & Silver	**20,688.0**	**24,243.1**	**32,599.0**	**17.2**	**34.5**
Mainly Industrial Inputs*	**19,313.9**	**22,617.7**	**30,382.6**	**17.1**	**34.3**

P : Provisional.

* : Non oil imports net of gold and silver, bulk consumption goods, manufactured fertilizers and professional instruments.

Note : Figures in brackets relate to percentage to total imports for the period.

Source : DGCI & S.

Statement 6 : Direction of India's Foreign Trade-Imports

(US $ million)

Group / Country	April-June			Percentage Variation	
	2005-06	2006-07	2007-08 P	(3)/(2)	(4)/(3)
1	2	3	4	5	6
I. O E C D Countries	**12,644.2**	**13,143.8**	**19,476.0**	**4.0**	**48.2**
A. E U	**5,674.4**	**5,923.9**	**7,776.7**	**4.4**	**31.3**
of which:					
1. Belgium	1,458.4	932.2	1,294.8	-36.1	38.9
2. France	380.0	460.5	525.7	21.2	14.2
3. Germany	1,417.2	1,751.4	2,180.9	23.6	24.5
4. Italy	415.4	541.7	801.4	30.4	47.9
5. Netherland	284.0	241.3	402.7	-15.0	66.8
6. U K	958.6	933.0	1,234.4	-2.7	32.3
B. North America	**2,052.9**	**2,663.4**	**3,085.0**	**29.7**	**15.8**
1. Canada	219.6	250.5	337.3	14.1	34.6
2. U S A	1,833.3	2,412.9	2,747.7	31.6	13.9
C. Asia and Oceania	**2,237.0**	**2,700.5**	**4,168.0**	**20.7**	**54.3**
of which:					
1. Australia	1,365.0	1,524.0	2,587.4	11.6	69.8
2. Japan	825.1	1,112.4	1,493.4	34.8	34.3
D. Other O E C D Countries	**2,679.9**	**1,855.9**	**4,446.4**	**-30.7**	**139.6**
of which:					
1. Switzerland	2,596.9	1,700.5	3,946.8	-34.5	132.1
II. O P E C	**2,679.8**	**13,395.2**	**17,008.6**	**399.9**	**27.0**
of which:					
1. Indonesia	612.7	807.0	1,247.2	31.7	54.5
2. Iran	168.9	1,605.8	2,426.7	850.7	51.1
3. Iraq	0.7	1,407.1	1,476.3	—	—
4. Kuwait	72.5	1,489.7	1,470.6	1,955.3	-1.3
5. Saudi Arabia	351.0	3,259.2	3,284.6	828.5	0.8
6. U A E	1,266.1	2,274.7	3,408.6	79.7	49.8
III. Eastern Europe	**1,012.2**	**904.4**	**1,229.6**	**-10.6**	**35.9**
of which:					
1. Romania	88.4	57.2	121.2	-35.3	111.9
2. Russia	522.0	376.5	474.3	-27.9	26.0
IV. Developing Countries	**8,561.5**	**13,372.9**	**18,586.3**	**56.2**	**39.0**
of which:					
A. Asia	**6,905.8**	**10,732.3**	**14,621.5**	**55.4**	**36.2**
a) S A A R C	**311.2**	**398.1**	**396.1**	**27.9**	**-0.5**
1. Bangladesh	20.2	59.4	70.4	194.3	18.6
2. Bhutan	24.8	24.4	47.0	-1.8	92.7
3. Maldives	0.5	0.7	1.0	-	-
4. Nepal	88.4	58.5	96.8	-33.8	65.5
5. Pakistan	33.8	82.1	68.2	142.7	-16.9
6. Sri Lanka	131.9	153.7	97.7	16.5	-36.5
7. Afghanistan	11.5	19.3	15.0	67.5	-22.0
b) Other Asian Developing Countries	**6,594.6**	**10,334.2**	**14,225.4**	**56.7**	**37.7**
of which:					
1. People's Rep of China	2,348.6	3,650.2	6,079.6	55.4	66.6
2. Hong Kong	499.1	565.0	709.5	13.2	25.6
3. South Korea	995.1	1,079.4	1,375.8	8.5	27.5
4. Malaysia	595.8	1,209.6	1,348.6	103.0	11.5
5. Singapore	776.4	1,423.0	1,766.6	83.3	24.2
6. Thailand	299.3	389.4	547.0	30.1	40.5
B. Africa	**1,178.6**	**1,567.5**	**2,571.3**	**33.0**	**64.0**
of which:					
1. Benin	41.1	36.3	30.8	-11.8	-15.0
2. Egypt Arab Republic	63.1	460.0	454.4	629.2	-1.2
3. Kenya	13.8	13.9	17.8	1.2	27.4
4. South Africa	702.2	684.9	996.9	-2.5	45.5
5. Sudan	7.9	8.9	110.3	13.1	1,132.5
6. Tanzania	8.4	10.0	14.0	19.8	39.7
7. Zambia	10.3	4.9	46.9	—	851.0
C. Latin American Countries	**477.1**	**1,073.2**	**1,393.4**	**124.9**	**29.8**
V. Others	**7.1**	**25.7**	**13.5**	**260.9**	**-47.6**
VI. Unspecified	**9,496.8**	**93.0**	**311.0**	**-99.0**	**234.3**
Total Imports	**34,401.6**	**40,935.1**	**56,625.0**	**19.0**	**38.3**

P : Provisional.

Note : The figures for 2006-07, which include country-wise distribution of petroleum imports, are not strictly comparable with the data for previous years.

Source : DGCI & S.

Other Items

Press Releases

Regulatory and Other Measures

Foreign Exchange Developments

Press Releases

RBI Sets Up Committee on Customer Services

October 18, 2007

The Reserve Bank of India has set up a Committee on Customer Services with effect from September 24, 2007 to look into customer services provided by Reserve Bank of India directly or through banks/ institutions with a view to maximize satisfaction to the general public. The Committee is headed by Shri H. Prabhakar Rao, former Controller General of Accounts, Government of India and includes Smt. Vani J. Sharma, former Regional Director, Reserve Bank of India and Shri Girish Pai K, Chartered Accountant as members.

The terms of reference of the committee are -

a) To evaluate the efforts for improving public services to individuals undertaken by the Reserve Bank directly or through banks/ institutions, since adoption of Committee on Procedures and Performance Audit on Public Services (CPPAPS) recommendation and to advise the Bank on improving the quality of such services.

b) To review existing policies and procedures with a view to their rationalisation, keeping in view the technological and other developments since CPPAPS recommendation.

c) To interact with various fora/ associations concerned with customers' interest to the extent it impinges on the services provided by the Reserve Bank.

d) To tender advice on any other issue relevant to the Committee's work as also any specific issues referred to it by the Reserve Bank.

The Committee is based in Reserve Bank of India, Regional Office, Bangalore. Among the various aspects which will be looked into by the committee are the following:

a) Problems faced by individuals relating to availability of coins and notes and exchange of soiled/mutilated notes at the Reserve Bank of India offices and bank branches.

b) Banking Services relating to foreign exchange transactions of individuals including encashment of currency/TCs, acquisition of foreign exchange for various permitted purposes, operation of non-resident accounts and foreign currency accounts of residents, etc.

c) Matters relating to Government transactions including payment of pensions through banks, payment of taxes by individuals at Reserve Bank of India/bank branches and any other related receipts/payment matters.

d) Matters relating to servicing and redemption of Government of India Bonds (Relief Bonds, Savings Bonds) sold through Reserve Bank of India and banks.

The Secretariat to the Committee can be contacted through email.

Lehman Brothers Fixed Income Securities Private Limited authorised as Primary Dealer

October 31, 2007

Lehman Brothers Fixed Income Securities Private Limited has been authorised to undertake Primary Dealer business with effect from Thursday, November 01, 2007.

Regulatory and Other Measures

October 2007

RBI/2007-2008/174 RPCD.CO.RF.BC.No.34/07.02.01/2007-08 dated October 30, 2007

All Scheduled State Co-operative Banks

StCBs - Maintenance of CRR

Section 42(1) of Reserve Bank of India Act, 1934-Maintenance of Cash Reserve Ratio (CRR)

Please refer to our Circular RBI/2007-2008/108 RPCD.CO.RF.BC.No.15/07.02.01/2007-08 dated August 1, 2007 on the captioned subject. On a review of the current liquidity situation, it has been decided to increase cash reserve ratio (CRR) of Scheduled State Co-operative Banks by 50 basis points to 7.50 per cent of their demand and time liabilities with effect from the fortnight beginning November 10, 2007.

2. A copy of the relative notification RPCD.CO.RF.BC.No.33/07.02.01/2007-08 dated October 30, 2007 is enclosed.

3. Please acknowledge receipt to our Regional Office concerned.

RPCD.CO.RF.BC.No.33/07.02.01/2007-08 dated October 30, 2007

Notification

In exercise of the powers conferred under the amended sub-section (1) of Section 42 of the Reserve Bank of India Act, 1934 and in partial modification of the notification RPCD.CO.RF.BC.No.14/07.02.01/2007-08 dated August 1, 2007, the Reserve Bank of India hereby notifies that every Scheduled State Co-operative bank should maintain a Cash Reserve Ratio of 7.50 per cent of its demand and time liabilities from the fortnight beginning November 10, 2007.

Foreign Exchange Developments

October 2007

(i) Exchange Eearner's Foreign Currency (EEFC) Account-Liberalisation

In terms of the existing provisions, a person resident in India is permitted to open and maintain with an authorized dealer in India a Foreign Currency Account known as Exchange Earner's Foreign Currency (EEFC) Account subject to the terms and conditions of the Exchange Earner's Foreign Currency Account Scheme specified in the Schedule to FEMA Notification No.10

In view of the recent global and domestic developments and with a view to give an opportunity to small and medium enterprises to manage the challenges in the global markets, it has been decided, in consultation with Government of India, to permit all exporters to earn interest on EEFC accounts to the extent of outstanding balances of US $ 1 million per exporter. Accordingly, EEFC account holders are now permitted to maintain outstanding balances to the extent of US $ 1 million in the form of term deposits up to one year maturing on or before 31st October 2008. The rate of interest may be determined by the banks themselves.

This is a purely temporary measure and valid up to October 31, 2008 and would be subject to further review.

[AP. (DIR Series) Circular No.13 dated October 06,2007]

(ii) Anti-Money Laundering Guidelines

In view of the difficulties expressed by Money Changers Association in implementing some of the guidelines issued vide A P. (DIR Series) Circular No.18{AP. (FL Series) Circular No.OH dated December 2. 2005 and A P. (DIR Series) Circular No.39{A P.(FI: Series) Circular No.02} dated June 26. 2006, the following instructions have been amended:

(a) In terms of paragraph 4 (c) of the Annex to A P. (DIR Series) Circular No.39 {A.P.(FL Series) Circular No.02} dated June 26, 2006 requests for payment in cash by foreign visitors / non-resident Indians may be acceded to the extent of USD 2000 or its equivalent. This limit has been raised to USD 3000. All other provisions of paragraph 4(c) of the Annex to the Circulars remain unchanged.

(b) In terms of paragraph 6 of Annex to A P. (DIR Series) Circular No.18 {AP. (FL Series) Circular No.01} dated December 2, 2005, relationship with a business entity like a company / firm should be established only after obtaining and verifying suitable documents in support of the name, address and business activity, such as certificate of incorporation under the Companies Act 1956, Memorandum of Association, Articles of Association, registration certificate of a firm (if registered), partnership deed, etc. It has now been decided that in addition to the above mentioned documents, PAN Card may also be accepted as a suitable document for establishing the relationship with the company / firm. All other provisions of paragraph 6 of the Annex to aforementioned circular shall remain unchanged.

[A.P. (DIR Series) Circular No. 14 dated October 17,2007]

(iii) Booking of Forward Contracts – Liberalisation

Under the extant FEMA provisions, persons resident in India have been allowed to enter into forward contracts on the basis of underlying exposures. Further, exporters and importers have also been allowed to book forward contracts on the basis of declaration of exposures and based on past performances, subject to specified conditions.

As announced in the Annual Policv Statement for the Year 2007-08 (paras 142 and 143), with a view to provide greater flexibility to the Small and Medium Enterprises (SME) sector and resident individuals, it has been decided to further liberalise the scope and range of forward contracts to facilitate such entities to hedge their foreign currency exposures on a dynamic basis.

Small and Medium Enterprises (SMEs) (para 142)

In order to enable Small and Medium Enterprises (SMEs), having direct and/or indirect exposures to foreign exchange risk to manage their exposures effectively, it has been decided to allow AD Category - I banks to permit such entities to book/cancel/ rebook/roll over forward contracts without production of underlying documents, subject to conditions.

Resident Individuals (para 143)

In order to enable resident individuals to manage/hedge their foreign exchange exposures arising out of actual or anticipated remittances, both inward and outward, it has been decided to permit them to book forward contracts, without production of underlying documents, up to a limit of USD 100,000, based on self declaration. The contracts booked under this facility would normally be on a deliverable basis. However, in case of mismatches in cash flows or other exigencies, the contracts booked under this facility may be allowed td be cancelled and re-booked. The notional value of the outstanding contracts should not exceed USD 100,000 at any time. Further, the contracts may be permitted to be booked up to tenors of one year only.

[A.P. (DIR Series) Circular No. 15 dated October 29,2007]

(iv) Exim Bank's Line of Credit (LOC) of USD 10 million to Government of the Republic of Senegal for IT Training Project

Export-Import Bank of India (Exim Bank) has concluded an Agreement dated July 2, 2007 with the Government of the Republic of Senegal, making available to the latter, a Line of Credit (LOC) of USO 10 million (USO Ten million) for financing exports of eligible goods and services including consultancy services for the Information Technology Training Project in the Borrower's country and which are eligible for export under the Foreign Trade Policy of the Government of India. Out of the total credit by Exim Bank under this Agreement, the goods and services of the value of at least 85 per cent of the contract price shall be supplied by the seller from India.

[A. P. (01R Series) Circular No. 16 dated October 31, 2007]

Index to Vol. LXI - RBI Bulletin 2007

Sr. No.	ARTICLES	Page No.
1.	Performance of Private Corporate Business Sector during the First Half of 2006-07	39-53
2.	International Banking Statistics of India – June 2006	55-88
3.	India's Foreign Trade: 2006-07 (April-November)	89-102
4.	New Series of Consumer Price Index Numbers for Industrial Workers (Base: 2001 = 100)	243-251

Page Numbers of the Issues in 2007

2007	Articles/Speeches and Other Items
January	1 - 110
February	111 - 304
March	305 - 402
April	403 - 545
May	547 - 930
June	931 - 1067
July	1069 - 1294
August	1295 - 1457
September	1459 - 1612
October	1613 - 1787
November	1789 - 2126
December	2127 - 2264

Current Statistics

General

No. 1: Selected Economic Indicators

Item	Unit / Base	1990-91	2004-05	2005-06	2006-07	2007 Aug.	2007 Sep.	2007 Oct.
1	2	3	4	5	6	7	8	9
Output								
1. Gross Domestic Product at Factor Cost (at 1999-00 prices)	Rs. crore	10,83,572	23,89,660 (P)	26,04,532 (Q.E.)	28,48,157 (R.E.)			
2. Index number of Agricultural Production (All crops)	Triennium ended 1993-94=100	148.4 +	139.2	146.7	156.9 (P)			
a. Foodgrains Production	Million tonnes	176.4	198.4	208.6	216.1 (A.E.)			
3. General Index of Industrial Production (1)	1993-94=100	212.6 *	204.8	221.5	247.1	259.9 (P)	259.1 (P)	
Money and Banking								
Reserve Bank of India (2)								
4. Notes in Circulation	Rs. crore	53,784	3,62,487	4,21,922	4,96,775	4,98,073	4,98,987	5,18,266
5. Rupee Securities (3)	"	86,035	65,455	70,409	96,861	42,850	66,907	60,654
6. Loans and Discount	"	19,900	6,388	4,746	6,585	1,549	1,059	426
(a) Scheduled Commercial Banks (4)	"	8,169	45	1,488	6,245	92	64	–
(b) Scheduled State Co-operative Banks (4)	"	38	5	7	–	–	19	–
(c) Bills Purchased and Discounted (internal)	"	–	–	–	–	–	–	–
Scheduled Commercial Banks								
7. Aggregate Deposits (5)	Rs. crore	1,92,541	17,00,198	21,09,049	26,08,309	27,76,850	28,64,297 (P)	28,77,955 (P)
8. Bank Credit (5)	"	1,16,301	11,00,428	15,07,077	19,28,913	19,62,309	20,25,399 (P)	20,25,879 (P)
9. Investment in Govt. Securities (5)	"	49,998	7,18,982	7,00,742	7,74,980	8,89,428	8,88,279 (P)	9,29,559 (P)
10. Cheque Clearances (6)	Rs. thousand crore	1,703	6,792	6,459	6,480 (P)	535 (P)	542 (P)	667 (P)
11. Money Stock Measures (7)								
(a) M_1	Rs. crore	92,892	6,47,495	8,26,375	9,65,195	9,27,106	9,76,884	9,65,893
(b) M_3	"	2,65,828	22,30,675	27,29,545	33,10,278	34,75,580	35,74,427	36,08,184
Cash Reserve Ratio and Interest Rates								
12. Cash Reserve Ratio (2), (16)	Per cent	15.00	5.00	5.00	6.50	7.00	7.00	7.00
13. Bank Rate	Per cent Per annum	10.00	6.00	6.00	6.00	6.00	6.00	6.00
14. Inter-bank Call Money Rate (Mumbai) (8)	"	4.00-70.00	0.60-6.25	3.00-8.25	0.5-4.90	0.5-55.00	1.00-9.50	3.00-8.25
15. Deposit Rate (9)								
(a) 30 days and 1 year	"	8.00 (11)	} 3.00-5.00	2.25-5.50	3.00-9.50	3.00-7.50	3.00-7.50	3.00-7.50
(b) 1 year and above	"	9.00-11.00	} 5.25-6.25	6.00-7.00	7.50-9.60	8.00-9.50	8.00-9.50	8.00-9.50

Q.E. : Quick Estimate. A.E. : Fourth Advance Estimate. R.E. : Revised Estimate. R : Revised.
* : Base : 1980-81 = 100. + : Base : Triennium ending 1981-82=100.
$: Fourth Advance Estimate ^ : Base : 2001 = 100 from January 2006 onwards.
@ : As the security 12.50% 2004 had matured on March 23, 2004, it has been substituted by 11.40% Loan 2008, with effect from March 2004, to represent the short-term yield.
# : As the maturity of the security 11.50% 2008, which represents the trends in long term yield, had become less than 5 years, it has been substituted by 7.40% Loan 2012, with effect from April 2004.
Also see 'Notes on Tables'.

No. 1: Selected Economic Indicators *(Concld.)*

Item	Unit / Base	1990-91	2004-05	2005-06	2006-07	2007 Aug.	2007 Sep.	2007 Oct.
1	2	3	4	5	6	7	8	9
16. Prime Lending Rate (10)	"	–	10.25-10.75	10.25-10.75	12.25-12.50	12.75-13.25	12.75-13.25	12.75-13.25
17. Yield on 11.40% Loan 2008 @	"	–	5.73	6.40	7.22	..	7.38	..
18. Yield on 7.40% Loan 2012 #	"	–	6.21	6.95	7.55	7.83	7.70	7.92
Government Securities Market (2)								
19. Govt. of India 91-day Treasury Bills (Total outstandings)	Rs. crore		27,792	16,318	45,229	73,596	59,953	66,003
Price Indices								
20. Wholesale Prices (13)	1993-94 = 100							
(a) All Commodities	"	182.7 +	187.3	195.6	206.1	213.8	..	..
(b) Primary Articles	"	184.9 +	188.1	193.6	208.6	223.8	..	..
(c) Fuel, Power, Light and Lubricants	"	175.8 +	280.1	306.8	324.9	322.4	..	..
(d) Manufactured Products	"	182.8 +	166.3	171.5	179.0	186.1	..	..
(e) Foodgrains (Cereals + Pulses)	"	179.2 +	177.5	186.9	205.9	215.6	..	..
(f) Edible Oils	"	223.3 +	156.4	146.1	154.6	171.1	..	..
(g) Sugar, Khandsari & Gur	"	152.3 +	163.5	178.8	179.8	155.1	..	..
(h) Raw Cotton	"	145.5 +	165.6	144.3	151.8	178.7	..	..
21. Consumer Prices (All-India) (1)								
(a) Industrial Workers ^	1982 = 100	193	520	542	125	133	133	134
(b) Urban Non-Manual Employees	1984-85 = 100	161	436	456	486	515	516	520
(c) Agricultural Labourers	July 1986-June 1987 = 100	..	342	358	388	408	410	413
Foreign Trade								
22. Value of Imports	U.S. $ Million	24,073	1,11,517	1,49,166	1,85,749 (R)	19,569 (P)	17,218 (P)	..
23. Value of Exports	"	18,145	83,536	1,03,091	1,26,361 (R)	12,686 (P)	12,797 (P)	..
24. Balance of Trade	"	–5,927	-27,981	-46,075	-59,388 (R)	-6,883 (P)	-4,421 (P)	..
25. Foreign Exchange Reserves (14)								
(a) Foreign Currency Assets	U.S. $ Million	2,236	1,35,571	1,45,108	1,91,924	2,21,509	2,39,955	2,56,427
(b) Gold	"	3,496	4,500	5,755	6,784	6,881	7,367	7,811
(c) SDRs	"	102	5	3	2	2	2	13
Employment Exchange Statistics (15)								
26. Number of Registrations	Thousand	6,541	5,553	..	..	..	..	..
27. Number of Applicants								
(a) Placed in Employment	"	265	171	..	..	..	..	..
(b) On live Register (14)	"	34,632	41,996	..	..	..	..	..

Money and Banking

No. 2: Reserve Bank of India

(Rs. crore)

Last Friday / Friday	1990-91	2005-06	2006-07	2006	2007									
				Nov.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov. 2	Nov. 9	Nov. 16	Nov. 23	Nov. 30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Issue Department														
Liabilities														
Notes in Circulation	53,784	4,21,922	4,96,775	4,60,556	5,07,347	5,01,178	4,98,073	4,98,987	5,18,266	5,23,574	5,41,863	5,42,652	5,38,279	5,35,311
Notes held in Banking Department	23	18	11	42	18	14	18	21	20	15	22	19	17	17
Total liabilities (total notes issued) or assets	**53,807**	**4,21,940**	**4,96,786**	**4,60,598**	**5,07,364**	**5,01,192**	**4,98,091**	**4,99,008**	**5,18,286**	**5,23,589**	**5,41,885**	**5,42,672**	**5,38,296**	**5,35,328**
Assets														
Gold coin and bullion	6,654	20,974	24,160	22,319	22,995	22,593	23,026	23,916	23,916	25,090	25,090	25,090	25,090	27,082
Foreign securities	200	3,99,769	4,71,567	4,37,049	4,83,199	4,77,474	4,73,798	4,73,885	4,93,234	4,97,382	5,15,696	5,16,498	5,11,937	5,06,992
Rupee coin (1)	29	150	12	184	124	79	220	160	90	71	52	37	223	208
Government of India rupee securities	46,924	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046	1,046
Banking Department														
Liabilities	‘													
Deposits	**38,542**	**2,05,934**	**3,02,615**	**2,01,179**	**3,04,389**	**3,91,515**	**3,53,911**	**4,22,877**	**4,48,042**	**4,61,490**	**4,60,208**	**5,00,003**	**4,45,541**	**4,64,498**
Central Government	61	28,928	36,661	11,405	101	100	907	10,871	23,835	31,305	29,401	41,984	17,583	16,768
Market Stabilisation Scheme	–	29,062	62,974	37,917	81,137	88,010	1,06,434	1,31,473	1,74,277	1,77,838	1,77,284	1,77,791	1,75,381	1,71,468
State Governments	33	41	41	41	41	41	41	41	41	41	46	41	125	41
Scheduled Commercial Banks	33,484	1,27,061	1,80,222	1,31,749	1,99,587	2,32,827	2,21,733	2,54,569	2,24,932	2,27,021	2,27,109	2,54,149	2,26,526	2,49,589
Scheduled State Co-operative Banks	244	2,299	2,851	1,755	2,598	2,399	2,606	2,723	2,689	2,920	3,033	3,094	2,998	3,103
Non-Scheduled State Co-operative Banks	13	54	55	52	55	53	46	49	51	47	49	44	46	47
Other banks	88	6,097	8,202	6,335	9,130	9,537	10,149	10,619	10,423	10,495	11,128	11,106	11,156	11,147
Others	4,619	12,391	11,609	11,926	11,740	58,547	11,995	12,533	11,794	11,824	12,160	11,795	11,726	12,335
Other liabiliities (2)	28,342	1,33,063	1,79,897	1,74,882	1,73,768	1,32,288	1,41,877	1,36,253	1,36,615	1,41,688	1,43,821	1,41,156	1,50,969	1,53,048
Total liabilities or assets	**66,884**	**3,38,997**	**4,82,512**	**3,76,062**	**4,78,157**	**5,23,802**	**4,95,788**	**5,59,131**	**5,84,658**	**6.03.178**	**6,04,029**	**6,41,159**	**5,96,510**	**6,17,546**

See ‘Notes on Tables’.

No. 2: Reserve Bank of India *(Concld.)*

(Rs. crore)

Last Friday / Friday	1990-91	2005-06	2006-07	2006	2007									
				Nov.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov. 2	Nov. 9	Nov. 16	Nov. 23	Nov. 30
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Assets														
Notes and coins	23	21	11	42	18	14	18	21	20	15	22	20	17	17
Balances held abroad (3)	4,008	2,47,367	3,64,834	3,07,870	3,56,530	4,05,196	4,33,316	4,79,511	5,12,622	5,19,219	5,14,522	5,17,834	5,32,646	5,42,986
Loans and Advances														
Central Government	–	–	–	–	15,159	20,199	–	–	–	–	–	–	–	–
State Governments (4)	916	86	–	196	–	1,066	1,374	893	343	1,199	1,629	25	105	147
Scheduled Commercial Banks	8,169	1,488	6,245	4	1,266	–	92	64	–	–	–	1,135	169	396
Scheduled State Co-op.Banks	38	7	–	15	10	10	–	19	–	19	6	19	5	19
Industrial Dev. Bank of India	3,705	–	–	–	–	–	–	–	–	–	–	–	–	–
NABARD	3,328	2,998	–	2,657	–	–	–	–	–	–	–	–	–	–
EXIM Bank	745	–	–	–	–	–	–	–	–	–	–	–	–	–
Others	1,615	167	340	84	83	83	83	83	83	83	83	408	404	374
Bills Purchased and Discounted														
Internal	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Government Treasury Bills	1,384	–	–	–	–	–	–	–	–	–	–	–	–	–
Investments	40,286	73,526	99,983	55,534	93,883	77,873	44,740	68,795	62,542	72,626	78,050	1,12,277	52,530	62,999
Other Assets (5)	2,666	13,336	11,099	9,659	12,207	19,361	16,165	9,745	9,048	10,016	9,716	9,442	10,633	10,609
	(–)	(4,699)	(5,414)	(5,001)	(5,152)	(5,062)	(5,160)	(5,359)	(5,359)	(5,622)	(5,622)	(5,622)	(5,622)	(6,068)

No. 3: All Scheduled Banks – Business in India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Number of reporting banks	299	289	249	255	247	247	246	246	245	245	245
Liabilities to the banking system (1)	**6,673**	**77,872**	**91,453**	**79,706**	**90,299**	**85,747**	**82,805**	**83,135**	**81,055**	**89,200**	**85,215**
Demand and time deposits from banks (2)	5,598	39,750	43,620	36,016	40,255	38,751	37,821	41,284	37,449	41,048	39,850
Borrowings from banks (3)	998	29,232	35,532	34,938	33,960	28,793	29,504	25,050	28,034	30,723	25,571
Other demand and time liabilities (4)	77	8,890	12,301	8,751	16,084	18,203	15,480	16,801	15,572	17,430	19,794
Liabilities to others (1)	**2,13,125**	**24,60,973**	**30,22,790**	**26,64,815**	**29,98,449**	**30,02,662**	**31,09,085**	**31,73,679**	**31,97,595**	**33,07,150**	**33,23,785**
Aggregate deposits (5)	**1,99,643**	**21,85,810**	**26,91,053**	**23,62,876**	**26,75,534**	**26,92,957**	**27,92,116**	**28,58,089**	**28,63,437**	**29,53,221**	**29,68,702**
Demand	34,823	3,74,125	4,39,949	3,66,208	3,87,212	3,77,905	4,10,650	4,34,780	4,03,866	4,50,260	4,20,753
Time (5)	1,64,820	18,11,684	22,51,104	19,96,668	22,88,322	23,15,052	23,81,466	24,23,308	24,59,571	25,02,960	25,47,950
Borrowings (6)	645	83,816	86,910	86,055	88,977	85,588	87,252	86,353	89,740	89,592	90,785
Other demand and time liabilities (4)	12,838	1,91,347	2,44,827	2,15,885	2,33,939	2,24,117	2,29,716	2,29,237	2,44,418	2,64,337	2,64,297
Borrowings from Reserve Bank (7)	**3,483**	**1,575**	**6,348**	**1,250**	**4,099**	**3,208**	**1,276**	**10**	**92**	**83**	**–**
Against usance bills / promissory notes	–	–	–	–	–	–	–	–	–	–	–
Others (8)	3,483	1,575	6,348	1,250	4,099	3,208	1,276	10	92	83	–
Cash in hand and balances with Reserve Bank	**25,995**	**1,45,120**	**2,02,565**	**1,42,649**	**2,12,148**	**2,08,013**	**2,23,062**	**2,55,842**	**2,45,672**	**2,79,624**	**2,48,757**
Cash in hand	1,847	13,512	16,607	16,468	15,455	16,157	17,479	16,936	17,442	18,130	17,262
Balances with Reserve Bank (9)	24,147	1,31,608	1,85,958	1,26,180	1,96,694	1,91,856	2,05,584	2,38,906	2,28,231	2,61,494	2,31,495

See "Notes on Tables"

No. 3: All Scheduled Banks – Business in India *(Concld.)*

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May.	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Assets with the Banking System	**6,848**	**63,882**	**86,922**	**72,339**	**79,743**	**78,512**	**78,917**	**77,234**	**75,656**	**78,870**	**88,898**
Balances with other banks	3,347	30,735	33,486	30,903	30,775	30,883	31,940	35,445	32,343	34,266	36,725
In current account	1,926	14,240	14,451	12,128	12,862	12,561	13,309	15,893	12,396	13,705	14,833
In other accounts	1,421	16,494	19,035	18,774	17,913	18,323	18,631	19,552	19,946	20,561	21,892
Money at call and short notice	2,201	17,669	22,761	22,314	19,959	17,260	19,310	14,906	17,302	15,566	19,621
Advances to banks (10)	902	4,701	6,516	5,914	6,055	4,957	4,325	3,760	3,685	4,136	4,057
Other assets	398	10,778	24,159	13,208	22,953	25,412	23,343	23,123	22,326	24,902	28,495
Investment	**76,831**	**7,49,682**	**8,20,249**	**7,88,915**	**8,37,364**	**8,44,025**	**8,76,048**	**9,01,855**	**9,35,180**	**9,39,232**	**9,81,744**
Government securities (11)	51,086	7,31,889	8,03,768	7,71,678	8,21,251	8,28,297	8,59,921	8,85,822	9,19,699	9,18,376	9,60,952
Other approved securities	25,746	17,792	16,481	17,237	16,113	15,729	16,127	16,033	15,481	20,856	20,792
Bank credit	**1,25,575**	**15,72,781**	**20,06,332**	**17,22,251**	**19,64,793**	**19,60,778**	**19,95,068**	**19,92,325**	**20,41,375**	**21,05,113**	**21,05,343**
Loans, cash-credits and overdrafts	1,14,982	14,94,715	19,17,260	16,45,100	18,84,051	18,83,151	19,15,542	19,12,534	19,57,694	20,21,739	20,19,237
Inland bills-purchased	3,532	13,242	16,408	10,571	12,528	11,873	12,008	11,641	12,719	12,153	11,393
Inland bills-discounted	2,409	31,362	31,933	30,427	31,335	30,732	31,354	32,956	33,388	34,066	33,116
Foreign bills-purchased	2,788	13,108	16,171	13,601	13,793	13,096	13,341	11,934	11,990	12,370	13,752
Foreign bills-discounted	1,864	20,353	24,559	22,552	23,086	21,926	22,823	23,259	25,584	24,786	27,844
Cash-Deposit Ratio	13.0	6.6	7.5	6.0	7.9	7.7	8.0	9.0	8.6	9.5	8.4
Investment-Deposit Ratio	38.5	34.3	30.5	33.4	31.3	31.3	31.4	31.6	32.7	31.8	33.1
Credit-Deposit Ratio	62.9	72.0	74.6	72.9	73.4	72.8	71.5	69.7	71.3	71.3	70.9

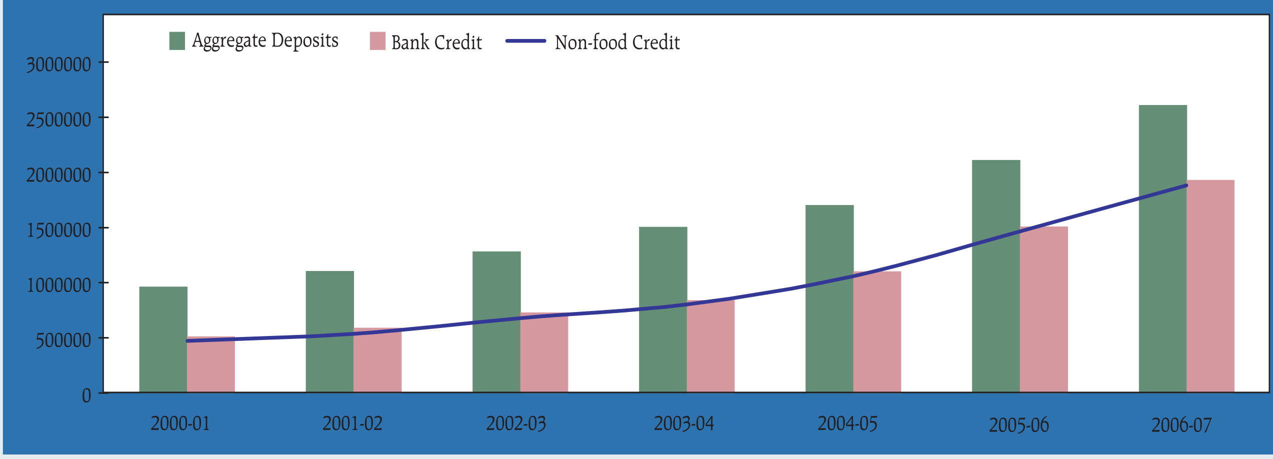
No. 4: All Scheduled Commercial Banks – Business in India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Number of Reporting banks	271	218	179	185	117	177	177	177	176	176	176
Liabilities to the banking system (1)	**6,486**	**75,165**	**88,457**	**76,983**	**87,296**	**82,795**	**79,837**	**79,664**	**77,580**	**85,764**	**81,833**
Demand and time deposits from banks (2), (12)	5,443	37,078	40,772	33,390	37,367	35,867	34,913	37,852	34,004	37,636	36,481
Borrowings from banks (3)	967	29,197	35,399	34,844	33,846	28,727	29,445	25,011	28,004	30,700	25,560
Other demand and time liabilities (4)	76	8,890	12,286	8,749	16,083	18,202	15,479	16,801	15,572	17,429	19,793
Liabilities to others (1)	**2,05,600**	**23,80,973**	**29,36,149**	**25,85,645**	**29,11,576**	**29,15,828**	**30,20,677**	**30,83,989**	**31,07,397**	**32,14,262**	**32,29,612**
Aggregate deposits (5)	**1,92,541**	**21,09,049**	**26,08,309**	**22,86,898**	**25,93,165**	**26,10,571**	**27,08,268**	**27,72,685**	**27,76,850**	**28,64,297**	**28,77,955**
Demand	33,192	3,64,640	4,29,137	3,56,901	3,77,672	3,68,394	4,00,853	4,25,147	3,93,893	4,39,885	4,10,060
Time (5)	1,59,349	17,44,409	21,79,172	19,29,997	22,15,493	22,42,176	23,07,416	23,47,538	23,82,956	24,24,412	24,67,895
Borrowings (6)	470	83,144	85,836	85,348	87,339	83,842	85,345	84,736	88,779	88,461	90,304
Other demand and time liabilities (4), (13)	12,589	1,88,780	2,42,004	2,13,399	2,31,072	2,21,415	2,27,064	2,26,568	2,41,768	2,61,504	2,61,354
Borrowings from Reserve Bank (7)	**3,468**	**1,488**	**6,245**	**1,200**	**4,078**	**3,139**	**1,266**	**–**	**92**	**64**	**–**
Against usance bills/ promissory notes	–	–	–	–	–	–	–	–	–	–	–
Others	3,468	1,488	6,245	1,200	4,078	3,139	1,266	–	92	64	–

See 'Notes on Tables'.

Select Banking Aggregates



No. 4: All Scheduled Commercial Banks – Business in India *(Concld.)*

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday	1990-91	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
Cash in hand and balances with Reserve Bank	**25,665**	**1,40,106**	**1,96,331**	**1,37,985**	**2,06,137**	**2,01,888**	**2,16,510**	**2,49,072**	**2,38,608**	**2,72,184**	**2,41,636**
Cash in hand	1,804	13,046	16,108	15,727	14,938	15,652	16,923	16,245	16,875	17,615	16,704
Balances with Reserve Bank (9)	23,861	1,27,061	1,80,222	1,22,259	1,91,200	1,86,236	1,99,587	2,32,827	2,21,733	2,54,569	2,24,932
Assets with the Banking System	**5,582**	**54,392**	**77,060**	**62,904**	**69,865**	**68,917**	**69,332**	**67,286**	**65,660**	**68,611**	**77,569**
Balances with other banks	2,846	26,462	29,088	26,143	26,123	26,522	27,223	30,325	27,618	29,519	31,531
In current account	1,793	12,974	13,201	11,218	11,788	11,502	12,162	14,690	11,122	12,437	13,636
In other accounts	1,053	13,488	15,887	14,925	14,336	15,020	15,061	15,635	16,496	17,082	17,895
Money at call and short notice	1,445	13,619	18,267	18,640	16,023	13,378	15,826	11,386	13,497	11,533	14,956
Advances to banks (10)	902	4,191	6,203	5,612	5,441	4,318	3,676	3,110	3,007	3,456	3,385
Other assets	388	10,120	23,503	12,509	22,278	24,699	22,607	22,465	21,538	24,103	27,697
Investment	**75,065**	**7,17,454**	**7,90,431**	**7,57,508**	**8,07,466**	**8,14,399**	**8,47,801**	**8,71,977**	**9,03,792**	**9,07,946**	**9,49,291**
Government securities (11)	49,998	7,00,742	7,74,980	7,41,275	7,92,260	7,99,712	8,32,775	8,57,024	8,89,428	8,88,279	9,29,559
Other approved securities	25,067	16,712	15,451	16,233	15,207	14,687	15,026	14,954	14,364	19,666	19,732
Bank credit (14)	**1,16,301**	**15,07,077**	**19,28,913**	**16,54,089**	**18,87,837**	**18,83,720**	**19,17,456**	**19,14,514**	**19,62,309**	**20,25,399**	**20,25,879**
	(4,506)	**(40,691)**	**(46,521)**	**(36,633)**	**(49,887)**	**(44,864)**	**(42,787)**	**(41,059)**	**(38,490)**	**(37,008)**	**(35,866)**
Loans, cash-credits and overdrafts	1,05,982	14,30,455	18,41,626	15,78,331	18,08,816	18,07,734	18,39,478	18,36,221	18,80,181	19,43,595	19,41,426
Inland bills-purchased	3,375	12,914	15,912	10,303	12,096	11,476	11,692	11,312	12,338	11,772	10,997
Inland bills-discounted	2,336	30,816	31,300	29,909	30,706	30,107	30,701	32,359	32,767	33,444	32,443
Foreign bills-purchased	2,758	13,075	16,139	13,575	13,747	13,050	13,315	11,907	11,964	12,345	13,726
Foreign bills-discounted	1,851	19,817	23,936	21,972	22,472	21,352	22,271	22,716	25,059	24,243	27,287
Cash-Deposit Ratio	13.3	6.6	7.5	6.0	7.9	7.7	8.0	9.0	8.6	9.5	8.4
Investment-Deposit Ratio	39.0	34.0	30.3	33.1	31.1	31.2	31.3	31.4	32.5	31.7	33.0
Credit-Deposit Ratio	60.4	71.5	74.0	72.3	72.8	72.2	70.8	69.0	70.7	70.7	70.4

No. 5: Scheduled Commercial Banks' Investments in Commercial Paper, Bonds, Debentures, Shares, *etc.*

(Rs. crore)

Outstanding as on	Commercial Paper	Bonds / Debentures / Preference Shares issued by		Equity Shares issued by PSUs and Private Corporate Sector +
		Public Sector Undertakings (PSUs)	Private Corporate Sector	
1	2	3	4	5
March 27, 1998	2,443	18,767	9,778	1,472 (44)
March 26, 1999	4,006	24,169	17,857	2,343 (64)
March 24, 2000	5,037	30,620	22,988	2,834 (20)
March 23, 2001	6,984	38,453	27,006	3,171 (15)
July 14, 2000	6,918	32,992	22,848	2,952 (15)
July 13, 2001	6,479	39,135	27,318	3,178 (15)
July 28, 2000	6,544	33,210	23,189	3,003 (15)
July 27, 2001	5,652	39,381	26,952	3,188 (15)

+ : Figures in brackets are loans to corporates against shares held by them to meet the promoters' contribution to the equity of new companies in anticipation of raising resources.

Note : Data are provisional and tentative and as such subject to revision.

Source : Special Fortnightly Returns.

(Rs. crore)

Outstanding as on	Commercial Paper	Shares issued by		Bonds / Debentures issued by	
		Public Sector Undertakings (PSUs)	Private Corporate Sector	Public Sector Undertakings (PSUs)	Private Corporate Sector
1	2	3	4	5	6
March 19, 2004	3,835	1,565	7,400	49,720	27,966
March 18, 2005	3,944	1,886	10,289	46,939	31,994
March 31, 2006	4,837	2,627	10,502	33,018	29,550
March 30, 2007	9,038	2,128	16,219	29,115	27,622
July 6, 2007	7,039	2,035	19,439	24,704	26,032
July 21, 2006	6,554	2,396	14,470	31,265	25,872
July 20, 2007	5,829	1,973	19,461	23,658	25,955
August 4, 2006	6,748	2,177	14,308	31,157	25,611
August 3, 2007	5,372	2,068	18,471	24,085	25,558
August 18, 2006	6,362	2,122	14,154	31,414	25,556
August 17, 2007	5,330	2,110	18,797	23,913	24,896
September 1, 2006	6,414	2,163	14,223	30,550	25,365
August 31, 2007	5,152	2,099	18,712	23,780	25,268
September 15, 2006	6,608	2,151	14,360	30,353	25,918
September 14, 2007	5,898	2,094	18,452	24,302	24,614
September 29, 2006	7,584	2,117	13,970	32,606	26,757
September 28, 2007	6,970	1,984	18,616	24,315	24,459
October 13, 2006	8,076	2,115	14,230	31,494	26,742
October 12, 2007	6,582	1,985	18,364	24,867	24,666
October 27, 2006	8,519	2,075	14,106	31,989	26,038
October 26, 2007	6,754	2,011	18,570	25,061	25,338

Note : From the financial year 2001-02, data on investments are based on Statutory Section 42(2) Returns. Such data for the earlier period were based on Special Fortnightly Returns (SFR VII), which has since been discontinued.

No. 6: State Co-operative Banks – Maintaining Accounts With the Reserve Bank of India

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday/ Reporting Friday	1990-91	2005-06	2006-07	2006	2007							
				Jul.	Feb.	Mar.	Apr.	May	Jun.	Jul. 6	Jul. 20	Jul. 27
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of reporting banks	28	31	31	31	31	31	31	31	31	31	31	31
Demand and Time Liabilities												
Aggregate Deposits (1)	**2,152**	**15,665**	**17,105**	**15,635**	**16,276**	**17,105**	**16,831**	**16,804**	**17,219**	**17,092**	**17,334**	**17,393**
Demand Liabilities	**1,831**	**6,065**	**7,324**	**5,550**	**6,122**	**7,324**	**6,835**	**6,832**	**6,998**	**6,674**	**6,333**	**7,396**
Deposits												
Inter-bank	718	1,457	1,921	985	933	1,921	956	893	1,104	1,050	896	1,427
Others	794	3,101	3,571	3,106	3,203	3,571	3,354	3,437	3,497	3,463	3,436	3,475
Borrowings from banks	181	464	914	580	1,147	914	1,533	1,545	1,609	1,276	1,199	1,640
Others	139	1,043	918	879	840	918	992	957	788	886	803	853
Time Liabilities	**3,963**	**38,464**	**39,425**	**37,472**	**37,181**	**39,425**	**39,640**	**38,790**	**38,440**	**38,884**	**38,870**	**38,889**
Deposits												
Inter-bank	2,545	25,561	25,540	24,711	23,818	25,540	25,720	24,981	24,261	24,821	24,555	24,547
Others	1,359	12,564	13,534	12,529	13,074	13,534	13,477	13,366	13,721	13,629	13,898	13,918
Borrowings from banks	–	12	10	12	10	10	10	10	10	10	10	10
Others	59	327	341	221	280	341	432	433	447	424	407	415
Borrowing from Reserve Bank	**15**	**–**	**–**	**–**	**21**	**–**	**6**	**–**	**–**	**10**	**10**	**10**
Borrowings from the State Bank and / or a notified bank (2) and State Government	**1,861**	**9,768**	**13,639**	**10,019**	**12,715**	**13,639**	**13,360**	**12,887**	**12,798**	**12,575**	**13,071**	**13,086**
Demand	116	2,021	3,292	1,913	2,979	3,292	2,999	2,718	2,522	2,612	2,606	2,561
Time	1,745	7,747	10,347	8,106	9,736	10,347	10,361	10,169	10,276	9,964	10,465	10,525
Assets												
Cash in hand and balances with Reserve Bank	**334**	**2,499**	**3,054**	**2,102**	**2,217**	**3,054**	**2,693**	**2,632**	**2,801**	**2,581**	**2,621**	**2,602**
Cash in hand	24	146	153	133	139	153	136	139	147	140	145	152
Balances with Reserve Bank	310	2,353	2,900	1,969	2,078	2,900	2,557	2,492	2,654	2,442	2,477	2,450
Balances with other banks in current account	93	575	486	286	329	486	612	651	644	697	679	695
Investments in Government securities (3)	1,058	16,472	14,146	16,260	14,895	14,146	14,351	14,011	12,959	13,325	13,351	13,860
Money at call and short notice	498	5,899	6,749	6,010	5,246	6,749	6,079	5,831	5,315	5,493	5,655	6,259
Bank credit (4)	**2,553**	**15,589**	**17,017**	**14,394**	**15,918**	**17,017**	**17,367**	**17,428**	**17,101**	**16,530**	**16,428**	**16,380**
Advances												
Loans, cash-credits and overdrafts	2,528	15,568	17,001	14,382	15,904	17,001	17,357	17,421	17,093	16,522	16,420	16,371
Due from banks (5)	5,560	24,167	30,098	24,870	29,562	30,098	29,257	29,332	30,207	30,584	28,319	31,136
Bills purchased and discounted	25	21	16	12	13	16	9	7	8	8	8	8
Cash-Deposit Ratio	15.5	16.0	17.9	13.4	13.6	17.9	16.0	15.7	16.3	15.1	15.1	15.0
Investment-Deposit Ratio	49.2	105.2	82.7	104.0	91.5	82.7	85.3	83.4	75.3	78.0	77.0	79.7
Credit-Deposit Ratio	118.6	99.5	99.5	92.1	97.8	99.5	103.2	103.7	99.3	96.7	94.8	94.2

See ‘Notes on Tables’.

No. 7: Reserve Bank's Standing Facilities to Scheduled Commercial Banks

(Rs. crore)

As on last reporting Friday of	Export Credit Refinance (1)		General Refinance (2)		Special Liquidity Support (3)		Total Refinance (4)	
	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding
1	2	3	4	5	6	7	8	9
1996-97	6,654.40	559.97	–	–			6,654.40	559.97
1997-98	2,402.96	394.52	1,115.02	0.11			3,517.98	394.63
1998-99	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
Mar. 1999	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
Apr. 1999	8,638.29	5,164.76	1,115.02	56.31	–	–	9,753.31	5,221.07

As on last reporting Friday of	Export Credit Refinance (1)						Others @						Total Standing Facility	
	Normal *		Back Stop **		Total ***		Normal *		Back Stop **		Total			
	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing	Limit	Out-standing
1	2	3	4	5	6 =(2+4)	7 =(3+5)	8	9	10	11	12 =(8+10)	13 =(9+11)	14 =(6+12)	15 =(7+13)
2001-02	6,060.29	3,144.11	3,025.60	49.83	9,085.89	3,193.94	837.62	422.35	218.65	–	1,056.27	422.35	10,142.16	3,616.29
2002-03	2,524.13	61.51	2,524.13	23.00	5,048.26	84.51	399.66	–	–	–	399.66	–	5,447.92	84.51
2003-04	1,553.25	–	3,111.17	–	4,664.42	–	399.66	–	–	–	399.66	–	5,064.08	–
2004-05	–	–	–	–	4,912.13	50.00	399.66	–	–	–	399.66	–	5,311.79	50.00
2005-06	–	–	–	–	6,050.63	1,567.68	–	–	–	–	–	–	6,050.63	1,567.68
2006-07	–	–	–	–	8,110.33	4,984.94	–	–	–	–	–	–	8,110.33	4,984.94
Sep. 2006	–	–	–	–	6,963.09	1,563.75	–	–	–	–	–	–	6,963.09	1,563.75
Dec. 2006	–	–	–	–	7,200.34	1,784.23	–	–	–	–	–	–	7,200.34	1,784.23
Mar. 2007	–	–	–	–	8,110.33	4,984.94	–	–	–	–	–	–	8,110.33	4,984.94
Sep. 2006	–	–	–	–	6,963.09	1,563.75	–	–	–	–	–	–	6,963.09	1,563.75
Oct. 2006	–	–	–	–	7,259.39	1,215.00	–	–	–	–	–	–	7,259.39	1,215.00
Nov. 2006	–	–	–	–	7,065.80	4.00	–	–	–	–	–	–	7,065.90	4.00
Dec. 2006	–	–	–	–	7,200.34	1,784.23	–	–	–	–	–	–	7,200.34	1,784.23
Jan. 2007	–	–	–	–	7,470.20	3,013.48	–	–	–	–	–	–	7,470.20	3,013.48
Feb. 2007	–	–	–	–	7,946.14	–	–	–	–	–	–	–	7,946.14	–
Mar. 2007	–	–	–	–	8,110.33	4,984.94	–	–	–	–	–	–	8,110.33	4,984.94
Apr. 2007	–	–	–	–	8,871.55	3,760.22	–	–	–	–	–	–	8,871.55	3,760.22
May 2007	–	–	–	–	8,510.80	2,746.00	–	–	–	–	–	–	8,510.80	2,746.00
Jun. 2007	–	–	–	–	8,342.90	100.90	–	–	–	–	–	–	8,342.90	100.90
Jul. 2007	–	–	–	–	8,103.46	0.90	–	–	–	–	–	–	8,103.46	0.90
Aug. 2007	–	–	–	–	7,806.76	92.00	–	–	–	–	–	–	7,806.76	92.00
Sep. 2007	–	–	–	–	7,505.46	45.00	–	–	–	–	–	–	7,505.46	45.00

@ : 'Others' include Collateralised Lending Facility (CLF) (withdrawn completely effective from October 5, 2002) / Additional CLF (withdrawn effective from June 5, 2000), *etc.*

* : Normal Limit = 1/2 of total limit effective from November 16, 2002; 1/3rd of the total limit effective from December 27, 2003.

** : Back-Stop Limit = 1/2 of total limit effective from November 16, 2002; 2/3rd of the total limit effective from December 27, 2003.

***: Total limits under Normal Facility and Back-Stop facility merged into a single facility effective from March 29, 2004.

Also see 'Notes on Tables'.

No. 8: Cheque Clearing Data

(Number in Lakhs and Amount in Rs. crore)

Month/Year	Total		Total MICR* Centres		Total Non-MICR** Centres		Total of RBI Centres		RBI Centres***					
									Ahmedabad		Bangalore		Bhopal	
1	2 = (3+4)		3 = (5+22)		4		5		6		7		8	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	9,015.00	1,25,75,254.00	5,377.00	1,09,47,391.00	3,638.00	16,27,863.00	5,377.00	1,09,47,391.00	414.00	2,07,524.00	445.00	2,69,346.00	–	–
2002-03	10,139.00	1,34,24,313.00	5,980.00	1,09,78,762.00	4,159.00	24,45,551.00	5,980.00	1,09,78,762.00	434.00	2,25,060.00	485.00	3,07,577.00	–	–
2003-04	10,228.00	1,15,95,960.00	6,241.00	91,78,751.00	3,987.00	24,17,209.00	6,241.00	91,78,751.00	473.00	2,80,649.00	547.00	3,75,885.00	–	–
2004-05	11,668.48	1,04,58,894.92	9,414.56	93,56,252.17	2,253.92	11,02,642.74	7,384.78	84,93,320.68	525.49	3,52,696.58	601.61	4,77,810.09	59.29	47,188.15
2005-06	12,867.58	1,13,29,133.50	10,318.36	94,74,370.75	2,549.22	18,54,762.75	7,942.44	81,94,976.69	603.72	4,06,598.68	656.11	4,98,344.46	71.86	32,180.97
2006-07 (P)	13,672.80	1,20,42,425.67	11,441.03	1,04,35,436.15	2,231.77	16,06,989.52	8,309.89	85,99,494.35	594.38	4,29,955.83	702.48	5,58,675.64	71.72	52,224.60
2006-07 (P)														
April	1,084.10	9,52,862.04	895.72	8,38,067.52	188.38	1,14,794.52	657.53	7,03,540.27	48.47	34,358.17	53.35	43,128.17	5.61	3,647.11
May	1,141.58	9,93,452.36	946.73	8,77,955.46	194.85	1,15,496.90	689.85	7,23,598.74	50.25	34,802.56	60.60	39,886.39	5.98	4,030.26
June	1,074.52	9,35,455.67	892.13	8,16,855.41	182.39	1,18,600.26	653.97	6,80,616.76	44.77	31,406.11	57.63	44,615.23	5.44	4,218.92
July	1,094.86	8,75,608.59	922.31	7,67,975.91	172.55	1,07,632.68	669.90	6,24,620.91	47.03	30,031.92	56.19	44,028.50	6.04	3,526.05
August	1,150.53	9,37,757.07	966.68	8,21,927.14	183.85	1,15,829.93	701.37	6,60,121.07	45.31	29,450.08	61.08	44,878.15	6.13	3,801.64
September	1,108.87	10,03,643.37	934.02	8,91,104.98	174.86	1,12,538.39	664.83	7,47,283.71	46.63	34,782.38	56.95	48,512.13	6.21	3,454.55
October	1,104.77	9,20,601.83	930.50	8,10,083.94	174.27	1,10,517.90	680.91	6,60,849.45	48.83	34,792.19	56.06	45,458.55	6.12	4,017.88
November	1,156.19	9,75,051.46	974.68	8,58,613.24	181.50	1,16,438.22	703.58	7,03,613.64	49.61	32,675.93	59.99	45,530.50	6.42	4,208.27
December	1,136.75	10,06,191.13	956.83	8,98,722.01	179.92	1,07,469.12	696.15	7,48,084.72	51.19	37,864.88	59.53	53,311.16	4.75	4,483.70
January	1,144.00	11,51,566.80	955.34	8,61,830.71	188.66	2,89,736.08	695.89	7,06,834.15	49.32	38,373.31	57.07	46,414.16	5.86	4,777.72
February	1,151.97	10,09,236.32	974.18	8,78,283.75	177.79	1,30,952.57	705.12	7,18,901.93	52.96	39,078.81	58.68	43,610.58	6.15	4,351.14
March	1,324.68	12,80,999.04	1,091.92	11,14,016.08	232.76	1,66,982.96	790.78	9,21,428.98	60.00	52,339.49	65.35	59,302.13	7.00	7,707.37
2007-08 (P)														
April	1,169.03	10,20,154.59	982.61	8,58,100.46	186.42	1,62,054.12	710.99	6,94,136.33	48.20	37,977.63	60.01	52,523.22	6.22	4,796.62
May	1,178.88	11,12,301.25	990.47	8,71,552.91	188.41	2,40,748.34	705.79	7,08,984.29	50.30	36,212.69	62.34	56,277.71	5.97	4,835.03
June	1,136.38	10,19,221.43	951.93	8,87,891.62	184.45	1,31,329.81	687.17	7,30,703.39	51.07	38,572.64	61.37	48,857.19	5.79	4,512.78
July	1,307.06	10,40,232.09	1,028.06	9,17,884.09	279.00	1,22,348.00	751.98	7,65,059.70	56.83	39,463.90	61.93	52,540.13	6.65	3,844.43
August	1,215.22	9,95,281.57	1,020.90	8,75,537.96	194.32	1,19,743.61	730.39	7,16,282.52	52.49	36,681.21	62.68	49,593.17	6.80	4,326.51
September	1,106.23	9,82,442.25	913.81	8,69,312.04	192.42	1,13,130.22	657.16	7,18,007.88	48.05	36,914.00	53.52	48,357.64	6.10	4,208.29
October	1,309.58	11,14,197.41	1,099.28	9,88,829.91	210.30	1,25,387.87	785.76	8,13,171.49	59.52	42,892.06	61.24	50,863.00	7.09	4,865.23
Total (upto October, 07)	**8,422.39**	**72,83,830.58**	**6,987.06**	**62,69,108.99**	**1,435.33**	**10,14,741.96**	**50,29.22**	**51,46,345.60**	**366.46**	**2,68,714.13**	**423.10**	**3,59,012.04**	**44.62**	**31,388.89**

* : MICR - Magnetic Ink Character Recognition - automated CPC (Cheque Processing Centres).

** : Non MICR - Clearing done at the clearing house where MICR cheque processing centres have not been setup. The processing is done either using magnetic media based clearing system (MMBCS) or is done manually.

*** : RBI Centres (MICR) refers to all centres where RBI is the manager of Clearing House.

Notes : 1. Non MICR Data for the month of October 2007, pertains to the Clearing Houses managed by 10 banks-managed clearing house-SBI (Patna, Delhi, Lucknow, Mumbai, Ahmedabad, Bhopal, Kolkata, Chennai, Guwahati, Chandigarh, Kerala, Hyderabad, Bangalore & Bhubaneswar), SBBJ, SB Indore, PNB, SBT, SBP, SBH, SBM and United Bank of India.

2. The other MICR Centres includes 43 centres managed by 13 PSBs namely Andhra Bank, Bank of Baroda, Bank of India, Canara Bank, Central Bank of India, Corporation Bank, Oriental Bank of Commerce, Punjab National Bank, State Bank of India, State Bank of Indore, State Bank of Travancore, State Bank of Hyderabad and Union Bank of India. The list of other MICR centres (apart from RBI) is given in the Notes on Table 8.

No. 8: Cheque Clearing Data *(Contd.)*

(Number in Lakhs and Amount in Rs. crore)

Month/Year	RBI Centres***													
	Bhubaneswar		Chandigarh		Chennai		Guwahati		Hyderabad		Jaipur		Kanpur	
1	9		10		11		12		13		14		15	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	27.00	21,625.00	–	–	522.00	5,00,872.00	30.00	19,592.00	305.00	1,82,764.00	123.00	54,432.00	67.00	32,369.00
2002-03	33.00	26,349.00	–	–	557.00	5,52,913.00	34.00	22,436.00	337.00	2,15,035.00	130.00	58,202.00	73.00	34,532.00
2003-04	37.00	37,136.00	–	–	602.00	6,12,158.00	37.00	27,840.00	369.00	2,75,503.00	148.00	70,122.00	78.00	41,397.00
2004-05	41.80	47,252.75	112.84	1,11,091.83	735.14	7,59,883.13	42.37	32,713.91	390.18	3,01,678.83	168.05	89,086.56	87.10	47,225.75
2005-06	48.63	53,649.70	123.75	1,27,037.87	813.18	6,55,277.92	48.21	39,660.48	416.84	3,63,317.08	187.42	1,13,452.52	92.67	55,328.69
2006-07 (P)	56.24	64,833.86	140.72	1,98,205.13	803.55	6,92,201.61	55.06	49,100.51	438.90	3,95,911.44	197.84	1,37,784.84	96.94	64,396.07
2006-07 (P)														
April	3.93	3,926.92	10.21	14,268.57	64.57	54,057.23	3.93	3,822.97	36.86	33,184.10	15.58	10,352.49	8.20	5,123.22
May	4.60	5,175.40	11.21	14,067.14	67.85	54,208.94	4.57	3,938.84	32.76	32,045.61	16.70	10,800.91	8.33	5,425.88
June	4.13	4,306.93	10.09	10,829.01	66.14	54,931.13	4.33	3,807.76	35.27	32,498.22	15.96	11,539.52	7.49	5,123.84
July	4.53	5,382.19	10.38	14,700.90	68.72	51,960.72	4.20	3,272.43	34.79	30,933.83	15.15	10,778.69	7.65	4,796.01
August	4.81	5,338.02	17.02	11,607.17	68.57	55,832.98	4.73	4,038.78	36.21	31,079.18	16.05	10,148.23	8.22	5,235.42
September	4.57	5,237.75	11.41	46,787.47	66.84	56,680.24	4.47	3,739.01	34.70	31,850.81	15.82	10,595.23	7.76	5,159.10
October	4.58	5,263.26	11.53	15,080.70	65.52	56,828.56	4.32	3,671.09	35.14	29,737.87	16.07	11,497.99	6.97	4,557.14
November	5.16	5,295.46	12.41	14,472.19	57.09	56,676.72	4.97	4,528.18	37.73	33,717.64	17.14	11,517.94	8.99	6,086.98
December	4.98	5,048.46	11.93	12,713.78	67.93	57,571.89	4.75	4,286.64	39.13	33,876.32	17.18	12,188.72	8.27	5,565.46
January	4.66	6,051.10	10.93	12,016.95	64.87	55,270.04	4.52	4,408.89	35.44	30,771.40	16.57	11,948.25	7.57	5,265.34
February	4.67	5,682.81	11.11	12,880.41	69.08	61,288.22	4.57	4,024.82	37.75	31,696.18	17.03	11,868.43	8.52	5,423.51
March	5.61	8,125.57	12.49	18,780.84	76.39	76,894.94	5.70	5,561.08	43.10	44,520.28	18.58	14,548.43	8.97	6,634.18
2007-08 (P)														
April	4.55	5,831.46	10.96	14,150.33	69.79	66,324.18	4.48	4,578.53	36.90	35,341.97	16.98	12,404.90	8.27	5,508.04
May	4.87	5,938.91	11.77	15,226.86	69.35	59,764.85	4.76	4,088.66	35.58	33,432.04	16.99	12,148.72	8.55	5,774.79
June	4.75	5,694.69	11.39	11,972.37	68.69	63,265.44	4.93	4,514.63	34.80	34,164.72	16.40	12,873.30	7.90	6,244.16
July	4.96	6,288.49	11.71	13,279.94	73.26	63,481.33	4.86	4,258.08	38.36	37,798.85	18.44	13,024.81	8.23	5,548.08
August	5.37	5,905.67	11.87	13,575.18	72.92	63,566.76	4.98	3,911.09	37.78	37,093.12	16.98	11,957.00	8.31	5,397.64
September	4.53	6,429.29	10.95	11,191.73	65.79	61,810.72	4.46	4,305.57	33.56	32,219.88	17.10	11,708.92	7.61	4,810.59
October	5.38	2,266.99	12.47	14,026.73	74.86	66,808.02	5.10	4,637.93	38.93	37,455.25	19.15	14,238.09	8.95	5,990.51
Total (upto October, 07)	**34.41**	**38,355.49**	**81.13**	**93,423.16**	**494.66**	**445,021.30**	**33.56**	**30,294.51**	**255.91**	**2,47,505.83**	**122.05**	**88,355.74**	**57.82**	**39,273.80**

No. 8: Cheque Clearing Data *(Contd.)*

(Number in Lakhs and Amount in Rs. crore)

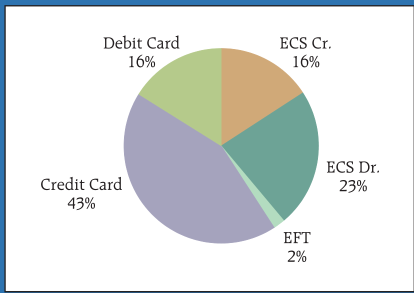
Month/Year	RBI Centres***											
	Kolkata		Mumbai		Nagpur		New Delhi		Patna		Thiruvananthapuram	
1	16		17		18		19		20		21	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2001-02	523.00	3,73,131.00	1,679.00	82,17,816.00	102.00	41,151.00	1,079.00	9,90,315.00	27.00	17,421.00	34.00	19,032.00
2002-03	531.00	4,19,164.00	2,019.00	76,94,748.00	109.00	46,924.00	1,164.00	13,19,625.00	37.00	19,506.00	37.00	36,691.00
2003-04	470.00	4,65,308.00	2,162.00	55,11,293.00	120.00	56,330.00	1,107.00	13,54,677.00	50.00	26,739.00	41.00	43,714.00
2004-05	599.87	5,60,659.90	2,304.10	37,53,670.27	124.43	63,495.08	1,479.32	17,73,610.10	65.01	30,861.67	48.19	44,396.08
2005-06	642.40	6,58,639.71	2,391.92	33,42,829.39	134.77	75,772.26	1,597.19	16,97,583.19	59.16	36,819.81	54.62	38,483.98
2006-07 (P)	684.19	6,82,358.03	2,518.27	33,19,090.06	145.64	92,546.61	1,690.93	17,73,548.27	56.84	47,968.83	56.19	40,693.03
2006-07 (P)												
April	50.29	52,003.11	204.15	2,82,175.80	11.78	7,721.07	132.22	1,50,395.90	3.95	3,683.53	4.43	1,691.93
May	58.05	54,915.43	204.92	3,03,037.07	11.98	8,237.97	142.55	1,46,372.42	4.68	3,401.74	4.82	3,252.18
June	53.63	52,311.78	197.38	2,69,119.60	11.71	7,629.23	131.01	1,41,374.32	4.25	3,764.13	4.73	3,141.01
July	54.82	48,532.53	202.55	2,34,137.31	11.86	6,836.81	136.88	1,28,656.80	4.41	3,870.61	4.70	3,175.61
August	58.95	54,667.93	212.78	2,48,886.47	11.46	6,756.49	140.24	1,41,680.38	4.83	3,538.17	4.99	3,181.98
September	53.79	55,803.16	197.48	2,76,372.18	11.19	6,484.33	138.06	1,54,902.85	4.76	3,858.32	4.21	3,064.20
October	54.72	49,873.94	209.06	2,42,863.66	12.07	7,299.28	141.11	1,43,425.99	4.22	3,446.99	4.58	3,034.37
November	59.72	58,185.96	218.46	2,77,426.09	12.34	7,396.77	143.66	1,38,470.75	5.16	4,012.04	4.74	3,412.22
December	56.50	59,901.38	207.06	2,91,559.56	12.61	8,156.51	140.59	1,54,432.14	5.16	3,929.78	4.57	3,194.35
January	55.82	51,879.84	217.47	2,74,341.90	11.86	7,697.74	144.60	1,49,332.25	4.54	3,988.98	4.80	4,296.28
February	59.37	58,149.01	210.49	2,79,723.94	12.33	7,704.51	142.72	1,45,494.05	5.12	4,323.79	4.58	3,601.72
March	68.53	86,133.96	236.47	3,39,446.46	14.46	10,625.90	157.30	1,79,010.41	5.77	6,150.76	5.05	5,647.19
2007-08 (P)												
April	57.79	58,696.55	220.95	2,29,445.80	11.28	8,695.68	145.30	1,46,704.99	4.77	6,928.47	4.53	4,227.97
May	59.91	61,399.15	208.02	2,61,566.10	11.94	8,660.45	145.97	1,34,494.93	4.71	5,352.23	4.76	3,811.16
June	57.46	62,309.84	203.11	2,80,461.07	12.00	8,428.31	137.95	1,40,266.44	4.97	4,335.59	4.57	4,230.20
July	61.00	61,347.99	231.06	3,06,618.10	12.68	7,646.34	152.15	1,41,101.08	5.17	5,217.52	4.70	3,600.63
August	62.18	59,161.41	219.17	2,74,074.25	12.77	7,849.04	146.21	1,34,970.59	5.37	3,959.89	4.52	4,260.00
September	55.03	57,083.72	194.43	2,84,887.24	11.27	7,589.84	135.53	1,38,687.38	4.86	3,760.41	4.37	4,042.66
October	61.57	60,282.92	248.11	3,32,783.19	14.08	8,763.06	158.99	1,57,435.86	5.40	5,044.38	4.93	4,818.27
Total (upto October, 07)	**414.94**	**4,20,281.58**	**1,524.86**	**19,69,835.76**	**86.00**	**57,632.72**	**1,022.09**	**9,93,661.26**	**35.25**	**34,598.49**	**32.37**	**28,990.90**

No. 8: Cheque Clearing Data *(Concld.)*

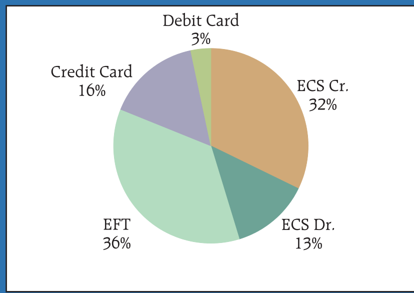
(Number in Lakhs and Amount in Rs. crore)

Month/Year	Other MICR Centres	
1	22	
	Number	Amount
2001-02	–	–
2002-03	–	–
2003-04	–	–
2004-05	2,029.78	8,62,931.50
2005-06	2,375.92	12,79,394.06
2006-07 (P)	3,131.14	18,35,941.80
2006-07		
April (P)	238.19	1,34,527.25
May (P)	256.88	1,54,356.72
June (P)	238.16	1,36,238.65
July (P)	252.40	1,43,355.00
August (P)	265.30	1,61,806.07
September (P)	269.18	1,43,821.27
October (P)	249.59	1,49,234.48
November (P)	271.10	1,54,999.60
December (P)	260.68	1,50,637.29
January (P)	259.45	1,54,996.56
February (P)	269.06	1,59,381.82
March (P)	301.13	1,92,587.10
2007-08 (P)		
April	271.62	1,63,964.13
May	284.68	1,62,568.62
June	264.76	1,57,188.23
July	276.08	1,52,824.38
August	290.51	1,59,255.44
September	256.65	1,51,304.16
October	313.53	1,75,658.42
Total (upto October, 07)	**1,957.84**	**11,22,763.39**

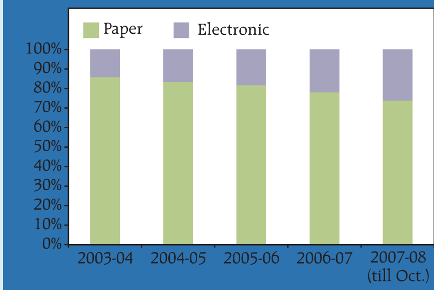
Retail Electronic Transactions- Value in percentage



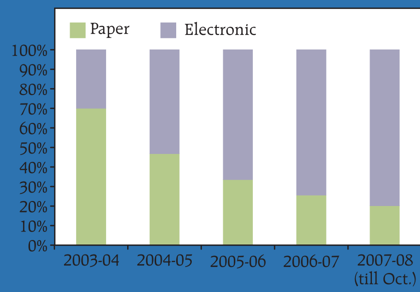
Retail Electronic Transactions- Volume in percentage



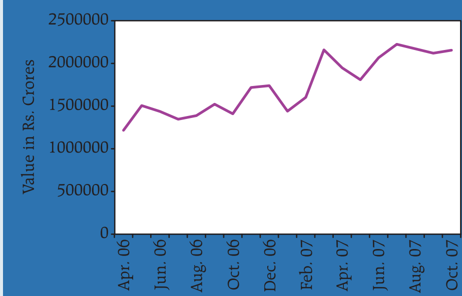
Representation of Electronic Transactions Volume in Total



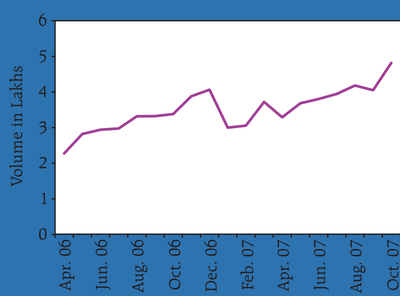
Representation of Electronic Transactions Value in Total



Growth in RTGS Value



Growth in RTGS Volume



No. 9A: Retail Electronic Payment Systems

(Number in Lakh and Amount in Rs. crore)

Year / Period	Total Electronic Payments		Electronic Clearing Services (ECS)				Electronic Funds Transfer (EFT)		Card Payments					
			ECS (Credit)		ECS (Debit)				Credit			Debit*		
1	2=(3+4+5+6+7)		3		4		5		6			7		
	Volume	Amount	Volume	Amount	Volume	Amount	Volume	Amount	Number of Out-standing Cards**	Volume	Amount	Number of Out-standing Cards**	Volume	Amount
2003-04	1,669.55	52,142.78	203.00	10,228.00	79.00	2,253.58	8.19	17,124.81	–	1,001.79	17,662.72	–	377.57	4,873.67
2004-05	2,289.04	1,08,749.83	400.51	20,179.81	153.00	2,921.24	25.49	54,601.38	–	1,294.72	25,686.36	–	415.32	5,361.04
2005-06	2,850.13	1,46,382.68	442.16	32,324.35	359.58	12,986.50	30.67	61,288.22	173.27	1,560.86	33,886.47	497.63	456.86	5,897.14
2006-07 (P)	3,787.09	2,35,693.12	690.19	83,273.09	752.02	25,440.79	47.76	77,446.31	231.23	1,695.36	41,361.31	749.76	601.77	8,171.63
2006-07 (P)														
April	248.66	13,307.04	41.69	4,361.55	44.73	1,527.94	3.01	4,261.11	177.16	117.72	2,615.53	518.13	41.50	540.91
May	270.01	19,454.10	46.78	8,978.03	43.53	1,685.09	3.40	5,234.09	180.55	131.93	2,970.52	526.95	44.37	586.38
June	275.45	12,769.55	52.51	3,469.70	51.53	1,585.07	3.36	4,383.87	185.76	125.45	2,773.69	546.88	42.60	557.22
July	301.41	20,495.04	61.90	6,078.30	53.15	1,643.62	3.39	9,195.79	190.27	133.71	2,957.08	573.13	49.26	620.25
August	321.75	17,470.80	70.75	5,633.54	56.95	1,976.00	3.60	5,991.33	195.65	139.77	3,211.80	589.64	50.68	658.12
September	298.98	17,141.85	51.87	4,990.12	60.15	2,022.28	3.85	6,166.52	200.39	136.22	3,270.12	613.98	46.89	692.81
October	334.69	21,231.53	57.47	8,304.32	65.13	2,166.65	4.15	5,936.81	204.85	151.66	3,991.78	658.59	56.28	831.97
November	328.13	22,522.59	66.06	9,245.42	69.32	2,207.17	3.44	6,808.25	210.98	139.62	3,602.20	664.19	49.68	659.56
December	329.08	18,792.68	42.88	5,970.25	72.37	2,517.06	3.59	5,597.25	215.99	151.85	3,883.96	689.28	58.39	824.16
January	342.32	20,750.14	48.13	6,296.77	76.21	2,334.62	3.71	7,262.69	221.08	161.90	4,110.29	698.44	52.38	745.76
February	369.00	26,403.45	84.55	11,568.11	78.49	2,259.09	5.73	7,995.26	226.54	147.25	3,875.02	720.26	52.98	705.97
March	367.61	25,354.35	65.60	8,376.98	80.46	3,516.19	6.53	8,613.34	231.23	158.28	4,099.32	749.76	56.75	748.52
2007-08 (P)														
April	376.45	28,346.53	60.07	8,027.76	82.63	3,040.37	6.75	12,159.06	235.03	167.35	4,258.26	758.66	59.65	861.07
May	370.93	24,451.57	38.70	3,620.43	88.98	2,942.11	7.42	12,734.62	241.29	174.70	4,296.39	784.59	61.13	858.02
June	385.26	24,170.64	52.90	7,824.70	90.56	4,586.06	7.50	6,704.94	243.98	171.86	4,190.71	795.65	62.43	864.23
July	440.52	29,912.23	89.85	11,709.17	96.57	3,231.45	8.48	9,615.62	244.89	179.50	4,450.51	819.74	66.12	905.48
August	449.29	28,259.80	81.17	11,944.00	98.47	3,310.76	8.97	7,395.73	249.48	188.37	4,600.60	849.54	72.30	1,008.71
September	414.09	28,685.38	58.41	9,575.51	103.02	4,540.73	9.60	9,301.03	251.40	174.15	4,315.04	876.52	68.91	953.07
October	493.02	37,516.39	83.98	12,401.66	111.56	4,212.86	12.28	14,583.40	256.16	207.51	5,201.23	897.07	77.69	1,117.23
Total (upto October, 07)	**2,929.57**	**2,01,342.54**	**465.10**	**65,103.23**	**671.78**	**25,864.34**	**61.02**	**72,494.40**	**256.16**	**1,263.45**	**31,312.75**	**897.07**	**468.23**	**6,567.82**

* : Debit Cards figures for 2003-04 and 2004-05 are estimated based on 2005-06 figures.
** : Cards issued by banks (excluding those withdrawn/blocked).

No. 9B: Large Value Clearing and Settlement Systems

(Number in Lakh and Amount in Rs. crore)

Year / Period	Real Time Gross Settlement System									
	Total		Customer remittance		Inter-Bank remittance		Inter-bank clearing settlement**		Total Inter-bank	
1	2=(3+4+5)		3		4		5		6=(4+5)	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2003-04	0.001	1,965.49	–	–	0.001	1,965.49	–	–	0.001	1,965.49
2004-05	4.60	40,66,184.00	0.68	2,49,662.00	3.92	38,16,522.00	–	–	3.92	38,16,522.00
2005-06	17.67	1,15,40,836.25	7.13	25,70,212.29	10.54	89,70,623.96	–	–	10.54	89,70,623.96
2006-07	38.80	2,46,19,179.99	24.82	71,67,807.91	13.94	1,13,13,346.69	0.04	61,38,025.39	13.98	1,74,51,372.08
2006-07										
April	2.27	12,15,738.55	1.36	4,14,832.62	0.92	8,00,905.93	–	–	0.92	8,00,905.93
May	2.82	15,05,769.58	1.72	5,22,421.94	1.10	9,83,347.64	–	–	1.10	9,83,347.64
June	2.94	14,37,408.04	1.82	4,90,716.67	1.13	9,46,691.37	–	–	1.13	9,46,691.37
July	2.97	13,46,465.65	1.87	4,54,992.42	1.11	8,91,473.23	–	–	1.11	8,91,473.23
August	3.32	13,87,871.86	2.16	4,82,295.19	1.16	9,05,576.67	–	–	1.16	9,05,576.67
September*	3.33	21,20,783.51	2.19	5,56,877.18	1.13	9,65,023.29	0.006	5,98,883.04	1.14	15,63,906.33
October	3.39	19,30,288.73	2.29	4,69,506.04	1.09	9,,39,937.84	0.005	5,20,844.85	1.10	14,60,782.69
November	3.89	24,16,741.81	2.64	6,65,072.44	1.24	10,52,418.91	0.006	6,99,250.46	1.25	17,51,669.37
December	4.07	26,73,508.76	2.82	7,14,428.61	1.24	10,24,691.36	0.005	9,34,388.79	1.25	19,59,080.15
January	3.01	25,11,745.65	1.78	5,98,777.17	1.22	8,41,163.48	0.006	10,71,805.00	1.22	19,12,968.48
February	3.06	24,92,395.60	1.87	7,37,553.10	1.19	8,63,897.68	0.006	8,90,944.82	1.19	17,54,842.50
March	3.73	35,80,462.25	2.31	10,60,334.53	1.41	10,98,219.29	0.006	14,21,908.43	1.42	25,20,127.72
2007-08										
April	3.30	30,52,145.05	2.06	8,37,607.28	1.23	11,09,957.75	0.006	11,04,580.02	1.24	22,14,537.77
May	3.69	30,56,182.88	2.37	9,33,089.84	1.32	8,75,831.15	0.009	12,47,261.89	1.32	21,23,093.04
June	3.82	31,85,137.95	2.49	12,50,113.93	1.31	8,16,059.70	0.019	11,18,964.32	1.33	19,35,024.02
July	3.97	33,90,128.37	2.63	13,83,382.06	1.31	8,40,713.46	0.021	11,66,032.85	1.33	20,06,746.31
August	4.19	39,46,479.77	2.81	11,88,033.68	1.37	9,83,548.72	0.012	17,74,897.37	1.39	27,58,446.09
September	4.06	41,53,981.12	2.78	12,09,224.98	1.27	9,10,182.26	0.009	20,34,573.88	1.28	29,44,756.14
October	4.83	49,49,173.65	3.41	13,07,702.75	1.41	8,46,505.29	0.013	27,94,965.61	1.43	36,41,470.90
Total (upto October, 07)	**27.87**	**2,57,33,228.79**	**18.55**	**81,09,154.52**	**9.23**	**63,82,798.33**	**0.09**	**1,12,41,275.94**	**9.32**	**1,76,24,074.27**

* : MNSB settlement in RTGS started from August 12, 2006.

** : Inter-bank Clearing Settlement pertains to the MNSB batches.

No. 9B: Large Value Clearing and Settlement Systems *(Concld.)*

(Number in Lakh and Amount in Rs. crore)

Year / Period	CCIL Operated Systems							
	Government Securities Settlement				Forex Settlement		CBLO Settlement	
	Outright		Repo					
1	7		8		9		10	
	No.of Trades	Value	No. of Trades	Value	No. of Trades	Value	No. of Trades	Value
2003-04	2.44	15,75,133.00	0.21	9,43,189.00	3.31	23,18,530.80	0.03	76,850.70
2004-05	1.61	11,34,222.08	0.24	15,57,906.55	4.66	40,42,434.86	0.29	9,76,757.10
2005-06	1.25	8,64,751.40	0.25	16,94,508.70	4.90	52,39,673.90	0.68	29,53,133.90
2006-07	1.37	10,21,535.70	0.30	25,56,501.50	6.06	80,23,078.00	0.86	47,32,271.30
2006-07								
April	0.07	65,574.20	0.02	1,19,853.80	0.43	5,74,361.50	0.06	3,59,227.90
May	0.08	67,748.80	0.03	2,33,469.50	0.53	6,81,602.20	0.07	4,28,666.90
June	0.05	48,565.90	0.03	2,74,677.00	0.52	6,12,044.80	0.06	3,63,646.30
July	0.06	44,318.00	0.03	2,41,765.50	0.45	5,08,753.10	0.07	3,91,737.70
August	0.14	1,06,896.60	0.03	2,61,423.20	0.47	5,29,951.70	0.07	3,74,214.60
September	0.20	1,49,361.20	0.03	2,38,804.80	0.50	6,16,516.70	0.07	3,69,532.00
October	0.10	73,362.00	0.02	2,13,868.50	0.44	5,90,332.70	0.07	3,73,561.20
November	0.25	1,73,279.40	0.03	2,62,460.90	0.60	7,65,387.70	0.09	4,62,395.40
December	0.12	87,551.70	0.02	1,72,089.30	0.49	7,12,010.70	0.08	3,87,828.80
January	0.12	82,359.80	0.02	1,58,176.30	0.58	7,51,947.10	0.07	3,78,183.80
February	0.10	67,412.10	0.02	1,71,475.90	0.47	7,40,587.00	0.07	4,19,390.50
March	0.08	55,106.00	0.02	2,08,436.80	0.59	9,39,582.80	0.08	4,23,886.20
2007-08								
April	0.09	79,052.00	0.02	1,50,668.90	0.68	10,33,519.20	0.08	3,97,902.20
May	0.10	78,229.50	0.02	2,24,137.20	0.63	8,67,577.50	0.09	5,20,253.50
June	0.14	1,13,569.70	0.02	2,57,372.10	0.62	9,03,131.40	0.07	5,39,299.60
July	0.26	2,28,950.90	0.02	2,71,081.40	0.61	9,78,291.00	0.06	5,19,190.00
August	0.14	1,20,419.00	0.03	4,17,198.80	0.67	10,28,677.00	0.09	6,72,243.00
September	0.12	97,568.60	0.02	4,11,137.80	0.58	10,58,087.20	0.09	6,68,018.10
October	0.12	1,20,504.80	0.02	3,97,798.60	0.72	12,02,092.20	0.11	7,69,062.20
Total (Upto October, 07)	**0.97**	**8,38,294.50**	**0.15**	**21,29,394.80**	**4.51**	**70,71,975.50**	**0.59**	**40,85,968.60**

No. 10: Money Stock Measures

(Rs. crore)

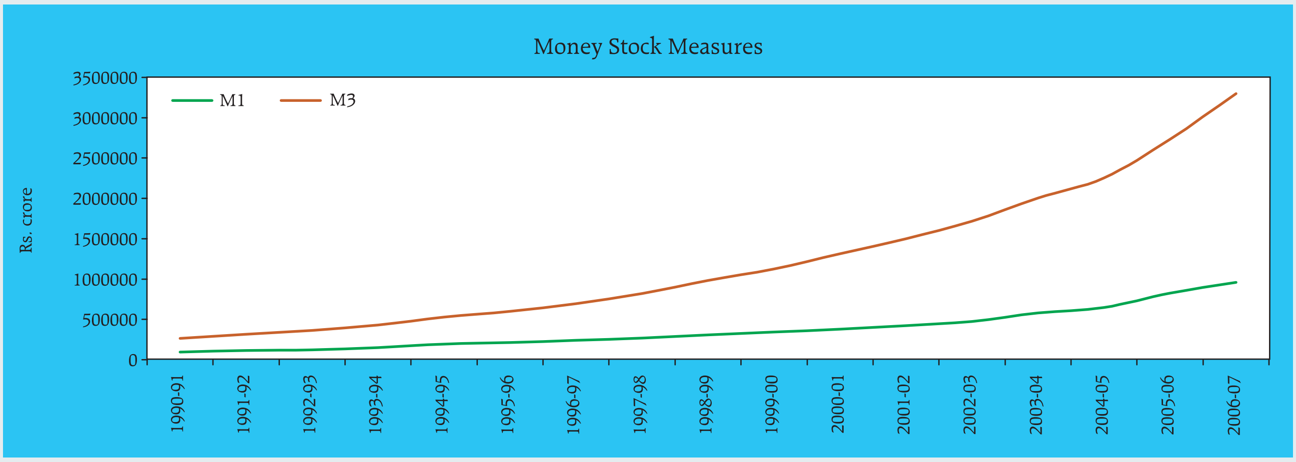
March 31/ Reporting Fridays of the month/ Last reporting Friday of the month	Currency with the public					Deposit money of the public			M_1 (6+9)	Post office savings bank deposits	M_2 (10+11)	Time deposits with banks	M_3 (10+13)	Total post office deposits	M_4 (14+15)
	Notes in circulation(1)	Circulation of		Cash on hand with banks	Total (2+3+4-5)	Demand deposits with banks	'Other' deposits with Reserve Bank (3)	Total (7+8)							
		Rupee coins (2)	Small coins (2)												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2004-2005	3,61,213	5,984	1,464	12,798	3,55,863	2,85,154	6,478	2,91,632	**6,47,495**	5,041	**6,52,536**	16,03,954	**22,51,449**	25,969	**22,77,418**
												(15,83,180)	**(22,30,675)**		
2005-2006	4,21,922	6,190	2,564	17,557	4,13,119	4,06,388	6,869	4,13,256	**8,26,375**	5,041	**8,31,416**	19,03,170	**27,29,545**	25,969	**27,55,514**
2006-2007	4,95,938	6,684	1,603	20,754	4,83,471	4,74,228	7,496	4,81,724	**9,65,195**	5,041	**9,70,236**	23,45,083	**33,10,278**	25,969	**33,36,247**
April 1, 2005	3,60,552	5,984	1,464	13,129	3,54,871	3,21,363	6,319	3,27,682	**6,82,553**	5,041	**6,87,594**	16,50,114	**23,32,667**	25,969	**23,58,636**
												(16,29,340)	**(23,11,893)**		
October 13, 2006	4,51,306	6,429	1,559	16,098	4,43,196	3,93,703	5,440	3,99,143	**8,42,339**	5,041	**8,47,380**	20,98,484	**29,40,824**	25,969	**29,66,793**
October 27, 2006	4,62,890	6,477	1,577	19,279	4,51,665	3,97,923	5,535	4,03,458	**8,55,122**	5,041	**8,60,163**	20,91,207	**29,46,329**	25,969	**29,72,298**
June 2007	5,12,638	6,927	1,603	20,171	5,00,996	4,31,686	7,061	4,38,747	**9,39,743**	5,041	**9,44,784**	24,46,729	**33,86,473**	25,969	**34,12,442**
July 2007	5,06,148	6,973	1,603	19,002	4,95,721	4,35,787	12,345	4,48,132	**9,43,852**	5,041	**9,48,893**	25,10,016	**34,53,868**	25,969	**34,79,837**
August 2007	4,98,073	7,091	1,603	19,851	4,86,916	4,35,163	5,028	4,40,190	**9,27,106**	5,041	**9,32,147**	25,48,475	**34,75,580**	25,969	**35,01,549**
September 2007	4,98,987	7,091	1,603	20,621	4,87,059	4,84,259	5,565	4,89,824	**9,76,884**	5,041	**9,81,925**	25,97,543	**35,74,427**	25,969	**36,00,396**
October 12, 2007	5,11,867	7,091	1,603	18,626	5,01,934	4,58,433	4,968	4,63,400	**9,65,335**	5,041	**9,70,376**	26,16,953	**35,82,288**	25,969	**36,08,257**
October 26, 2007	5,18,266	7,091	1,603	20,421	5,06,539	4,54,527	4,826	4,59,354	**9,65,893**	5,041	**9,70,934**	26,42,291	**36,08,184**	25,969	**36,34,153**

Notes : 1. Figures in brackets exclude the impact of mergers since May 3,2002 and October 11,2004, respectively.

2. Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.

3. Last reporting Friday for 2005-06 was as on March 31, 2006 and coincided with the closing day for banks annual accounts while last reporting Friday for 2004-05 was as on March 18, 2005 and that for 2006-07 was on March 30,2007. Data on fiscal year variation for 2005-06 are, thus not comparable with those of the other years as the data for 2005-06 include 27 fortnights while usually the data include 26 fortnights.

Also see 'Notes on Tables'.



No. 11: Sources of Money Stock (M_3)

(Rs. crore)

Source	Outstandings as on March 31/reporting Fridays of the month/last reporting Friday of the month					
	2004-05	2005-06	2006-07	April 1, 2005	October 13, 2006	October 27, 2006
1	2	3	4	5	6	7
1. Net Bank Credit to Government (A+B)	**7,56,766 (7,44,574)**	**7,66,595**	**8,38,177**	**7,48,707 (7,36,514)**	**8,10,719**	**8,09,798**
A. RBI's net credit to Government (i-ii)	-17,975	8,136	5,752	-27,662	2,776	10,732
(i) Claims on Government (a+b)	61,970	73,540	1,00,800	36,700	50,611	56,833
(a) Central Government (1)	56,687	70,563	97,184	36,107	50,361	56,676
(b) State Governments	5,283	2,977	3,616	593	250	157
(ii) Government deposits with RBI (a+b)	79,945	65,404	95,048	64,362	47,835	46,101
(a) Central Government	79,945	65,404	95,048	64,321	47,794	46,059
(b) State Governments	–	–	–	41	41	41
B. Other Banks' Credit to Government	7,74,741	7,58,459	8,32,425	7,76,369	8,07,943	7,99,065
2. Bank Credit to Commercial Sector (A+B)	**12,80,249 (12,47,367)**	**16,93,004**	**21,23,362**	**13,31,258 (12,98,376)**	**18,30,378**	**18,45,673**
A. RBI's credit to commercial sector (2)	1,390	1,387	1,537	1,390	1,384	1,384
B. Other banks' credit to commercial sector (i+ii+iii)	12,78,859	16,91,617	21,21,825	13,29,869	18,28,994	18,44,289
(i) Bank credit by commercial banks	11,00,428	15,07,077	19,28,913	11,52,210	16,37,841	16,54,089
(ii) Bank credit by co-operative banks	1,53,508	1,63,731	1,74,231	1,53,419	1,70,139	1,70,289
(iii) Investments by commercial and co-operative banks in other securities	24,923	20,809	18,681	24,240	21,014	19,911
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**6,49,255**	**7,26,194**	**9,13,179**	**6,47,903**	**7,95,966**	**8,01,331**
A. RBI's net foreign exchange assets (i-ii)(3)	6,12,790	6,72,983	8,66,153	6,11,439	7,47,709	7,53,075
(i) Gross foreign assets	6,12,808	6,73,001	8,66,170	6,11,456	7,47,727	7,53,092
(ii) Foreign liabilities	17	17	17	17	17	17
B. Other banks' net foreign exchange assets	36,465	53,211	47,026	36,465	48,256	48,256
4. Government's Currency Liabilities to the Public	**7,448**	**8,754**	**8,286**	**7,448**	**7,988**	**8,054**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**4,42,269**	**4,65,002**	**5,72,727**	**4,02,649**	**5,04,226**	**5,18,526**
A. Net non-monetary liabilities of RBI (3)	1,19,776	1,24,001	1,80,348	1,23,214	1,66,385	1,71,814
B. Net non-monetary liabilities of other banks(residual)	3,22,493	3,41,001	3,92,379	2,79,435	3,37,842	3,46,712
M_3 (1+2+3+4-5)	**22,51,449 (22,30,675)**	**27,29,545**	**33,10,278**	**23,32,667 (23,11,893)**	**29,40,824**	**29,46,329**

No. 11: Sources of Money Stock (M_3) *(Concld.)*

(Rs.crore)

Source	Outstandings as on March 31/reporting Fridays of the month/last reporting Friday of the month					
	June 2007	July 2007	August 2007	September 2007	October 12, 2007	October 26, 2007
1	8	9	10	11	12	13
1. Net Bank Credit to Government (A+B)	**8,63,010**	**9,16,949**	**8,78,635**	**8,72,678**	**8,46,054**	**8,52,761**
A. RBI's net credit to Government (i-ii)	-19,731	21,884	-62,939	-74,426	-1,36,711	-1,37,066
(i) Claims on Government (a+b)	63,028	1,07,052	44,443	67,959	41,933	61,087
(a)Central Government (1)	63,028	1,06,138	43,070	67,067	41,791	60,744
(b)State Governments	–	914	1,374	893	142	343
(ii) Government deposits with RBI (a+b)	82,759	85,168	1,07,382	1,42,385	1,78,644	1,98,153
(a)Central Government	82,717	85,127	1,07,341	1,42,344	1,78,602	1,98,112
(b)State Governments	41	41	41	41	41	41
B. Other Banks' Credit to Government	8,82,740	8,95,065	9,41,574	9,47,104	9,82,765	9,89,828
2. Bank Credit to Commercial Sector (A+B)	**20,91,489**	**21,11,880**	**21,63,085**	**22,31,880**	**22,25,003**	**22,32,299**
A. RBI's credit to commercial sector (2)	1,386	1,383	1,383	1,383	1,383	1,383
B. Other banks' credit to commercial sector (i+ii+iii)	20,90,103	21,10,497	21,61,701	22,30,497	22,23,620	22,30,916
(i) Bank credit by commercial banks	18,94,841	19,14,055	19,60,072	20,25,399	20,19,175	20,25,879
(ii) Bank credit by co-operative banks	1,76,752	1,78,011	1,77,814	1,81,906	1,81,643	1,81,843
(iii) Investments by commercial and co-operative banks in other securities	18,509	18,431	23,815	23,193	22,803	23,194
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**8,95,234**	**9,25,714**	**9,67,296**	**10,14,665**	**10,39,928**	**10,67,124**
A. RBI's net foreign exchange assets (i-ii)(3)	8,63,408	8,93,888	9,35,470	9,82,839	10,08,102	10,35,297
(i) Gross foreign assets	8,63,426	8,93,905	9,35,488	9,82,856	10,08,120	10,35,315
(ii) Foreign liabilities	17	17	17	17	17	17
B. Other banks' net foreign exchange assets	31,826	31,826	31,826	31,826	31,826	31,826
4. Government's Currency Liabilities to the Public	**8,530**	**8,576**	**8,694**	**8,694**	**8,694**	**8,694**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**4,71,790**	**5,09,251**	**5,42,130**	**5,53,490**	**5,37,392**	**5,52,694**
A. Net non-monetary liabilities of RBI(3)	1,34,206	1,73,693	1,36,372	1,37,368	1,24,176	1,38,427
B. Net non-monetary liabilities of other banks (residual)	3,37,585	3,35,558	4,05,757	4,16,122	4,13,216	4,14,267
M_3 (1+2+3+4-5)	**33,86,473**	**34,53,868**	**34,75,580**	**35,74,427**	**35,82,288**	**36,08,184**

Notes : 1. Figures in brackets exclude the impact of mergers and conversion on May 3, 2002 and October 11, 2004, respectively.
2. Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.
3. Last reporting Friday for 2005-06 was as on March 31, 2006 and coincided with the closing day for banks' annual accounts while last reporting Friday for 2004-05 was as on March 18, 2005. Data on fiscal year variation for 2005-06 are, thus, not comparable with those of the other years as the data for 2005-06 include 27 fortnights while usually the data include 26 fortnights.

Also see 'Notes on Tables'.

No. 11A: Commercial Bank Survey

(Rs. crore)

Item		Outstanding as on							
		Mar. 18 2005	Apr. 1 2005	Mar. 31 2006	Oct. 13 2006	Oct. 27 2006	Mar. 30 2007	Oct. 12 2007	Oct. 26 2007
1		2	3	4	5	6	7	8	9
Components									
C.I	**Aggregate Deposits of Residents** (C.I.1+C.I.2)	**16,23,793**	**17,08,984**	**20,49,773**	**22,24,454**	**22,22,441**	**25,41,201**	**27,97,332**	**28,16,974**
C.I.1	Demand Deposits	2,48,028	2,86,017	3,64,640	3,52,626	3,56,901	4,29,137	4,14,194	4,10,060
C.I.2	Time Deposits of Residents (C.I.2.1+C.I.2.2)	13,75,766	14,22,967	16,85,133	18,71,828	18,65,541	21,12,063	23,83,138	24,06,914
C.I.2.1	Short-term Time Deposits	6,19,095	6,40,335	7,58,310	8,42,322	8,39,493	9,50,429	10,72,412	10,83,111
C.I.2.1.1	Certificates of Deposits (CDs)	13,112	15,527	44,499	96,575	64,643	97,354	1,28,855	1,35,394
C.I.2.2	Long-term Time Deposits	7,56,671	7,82,632	9,26,823	10,29,505	10,26,047	11,61,635	13,10,726	13,23,803
C.II	**Call/Term Funding from Financial Institutions**	**69,523**	**71,920**	**83,144**	**84,726**	**85,348**	**85,836**	**86,143**	**90,304**
Sources									
S.I	**Domestic Credit (S.I.1+S.I.2)**	**19,87,406**	**20,41,434**	**23,64,241**	**25,60,689**	**25,57,365**	**28,62,491**	**31,44,079**	**31,62,832**
S.I.1	Credit to the Government	7,18,982	7,20,256	7,00,742	7,49,767	7,41,275	7,74,980	9,23,532	9,29,559
S.I.2	Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	12,68,425	13,21,178	16,63,499	18,10,922	18,16,089	20,87,511	22,20,547	22,33,273
S.I.2.1	Bank Credit	11,00,428	11,52,210	15,07,077	16,37,841	16,54,089	19,28,913	20,19,175	20,25,879
S.I.2.1.1	Non-food Credit	10,59,308	11,12,194	14,66,386	16,04,396	16,17,456	18,82,392	19,82,156	19,90,012
S.I.2.2	Net Credit to Primary Dealers	1,447	1,783	4,369	5,691	5,078	2,799	3064	897
S.I.2.3	Investments in Other Approved Securities	20,172	20,007	16,712	17,404	16,233	15,451	19,388	19,732
S.I.2.4	Other Investments (in non-SLR Securities)	1,46,377	1,47,178	1,35,340	1,49,985	1,40,689	1,40,347	1,78,920	1,86,765
S.II	**Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)**	**-75,980**	**-75,256**	**-45,616**	**-54,264**	**-52,443**	**-40,259**	**-62,826**	**-63,497**
S.II.1	Foreign Currency Assets	26,091	29,435	43,494	40,520	41,129	58,754	29,669	28,217
S.II.2	Non-resident Foreign Currency Repatriable Fixed Deposits	76,405	76,151	59,275	64,518	64,456	67,108	60,702	60,981
S.II.3	Overseas Foreign Currency Borrowings	25,666	28,540	29,834	30,266	29,115	31,905	31,793	30,733
S.III	**Net Bank Reserves (S.III.1+S.III.2-S.III.3)**	**96,527**	**1,03,037**	**1,38,619**	**1,37,650**	**1,36,785**	**1,90,086**	**2,34,383**	**2,41,636**
S.III.1	Balances with the RBI	88,105	92,983	1,27,061	1,25,080	1,22,259	1,80,222	2,18,684	2,24,932
S.III.2	Cash in Hand	8,472	10,149	13,046	13,120	15,727	16,108	15,698	16,704
S.III.3	Loans and Advances from the RBI	50	95	1,488	550	1,200	6,245	–	–
S.IV	**Capital Account**	**1,33,688**	**1,37,406**	**1,77,727**	**1,96,585**	**2,32,459**	**2,02,618**	**2,50,941**	**2,53,995**
S.V.	**Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)**	**1,80,949**	**1,50,904**	**1,46,600**	**1,38,310**	**1,01,458**	**1,82,663**	**1,81,219**	**1,79,699**
S.V.1	Other Demand & Time Liabilities (net of S.II.3)	1,67,094	1,58,477	1,58,946	1,78,504	1,84,283	2,10,099	2,51,214	2,30,620
S.V.2	Net Inter-Bank Liabilities (other than to PDs)	17,199	23,110	25,141	19,594	19,157	14,196	12,189	5,162

Note : Data are provisional.

No. 11B: Monetary Survey

(Rs. crore)

Item		Outstanding as on							
		Mar. 31 2005	Apr. 1 2005	Mar. 31 2006	Oct. 13 2006	Oct. 27 2006	Mar. 31 2007	Oct. 12 2007	Oct. 26 2007
1		2	3	4	5	6	7	8	9
Monetary Aggregates									
M_1 (C.I+C.II.1+C.III)		6,52,672	6,87,437	8,30,269	8,45,999	8,58,810	9,68,514	9,68,282	9,68,506
NM_2 (M_1+C.II.2.1)		13,37,113	13,92,634	16,55,646	17,56,031	17,65,576	19,87,668	21,08,974	21,20,009
NM_3 (NM_2+C.II.2.2+C.IV = S.I+S.II+S.III-S.IV-S.V)		**22,43,174**	**23,26,461**	**27,47,585**	**29,53,017**	**29,59,194**	**33,19,135**	**35,89,296**	**36,17,705**
Components									
C.I	**Currency with the Public**	**3,55,850**	**3,54,844**	**4,13,143**	**4,43,291**	**4,51,827**	**4,83,542**	**5,01,960**	**5,06,694**
C.II	**Aggregate Deposits of Residents** (C.II.1+C.II.2)	**18,11,323**	**18,93,377**	**22,44,430**	**24,19,561**	**24,16,484**	**27,42,261**	**29,96,224**	**30,15,880**
C.II.1	Demand Deposits	2,90,344	3,26,273	4,10,258	3,97,269	4,01,448	4,77,476	4,61,354	4,56,985
C.II.2	Time Deposits of Residents (C.II.2.1+C.II.2.2)	15,20,979	15,67,104	18,34,172	20,22,292	20,15,035	22,64,785	25,34,870	25,58,896
C.II.2.1	Short-term Time Deposits	6,84,441	7,05,197	8,25,378	9,10,031	9,06,766	10,19,153	11,40,692	11,51,503
C.II.2.1.1	Certificates of Deposits (CDs)	13,112	15,527	44,499	96,575	64,643	97,354	1,28,855	1,35,394
C.II.2.2	Long-term Time Deposits	8,36,538	8,61,907	10,08,795	11,12,261	11,08,269	12,45,632	13,94,179	14,07,393
C.III	**'Other' Deposits with RBI**	**6,478**	**6,319**	**6,869**	**5,440**	**5,535**	**7,496**	**4,968**	**4,826**
C.IV	**Call/Term Funding from Financial Institutions**	**69,523**	**71,920**	**83,144**	**84,726**	**85,348**	**85,836**	**86,143**	**90,304**
Sources									
S.I	**Domestic Credit (S.I.1+S.I.2)**	**21,83,803**	**22,27,602**	**25,94,668**	**27,89,754**	**27,94,323**	**30,93,257**	**32,38,184**	**32,56,685**
S.I.1	Net Bank Credit to the Government (S.I.1.1+S.I.1.2)	7,48,656	7,41,116	7,57,632	8,01,269	8,00,333	8,29,500	8,35,834	8,42,210
S.I.1.1	Net RBI credit to the Government	-17,975	-27,662	8,136	2,776	10,732	5,752	-1,36,711	-1,37,066
S.I.1.2	Credit to the Government by the Banking System	7,66,630	7,68,778	7,49,495	7,98,493	7,89,600	8,23,748	9,72,545	9,79,276
S.I.2	Bank Credit to the Commercial Sector (S.I.2.1+S.I.2.2)	14,35,148	14,86,486	18,37,037	19,88,485	19,93,991	22,63,757	24,02,350	24,14,475
S.I.2.1	RBI Credit to the Commercial Sector	5,317	5,303	4,385	4,272	4,334	1,537	1,383	1,383
S.I.2.2	Credit to the Commercial Sector by the Banking System	14,29,831	14,81,183	18,32,652	19,84,212	19,89,656	22,62,220	24,00,967	24,13,092
S.I.2.2.1	Other Investments (Non-SLR Securities)	1,55,339	1,56,141	1,44,303	1,58,947	1,49,652	1,49,310	1,87,882	1,95,728
S.II	**Government's Currency Liabilities to the Public**	**7,448**	**7,448**	**8,754**	**7,988**	**8,054**	**8,286**	**8,694**	**8,694**
S.III	**Net Foreign Exchange Assets of the Banking Sector (S.III.1+S.III.2)**	**5,36,810**	**5,36,182**	**6,27,368**	**6,93,446**	**7,00,632**	**8,25,894**	**9,45,276**	**9,71,800**
S.III.1	Net Foreign Exchange Assets of the RBI	6,12,790	6,11,438	6,72,983	7,47,709	7,53,075	8,66,153	10,08,102	10,35,297
S.III.2	Net Foreign Currency Assets of the Banking System	-75,980	-75,256	-45,616	-54,264	-52,443	-40,259	-62,826	-63,497
S.IV	**Capital Account**	**2,76,376**	**2,78,634**	**3,18,544**	**3,82,716**	**4,22,339**	**3,84,067**	**3,93,940**	**4,08,891**
S.V	**Other items (net)**	**2,08,511**	**1,66,137**	**1,64,661**	**1,55,455**	**1,21,475**	**2,24,234**	**2,08,917**	**2,10,583**

Notes : 1. Data are provisional.

2. Monetary Aggregates as at end-march incorporate data on i) scheduled commercial banks as on Last Reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.

No. 11C: Reserve Bank of India Survey

(Rs. crore)

Item		Outstanding as on						
		Mar. 31 2005	Mar. 31 2006	Oct. 13 2006	Oct. 27 2006	Mar. 31 2007	Oct. 12 2007	Oct. 26 2007
1		2	3	4	5	6	7	8
Components								
C.I	Currency in Circulation	3,68,661	4,30,676	4,59,295	4,70,944	5,04,225	5,20,561	5,26,960
C.II	Bankers' Deposits with the RBI	1,13,996	1,35,511	1,33,400	1,30,375	1,97,295	2,31,763	2,38,095
C.II.1	Scheduled Commercial Banks	1,06,659	1,27,061	1,25,080	1,22,259	1,86,322	2,18,684	2,24,932
C.III	'Other' Deposits with the RBI	6,478	6,869	5,440	5,535	7,496	4,968	4,826
C.IV	**Reserve Money (C.I+C.II+C.III = S.I + S.II + S.III - S.IV - S.V)**	**4,89,135**	**5,73,055**	**5,98,134**	**6,06,854**	**7,09,016**	**7,57,292**	**7,69,881**
Sources								
S.I	**RBI's Domestic Credit (S.I.1+S.I.2+S.I.3)**	**-11,327**	**15,319**	**8,821**	**17,539**	**14,925**	**-1,35,328**	**-1,35,683**
S.I.1	Net RBI credit to the Government (S.I.1.1+S.I.1.2)	-17,975	8,136	2,776	10,732	5,752	-1,36,711	-1,37,066
S.I.1.1	Net RBI credit to the Central Government (S.I.1.1.1+S.I.1.1.2+S.I.1.1.3+S.I.1.1.4-S.I.1.1.5)	-23,258	5,160	2,567	10,617	2,136	-1,36,812	-1,37,368
S.I.1.1.1	Loans and Advances to the Central Government	–	–	–	–	–	–	–
S.I.1.1.2	Investments in Treasury Bills	–	–	–	–	–	–	–
S.I.1.1.3	Investments in dated Government Securities	56,540	70,409	50,326	56,462	97,172	41,664	60,654
S.I.1.1.3.1	Central Government Securities	55,022	69,362	49,280	55,415	96,126	40,618	59,608
S.I.1.1.4	Rupee Coins	147	154	34	215	12	126	90
S.I.1.1.5	Deposits of the Central Government	79,945	65,404	47,794	46,059	95,048	1,78,602	1,98,112
S.I.1.2	Net RBI credit to State Governments	5,283	2,977	209	115	3,616	101	302
S.I.2	RBI's Claims on Banks	1,331	2,797	1,773	2,473	7,635	–	–
S.I.2.1	Loans and Advances to Scheduled Commercial Banks	95	1,488	550	1,200	6,310	–	–
S.I.3	RBI's Credit to Commercial Sector	5,317	4,385	4,272	4,334	1,537	1,383	1,383
S.I.3.1	Loans and Advances to Primary Dealers	–	–	88	–	153	–	–
S.I.3.2	Loans and Advances to NABARD	3,927	2,998	2,888	2,950	–	–	–
S.II	**Government's Currency Liabilities to the Public**	**7,448**	**8,754**	**7,988**	**8,054**	**8,286**	**8,694**	**8,694**
S.III	**Net Foreign Exchange Assets of the RBI**	**6,12,790**	**6,72,983**	**7,47,709**	**7,53,075**	**8,66,153**	**10,08,102**	**10,35,297**
S.III.1	Gold	19,686	25,674	28,506	28,506	29,573	29,275	29,275
S.III.2	Foreign Currency Assets	5,93,121	6,47,327	7,19,221	7,24,586	8,36,597	9,78,844	10,06,040
S.IV	**Capital Account**	**1,18,517**	**1,16,647**	**1,61,960**	**1,65,709**	**1,57,279**	**1,18,829**	**1,30,725**
S.V	**Other Items (net)**	**1,259**	**7,354**	**4,424**	**6,105**	**23,069**	**5,347**	**7,702**

Note : Data are provisional.

No. 11D: Liquidity Aggregates (Outstanding Amounts)

(Rs. crore)

Month/Year	NM_3	Postal Deposits	L_1	Liabilities of Financial Institutions				L_2	Public Deposits with NBFCs	L_3
				Term Money Borrowings	CDs	Term Deposits	Total			
1	2	3	**4=(2+3)**	5	6	7	8=(5+6+7)	**9=(4+8)**	10	**11=(9+10)**
2005-06										
April	23,29,999	89,718	**24,19,717**	2,474	30	245	2,749	**24,22,466**		
May	23,40,363	91,306	**24,31,669**	3,027	31	245	3,303	**24,34,972**		
June	23,51,794	92,870	**24,44,664**	2,954	30	242	3,226	**24,47,890**	20,797	**24,68,687**
July	23,67,507	94,376	**24,61,883**	2,978	31	243	3,252	**24,65,135**		
August	23,95,530	95,885	**24,91,415**	2,991	31	246	3,268	**24,94,683**		
September	24,80,351	97,248	**25,77,599**	2,655	31	235	2,921	**25,80,520**	21,694	**26,02,214**
October	24,87,997	98,418	**25,86,415**	2,656	31	245	2,932	**25,89,347**		
November	25,00,697	99,771	**26,00,468**	2,656	31	245	2,932	**26,03,400**		
December	25,26,094	1,01,199	**26,27,293**	2,656	31	245	2,932	**26,30,225**	21,694	**26,51,919**
January	25,54,824	1,01,832	**26,56,656**	2,656	31	245	2,932	**26,59,588**		
February	25,96,656	1,02,121	**26,98,777**	2,656	31	245	2,932	**27,01,709**		
March	27,47,585	1,03,918	**28,51,503**	2,656	31	245	2,932	**28,54,435**	23,841	**28,78,276**
2006-07										
April	27,84,883	1,04,700	**28,89,583**	2,656	31	245	2,932	**28,92,515**		
May	27,88,335	1,05,852	**28,94,187**	2,656	31	245	2,932	**28,97,119**		
June	28,01,951	1,07,171	**29,09,122**	2,656	31	245	2,932	**29,12,054**	23,841	**29,35,895**
July	28,46,735	1,08,492	**29,55,227**	2,656	31	245	2,932	**29,58,159**		
August	28,90,723	1,09,931	**30,00,654**	2,656	31	245	2,932	**30,03,586**		
September	29,65,093	1,11,023	**30,76,116**	2,656	31	245	2,932	**30,79,048**	25,578	**31,04,625**
October	29,59,194	1,11,997	**30,71,191**	2,656	31	245	2,932	**30,74,123**		
November	30,03,278	1,13,240	**31,16,518**	2,656	31	245	2,932	**31,19,450**		
December	30,21,785	1,14,365	**31,36,150**	2,656	31	245	2,932	**31,39,082**	26,064	**31,65,147**
January	30,84,617	1,14,759	**31,99,376**	2,656	31	245	2,932	**32,02,308**		
February	31,52,850	1,14,804	**32,67,654**	2,656	31	245	2,932	**32,70,586**		
March	33,19,135	1,15,549	**34,34,684**	2,656	31	245	2,932	**34,37,616**	26,064	**34,63,681**
2007- 08										
April	33,25,589	1,15,589	**34,41,178**	2,656	31	245	2,932	**34,44,110**		
May	33,40,871	1,16,135	**34,57,006**	2,656	31	245	2,932	**34,59,938**		
June	33,92,739	1,16,573	**35,09,312**	2,656	31	245	2,932	**35,12,244**	26,064	**35,38,309**
July	34,59,805	1,16,874	**35,76,679**	2,656	31	245	2,932	**35,79,611**		
August	34,89,022	1,16,886	**36,05,908**	2,656	31	245	2,932	**36,08,840**		
September	35,82,989	1,16,882	**36,99,871**	2,656	31	245	2,932	**37,02,803**	26,064	**37,28,867**
October	36,17,705	1,16,886	**37,34,591**	2,656	31	245	2,932	**37,37,523**		

CDs: Certificates of Deposits; L_1, L_2 and L_3: Liquidity Aggregates; NBFCs: Non-Banking Financial Companies.

Notes:

1. Postal Deposits comprise post office savings bank deposits, post office time deposits, post office recurring deposits, other deposits and post office cumulative time deposits.
2. Financial Institutions (FIs), here, comprise IFCI, EXIM Bank, IIBI, SIDBI, NABARD, NHB, TFCI and IDFC. Since October 2004, data on FIs do not include that of IDBI reflecting its conversion into a banking entity.
3. Since July 2001, the term money borrowings of the FIs comprise borrowings from corporates and others.
4. Since August 2002, Term Deposits include CPs and Others.
5. Estimates of public deposits are generated on the basis of returns received from all NBFCs with public deposits of Rs. 20 crore and more as had been recommended by the Working Group.
6. While L_1 and L_2 are compiled on a monthly basis, L_3 is compiled on a quarterly basis.
7. Data are provisional. Wherever data are not available, the estimates for the last available month have been repeated.

No. 12: Reserve Money and its Components

(Rs. crore)

Outstandings as on March 31/each Friday/ last reporting Friday of the month	Currency in circulation		'Other' deposits with RBI	Bankers' deposits with RBI	**Reserve Money (2+4+5)**
	Total	o / w cash with banks			
1	2	3	4	5	6
2004-05	3,68,661	12,798	6,478	1,13,996	**4,89,135**
2005-06	4,30,676	17,557	6,869	1,35,511	**5,73,055**
2006-07	5,04,225	20,754	7,496	1,97,295	**7,09,016**
October 6, 2006	4,55,376	–	5,694	1,28,351	**5,89,421**
October 13, 2006	4,59,295	16,098	5,440	1,33,400	**5,98,134**
October 20, 2006	4,67,995	–	5,434	1,42,558	**6,15,988**
October 27, 2006	4,70,944	19,279	5,535	1,30,375	**6,06,854**
June 2007	5,21,168	20,171	7,061	1,92,496	**7,20,725**
July 2007	5,14,723	19,002	12,345	2,24,980	**7,52,048**
August 2007	5,06,767	19,851	5,028	2,34,534	**7,46,328**
September 2007	5,07,681	20,621	5,565	2,67,959	**7,81,205**
October 5, 2007	5,12,557	–	5,250	2,23,688	**7,41,496**
October 12, 2007	5,20,561	18,626	4,968	2,31,763	**7,57,292**
October 19, 2007	5,26,814	–	4,984	2,34,279	**7,66,077**
October 26, 2007	5,26,960	20,421	4,826	2,38,095	**7,69,881**

See 'Notes on Tables'.

No. 13: Sources of Reserve Money

(Rs. crore)

Outstanding as on March 31/each Friday/ last reporting Friday of the month	Reserve Bank's claims on				Net foreign exchange assets of RBI (3)	Government's currency liabilities to the public	Net non-monetary liabilities of RBI (3)	**Reserve Money (2+3+4+5 +6+7-8)**
	Government (net)(1)	Commercial & co-operative banks	National Bank for Agriculture and Rural Development	Commercial sector(2)				
1	2	3	4	5	6	7	8	9
2004-05	-17,975	1,331	3,927	1,390	6,12,790	7,448	1,19,776	**4,89,135**
2005-06	8,136	2,797	2,998	1,387	6,72,983	8,754	1,24,001	**5,73,055**
2006-07	5,752	7,635	–	1,537	8,66,153	8,286	1,80,348	**7,09,016**
October 6, 2006	-5,959	1,794	2,940	1,384	7,50,540	7,988	1,69,267	**5,89,421**
October 13, 2006	2,776	1,773	2,888	1,384	7,47,709	7,988	1,66,385	**5,98,134**
October 20, 2006	20,124	2,568	2,853	1,384	7,50,294	7,988	1,69,224	**6,15,988**
October 27, 2006	10,732	2,473	2,950	1,384	7,53,075	8,054	1,71,814	**6,06,854**
June 2007	-19,731	1,337	–	1,386	8,63,408	8,530	1,34,206	**7,20,725**
July 2007	21,884	11	–	1,383	8,93,888	8,576	1,73,693	**7,52,048**
August 2007	-62,939	92	–	1,383	9,35,470	8,694	1,36,372	**7,46,328**
September 2007	-74,426	83	–	1,383	9,82,839	8,694	1,37,368	**7,81,205**
October 5, 2007	-1,34,974	–	–	1,383	9,90,935	8,694	1,24,542	**7,41,496**
October 12, 2007	-1,36,711	–	–	1,383	10,08,102	8,694	1,24,176	**7,57,292**
October 19, 2007	-1,41,002	19	–	1,383	10,37,233	8,694	1,40,250	**7,66,077**
October 26, 2007	-1,37,066	–	–	1,383	10,35,297	8,694	1,38,427	**7,69,881**

See 'Notes on Tables'.

No. 14: Daily Call Money Rates

As on	Range of Rates		Weighted Average Rates	
	Borrowings	Lendings	Borrowings	Lendings
1	2	3	4	5
October 1, 2007	5.00 – 6.20	5.00 – 6.20	6.09	6.09
October 3, 2007	5.00 – 6.15	5.00 – 6.15	6.04	6.04
October 4, 2007	4.00 – 6.55	4.00 – 6.55	6.01	6.01
October 5, 2007	4.00 – 6.30	4.00 – 6.30	6.00	6.00
October 6, 2007	5.25 – 6.15	5.25 – 6.15	6.06	6.06
October 8, 2007	4.00 – 6.10	4.00 – 6.10	6.01	6.01
October 9, 2007	4.00 – 6.20	4.00 – 6.20	6.01	6.01
October 10, 2007	4.00 – 6.20	4.00 – 6.20	6.03	6.03
October 11, 2007	4.50 – 6.65	4.50 – 6.65	6.02	6.02
October 12, 2007	3.50 – 6.41	3.50 – 6.41	5.72	5.72
October 13, 2007	3.00 – 6.60	3.00 – 6.60	6.27	6.27
October 15, 2007	3.50 – 6.35	3.50 – 6.35	6.04	6.04
October 16, 2007	3.50 – 6.64	3.50 – 6.64	6.05	6.05
October 17, 2007	3.75 – 6.20	3.75 – 6.20	6.05	6.05
October 18, 2007	3.75 – 6.10	3.75 – 6.10	6.04	6.04
October 19, 2007	3.75 – 6.25	3.75 – 6.25	6.03	6.03
October 20, 2007	5.00 – 6.05	5.00 – 6.05	5.89	5.89
October 22, 2007	3.75 – 6.20	3.75 – 6.20	6.04	6.04
October 23, 2007	3.75 – 6.20	3.75 – 6.20	6.03	6.03
October 24, 2007	4.00 – 6.10	4.00 – 6.10	6.02	6.02
October 25, 2007	4.00 – 6.10	4.00 – 6.10	6.02	6.02
October 26, 2007	4.00 – 6.15	4.00 – 6.15	6.01	6.01
October 27, 2007	5.25 – 6.05	5.25 – 6.05	6.02	6.02
October 29, 2007	4.00 – 6.30	4.00 – 6.30	6.05	6.05
October 30, 2007	4.00 – 6.15	4.00 – 6.15	6.06	6.06
October 31, 2007	4.05 – 6.20	4.05 – 6.20	6.10	6.10
November 1, 2007	4.50 – 6.15	4.50 – 6.15	6.08	6.08
November 2, 2007	5.00 – 6.20	5.00 – 6.20	6.08	6.08
November 3, 2007	5.50 – 6.05	5.50 – 6.05	5.67	5.67
November 5, 2007	5.00 – 6.10	5.00 – 6.10	6.06	6.06
November 6, 2007	5.00 – 6.70	5.00 – 6.70	6.11	6.11
November 7, 2007	5.10 – 6.50	5.10 – 6.50	6.12	6.12
November 8, 2007	4.00 – 8.00	4.00 – 8.00	7.04	7.04
November 9, 2007	4.00 – 8.00	4.00 – 8.00	7.04	7.04
November 10, 2007	6.00 – 7.25	6.00 – 7.25	6.47	6.47
November 12, 2007	5.00 – 9.75	5.00 – 9.75	7.75	7.75
November 13, 2007	6.10 – 8.50	6.10 – 8.50	7.90	7.90
November 14, 2007	6.00 – 8.25	6.00 – 8.25	7.68	7.68
November 15, 2007	6.25 – 8.10	6.25 – 8.10	7.85	7.85

No. 15: Average Daily Turnover in Call Money Market

(Rs. crore)

Fortnight ended			Average Daily Call Money Turnover				
			Banks		Primary Dealers		**Total**
			Borrowings	Lendings	Borrowings	Lendings	
1			2	3	4	5	6
September	1,	2006	7,831	10,035	2,206	2	**20,075**
September	15,	2006	9,536	12,051	2,524	9	**24,120**
September	29,	2006	10,084	12,053	2,253	284	**24,674**
October	13,	2006	9,366	11,382	2,078	63	**22,889**
October	27,	2006	11,829	13,617	2,120	332	**27,898**
November	10,	2006	12,572	14,237	1,962	298	**29,069**
November	24,	2006	8,797	10,752	2,178	223	**21,951**
December	8,	2006	10,824	12,585	2,182	420	**26,011**
December	22,	2006	11,212	12,931	1,860	141	**26,144**
January	5,	2007	10,182	11,194	1,177	165	**22,718**
January	19,	2007	9,271	10,727	1,618	162	**21,779**
February	2,	2007	9,956	11,393	1,514	77	**22,940**
February	16,	2007	10,139	11,789	1,730	79	**23,737**
March	2,	2007	9,081	10,706	1,675	49	**21,511**
March	16,	2007	9,790	11,341	1,646	95	**22,873**
March	30,	2007	10,325	11,304	1,131	152	**22,912**
April	13,	2007	14,046	16,030	2,083	100	**32,259**
April	27,	2007	14,352	15,349	1,147	150	**30,997**
May	11,	2007	10,236	10,943	756	49	**21,985**
May	25,	2007	9,522	10,064	624	82	**20,292**
June	8,	2007	5,836	6,399	612	49	**12,896**
June	22,	2007	8,914	9,340	433	6	**18,693**
July	6,	2007	8,735	9,217	494	11	**18,457**
July	20,	2007	9,043	9,589	555	9	**19,195**
August	3,	2007	7,089	7,723	661	27	**15,501**
August	17,	2007	12,047	12,412	492	126	**25,077**
August	31,	2007	10,757	11,286	559	30	**22,633**
September	14,	2007	9,598	10,435	854	17	**20,904**
September	28,	2007	10,594	11,732	1,175	37	**23,539**
October	15,	2007	7,804	8,648	867	22	**17,341**
October	26,	2007	8,618	9,603	989	5	**19,214**
November	9,	2007	9,535	10,929	1,396	2	**21,862**

Notes : 1. Data are provisional.
2. Since August 6, 2005 eligible participants are Banks and Primary Dealers.

No. 16: Issue of Certificates of Deposit by Scheduled Commercial Banks

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @	Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @	Fortnight ended		Total Amount Outstanding	Range of Discount Rate (per cent) @
1		2	3	1		2	3	1		2	3
2005-06				**2006-07**				**2007-08**			
April	1	14,975	4.75 - 6.60	April	14	38,568	6.00 - 8.90	April	13	93,808	9.50 - 11.50
	15	14,106	4.10 - 6.60		28	44,059	6.00 - 8.45		27	95,980	9.40 - 11.50
	29	16,602	4.24 - 6.50	May	12	48,515	6.50 - 7.90	May	11	97,292	10.05 - 11.50
May	13	17,420	4.29 - 6.75		26	50,228	6.37 - 8.67		25	99,715	7.00 - 10.82
	27	17,689	4.29 - 6.75	June	9	53,863	5.75 - 7.96	June	8	99,287	6.13 - 10.95
June	10	18,503	5.47 - 7.00		23	56,390	5.50 - 8.16		22	98,337	7.00 - 10.20
	24	19,270	5.58 - 7.50	July	7	57,256	6.00 - 8.70	July	6	1,02,992	6.25 - 9.69
July	8	20,509	4.50 - 7.00		21	59,167	4.35 - 8.21		20	1,05,317	5.50 - 10.82
	22	20,768	4.25 - 7.00	August	4	64,748	6.00 - 8.62	August	3	1,03,750	6.05 - 10.75
August	5	21,062	4.75 - 7.00		18	65,621	4.75 - 8.50		17	1,06,350	6.87 - 8.91
	19	23,568	4.66 - 7.00	September	1	66,340	4.60 - 8.50		31	1,09,224	6.87 - 10.75
September	2	21,935	4.66 - 7.00		15	63,864	7.13 - 8.50	September	14	1,13,892	6.87 - 10.00
	16	25,604	4.66 - 7.00		29	65,274	7.25 - 8.50		28	1,18,481	6.87 - 10.00
	30	27,641	4.39 - 7.00	October	13	64,482	4.75 - 8.50	October	12	1,22,142	6.87 - 10.00
October	14	27,626	4.66 - 7.75		27	65,764	6.00 - 8.50				
	28	29,193	5.25 - 7.75	November	10	67,694	6.75 - 8.50				
November	11	29,345	5.25 - 6.50		24	68,911	7.50 - 8.33				
	25	27,457	5.25 - 7.50	December	8	69,664	6.00 - 8.36				
December	9	30,445	5.35 - 7.75		22	68,619	7.25 - 8.90				
	23	32,806	5.50 - 7.25	January	5	68,928	8.26 - 9.25				
January	6	34,432	4.40 - 7.75		19	70,149	8.00 - 9.55				
	20	34,521	5.40 - 7.75	February	2	70,727	8.41 - 9.80				
February	3	33,986	4.35 - 7.90		16	72,795	9.40 - 10.83				
	17	34,487	4.35 - 8.16	March	2	77,971	9.90 - 11.30				
March	17	36,931	4.35 - 8.81		16	92,468	10.30 - 11.25				
	31	43,568	6.50 - 8.94		30	93,272	10.23 - 11.90				

@ : Effective discount rate range per annum.

No. 17: Issue of Commercial Paper* By Companies

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @
1		2	3	1		2	3	1		2	3
2005-06				**2006-07**				**2007-08**			
April	15	15,213.90	5.55 - 6.33	April	15	12,968.25	6.77 - 8.95	April	15	19,012.70	10.00 - 14.00
	30	15,597.90	5.50 - 6.65		30	16,550.15	6.35 - 9.25		30	18,759.00	9.65 - 11.75
May	15	16,077.90	5.38 - 6.65	May	15	17,264.35	6.32 - 7.95	May	15	19,288.00	9.25.11.45
	31	17,181.90	5.40 - 6.65		31	17,066.51	6.40 - 9.25		31	22,024.00	8.71 - 12.00
June	15	17,521.90	5.42 - 6.65	June	15	18,932.51	6.44 - 9.25	June	15	25,499.75	7.00 - 10.80
	30	17,796.90	5.45 - 6.51		30	19,649.51	6.59 - 9.25		30	26,256.25	7.35 - 12.00
July	15	18,156.51	5.57 - 7.50	July	15	21,652.30	6.25 - 8.30	July	15	28,129.25	4.00 - 11.50
	31	18,349.11	5.25 - 7.50		31	21,110.30	6.50 - 8.25		31	30,631.25	7.05-11.50
August	15	201,116.71	5.50 - 7.50	August	15	23,084.30	6.25 - 8.10	August	15	31,784.25	7.59-13.50
	31	19,507.71	5.45 - 7.50		31	23,299.30	6.60 - 9.00		31	31,527.00	8.30-10.25
September	15	20,018.71	5.50 - 6.56	September	15	24,011.30	6.40 - 8.17	September	15	33,227.00	6.35-10.90
	30	19,724.71	5.45 - 6.65		30	24,444.30	7.10 - 9.25		30	33,614.05	7.70-12.00
October	15	18,701.71	5.69 - 7.50	October	15	23,521.00	7.20 - 8.65	October	15	38,494.55	7.00-13.00
	31	18,725.51	5.63 - 7.50		31	23,171.00	7.00 - 8.75		31	42,182.55	6.70-12.00
November	15	17,902.51	5.75 - 6.60	November	15	23,450.20	7.25 - 9.25				
	30	18,013.35	5.90 - 6.79		30	24,238.20	7.50 - 9.50				
December	15	17,431.35	6.21 - 7.75	December	15	23,827.20	7.50 - 8.75				
	31	17,234.34	6.20 - 7.75		31	23,536.20	7.74 - 10.00				
January	15	17,415.15	6.50 - 7.75	January	15	23,758.20	8.30 - 9.58				
	31	16,431.35	6.65 - 8.50		31	24,398.20	8.25 - 10.50				
February	15	16,203.35	7.03 - 8.50	February	15	23,999.20	8.00 - 11.25				
	28	15,876.35	7.22 - 8.75		28	21,167.20	8.70 - 12.00				
March	15	12,877.35	7.75 - 8.95	March	15	19,102.20	7.50 - 13.35				
	31	12,718.25	6.69 - 9.25		31	17,688.20	10.25 - 13.00				

* : Issued at face value by companies.
@ : Typical effective discount rate range per annum on issues during the fortnight.

Government Accounts

No. 18: Union Government Accounts at a Glance

(Amount in Rs. crore)

Item	Financial Year	April - October			
	2007-08 (Budget Estimates)	2006-07 (Actuals)	2007-08 (Actuals)	Percentage to Budget Estimates	
				2006-07	2007-08
1	2	3	4	5	6
1. Revenue Receipts	**4,86,422**	**1,96,474**	**2,46,546**	**48.7**	**50.7**
2. Tax Revenue (Net)	4,03,872	1,55,660	1,95,339	47.6	48.4
3. Non-Tax Revenue	82,550	40,814	51,207	53.5	62.0
4. Capital Receipts	**1,94,099**	**92,795**	**1,22,356**	**57.8**	**63.0**
5. Recovery of Loans	1,500	5,695	2,400	71.2	160.0
6. Other Receipts	41,651	–	37,700	–	90.5
7. Borrowings and Other Liabilities	1,50,948	87,100	82,256	58.6	54.5
8. Total Receipts (1+4)	**6,80,521**	**2,89,269**	**3,68,902**	**51.3**	**54.2**
9. Non-Plan Expenditure	**4,75,421**	**2,14,017**	**2,69,549**	**54.7**	**56.7**
10. On Revenue Account	3,83,546	2,00,666	2,23,797	58.3	58.3
of which :					
(i) Interest Payments	1,58,995	74,150	89,983	53.0	56.6
11. On Capital Account	91,875	13,351	45,752	28.5	49.8
12. Plan Expenditure	**2,05,100**	**75,252**	**99,353**	**43.6**	**48.4**
13. On Revenue Account	1,74,354	63,107	80,311	43.9	46.1
14. On Capital Account	30,746	12,145	19,042	41.9	61.9
15. Total Expenditure (9+12)	**6,80,521**	**2,89,269**	**3,68,902**	**51.3**	**54.2**
16. Revenue Expenditure (10+13)	5,57,900	2,63,773	3,04,108	54.0	54.5
17. Capital Expenditure (11+14)	1,22,621	25,496	64,794	33.6	52.8
18. Revenue Deficit (16-1)	**71,478**	**67,299**	**57,562**	**79.4**	**80.5**
19. Fiscal Deficit {15-(1+5+6)}	**1,50,948**	**87,100**	**82,256**	**58.6**	**54.5**
20. Gross Primary Deficit [19-10(i)]	**-8,047**	**12,950**	**-7,727**	**146.1**	**96.0**

Notes : 1. Financial year runs from “April to March”.
2. Actuals are unaudited figures.

Source : Controller General of Accounts, Ministry of Finance, Government of India.

Government Securities Market

No. 19: Government of India : 91 Day Treasury Bills (Outstanding at Face Value)

(Rs. crore)

March 31/ Last Friday/ Friday	Reserve Bank of India			Banks		State Governments		Others		Foreign Central Banks	
	Tap*		Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction
	Re-discounted	Ad hocs									
1	2	3	4	5	6	7	8	9	10	11	12
Mar. 31, 2000	–	–	288	–	557	–	–	–	455	–	220
Mar. 31, 2001	–	–	67	–	868	–	–	–	153	–	630
Mar. 31, 2002	–	–	154	–	2,292	–	450	–	360	–	1,301
Mar. 31, 2003	–	–	–	–	6,427	–	800	–	780	–	700
Mar. 31, 2004	–	–	–	–	3,948	–	600	–	1,452	–	39
Mar. 31, 2005	–	–	–	–	21,176	–	1,755	–	4,829	–	32
Mar. 31, 2006	–	–	–	–	5,943	–	9,762	–	576	–	37
Mar. 31, 2007	–	–	–	–	12,684	–	24,250	–	6,743	–	5
Jul. 2006	–	–	–	–	14,092	–	9,619	–	5,238	–	19
Aug. 2006	–	–	–	–	16,019	–	9,727	–	4,800	–	10
Sep. 2006	–	–	–	–	18,637	–	9,385	–	4,029	–	10
Oct. 2006	–	–	–	–	16,306	–	8,485	–	4,955	–	10
Nov. 2006	–	–	–	–	13,887	–	13,035	–	3,933	–	10
Dec. 2006	–	–	–	–	12,521	–	15,543	–	2,538	–	5
Jan. 2007	–	–	–	–	12,734	–	15,343	–	2,855	–	5
Feb. 2007	–	–	–	–	12,810	–	12,793	–	5,762	–	5
Mar. 2007	–	–	–	–	12,684	–	24,250	–	6,743	–	5
Apr. 2007	–	–	–	–	16,126	–	24,050	–	6,927	–	5
May 2007	–	–	–	–	14,956	–	22,303	–	9,075	–	1
Jun. 2007	–	–	–	–	26,331	–	27,246	–	12,378	–	1
Jul. 2007	–	–	–	–	25,736	–	32,296	–	12,764	–	1
Aug. 2007	–	–	–	–	27,491	–	33,596	–	12,509	–	–
Sep. 2007	–	–	–	–	22,194	–	27,953	–	9,807	–	–
Week Ended											
Oct. 5, 2007	–	–	–	–	23,060	–	24,853	–	11,940	–	–
Oct. 12, 2007	–	–	–	–	22,223	–	25,803	–	14,277	–	–
Oct. 19, 2007	–	–	–	–	23,662	–	26,403	–	14,338	–	–
Oct. 26, 2007	–	–	–	–	23,927	–	26,503	–	15,573	–	–

* : The rate of discount is 4.60 per cent per annum.

No. 21: Auctions of 91 Day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/SDs*	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2006-07													
Nov. 1	Nov. 3	2,000	40	2,567.40	2,000.00	7	602.40	2,000.00	–	2,602.40	98.37	6.6462	30,359.01
Nov. 8	Nov. 10	2,000	44	3,196.74	200.00	16	988.74	200.00	–	1,188.74	98.37	6.6462	28,847.75
Nov. 15	Nov. 17	2,000	39	1,670.52	2,305.00	11	620.52	2,305.00	–	2,925.52	98.37	6.6462	28,263.27
Nov. 22	Nov. 24	2,000	43	3,502.10	2,750.00	27	2,000.00	2,750.00	–	4,750.00	98.37	6.6462	30,513.27
Nov. 29	Dec. 1	2,000	42	2,361.47	563.00	32	2,000.00	563.00	–	2,563.00	98.36	6.6877	30,976.27
Dec. 6	Dec. 8	2,000	48	4,216.25	1,500.00	18	2,000.00	1,500.00	–	3,500.00	98.37	6.6462	32,476.27
Dec. 13	Dec. 15	2,000	41	1,254.14	830.00	34	1,059.14	830.00	–	1,889.14	98.26	7.1027	31,200.41
Dec. 20	Dec. 22	2,000	50	2,426.61	500.00	17	756.61	500.00	–	1,256.61	98.26	7.1027	30,976.91
Dec. 27	Dec. 29	2,000	34	1,650.25	2,200.00	12	630.25	2,200.00	–	2,830.25	98.24	7.1858	30,607.16
Jan. 3	Jan. 5	2,000	52	2,971.91	–	36	2,000.00	–	–	2,000.00	98.25	7.1443	28,507.16
Jan. 10	Jan. 12	2,000	49	2,855.22	2,000.00	37	2,000.00	2,000.00	–	4,000.00	98.25	7.1443	31,437.16
Jan. 17	Jan. 19	2,000	40	1,920.15	500.00	17	931.15	500.00	–	1,431.15	98.25	7.1443	31,587.81
Jan. 24,	Jan. 27	2,000	33	900.41	100.00	23	520.41	100.00	–	620.41	98.19	7.3937	31,557.22
Jan. 31	Feb. 2	2,000	41	1,514.57	–	17	699.57	–	–	699.57	98.15	7.5602	29,654.39
Feb. 7	Feb. 9	2,000	89	4,361.96	2,000.00	34	2,000.00	2,000.00	–	4,000.00	98.16	7.5186	32,465.65
Feb. 14	Feb. 17	2,000	71	2,322.77	705.44	63	2,000.00	705.44	–	2,705.44	98.02	8.1022	32,245.57
Feb. 21	Feb. 23	2,000	132	7,019.30	1,900.00	37	2,000.00	1,900.00	–	3,900.00	98.10	7.7685	31,395.57
Feb. 28	Mar. 2	2,000	106	6,127.05	4,250.00	34	2,000.00	4,250.00	–	6,250.00	98.17	7.4769	35,082.57
Mar. 7	Mar. 9	2,000	78	2,843.55	–	65	2,000.00	–	–	2,000.00	98.17	7.4769	33,582.57
Mar. 14	Mar. 16	2,000	102	4,035.44	5,000.50	37	2,000.00	5,000.00	–	7,000.50	98.17	7.4769	38,693.93
Mar. 21	Mar, 23	2,000	121	5,035.00	1,800.00	21	821.50	1,800.00	–	2,621.50	98.05	7.9770	40,058.82
Mar. 28	Mar. 30	2,000	103	4,705.40	6,000.00	55	2,000.00	6,000.00	–	8,000.00	98.05	7.9770	45,228.57
2007-08													
Apr. 4	Apr. 7	2,000	111	8,612.05	1,200.00	15	2,000.00	1,200.00	–	3,200.00	98.06	7.9353	46,428.57
Apr. 11	Apr. 13	2,000	138	7,215.42	500.00	19	2,000.00	500.00	–	2,500.00	98.20	7.3521	44,928.57
Apr. 18	Apr. 20	2,000	71	2,714.35	1,000.00	31	709.35	1,000.00	–	1,709.35	98.17	7.4769	45,206.77
Apr. 25	Apr. 27	2,000	96	4,416.73	100.00	36	2,000.00	100.00	–	2,100.00	98.20	7.3521	46,686.36
May 3	May 4	2,000	54	2,501.03	–	45	2,000.00	–	–	2,000.00	98.12	7.6851	47,986.79
May 9	May 11	2,000	75	4,794.50	–	47	2,000.00	–	–	2,000.00	98.14	7.6018	45,986.79
May 16	May 18	2,000	74	4,353.66	1,403.00	39	2,000.00	1,403.00	–	3,403.00	98.13	7.6435	46,684.35
May 23	May 25	2,000	71	5,324.50	1,551.00	50	2,000.00	1,551.00	–	3,551.00	98.13	7.6435	46,335.35

No. 21: Auctions of 91 Day Government of India Treasury Bills *(Concld.)*

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/ SDs*	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007-08													
May 30	June 1	2,000	103	6,333.30	1,350.00	60	2,000.00	1,350.00	–	3,350.00	98.19	7.3937	43,435.35
June 6	June 8	3,500	148	9,986.80	5,993.08	34	3,500.00	5,993.08	–	9,493.08	98.23	7.2274	50,928.43
June 11	June 13	3,000	119	6,492.00	–	88	3,000.00	–	–	3,000.00	98.11	7.7268	53,928.43
June 13	June 15	3,500	119	9,997.75	1,600.00	47	3,500.00	1,600.00	–	5,100.00	98.10	7.7685	52,027.93
June 20	June 22	3,500	170	13,942.63	11,450.00	29	3,500.00	11,450.00	–	14,950.00	98.24	7.1858	64,356.43
June 25	June 27	5,000	190	18,850.00	–	32	5,000.00	–	–	5,000.00	98.25	7.1443	69,356.43
June 27	June 29	3,500	143	11,682.00	1,100.00	52	3,500.00	1,100.00	–	4,600.00	98.19	7.3937	65,956.43
July 4	July 6	500	106	6,246.00	7,100.00	22	500.00	7,100.00	–	7,600.00	98.48	6.1908	70,356.43
July 11	July 13	2,000	133	7,253.00	250.00	36	2,000.00	250.00	–	2,250.00	98.74	5.1183	70,106.43
July 18	July 20	2,000	101	9,177.47	500.00	15	2,000.00	500.00	–	2,500.00	98.89	4.5022	70,897.08
July 25	July 27	2,000	78	6,468.08	–	32	2,000.00	–	–	2,000.00	98.90	4.4612	70,797.08
Aug. 1	Aug. 3	2,000	97	4,932.24	200.00	56	2,000	200.00	–	2,200.00	98.41	6.4805	70,997.08
Aug. 8	Aug. 10	2,000	86	4,295.00	2,500.00	29	2,000	2,500.00	–	4,500.00	98.39	6.5634	73,497.08
Aug. 14	Aug. 17	2,000	94	3,450.47	303.00	61	2,000	303.00	–	2,303.00	98.35	6.7292	72,397.08
Aug. 22	Aug. 24	2,000	82	3,990.50	2,050.00	14	2,000	2,050.00	–	4,050.00	98.33	6.8121	72,896.08
Aug. 29	Aug. 31	3,500	104	7,552.50	550.00	26	3,500	550.00	–	4,050.00	98.26	7.1027	73,596.08
Sep. 5	Sep. 7	3,500	103	7,985.00	2,100.00	52	3,500.00	2,100.00	–	5,600.00	98.27	7.0612	69,703.00
Sep. 12	Sep. 14	3,500	110	8,870.92	4,300.00	53	3,500.00	4,300.00	–	7,800.00	98.26	7.1027	69,403.00
Sep. 19	Sep. 21	3,500	88	7,838.25	7,100.00	33	3,500.00	7,100.00	–	10,600.00	98.29	6.9781	65,053.00
Sep. 26	Sep. 28	3,500	82	4,255.14	1,000.00	69	3,500.00	1,000.00	–	4,500.00	98.24	7.1858	59,953.00
Oct . 3	Oct. 5	3,500.00	94	5,383.00	4,000.00	80	3,500.00	4,000.00	–	7,500.00	98.25	7.1443	59,853.00
Oct . 10	Oct. 12	3,500.00	117	13,193.00	1,200.00	32	3,500.00	1,200.00	–	4,700.00	98.29	6.9781	62,303.00
Oct . 17	Oct. 19	3,500.00	122	7,672.50	1,100.00	68	3,500.00	1,100.00	–	4,600.00	98.26	7.1027	64,403.00
Oct . 24	Oct. 26	3,500.00	110	7,803.33	100.00	60	3,500.00	100.00	–	3,600.00	98.28	7.0196	66,003.00

* : Effective from auction dated May 14,1999, devolvement would be on RBI only.

Note : The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated October 27, 2004.

No. 22: Auctions of 182-day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs	Total Issue (8+9+10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2006-07													
Sep. 20	Sep. 22	1,500	47	2,807.09	1,262.14	27	1,500	1,262.14	–	2,762.14	96.73	6.7797	19,706.56
Oct. 4	Oct. 6	1,500	33	2,446.50	–	18	1,500	–	–	1,500.00	96.72	6.8011	20,706.56
Oct. 18	Oct. 20	1,500	31	1,140.00	500.00	17	620	500.00	–	1,120.00	96.68	6.8869	21,326.56
Nov. 1	Nov. 3	1,500	37	1,695.00	54.51	6	615	54.51	–	669.51	96.66	6.9298	20,893.08
Nov. 15	Nov. 17	1,500	40	1,700.00	203.00	22	1,115	203.00	–	1,318.00	96.66	6.9298	20,008.08
Nov. 29	Dec. 1	1,500	41	2,105.00	773.18	26	1,500	773.18	–	2,273.18	96.68	6.8869	20,267.83
Dec. 13	Dec. 15	1,500	30	1,742.50	–	26	1,500	–	–	1,500.00	96.51	7.2523	20,267.83
Dec. 27	Dec. 29	1,500	36	2,120.00	–	10	510	–	–	510.00	96.49	7.2954	19,677.83
Jan. 10	Jan. 12	1,500	51	3,408.40	400.00	17	1,500	400.00	–	1,900.00	96.56	7.1447	21,052.83
Jan. 24	Jan. 27	1,500	22	635.00	–	21	560	–	–	560.00	96.28	7.7487	20,112.83
Feb. 7	Feb. 9	1,500	57	3,790.00	–	12	1,500.00	–	–	1,500.00	96.34	7.6190	20,112.83
Feb. 21	Feb. 23	1,500	55	3,903.00	–	8	1,500.00	–	–	1,500.00	96.29	7.7271	19,612.83
Mar. 7	Mar. 9	1,500	54	2,265.00	500.00	50	1,500.00	500.00	–	2,000.00	96.28	7.7487	19,112.83
Mar. 21	Mar. 23	1,500	109	4,195.00	325.00	15	530.00	325.00	–	855.00	96.07	8.2040	17,205.69
2007-08													
Apr. 4	Apr. 7	1,500	88	7,005.00	–	5	1,500.00	–	–	1,500.00	96.17	7.9869	17,205.69
Apr. 18	Apr. 20	1,500	67	3,085.00	524.16	23	1,500.00	524.16	–	2,024.16	96.28	7.7487	18,109.85
May 3	May 4	1,500	52	3,550.50	126.33	16	1,500.00	126.33	–	1,626.33	96.29	7.7271	19,066.67
May 16	May 18	1,500	66	3,740.00	–	21	1,500.00	–	–	1,500.00	96.28	7.7487	19,248.67
May 30	Jun. 1	1,500	67	4,295.00	235.95	44	1,500.00	235.95	–	1,735.95	96.34	7.6190	18,711.44
Jun. 11	Jun. 13	2,000	113	7,145.00	–	56	2,000.00	–	–	2,000.00	96.25	7.8136	20,711.44
Jun. 13	Jun. 15	2,500	114	9,925.00	–	15	2,500.00	–	–	2,500.00	96.25	7.8136	21,711.44
Jun. 27	Jun. 29	2,500	120	11,687.00	–	33	2,500.00	–	–	2,500.00	96.32	7.6622	23,701.44
Jul. 11	Jul. 13	1,500	78	4,005.67	–	30	1,500.00	–	–	1,500.00	97.07	6.0535	23,301.44
Jul. 25	Jul. 27	1,500	71	4,085.00	900.00	15	1,500.00	900.00	–	2,400.00	97.18	5.8196	25,141.44
Aug. 8	Aug. 10	1,500	52	1,985.00	500.00	47	1,500.00	500.00	–	2,000.00	96.50	7.2738	25,641.44
Aug. 22	Aug. 24	1,500	69	2,235.00	1,500.00	54	1,500.00	1,500.00	–	3,000.00	96.41	7.4678	27,141.44
Sep. 5	Sep. 7	2,500	105	4,573.00	855.00	62	2,500.00	855.00	–	3,355.00	96.44	7.4031	28,496.44
Sep. 19	Sep. 21	2,500	102	9,980.00	–	38	2,500.00	–	–	2,500.00	96.51	7.2523	30,141.44
Oct. 3	Oct. 5	2,500	71	4,990.00	–	48	2,500.00	–	–	2,500.00	96.48	7.3169	31,141.44
Oct. 17	Oct. 19	2,500	98	4,815.00	500.00	79	2,500.00	500.00	–	3,000.00	96.42	7.4462	32,117.28

Notes : 1. Outstanding amount is net of redemption during the week.

2. The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated April 6, 2005.

3. The auctions of 182-day Treasury Bills (TBs) which were discontinued effective May 14, 2001 have been reintroduced from April 6, 2005 onwards.

No. 23: Auctions of 364-day Government of India Treasury Bills

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on PDs/ SDs*	Total Issue (8+9+ 10)	Cut-off Price	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value						
				Competitive	Non-Competitive		Competitive	Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2006-07													
Oct. 11	Oct. 13	2,000	58	4,680.00	17.20	24	2,000	17.20	–	2,017.20	93.55	6.9137	43,983.04
Oct. 26	Oct. 27	2,000	56	3,415.00	–	17	1,285	–	–	1,285.00	93.48	6.9939	43,268.04
Nov. 8	Nov. 10	2,000	59	4,510.00	–	30	2,000	–	–	2,000.00	93.48	6.9939	44,268.04
Nov. 22	Nov. 24	2,000	56	5,460.00	–	26	2,000	–	–	2,000.00	93.49	6.9824	45,268.04
Dec. 6	Dec. 8	2,000	77	6,115.00	–	22	2,000	–	–	2,000.00	93.53	6.9366	46,098.04
Dec. 20	Dec. 22	2,000	84	7,230.00	250.00	28	2,000	250.00	–	2,250.00	93.27	7.2354	47,348.04
Jan. 3	Jan. 5	2,000	78	4,225.00	5.10	27	2,000	5.10	–	2,005.10	93.31	7.1893	48,349.06
Jan. 17	Jan 19	2,000	43	2,315.00	402.20	21	1,155	402.20	–	1,557.20	93.24	7.2700	48,904.21
Jan. 31	Feb. 2	2,000	39	3,890.00	250.00	2	1,000	250.00	–	1,250.00	92.87	7.6985	48,904.21
Feb. 14	Feb. 17	2,000	70	8.065.50	96.00	6	2,000	96.00	–	2,096.00	92.75	7.8382	49,758.61
Feb. 28	Mar. 2	2,000	65	4,575.00	–	28	2,000	–	–	2,000.00	92.84	7.7334	50,758.61
Mar. 14	Mar. 16	2,000	96	4,970.00	271.00	31	2,000	271.00	–	2,271.00	92.76	7.8265	52,012.61
Mar. 28	Mar. 30	2,000	119	10,510.60	1,550.00	21	2,000	1,550.00	–	3,550.00	92.63	7.9782	53,812.61
2007-08													
Apr. 11	Apr. 13	2,000	112	8,010.00	130.00	10	2,000	130.00	–	2,130.00	92.87	7.6985	54,942.61
Apr. 25	Apr. 27	2,000	82	4,625.00	300.00	45	2,000	300.00	–	2,300.00	92.83	7.7450	55,942.61
May 9	May 11	2,000	64	5,100.00	–	24	2,000	–	–	2,000.00	92.81	7.7683	56,942.61
May 23	May 25	2,000	61	4,211.00	–	44	2,000	–	–	2,000.00	92.78	7.8032	56,292.61
Jun. 6	Jun. 8	3,000	120	10,936.40	118.54	28	3,000	118.54	–	3,118.54	92.88	7.69.00	55,744.37
Jun. 20	Jun. 22	3,000	131	12,910.00	495.96	47	3,000	495.96	–	3,495.96	92.91	7.65.00	56,324.50
Jul. 4	Jul. 6	1,000	93	6,255.00	–	20	1,000	–	–	1,000.00	93.33	7.1663	55,324.50
Jul. 18	Jul. 20	2,000	96	7,415.49	583.43	25	2,000	583.43	–	2,583.43	93.84	6.5824	55,627.43
Aug. 1	Aug. 3	2,000	84	4,675.00	–	43	2,000	–	–	2,000.00	93.26	7.2470	55,627.43
Aug. 14	Aug. 17	2,000	104	4,685.00	–	33	2,000	–	–	2,000.00	93.05	7.4896	55,619.43
Aug. 29	Aug. 31	2,000	115	5,415.00	33.27	39	2,000	33.27	–	2,033.27	93.02	7.5244	55,642.70
Sep. 12	Sep. 14	3,000	133	11,145.00	–	30	3,000	–	–	3,000.00	93.07	7.4665	56,542.70
Sep. 26	Sep. 28	3,000	97	5,846.00	375.00	66	3,000	375.00	–	3,375.00	93.04	7.5012	57,317.70
Oct. 10	Oct. 12	3,000	154	11,231.50	–	31	3,000	–	–	3,000.00	93.15	7.3739	58,300.50
Oct. 24	Oct. 26	3,000	125	8,141.00	24.00	36	3,000	24.00	–	3,024.00	93.16	7.3624	60,039.50

* : Effective from auction dated May 19, 1999, devolvement would be on RBI only.

Notes: 1. Outstanding amount is net of redemption during the week.

2. The presentation of implicit yield at cut-off price has been changed from actual/364-day count convention to actual/365-day count convention from auction dated October 27, 2004.

No. 24: Turnover in Government Securities Market (Face Value) at Mumbai @

(Rs. crore)

Week / Month +	Govt. of India Dated Securities	State Govt. Securities	Treasury Bills			RBI*
			91 Day	182 Day	364 Day	
1	2	3	4	5	6	7
2005-06						
April	1,05,957.84	2,816.60	39,451.32	2,892.32	46,996.86	263.33
May	1,10,288.70	4,792.84	13,962.04	1,839.76	30,696.52	325.25
June	1,84,346.88	5,115.40	13,220.68	2,693.08	16,656.62	925.00
July	1,36,973.70	3,354.56	10,214.14	3,331.72	14,745.80	563.29
August	1,18,444.96	2,694.06	12,781.18	4,997.92	28,388.16	34.60
September	1,76,385.80	5,637.28	7,375.44	4,360.84	24,728.22	342.42
October	82,481.98	3,035.63	10,873.84	5,723.80	16,002.88	123.68
November	87,190.44	2,003.52	5,972.90	4,973.52	11,500.24	78.67
December	1,08,378.46	2,522.96	5,665.48	5,243.44	13,946.10	58.76
January	87,274.56	1,672.48	2,966.46	2,728.50	11,688.64	660.40
February	74,163.70	1,768.04	3,482.62	2,455.74	7,594.94	733.54
March	75,119.10	4,721.14	5,219.72	2,913.10	11,656.42	1,254.66
2006-07						
April	1,10,559.28	851.16	2,193.88	2,046.40	16,666.50	922.00
May	1,00,542.72	4,781.64	6,217.52	4,076.30	10,766.88	1,453.00
June	77,255.06	2,395.66	5,996.84	8,689.56	12,871.16	883.00
July	65,538.70	1,376.06	5,206.80	3,761.72	8,127.34	387.88
August	1,48,081.02	1,048.40	10,290.66	8,646.20	12,898.72	166.48
September	2,84,464.66	1,893.48	8,821.54	6,014.18	17,127.28	279.19
October	1,22,101.80	776.32	5,898.98	3,134.06	9,134.16	233.42
November	2,57.667.60	1,358.46	4,857.48	8,209.80	13,484.26	151.08
December	2,39,765.16	3,072.80	6,087.18	2,928.06	9,965.98	58.44
January	1,40,660.36	1,319.26	6,006.94	3,306.44	6,204.12	551.14
February	1,13,360.08	1,362.28	4,998.06	2,854.74	4,948.44	72.88
March	1,10,983.52	4,861.96	5,968.82	4,739.42	6,464.76	1,405.99
2007-08						
April	1,29,393.26	3,090.88	9,866.80	2,869.22	5,782.54	333.23
May	1,14,658.96	2,481.32	7,160.10	1,498.68	3,183.70	680.35
June	2,20,172.02	2,078.77	29,236.33	7,998.44	10,091.95	266.57
July	3,83,106.46	1,906.39	19,820.37	3,291.27	22,143.25	715.20
August	2,41,706.99	2,514.20	11,899.44	6,877.99	13,643.66	482.50
September	1,74,533.46	1,201.42	5,521.12	8,768.86	10,539.40	428.36
Week-Ended						
October 5, 2007	32,844.24	433.84	4,043.26	3,864.00	6,744.00	77.26
October 12, 2007	26,150.19	950.76	7,211.60	3,835.07	8,577.96	113.12
October 19, 2007	25,613.41	138.26	4,427.30	3,312.48	1,044.72	341.03
October 26, 2007	61,207.01	191.14	6,509.18	2,287.50	4,366.90	–

@ : Based on SGL outright transactions in government securities in secondary market at Mumbai. It excludes repo transactions.

+ : Turnover upto the last Friday of the month over the last Friday of preceding month.

* : RBI's Sales and Purchases include transactions in other offices also. It excludes transactions relating to the Government of India and the Welfare Commissioner, Bhopal.

No. 25: Repo / Reverse Repo auctions under Liquidity Adjustment Facility

(Amount in Rs. crore)

LAF Date	Repo/ Reverse Repo Period (Day(s))	REPO (INJECTION)					REVERSE REPO (ABSORPTION)					Net Injection (+)/ Absorption (–) of liquidity [(6) – (11)]	Outstanding Amount @
		Bids Received		Bids Accepted		Cut-off Rate (%)	Bids Received		Bids Accepted		Cut-off Rate (%)		
		Number	Amount	Number	Amount		Number	Amount	Number	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
October 1, 2007	2	–	–	–	–	–	19	30,400	19	30,400	6.00	-30,400	30,400
October 3, 2007	1	–	–	–	–	–	30	53,520	30	53,520	6.00	-53,520	53,520
October 4, 2007	1	–	–	–	–	–	38	57,480	38	57,480	6.00	-57,480	57,480
October 5, 2007	3	–	–	–	–	–	37	54,370	37	54,370	6.00	-54,370	54,370
October 8, 2007	1	–	–	–	–	–	39	56,105	39	56,105	6.00	-56,105	56,105
October 9, 2007	1	–	–	–	–	–	44	69,620	44	69,620	6.00	-69,620	69,620
October 10, 2007	1	–	–	–	–	–	39	60,945	39	60,945	6.00	-60,945	60,945
October 11, 2007	1	–	–	–	–	–	33	46,615	33	46,615	6.00	-46,615	46,615
October 12, 2007	3	–	–	–	–	–	35	36,545	35	36,545	6.00	-36,545	36,545
October 15, 2007	1	–	–	–	–	–	29	46,710	29	46,710	6.00	-46,710	46,710
October 16, 2007	1	–	–	–	–	–	21	34,215	21	34,215	6.00	-34,215	34,215
October 17, 2007	1	–	–	–	–	–	21	28,770	21	28,770	6.00	-28,770	28,770
October 18, 2007	1	–	–	–	–	–	27	40,525	27	40,525	6.00	-40,525	40,525
October 19, 2007	3	–	–	–	–	–	30	31,950	30	31,950	6.00	-31,950	31,950
October 22, 2007	1	–	–	–	–	–	34	36,730	34	36,730	6.00	-36,730	36,730
October 23, 2007	1	–	–	–	–	–	25	30,130	25	30,130	6.00	-30,130	30,130
October 24, 2007	1	–	–	–	–	–	28	32,260	28	32,260	6.00	-32,260	32,260
October 25, 2007	1	–	–	–	–	–	28	31,675	28	31,675	6.00	-31,675	31,675
October 26, 2007	3	–	–	–	–	–	22	18,135	22	18,135	6.00	-18,135	18,135
October 29, 2007	1	–	–	–	–	–	15	18,605	15	18,605	6.00	-18,605	18,605
October 30, 2007	1	–	–	–	–	–	7	3,890	7	3,890	6.00	-3,890	3,890
October 31, 2007	1	–	–	–	–	–	5	5,015	5	5,015	6.00	-5,015	5,015

@ : Net of overnight repo.

No. 26: Open Market Operations of Reserve Bank of India*

(Rs. crore)

Month End		Government of India Dated Securities - Face Value			Treasury Bills		
		Purchase	Sale	Net Purchases (+) / Net Sales (-)	Purchase	Sale	Net Purchases (+) / Net Sales (-)
1		2	3	4	5	6	7
2005-06							
April	2005	–	263.33	-263.33	–	–	–
May	2005	–	686.46	-686.46	–	–	–
June	2005	–	832.91	-832.91	–	–	–
July	2005	–	323.66	-323.66	–	–	–
August	2005	–	121.19	-121.19	–	–	–
September	2005	–	255.85	-255.85	–	–	–
October	2005	–	123.68	-123.68	–	–	–
November	2005	–	107.92	-107.92	–	–	–
December	2005	–	29.51	-29.51	–	–	–
January	2006	–	674.41	-674.41	–	–	–
February	2006	215.00	522.56	-307.56	–	–	–
March	2006	525.00	711.23	-186.23	–	–	–
2006-07							
April	2006	405.00	516.80	-111.80	–	–	–
May	2006	85.00	1,386.74	-1,301.74	–	–	–
June	2006	55.00	809.88	-754.88	–	–	–
July	2006	25.00	374.36	-349.36	–	–	–
August	2006	80.00	127.64	-47.64	–	–	–
September	2006	40.00	237.24	-197.24	–	–	–
October	2006	–	191.10	-191.10	–	–	–
November	2006	10.00	140.20	-130.20	–	–	–
December	2006	15.00	36.41	-21.41	–	–	–
January	2007	–	571.36	-571.36	–	–	–
February	2007	–	118.09	-118.09	–	–	–
March	2007	5.00	1,335.56	-1,330.56	–	–	–
April	2007	10.00	332.24	-322.24	–	–	–

Year / Month	Government of India Dated Securities - Face Value					Treasury bills				
	Purchase		Sale		Net purchase (+)/net sale (-)	Purchase		Sale		Net purchase (+)/net sale (-)
	Market	SG	Market	SG		Market	SG	Market	SG	
1	2	3	4	5	6	7	8	9	10	11
2007-08										
April	10	–	–	332.24	-322.24	–	–	–	–	–
May	–	–	–	742.80	-742.80	–	–	–	–	–
June	–	–	–	254.86	-254.86	–	–	–	–	–
July	25.00	–	–	656.74	-631.74	–	–	–	–	–
August	–	–	–	456.28	-456.28	–	–	–	–	–
September	15.00	–	–	413.35	-398.35	–	–	–	–	–
October	–	–	–	539.93	-539.93	–	–	–	–	–

***** : Excluding transactions of RBI with the Government of India and the Welfare Commissioner, Bhopal.

No. 27 A: Secondary Market Outright Transactions in Government dated Securities (Face Value)

(Amount in Rs. crore)

Week ended		Government of India Dated Securities – Maturing in the year										State Govt. Securities
		2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-16	2016-17	2017-18	Beyond 2018	
1		2	3	4	5	6	7	8	9	10	11	12
I.	**October 5, 2007**											
a.	Amount	–	200.00	5,993.38	15.42	742.71	–	666.25	82.70	4,747.92	3,973.74	216.92
b.	YTM *											
	Min.	–	7.3899	7.6631	7.7386	8.1837	–	7.7819	7.8671	7.8653	8.1577	8.1523
	Max.	–	7.9300	7.8390	7.8026	8.4036	–	7.8865	7.9820	7.9330	8.8031	8.4699
II.	**October 12, 2007**											
a.	Amount	–	131.02	5,602.01	504.60	2.38	45.30	1,151.99	634.96	4,006.36	996.49	475.38
b.	YTM *											
	Min.	–	7.0722	7.6299	7.7403	–	7.7948	7.8158	7.8843	7.8828	8.1533	7.9500
	Max.	–	7.9949	8.1800	7.8460	–	7.7954	7.9222	8.0127	8.2671	8.8032	8.4465
III.	**October 19, 2007**											
a.	Amount	–	10.50	4,129.55	74.65	95.12	50.70	694.54	284.62	5,311.12	2,155.92	69.13
b.	YTM *											
	Min.	–	7.9100	7.6289	7.7956	8.2515	7.8185	7.8367	7.9354	7.8887	8.0978	7.9500
	Max.	–	7.9100	8.1768	7.8029	8.4500	7.8269	7.8807	8.0049	7.9404	8.8033	8.3694
IV.	**October 26, 2007**											
a.	Amount	–	–	7,619.53	622.49	100.00	13.20	1,856.25	1,597.18	15,736.07	3,058.79	95.57
b.	YTM *											
	Min.	–	–	7.5919	7.6886	7.7055	7.7317	7.7172	7.8019	7.8056	8.1618	7.9000
	Max.	–	–	7.7597	7.8133	8.4000	7.8305	7.8547	7.9569	8.1821	8.7403	8.3594

* : Minimum and maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 27 B: Secondary Market Outright Transactions in Treasury Bills

(Amount in Rs. crore, YTM in per cent per annum)

Week ended	Treasury Bills Residual Maturity in Days			
	up to 14 days	15 - 91 days	92 - 182 days	183 - 364 days
1	2	3	4	5
I. October 5, 2007				
a. Amount	197.00	4,348.63	2,025.00	755.00
b. YTM *				
Min.	6.0991	6.2306	7.0300	7.2500
Max.	6.6996	7.1200	7.2954	7.4575
II. October 12, 2007				
a. Amount	31.59	5,080.80	2,210.96	2,488.98
b. YTM *				
Min.	5.7012	5.5998	6.8500	7.1500
Max.	6.2500	7.0100	7.2701	7.3800
III. October 19, 2007				
a. Amount	25.00	2,758.01	1,467.24	142.00
b. YTM *				
Min.	6.4993	6.1505	6.8201	7.2100
Max.	6.4993	7.1502	7.4462	7.4000
IV. October 26, 2007				
a. Amount	385.18	4,024.10	988.50	1,184.01
b. YTM *				
Min.	6.0011	5.9536	6.9499	7.1601
Max.	6.2501	7.0196	7.3200	7.3624

* : Minimum and maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 27 C: Month-end Yield to Maturity of SGL Transactions in Central Government Dated Securities for Various Residual Maturities

(Per cent)

Term to Maturity (in years)	2006		2007									
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	6.9959	7.4422	7.5263	7.6383	7.8941	7.9308	7.8277	7.5803	7.1362	7.6839	7.6836	7.6895
2	7.0759	7.4627	7.6326	7.7950	7.9851	8.0842	7.8559	7.6867	7.2619	7.7159	7.7759	7.7266
3	7.1554	7.4832	7.7382	7.9024	7.9755	8.1280	7.8864	7.8031	7.3610	7.7479	7.8006	7.7420
4	7.2349	7.5037	7.7075	7.9158	7.9645	8.1213	7.9610	7.8106	7.3621	7.7774	7.8014	7.7529
5	7.2681	7.5242	7.6349	7.9120	7.9700	8.1120	8.0125	7.9072	7.3980	7.7944	7.8022	7.7639
6	7.2708	7.5447	7.6751	7.9182	7.9812	8.1027	8.0619	8.0046	7.5420	7.8114	7.8100	7.7825
7	7.2999	7.5652	7.7767	7.9286	7.9923	8.0939	8.1052	8.0843	7.6543	7.8577	7.8680	7.8189
8	7.3743	7.5867	7.8784	7.9237	7.9698	8.1010	8.1059	8.0946	7.6890	7.9041	7.8750	7.8356
9	7.4518	7.6088	7.9085	7.9164	7.9457	8.1137	8.1117	8.1234	7.8113	7.9103	7.8902	7.8464
10	7.4061	7.6071	7.7739	7.9454	7.9360	8.1316	8.1225	8.1559	7.9108	7.9194	7.9155	7.8699
11	7.4283	7.6149	7.8322	7.9725	7.9809	8.1550	8.1557	8.1871	7.9338	7.9463	7.9762	7.9217
12	7.4559	7.6236	7.8904	7.9927	8.0259	8.1784	8.1889	8.2182	7.9568	7.9732	8.0369	7.9735
13	7.4835	7.6323	7.9486	8.0129	8.0709	8.2017	8.2220	8.2493	7.9798	8.0002	8.0976	8.0252
14	7.5111	7.6410	8.0068	8.0332	8.1159	8.2251	8.2552	8.2789	8.0028	8.0271	8.1583	8.0770
15	7.5272	7.6496	8.0305	8.0439	8.1340	8.2485	8.2873	8.2940	8.0265	8.0540	8.1915	8.1135
16	7.5325	7.6583	8.0383	8.0517	8.1474	8.2616	8.2993	8.3092	8.0529	8.0810	8.2079	8.1325
17	7.5378	7.6670	8.0462	8.0595	8.1608	8.2743	8.3112	8.3243	8.0793	8.1079	8.2242	8.1515
18	7.5432	7.6757	8.0540	8.0673	8.1743	8.2869	8.3231	8.3395	8.1057	8.1349	8.2406	8.1704
19	7.5485	7.6844	8.0619	8.0751	8.1877	8.2995	8.3351	8.3547	8.1321	8.1618	8.2569	8.1894
20	7.5539	7.6931	8.0697	8.0829	8.2011	8.3121	8.3470	8.3698	8.1585	8.1887	8.2733	8.2083
21	7.5592	7.7017	8.0776	8.0907	8.2145	8.3248	8.3589	8.3850	8.1849	8.2157	8.2897	8.2273
22	7.5646	7.7104	8.0854	8.0985	8.2280	8.3374	8.3708	8.4001	8.2114	8.2426	8.3060	8.2462
23	7.5699	7.7191	8.0933	8.1063	8.2414	8.3500	8.3828	8.4153	8.2378	8.2696	8.3224	8.2652
24	7.5753	7.7278	8.1011	8.1141	8.2548	8.3626	8.3947	8.4304	8.2642	8.2965	8.3387	8.2841
25	7.5806	7.7365	8.1090	8.1219	8.2682	8.3752	8.4066	8.4456	8.2906	8.3232	8.3551	8.3002
26	7.5859	7.7452	8.1168	8.1297	8.2816	8.3879	8.4185	8.4607	8.2954	8.3232	8.3714	8.3024
27	7.5913	7.7538	8.1247	8.1375	8.2951	8.4005	8.4305	8.4759	8.2983	8.3232	8.3878	8.3047
28	7.6029	7.7634	8.1325	8.1479	8.3085	8.4131	8.4424	8.4911	8.3013	8.3232	8.4041	8.3069
29	7.6166	7.7742	8.1404	8.1604	8.3219	8.4257	8.4543	8.5062	8.3043	8.3231	8.4205	8.3092
30	7.5889	7.7851	8.1482	8.1730	8.3353	8.4384	8.4662	–	–	–	–	–

No. 28: Redemption Yield on Government of India Securities Based on SGL Transactions*

(Per cent per annum)

Sr. No.	Nomenclature of the loan	2004-05	2005-06	2006-07	2006		2007			
					Sep.	Oct.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11
A)	**Terminable Under 5 years**									
1	6.75% 2007	6.05	6.49	6.73	..	..	..	..	..	..
2	6.00% 2008	..	..	..	..	..	..	..	..	..
3	9.50% 2008	6.19	6.59	7.14	..	7.40	7.09	..	..	..
4	10.80% 2008	5.79	6.56	6.65	..	..	..	..	..	7.49
5	11.40% 2008	5.73	6.40	7.22	7.11	7.16	6.98	..	7.38	..
6	11.50% 2008	5.89	6.38	7.08	7.04	7.37	6.95	..	7.32	7.37
7	12.00% 2008	6.03	6.41	7.04	7.02	7.08	7.09	7.47	7.44	6.35
8	12.10% 2008	5.87	6.62	7.54	..	..	7.82	..	..	..
9	12.15% 2008	5.10	6.32	7.75	..	..	..	..	..	..
10	12.22% 2008	5.99	6.35	6.86	..	..	..	..	..	..
11	12.25% 2008	5.89	6.55	7.07	..	7.17	7.13	7.88	..	9.35
12	5.48% 2009	5.57	6.87	6.88	..	..	..	7.72	7.62	7.71
13	6.65% 2009	6.18	6.54	7.51	7.33	7.23	7.21	7.71	7.59	7.73
14	6.99% 2009	..	..	..	..	..	..	..	..	..
15	7.00% 2009	6.34	6.73	7.50	6.99	7.19	..	6.41	..	9.18
16	11.50% 2009	5.98	6.71	7.52	..	..	7.22	7.56	7.64	..
17	11.99% 2009	5.80	6.59	7.25	7.29	7.68	7.21	7.83	7.65	..
18	5.87% 2010	5.61	6.57	..	..	..	..	..	7.83	7.75
19	6.00% 2010	..	..	..	..	..	..	..	..	..
20	6.20% 2010	..	..	..	..	..	..	..	..	..
21	7.50% 2010	6.04	6.89	7.77	..	7.96	..	6.67	..	..
22	7.55% 2010	6.02	6.69	7.42	7.38	7.39	7.26	7.54	7.66	7.72
23	8.75% 2010	5.92	6.95	7.98	..	7.58	..	..	..	..
24	11.30% 2010	5.86	6.85	7.39	..	..	7.32	7.98	7.62	7.75
25	11.50% 2010	6.32	6.85	7.43	7.36	7.36	7.38	7.88	7.78	..
26	12.25% 2010	5.87	6.86	7.45	7.49	7.56	7.43	7.98	..	..
27	12.29% 2010	6.09	6.85	7.50	7.48	..	7.43	7.69	7.65	7.72
28	5.03% 2011	..	..	..	..	..	..	..	..	..
29	8.00% 2011	6.54	7.10	7.86	..	7.68	7.71	7.57	..	..
30	9.39% 2011	6.17	6.86	7.52	7.47	7.43	7.46	7.65	7.59	7.73
31	10.95% 2011	6.26	6.96	7.33	7.54	7.47	..	..	..	..
32	11.50% 2011	5.90	6.98	7.43	..	7.49	7.86	..	..	7.68
33	12.00% 2011	6.71	7.03	7.97	7.98	7.49	..	..	..	..
34	12.32% 2011	6.38	6.89	7.59	7.53	7.66	7.49	8.06	7.69	7.67
B)	**Between 5 and 10 years**									
35	6.72% 2007/2012@	6.09	6.51	6.93	..	..	..	7.21	..	..
36	6.85% 2012	6.00	6.86	7.58	7.59	7.52	7.92	7.91	8.04	7.88
37	7.40% 2012	6.21	6.95	7.55	7.58	7.41	7.51	7.83	7.70	7.92
38	9.40% 2012	6.18	6.96	7.60	..	7.40	7.79	7.60	..	7.92
39	10.25% 2012	6.75	7.06	7.88	..	7.53	7.66	..	7.75	8.46
40	11.03% 2012	6.16	7.02	7.81	7.79	7.47	..	7.92	..	..
41	7.27% 2013	6.05	6.98	7.58	7.60	7.49	7.65	7.78	7.71	7.75
42	9.00% 2013	6.57	7.06	7.86	7.67	7.71	..	8.11	7.93	8.12
43	9.81% 2013	6.02	7.11	7.85	7.75	7.68	8.11	..	..	..
44	12.40% 2013	6.65	7.17	7.93	7.72	7.67	7.62	8.02	7.85	..
45	6.72% 2014	5.52	7.05	8.05	..	..	..	..	..	..
46	7.37% 2014	6.14	7.04	7.74	7.63	7.55	7.80	7.84	7.81	7.84
47	10.00% 2014	6.71	7.22	7.71	7.71	7.88	..	8.15	..	8.01
48	10.50% 2014	6.74	7.28	7.83	7.81	8.01	..	8.18	7.81	..
49	11.83% 2014	6.48	7.17	7.84	7.50	..	7.94	8.10	8.05	7.91

No. 28: Redemption Yield on Government of India Securities Based on SGL Transactions**(Concld.)*

(Per cent per annum)

Sr. No.	Nomenclature of the loan	2004-05	2005-06	2006-07	2006		2007			
					Sep.	Oct.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11
50	7.38% 2015	6.26	7.06	7.70	7.74	7.67	7.84	7.92	7.85	7.93
51	9.85% 2015	6.18	7.24	7.76	..	..	8.14	7.95	7.97	..
52	10.47% 2015	6.40	7.22	7.59	..	..	7.97	..	..	..
53	10.79% 2015	6.87	7.22	7.65	7.78	..	..	8.15	..	7.95
54	11.43% 2015	6.42	7.19	7.92	7.84	7.66	8.25	8.10	..	7.92
55	11.50% 2015	6.71	7.27	7.91	7.77	8.36	..	8.14	..	..
56	5.59% 2016	6.40	7.17	7.66	7.85	..	8.18	..	..	..
57	7.59% 2016	–	–	7.79	7.72	7.63	7.86	7.95	7.90	7.88
58	10.71% 2016	6.36	7.26	7.95	7.92	7.73	7.84	8.10	8.08	7.90
59	12.30% 2016	6.63	7.26	8.21	..	..	8.21	8.12	8.05	..
C)	**Between 10 and 15 years**									
60	7.46% 2017	6.47	7.25	7.81	7.84	7.79	7.86	7.67	8.04	7.90
61	7.49% 2017	6.35	7.25	7.82	7.82	7.75	7.88	7.93	7.89	7.90
62	7.99% 2017	–	–	–	–	–	7.84	8.53	7.87	7.88
63	8.07% 2017	6.40	7.22	7.80	7.77	7.67	7.92	7.94	7.95	7.94
64	5.69% 2018	6.39	7.29	7.95	..	7.81	8.12	7.68	8.11	8.00
65	6.25% 2018	6.46	7.23	7.91	7.87	7.80	8.07	8.19	8.09	8.12
66	10.45% 2018	6.44	7.34	8.05	8.10	..	8.13	8.09	8.02	..
67	12.60% 2018	..	7.61	7.91	..	..	..	..	..	..
68	5.64% 2019	6.27	7.27	8.12	8.11	7.79	8.11	8.16	..	8.14
69	6.05% 2019	6.45	7.27	7.91	8.06	7.87	8.15	8.11	8.03	8.13
70	10.03% 2019	6.68	7.38	7.83	8.16	7.80	..	8.17	..	8.15
71	6.35% 2020	6.52	7.33	7.95	8.04	7.89	8.13	8.31	8.14	8.00
72	10.70% 2020	6.85	7.46	8.00	8.17	7.89	8.20	8.22	..	..
73	11.60% 2020	6.78	7.36	7.73	..	..	8.26	..	..	..
74	7.94% 2021	–	–	8.07	8.04	7.85	8.01	8.14	7.99	8.11
75	10.25% 2021	6.78	7.46	8.07	8.12	7.90	8.15	8.20	8.11	8.08
D)	**Over 15 years**									
76	5.87% 2022	5.88	7.51	8.02	..	..	..	..	..	..
77	8.20% 2022	–	–	–	–	–	–	–	8.12	8.16
78	8.35% 2022	6.70	7.41	8.02	8.08	7.87	8.13	8.12	8.10	8.17
79	6.17% 2023	6.60	7.38	8.01	8.16	8.05	8.34	8.30	8.12	8.29
80	6.30% 2023	6.52	7.36	8.01	8.18	7.99	8.22	8.24	..	..
81	10.18% 2026	6.94	7.49	7.86	8.31	..	8.38	8.34	..	..
82	8.24% 2027	–	–	8.19	–	–	..	..	..	..
83	6.01% 2028	6.66	7.38	8.02	8.23	8.09	8.33	8.36	8.32	8.36
84	6.13% 2028	6.63	7.42	8.02	8.38	8.10	8.43	8.48	8.34	8.42
85	7.95% 2032	6.97	7.57	8.07	..	..	8.34	8.37	8.36	8.38
86	7.5% 2034	7.25	7.54	8.19	8.38	8.13	8.35	8.33	..	8.54
87	7.40% 2035	–	7.55	8.14	8.42	8.16	8.38	8.32	8.49	8.49
88	8.33% 2036	–	–	8.13	8.39	8.14	8.35	8.36	8.37	8.38

* : Monthly redemption yield is computed from April 2000 as the mean of the daily weighted average yields of the transactions in each traded security. The weight is calculated as the share of the transaction in a given security in the aggregated value of transactions in the said security. Prior to April 2000, the redemption yield was not weighted and was computed as an average of daily prices of each security.

@ : GOI Securities issued with call and put options exercisable on or after 5 years from the date of issue.

– : Indicates that the relevant security was not available for trading.

.. : Indicates that trading in the relevant security was nil/negligible during the month.

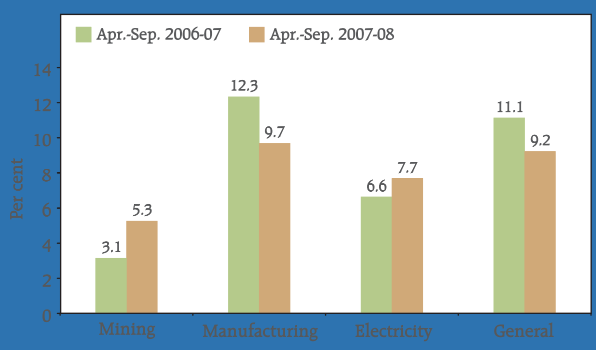
Production

No. 29: Group-wise Index Number of Industrial Production (Base: 1993-94=100)

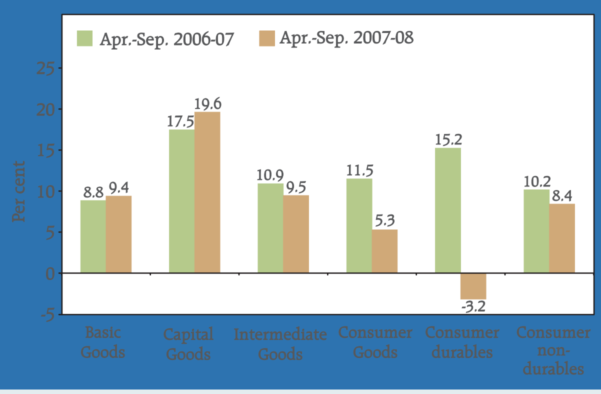
Sr. No.	Industry	Weight	Annual			Cumulative		Monthly	
			2004-05	2005-06	2006-07 (P)	April-September		September	
						2006-07	2007-08 P	2006	2007 P
1	2	3	4	5	6	7	8	9	10
	General Index	**100.00**	**204.8**	**221.5**	**247.1**	**235.2**	**256.9**	**243.5**	**259.1**
I.	**Sectoral Classification**								
1	Mining and quarrying	10.47	153.4	154.9	163.2	151.7	159.7	146.8	155.6
2	Manufacturing	79.36	214.6	234.2	263.5	250.6	274.9	261.7	279.1
3	Electricity	10.17	181.5	190.9	204.7	201.0	216.5	201.0	210.1
II.	**Use-Based Classification**								
1	Basic Goods	35.57	177.9	189.8	209.3	198.3	216.9	200.9	214.4
2	Capital Goods	9.26	229.6	265.8	314.2	283.7	339.4	321.9	381.9
3	Intermediate Goods	26.51	211.1	216.4	242.4	238.9	261.5	240.4	262.7
4	Consumer Goods	28.66	224.4	251.4	276.8	262.4	276.2	274.0	272.4
4(a)	Consumer Durables	5.36	303.5	349.9	382.0	378.8	366.8	419.4	387.6
4(b)	Consumer Non-Durables	23.30	206.2	228.8	252.6	235.6	255.4	240.5	245.9

Source : Central Statistical Organisation, Government of India.

Sectoral Growth of Industrial Production



Growth in IIP: Use-based Classification

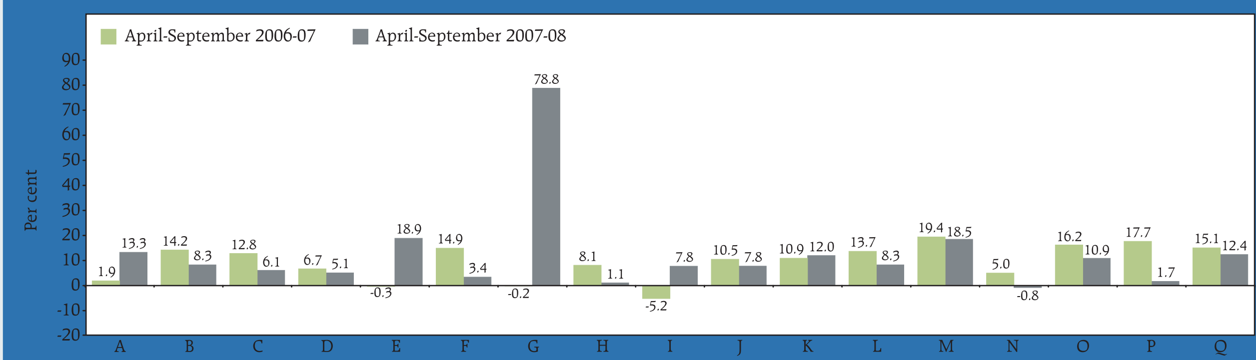


No. 30: IIP – Seventeen Major Industry Groups of Manufacturing Sector (Base : 1993-94 = 100)

Industry Group	Industry	Weight	Annual			Cumulative		Monthly	
			2004-05	2005-06	2006-07 (P)	April- September		September	
						2006-07	2007-08 P	2006	2007 P
1	2	3	4	5	6	7	8	9	10
	Manufacturing Index	**79.36**	**214.6**	**234.2**	**263.5**	**250.6**	**274.9**	**261.7**	**279.1**
20-21	Food products	9.08	167.3	170.6	185.2	132.7	150.3	127.6	125.7
22	Beverages, tobacco and related products	2.38	345.9	400.3	444.5	440.8	477.2	442.1	463.2
23	Cotton textiles	5.52	126.3	137.0	157.3	154.7	164.2	158.2	166.3
24	Wool, silk and man-made fibre textiles	2.26	249.0	248.9	268.4	263.8	277.2	251.9	269.5
25	Jute and other vegetable fibre textiles (except cotton)	0.59	107.2	107.7	90.7	101.1	120.2	117.7	123.2
26	Textile products (including wearing apparel)	2.54	219.6	255.5	285.0	285.3	295.0	288.5	292.2
27	Wood and wood products, furniture and fixtures	2.70	74.8	70.5	91.0	72.3	129.3	73.9	127.5
28	Paper and paper products and printing, publishing and allied industries	2.65	230.7	228.6	248.6	247.7	250.5	244.1	252.8
29	Leather and leather & fur products	1.14	156.9	149.3	150.2	150.9	162.6	151.6	165.2
30	Basic chemicals and chemical products (except products of petroleum and coal)	14.00	238.6	258.5	283.4	291.7	314.4	301.8	318.2
31	Rubber, plastic, petroleum and coal products	5.73	192.2	200.5	226.3	220.1	246.6	223.4	240.5
32	Non-metallic mineral products	4.40	244.3	271.1	305.8	294.4	318.7	297.1	316.9
33	Basic metal and alloy industries	7.45	196.1	227.0	278.9	254.5	301.5	270.9	308.9
34	Metal products and parts, except machinery and equipment	2.81	166.3	164.4	183.2	166.3	164.9	181.9	189.7
35-36	Machinery and equipment other than transport equipment	9.57	279.4	312.8	357.1	337.2	373.8	378.1	394.6
37	Transport equipment and parts	3.98	283.7	319.7	367.7	351.9	357.8	383.9	377.9
38	Other manufacturing industries	2.56	221.2	276.9	298.4	291.6	327.9	313.9	398.9

Source : Central Statistical Organisation, Government of India.

Growth Performance of Manufacturing Industries



A Food products
B Beverages, tobacco and related products
C Cotton textiles
D Wool,silk and man-made fibre textiles
E Jute and other vegetable fibre textiles (except Cotton)
F Textile products (including wearing apparel)
G Wood and wood products, furniture & fixtures
H Paper and paper products and printing publishing and allied industries
I Leather and leather & fur products
J Basic Chemicals and chemical products except products of Petroleum & coal
K Rubber, plastic, petroleum and coal products
L Non-metallic mineral products
M Basic metal and alloy industries
N Metal products and parts (except machinery and equipment)
O Machinery and equipment other than Transport equipment
P Transport equipment and parts
Q Other manufacturing industries

Capital Market

No.31: New Capital Issues By Non-government Public Limited Companies

(Amount in Rs. crore)

Security & Type of Issue	2005-06 (April-March)		2006-07 (April-March)		2006 (April-September)		2007 (April-September)	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5	6	7	8	9
1) Equity Shares (a+b)	128 (118)	20,899.3 (18,793.0)	115 (110)	30,753.0 (20,612.8)	50 (48)	12,770.0 (4,332.0)	57 (52)	28,521.0 (26,976.4)
a) Prospectus	92 (89)	16,801.4 (15,354.5)	82 (82)	28,172.0 (18,519.5)	30 (30)	12,142.0 (3,815.2)	47 (45)	27,589.0 (26,453.9)
b) Rights	36 (29)	4,097.9 (3,438.5)	33 (28)	2,581.0 (2,093.3)	20 (18)	628.0 (516.8)	10 (7)	932.0 (522.5)
2) Preference Shares (a+b)	1	10.0	–	–	–	–	–	–
a) Prospectus	1	10.0	–	–	–	–	–	–
b) Rights	–	–	–	–	–	–	–	–
3) Debentures (a+b)	2	245.1	3	847.0	–	–	–	–
a) Prospectus	1	127.0	–	–	–	–	–	–
b) Rights	1	118.1	3	847.0	–	–	–	–
of which:								
I) Convertible (a+b)	–	–	–	–	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	–	–	–	–	–	–
II) Non-Convertible (a+b)	2	245.1	3	847.0	–	–	–	–
a) Prospectus	1	127.0	–	–	–	–	–	–
b) Rights	1	118.1	3	847.0	–	–	–	–
4) Bonds (a+b)	–	–	–	–	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	–	–	–	–	–	–
5) Total (1+2+3+4)	**131**	**21,154.4**	**118**	**31,600.0**	**50**	**12,770.0**	**57**	**28,521.0**
a) Prospectus	94	16,938.4	82	28,172.0	30	12,142.0	47	27,589.0
b) Rights	37	4,216.0	36	3,428.0	20	628.0	10	932.0

Note : Figures in brackets indicate data in respect of premium on capital issues which are included in respective totals.
Source : Data are compiled from prospectus/circulars/advertisements issued by companies, replies given by the companies to the Reserve Bank's question-naire, information received from stock exchanges, press reports, *etc.*
Also see 'Notes on Tables'.

No. 32: Index Numbers of Ordinary Share Prices

Year / Month		BSE Sensitive Index (Base : 1978 - 79 = 100)			BSE - 100 (Base : 1983 - 84 = 100)			S & P CNX Nifty* (Base : November 3, 1995 = 1000)		
		Average	High	Low	Average	High	Low	Average	High	Low
1		2	3	4	5	6	7	8	9	10
2004-05		5740.99	6915.09	4505.16	3076.35	3732.81	2381.53	1805.26	2168.95	1388.75
2005-06		8280.08	11307.04	6134.86	4393.54	5904.17	3310.14	2513.44	3418.95	1902.50
2006-07		12277.33	14652.09	8929.44	6242.73	7413.22	4535.00	3572.44	4224.25	2632.80
October	2006	12637.25	13024.26	12204.01	6432.94	6628.20	6223.29	3649.43	3769.10	3515.35
November	2006	13415.79	13773.59	13033.04	6812.65	6983.42	6639.14	3868.61	3968.90	3767.05
December	2006	13628.30	13972.03	12995.02	6883.73	7066.55	6542.39	3910.18	4015.95	3716.90
January	2007	13984.00	14282.72	13362.16	7091.62	7249.98	6779.00	4037.06	4147.70	3850.30
February	2007	14142.70	14652.09	12938.09	7124.77	7413.22	6527.12	4083.74	4224.25	3745.30
March	2007	12857.74	13308.03	12415.04	6465.26	6686.15	6223.12	3731.13	3875.90	3576.50
April	2007	13477.79	14228.88	12455.37	6800.70	7171.33	6287.69	3947.28	4177.85	3633.60
May	2007	14156.47	14544.46	13765.46	7244.49	7468.70	7015.37	4184.39	4295.80	4066.80
June	2007	14334.30	14650.51	14003.03	7392.34	7605.37	7188.38	4222.17	4318.30	4113.05
July	2007	15253.42	15794.92	14664.26	7897.30	8155.29	7625.71	4474.18	4620.75	4313.75
August	2007	14779.05	15318.60	13989.11	7594.81	7897.92	7179.39	4301.36	4464.00	4074.90
September	2007	16046.02	17291.10	15422.05	8292.69	8967.41	7924.29	4659.92	5021.35	4474.75
October	2007	18500.31	19977.67	17328.62	9587.50	10391.19	8998.60	5456.62	5905.90	5068.95

* : NSE - 50, *i.e.,* Nifty has been rechristened as ' S & P CNX Nifty, with effect from July 28, 1998.

Sources : 1. Bombay Stock Exchange Ltd.
2. National Stock Exchange of India Ltd.

No. 33: Volume in Corporate Debt Traded at NSE*

(Rs. crore)

Week / Month / Year (April-March)			Volume
1			2
2004 - 05			**17,521.27**
2005 - 06			**10,619.36**
2006 - 07			**6,639.78**
2006 - 2007			
April	2006		298.82
May	2006		994.09
June	2006		377.56
July	2006		311.61
August	2006		596.69
September	2006		371.20
October	2006		222.22
November	2006		493.40
December	2006		389.42
January	2007		718.14
February	2007		796.76
March	2007		1,069.87
2007 - 2008			
April	2007		550.52
May	2007		716.98
June	2007		769.88
July	2007		1,344.21
August	2007		616.47
September	2007		606.03
October	2007		601.11
Week ended			
September	7,	2007	47.18
September	14,	2007	112.48
September	21,	2007	247.71
September	28,	2007	198.66
October	5,	2007	149.26
October	12,	2007	112.20
October	19,	2007	157.73
October	26,	2007	106.30

* : Excluding trade in commercial papers.
Source : National Stock Exchange of India Ltd.

No. 34: Assistance Sanctioned and Disbursed by All - India Financial Institutions

(Rs. crore)

	April-September		April-March	
	2003-04	2004-05	2002-03	2003-04
1	2	3	4	5
Sanctions				
All-India Development Banks	**9,831.9**	**12,860.0**	**22,318.1**	**23,444.3**
1. IDBI	2,860.2	6,314.4	5,898.2	5,630.8
2. IFCI	132.1	–	2,005.8	1,451.9
3. SIDBI	2,607.9	2,991.8	10,903.7	8,223.7
4. IIBI	1,392.8	0.9	1,206.4	2,411.9
5. IDFC	2,838.9	3,552.9	2,304.0	5,726.0
Investment Institutions	**13,025.1**	**7,805.5**	**5,666.5**	**29,479.2**
6. LIC	12,291.1	7,135.3	4,341.5	27,748.0
7. GIC	324.3	93.0	369.3	674.0
8. National Ins. Co. Ltd.	115.6	87.3	200.0	373.0
9. New India Ass. Co Ltd.	84.1	179.3	138.0	199.1
10. Oriental Ins. Co. Ltd.	93.3	28.2	123.9	134.8
11. United India Ins. Co. Ltd.	116.7	282.4	493.8	350.3
Total	**22,857.0**	**20,665.5**	**27,984.6**	**52,923.5**
Disbursements				
All India Development Banks	**5,750.2**	**5,027.1**	**17,225.2**	**14,056.6**
1. IDBI	1,637.2	2,085.1	6,614.9	4,409.1
2. IFCI	176.3	43.8	1,779.9	279.0
3. SIDBI	1,742.2	1,358.3	6,789.5	4,412.7
4. IIBI	1,216.5	7.6	1,091.9	2,251.8
5. IDFC	978.0	1,532.3	949.0	2,704.0
Investment Institutions	**4,615.6**	**5,421.3**	**7,487.6**	**17,400.2**
6. LIC	3,829.2	4,871.0	6,205.7	15,781.6
7. GIC	328.4	108.0	328.4	657.7
8. National Ins. Co. Ltd.	118.4	17.3	177.6	224.4
9. New India Ass. Co Ltd.	85.6	115.2	78.0	195.6
10. Oriental Ins. Co. Ltd.	135.0	27.4	241.5	187.1
11. United India Ins. Co. Ltd.	119.0	282.4	456.4	353.8
Total	**10,365.8**	**10,448.4**	**24,712.8**	**31,456.8**

Note : Data are provisional. Monthly data are not adjusted for inter-institutional flows.
Source : Industrial Development Bank of India.

Prices

No. 35: Bullion Prices (Spot) – Mumbai

As on the last Friday / Friday (1)	Standard Gold (Rs. per 10 grams)		Silver (Rs. per kilogram)	
	Opening	Closing	Opening	Closing
1	2	3	4	5
1990-91	3,470	3,440	6,668	6,663
1998-99	4,270	4,250	7,675	7,670
1999-00	4,400	4,380	7,900	7,900
2000-01	4,230	4,225	7,270	7,270
April 1999	4,440	4,430	8,185	8,215
May 1999	4,250	4,250	7,780	7,755
June 1999	4,120	4,120	7,965	7,940
July 1999	4,060	4,060	8,225	8,250
August 1999	4,040	4,050	8,005	8,040
September 1999	4,150	4,150	8,125	8,125
October 1999	4,650	4,640	8,205	8,190
November 1999	4,660	4,665	8,125	8,130
December 1999	4,530	4,530	8,260	8,225
January 2000	4,525	4,540	8,230	8,245
February 2000	4,700	4,700	8,185	8,130
March 2000	4,400	4,380	7,900	7,900
April 2000	4,370	4,370	7,850	7,870
May 2000	4,350	4,345	7,790	7,830
June 2000	4,580	4,570	7,985	7,980
July 2000	4,500	4,480	7,975	7,970
August 2000	4,515	4,520	7,990	7,990
September 2000	4,540	4,535	8,125	8,125
October 2000	4,530	4,530	7,975	7,970
November 2000	4,485	4,480	7,815	7,815
December 2000	4,560	4,550	7,715	7,720
January 2001	4,430	4,430	7,850	7,830
February 2001	4,325	4,325	7,420	7,440
March 2001	4,230	4,225	7,270	7,270
April 2001	4,305	4,320	7,410	7,435
May 2001	4,540	4,560	7,620	7,640
Week Ended				
June 1, 2001	4,350	4,350	7,495	7,500
June 8, 2001	4,360	4,350	7,400	7,400
June 15, 2001	4,445	4,430	7,515	7,490

Note : Information on bullion prices for the period subsequent to June 15, 2001 is not reported in this Table as the Bombay Bullion Association Ltd. has discontinued the release of these data.

Source : Bombay Bullion Association Ltd.

Also see 'Notes on Tables'.

No.36: Consumer Price Index Numbers for Industrial Workers – All-India and Selected Centres

(Base : 1982 = 100 upto December 2005 and 2001 = 100 for data from January 2006 onwards)

Centre	New Linking Factor (1)	1990-91	2005-06@	2006-07	2007						
					Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11	12
All India (2)	**4.63**	**193**	**540**	**125**	**128**	**129**	**130**	**132**	**133**	**133**	**134**
Ahmedabad	4.62	196	522	123	127	127	127	131	131	131	133
Alwaye(Ernakulam)	4.52	176	545	127	127	128	132	134	133	132	132
Asansol	4.37	189	515	128	136	135	136	140	142	143	144
Bangalore	4.51	183	538	128	133	134	135	138	138	137	138
Bhavnagar	4.76	198	540	122	126	127	127	134	133	133	133
Bhopal	4.83	196	566	130	132	133	134	136	138	136	137
Chandigarh	5.26	189	620	127	130	130	130	131	132	133	133
Chennai	4.95	189	567	119	122	123	125	126	126	125	126
Coimbatore	4.49	178	508	121	125	126	127	128	128	128	128
Delhi	5.6	201	652	124	128	128	128	130	131	132	131
Faridabad	4.79	187	550	124	127	128	127	128	135	135	136
Guwahati	4.8	195	541	117	119	118	118	119	120	121	121
Howrah	5.42	212	627	124	127	127	128	131	133	133	135
Hyderabad	4.79	182	536	118	121	122	123	124	124	124	124
Jaipur	4.25	190	498	130	132	132	134	135	137	136	137
Jamshedpur	4.23	187	514	128	130	130	130	133	134	136	136
Kolkata	5.12	203	593	123	130	130	130	133	135	136	138
Ludhiana	4.12	193	508	131	133	134	136	134	134	135	137
Madurai	4.51	192	512	117	118	121	122	123	122	121	121
Monghyr-Jamalpur	4.3	189	516	128	130	128	130	134	138	141	142
Mumbai	5.18	201	608	128	132	132	134	136	135	136	138
Mundakayam	4.37	184	516	126	128	130	131	132	131	129	130
Nagpur	4.68	201	556	134	136	137	138	142	142	143	145
Pondicherry	4.88	204	582	125	127	128	131	132	132	131	131
Rourkela	4.03	179	478	127	131	135	135	139	140	140	141
Saharanpur(Kanpur) *	4.50	195	510	127	130	130	131	132	133	134	134
Solapur	4.73	197	540	127	137	137	137	141	141	143	142
Srinagar	5.62	184	634	120	125	124	126	127	126	126	127

@ Represents average for Nine Months (April-December 2005).
* Data for Saharanpur has been replaced by data for Kanpur from January 2006 onwards.
Note : New series of Consumer Price Index for Industrial Workers with base 2001 = 100 was released in January 2006 by Labour Bureau, Shimla. Linking Factors betwen old and new series as published by the Labour Bureau are reproduced in column 2.
For (1) and (2) See 'Notes on Tables'.
Source : Labour Bureau, Ministry of Labour, Government of India.

No. 37: Consumer Price Index Numbers for Urban Non-manual Employees – All-India and Selected Centres

(Base : 1984 - 85 = 100)

Centre	1990-91	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11	12
All India (1)	**161**	**456**	**486**	**493**	**501**	**503**	**506**	**514**	**515**	**516**	**520**
Mumbai	154	450	478	480	491	493	496	502	502	502	506
Delhi	156	472	499	505	510	511	513	518	522	522	528
Kolkata	164	416	439	448	455	461	464	479	482	481	486
Chennai	168	543	569	570	590	595	599	605	605	606	607
Hyderabad	164	488	526	531	545	551	556	557	554	558	561
Bangalore	161	480	513	515	527	529	532	541	543	545	544
Lucknow	158	438	465	471	473	476	481	491	490	488	487
Ahmedabad	153	400	426	434	436	437	440	448	449	450	454
Jaipur	165	443	477	486	495	494	493	505	514	517	519
Patna	167	418	451	462	464	461	463	475	482	490	494
Srinagar	150	449	475	479	497	497	502	510	508	511	517
Thiruvananthapuram	152	479	507	504	516	517	527	536	532	528	530
Cuttack	154	447	479	488	495	497	501	511	512	507	511
Bhopal	166	417	458	468	462	465	468	480	478	481	488
Chandigarh	176	605	637	643	651	651	651	665	669	672	672
Shillong	179	466	499	497	539	544	552	557	561	566	571
Shimla	163	462	490	496	508	510	508	507	512	517	519
Jammu	161	453	480	487	500	498	499	507	507	512	514
Amritsar	152	381	402	409	412	413	414	417	422	431	433
Kozhikode (Calicut)	150	430	447	449	453	453	455	464	462	462	464
Kanpur	165	418	450	461	466	469	476	488	487	490	489
Indore	170	452	485	493	491	493	492	504	512	513	515
Pune	162	471	509	512	531	533	538	541	542	546	549
Jabalpur	164	404	437	443	452	453	457	464	468	473	476
Jodhpur	168	435	465	473	478	476	474	487	491	490	492

See 'Notes on Tables'.

Source : Central Statistical Organisation, Government of India.

No. 38: Consumer Price Index Numbers for Agricultural / Rural Labourers

A : Consumer Price Index Numbers for Agricultural Labourers
(Base : July 1986 - June 1987 = 100)

State	1990-91(1)	Linking Factor (2)	2005-06	2006-07	2006	2007					
					Oct.	May	Jun.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**830**	**5.89**	**358**	**388**	**386**	**395**	**399**	**404**	**408**	**410**	**413**
Andhra Pradesh	657	4.84	371	401	397	408	415	418	421	421	424
Assam	854	(3)	362	388	389	395	400	405	409	414	419
Bihar	858	6.22	347	384	389	385	385	390	400	408	415
Gujarat	742	5.34	369	403	400	413	415	419	423	425	428
Haryana		(5)	376	403	401	413	421	426	432	442	447
Himachal Pradesh		(5)	343	367	368	372	367	372	375	380	387
Jammu & Kashmir	843	5.98	359	392	386	402	403	403	405	409	413
Karnataka	807	5.81	341	367	359	383	388	395	399	398	398
Kerala	939	6.56	356	374	366	380	385	387	388	388	389
Madhya Pradesh	862	6.04	352	388	387	392	397	402	403	401	405
Maharashtra	801	5.85	368	402	400	411	415	420	424	423	425
Manipur		(5)	328	337	333	348	353	362	360	360	362
Meghalaya		(5)	382	410	406	418	422	420	426	435	439
Orissa	830	6.05	334	365	367	370	376	385	391	395	401
Punjab	930	(4)	380	417	413	423	429	432	437	446	446
Rajasthan	885	6.15	377	413	407	424	422	428	430	430	434
Tamil Nadu	784	5.67	355	371	363	382	386	388	388	389	390
Tripura		(5)	351	383	389	389	395	394	400	410	416
Uttar Pradesh	960	6.60	371	408	405	416	418	423	429	431	429
West Bengal	842	5.73	342	365	369	370	371	375	381	389	394

See 'Notes on Tables'.

No. 38: Consumer Price Index Numbers for Agricultural / Rural Labourers

B : Consumer Price Index Numbers for Rural Labourers
(Base : July 1986 - June 1987 = 100)

State	1995-96 (7)	2005-06	2006-07	2006	2007						
				Oct.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**240**	**360**	**389**	**387**	**395**	**396**	**400**	**404**	**408**	**410**	**413**
Andhra Pradesh	244	371	401	397	406	408	415	418	420	420	423
Assam	243	364	390	392	394	399	403	408	412	417	423
Bihar	223	348	384	389	391	386	385	391	400	408	415
Gujarat	241	371	403	400	412	413	416	420	424	425	429
Haryana	237	378	404	402	410	413	420	425	430	439	446
Himachal Pradesh	221	350	377	377	384	383	380	383	386	391	396
Jammu & Kashmir	225	359	393	389	402	403	403	403	405	409	414
Karnataka	250	341	367	359	377	383	388	395	399	398	398
Kerala	260	359	378	370	380	384	388	389	390	390	391
Madhya Pradesh	239	358	392	391	395	396	400	405	406	404	408
Maharashtra	247	368	400	398	405	409	412	417	420	420	421
Manipur	245	328	338	334	344	349	354	363	361	361	363
Meghalaya	250	379	408	404	413	416	420	418	424	432	436
Orissa	236	335	366	368	372	371	376	385	391	395	401
Punjab	247	384	419	416	427	425	430	433	438	447	447
Rajasthan	239	375	412	406	425	422	421	427	428	428	432
Tamil Nadu	244	355	370	362	377	380	384	387	387	388	389
Tripura	219	344	373	379	376	378	384	383	390	402	407
Uttar Pradesh	231	372	409	405	417	417	418	424	429	431	430
West Bengal	232	346	368	372	369	373	376	378	385	392	397

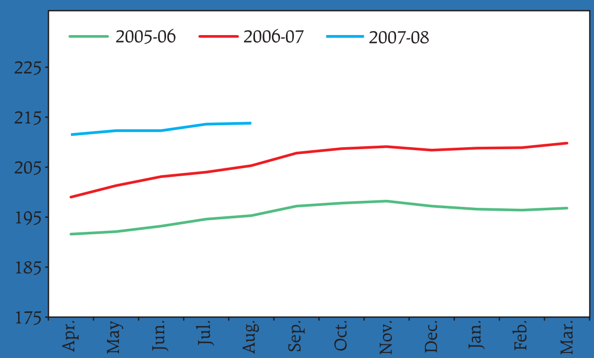
Source : Labour Bureau, Ministry of Labour, Government of India.

No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages)

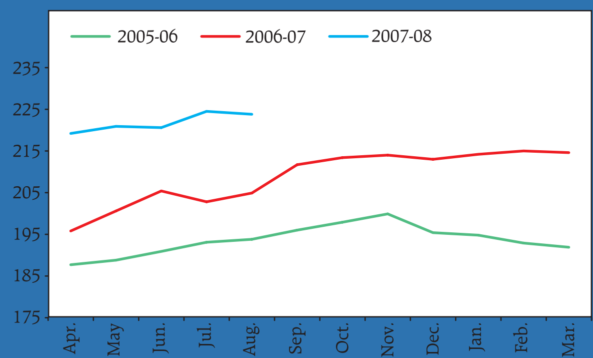
(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**112.6**	**195.6**	**206.1**	**205.3**	**209.8**	**211.5**	**212.3**	**212.3**	**213.6**	**213.8**
I. Primary Articles	**22.025**	**115.8**	**193.6**	**208.6**	**204.9**	**214.6**	**219.2**	**220.9**	**220.6**	**224.5**	**223.8**
(A) Food Articles	**15.402**	**112.8**	**195.3**	**210.3**	**205.1**	**214.0**	**218.3**	**220.6**	**219.3**	**223.2**	**222.6**
a. Foodgrains (Cereals+Pulses)	5.009	114.7	186.9	205.9	201.0	211.1	211.0	210.9	211.2	214.1	215.6
a1. Cereals	4.406	113.6	185.8	199.3	195.4	205.8	205.2	205.6	206.3	209.2	211.1
a2. Pulses	0.603	122.2	194.6	253.8	242.1	250.4	252.5	249.0	247.1	249.7	248.6
b. Fruits & Vegetables	2.917	108.0	219.3	227.9	216.6	222.3	238.3	244.7	232.9	245.8	243.6
b1. Vegetables	1.459	110.4	191.6	197.9	209.7	178.0	214.6	222.3	236.2	273.2	268.7
b2. Fruits	1.458	105.7	247.0	258.0	223.6	266.6	262.1	267.1	229.5	218.3	218.5
c. Milk	4.367	110.3	184.3	195.8	191.6	201.2	203.0	205.6	207.3	209.2	212.2
d. Eggs, meat & fish	2.208	116.1	217.2	226.9	226.1	236.6	240.8	245.8	246.0	244.6	232.8
e. Condiments & spices	0.662	126.2	176.9	227.9	223.0	232.5	235.1	228.9	231.3	237.8	241.1
f. Other food articles	0.239	111.6	129.9	154.3	151.3	149.0	149.0	150.1	161.2	157.4	153.8
(B) Non-Food Articles	**6.138**	**124.2**	**179.1**	**188.2**	**187.2**	**200.0**	**204.8**	**203.4**	**206.0**	**210.9**	**210.5**
a. Fibres	1.523	150.0	149.7	155.9	162.6	160.8	173.3	166.7	170.4	179.7	179.0
b. Oil seeds	2.666	118.5	167.1	175.7	167.8	199.7	203.8	205.1	210.7	217.2	215.5
c. Other non-food articles	1.949	112.0	218.5	230.6	233.0	231.0	231.0	229.7	227.3	226.5	228.1
(C) Minerals	**0.485**	**104.9**	**322.8**	**413.2**	**424.6**	**420.0**	**428.6**	**452.3**	**448.3**	**437.6**	**429.8**
a. Metallic minerals	0.297	103.8	453.1	598.7	618.2	608.1	622.0	661.8	655.4	638.0	622.7
b. Other minerals	0.188	106.7	117.0	120.4	118.7	123.0	123.2	121.4	121.2	121.0	125.2
II. Fuel, Power, Light & Lubricants	**14.226**	**108.9**	**306.8**	**324.9**	**328.8**	**319.8**	**320.4**	**322.1**	**322.0**	**321.9**	**322.4**
a. Coal mining	1.753	105.1	231.6	231.6	231.6	231.6	231.6	231.6	231.6	231.6	231.6
b. Minerals oils	6.990	106.1	359.8	388.1	402.3	379.1	380.3	383.5	383.3	383.0	384.0
c. Electricity	5.484	113.6	263.4	271.7	266.3	272.4	272.4	272.7	272.7	272.7	272.7

Monthly Movement of the Index of WPI-All Commodities



Monthly Movement in the Index of WPI-Primary Articles

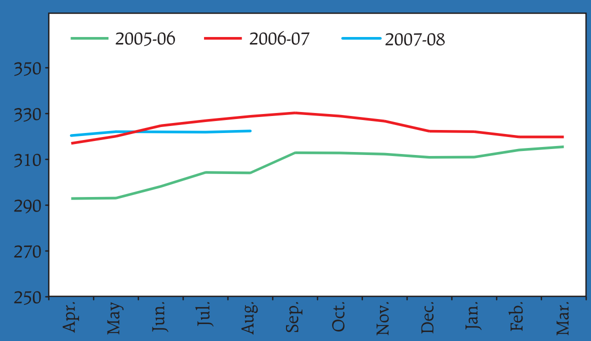


No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Contd.)*

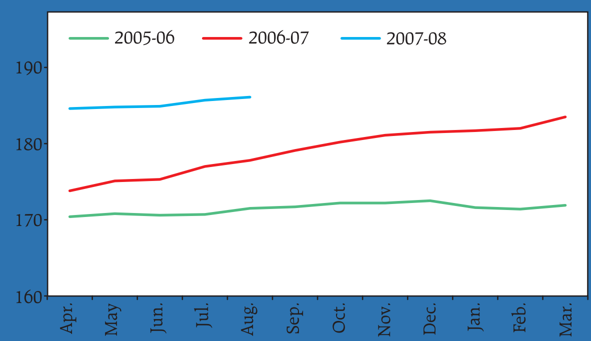
(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
III. Manufactured Products	**63.749**	**112.3**	**171.5**	**179.0**	**177.8**	**183.5**	**184.6**	**184.8**	**184.9**	**185.7**	**186.1**
(A) Food Products	**11.538**	**114.1**	**176.9**	**182.5**	**181.6**	**185.2**	**185.8**	**183.7**	**183.5**	**186.4**	**187.0**
a. Dairy products	0.687	117.0	206.5	217.3	217.2	219.9	220.3	224.3	224.6	227.4	233.1
b. Canning, preserving & processing of fish	0.047	100.0	273.1	283.7	283.1	289.5	293.8	293.8	293.8	293.8	293.8
c. Grain mill products	1.033	103.7	187.8	219.6	212.7	230.9	222.6	217.8	218.1	224.4	227.6
d. Bakery products	0.441	107.7	175.8	184.3	186.4	192.2	192.2	192.2	192.2	192.2	192.2
e. Sugar, khandsari & gur	3.929	119.1	178.8	179.8	185.6	164.3	163.1	158.7	155.7	155.6	155.1
f. Manufacture of common salts	0.021	104.8	235.1	223.0	204.9	220.0	219.0	218.0	218.0	217.6	219.3
g. Cocoa, chocolate, sugar & confectionery	0.087	118.3	177.2	183.1	183.0	188.1	188.1	188.1	188.1	188.1	188.1
h. Edible oils	2.775	110.9	146.1	154.6	151.9	163.6	165.4	166.2	168.3	171.4	171.1
i. Oil cakes	1.416	121.6	189.8	196.6	187.8	224.3	235.8	228.8	230.6	241.3	239.2
j. Tea & coffee proccessing	0.967	104.4	197.3	178.9	171.5	188.6	187.8	188.4	189.4	191.3	197.0
k. Other food products n.e.c.	0.154	111.6	190.1	198.1	199.2	201.4	210.4	211.4	214.7	214.7	214.7
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**118.3**	**226.8**	**243.5**	**238.7**	**256.3**	**258.5**	**263.9**	**264.7**	**265.0**	**265.0**
a. Wine Industries	0.269	150.2	246.1	288.7	282.3	306.9	306.9	306.9	306.9	308.8	308.8
b. Malt liquor	0.043	109.1	195.9	204.1	209.3	202.7	203.0	203.7	197.0	197.0	197.0
c. Soft drinks & carbonated water	0.053	109.1	164.8	176.3	171.0	186.7	186.7	186.7	186.7	186.7	187.1
d. Manufacture of bidi, cigarettes, tobacco & zarda	0.975	110.4	226.2	236.4	231.6	248.4	251.5	258.9	260.2	260.2	260.2

Monthly Movement of the Index of the WPI-Fuel, Power, Light & Lubricants



Monthly Movement in the Index of WPI-Manufactured Products



No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Contd.)*

(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
(C) Textiles	**9.800**	**118.2**	**129.5**	**132.3**	**131.8**	**133.2**	**132.7**	**132.6**	**132.1**	**132.5**	**132.8**
a. Cotton textiles	4.215	132.7	154.3	159.1	157.6	159.9	159.2	160.5	160.1	159.5	160.1
a1. Cotton yarn	3.312	136.2	150.0	156.4	154.4	157.3	156.4	158.0	157.5	156.7	158.0
a2. Cotton cloth (Mills)	0.903	119.9	170.2	169.4	169.4	169.4	169.4	169.6	169.8	169.8	168.1
b. Man made textiles	4.719	105.9	94.7	96.2	97.8	96.1	96.6	96.5	96.7	97.8	97.7
b1. Man made fibre	4.406	105.6	91.6	93.4	95.1	93.2	93.8	93.6	93.9	95.1	95.1
b2. Man made cloth	0.313	109.9	138.6	136.2	136.3	136.3	136.2	136.2	136.2	136.2	134.4
c. Woolen textiles	0.190	132.6	181.4	174.1	170.4	170.3	170.3	170.3	170.3	170.3	170.3
d. Jute, hemp & mesta textiles	0.376	110.3	206.4	217.3	204.3	239.4	229.0	211.6	202.5	205.7	209.1
e. Other misc. textiles	0.300	109.0	199.6	189.8	190.2	184.9	184.7	184.8	184.6	182.2	181.8
(D) Wood & Wood Products	**0.173**	**110.9**	**194.6**	**206.4**	**201.5**	**215.6**	**215.9**	**215.9**	**215.9**	**215.9**	**215.9**
(E) Paper & Paper Products	**2.044**	**106.1**	**178.4**	**190.7**	**190.9**	**192.6**	**192.5**	**192.6**	**192.8**	**193.8**	**194.8**
a. Paper & pulp	1.229	108.7	157.5	170.2	170.3	172.9	173.0	172.8	173.1	174.7	176.5
b. Manufacture of boards	0.237	110.9	135.3	165.6	166.9	163.4	162.8	164.3	164.3	164.3	164.3
c. Printing & publishing of newspapers,periodicals *etc.*	0.578	98.5	240.6	244.6	244.5	246.3	246.3	246.3	246.3	246.3	246.3
(F) Leather & Leather Products	**1.019**	**109.7**	**166.8**	**159.4**	**156.0**	**164.9**	**164.7**	**164.7**	**165.2**	**167.2**	**167.3**
(G) Rubber & Plastic Products	**2.388**	**106.4**	**139.1**	**148.2**	**145.2**	**152.8**	**155.0**	**155.0**	**154.6**	**154.5**	**154.6**
a. Tyres & tubes	1.286	104.1	131.1	141.5	141.2	146.3	150.2	150.2	150.2	150.2	150.2
a1. Tyres	1.144	103.4	122.5	130.4	131.5	133.2	136.8	136.8	136.8	136.8	136.8
a2. Tubes	0.142	110.0	201.0	231.4	219.2	251.9	258.0	258.0	258.0	258.0	258.0
b. Plastic products	0.937	106.8	139.1	146.7	139.0	152.7	153.0	153.0	152.0	151.8	152.0
c. Other rubber & plastic products	0.165	121.0	201.5	209.8	212.4	203.8	203.8	203.8	203.6	202.8	202.8
(H) Chemicals & Chemical Products	**11.931**	**116.6**	**188.3**	**193.9**	**193.2**	**198.4**	**200.1**	**202.0**	**201.8**	**201.9**	**202.8**
a. Basic heavy inorganic chemicals	1.446	112.2	174.4	171.0	175.5	166.3	167.5	169.6	170.4	173.1	177.6
b. Basic heavy organic chemicals	0.455	118.7	164.2	180.2	187.5	182.3	182.7	180.7	183.9	176.2	173.9
c. Fertilisers & pesticides	4.164	117.7	171.6	171.6	170.0	171.3	173.0	172.6	172.5	172.5	172.8
c1. Fertilisers	3.689	115.8	174.9	177.2	176.7	178.1	180.0	179.6	179.4	179.4	179.8
c2. Pesticides	0.475	132.5	145.9	127.9	117.9	118.2	118.2	118.3	118.6	118.6	118.5
d. Paints, varnishes & lacquers	0.496	101.3	124.0	128.1	127.7	129.7	134.5	137.1	137.0	136.9	146.4
e. Dyestuffs & indigo	0.175	108.4	110.8	105.8	105.2	105.2	105.2	105.2	105.2	112.7	112.7
f. Drugs & medicines	2.532	129.4	278.1	293.1	291.5	308.8	310.5	315.8	315.4	315.6	315.6
g. Perfumes, cosmetics, toiletries *etc.*	0.978	118.0	204.9	223.6	221.1	235.4	238.4	238.4	238.4	238.4	238.4
h. Turpentine, synthetic resins, plastic materials *etc.*	0.746	107.6	131.8	133.4	127.9	138.6	138.4	148.1	143.8	142.9	141.3
i. Matches, explosives & other chemicals n.e.c.	0.940	98.3	128.8	136.0	135.0	141.1	142.6	142.6	142.6	142.6	142.5

No. 39: Index Numbers of Wholesale Prices in India – by Groups and Sub-Groups (Averages) *(Concld.)*

(Base : 1993-94 = 100)

Average of months/Average of weeks ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
(I) Non-Metallic Mineral Products	**2.516**	**110.9**	**170.0**	**191.8**	**189.8**	**201.9**	**203.1**	**204.1**	**205.0**	**206.3**	**207.5**
a. Structural clay products	0.230	100.0	189.7	195.2	195.2	197.1	203.5	211.7	211.7	211.7	211.7
b. Glass, earthernware, chinaware & their products	0.237	113.3	159.4	160.7	156.6	168.6	168.6	168.6	168.6	168.6	168.6
c. Cement	1.731	112.4	166.7	197.3	195.0	210.7	211.6	211.6	213.3	215.1	215.6
d. Cement, slate & graphite products	0.319	108.8	181.6	182.9	182.3	182.3	182.3	182.3	182.3	182.3	188.9
(J) Basic Metals Alloys & Metals Products	**8.342**	**108.4**	**218.7**	**233.3**	**231.7**	**241.9**	**244.6**	**244.5**	**244.6**	**244.5**	**243.5**
a. Basic Metals & Alloys	6.206	107.0	232.4	236.3	235.8	242.8	245.9	246.8	247.4	247.7	246.6
a1. Iron & Steel	3.637	106.0	250.7	254.4	253.8	261.9	266.7	267.9	268.1	268.8	267.5
a2. Foundries for Casting, Forging & Structurals	0.896	106.7	231.8	228.5	225.1	236.5	238.3	238.3	238.3	238.3	238.3
a3. Pipes, Wires Drawing & Others	1.589	109.5	193.1	204.1	204.9	207.4	207.5	208.2	210.1	209.6	208.3
a4. Ferro Alloys	0.085	104.5	186.2	148.5	150.7	150.7	154.1	154.1	154.1	154.1	156.2
b. Non-Ferrous Metals	1.466	115.9	194.7	258.3	252.4	278.8	280.7	276.0	274.3	271.8	270.6
b1. Aluminium	0.853	114.7	210.9	253.6	251.2	269.5	269.5	259.0	257.3	252.3	252.3
b2. Other Non-Ferrous Metals	0.613	117.7	172.2	264.8	254.0	291.7	296.3	299.8	298.0	298.9	296.0
c. Metal Products	0.669	105.0	144.1	149.8	148.4	153.8	153.8	153.8	153.8	154.7	155.5
(K) Machinery & Machine Tools	**8.363**	**106.0**	**147.5**	**155.6**	**153.7**	**161.9**	**163.0**	**164.6**	**165.1**	**166.0**	**166.7**
a. Non-electrical machinery & parts	3.379	108.6	188.3	194.8	194.9	196.6	197.5	198.0	197.8	198.0	198.4
a1. Heavy machinery & parts	1.822	111.0	199.2	201.8	201.7	203.7	204.5	205.2	204.9	205.0	205.0
a2. Industrial machinery for textiles, *etc.*	0.568	108.5	245.6	255.2	255.2	256.5	259.9	259.9	259.9	260.2	260.9
a3. Refrigeration & other non-electrical machinery	0.989	104.3	135.2	147.3	147.6	149.1	148.9	149.2	149.0	149.4	150.4
b. Electrical machinery	4.985	104.2	119.6	129.0	125.7	138.4	139.6	141.9	142.9	144.3	145.2
b1. Electrical industrial machinery	1.811	105.2	142.4	150.4	149.5	153.8	156.0	155.7	156.6	159.2	162.8
b2. Wires & cables	1.076	109.0	145.7	179.0	164.5	215.1	216.3	226.4	229.4	231.3	231.3
b3. Dry & wet batteries	0.275	105.8	130.5	148.5	149.1	159.8	159.9	161.6	161.6	162.2	162.8
b4. Electrical apparatus & appliances	1.823	100.1	80.0	75.3	75.6	74.7	75.1	75.2	75.4	75.4	74.1
(L) Transport Equipment & Parts	**4.295**	**107.4**	**159.9**	**162.4**	**162.9**	**163.5**	**163.6**	**163.8**	**164.2**	**164.7**	**164.9**
a. Locomotives, railway wagons & parts	0.318	105.3	124.8	125.2	127.5	122.2	122.2	122.2	127.8	131.6	131.6
b. Motor vehicles,motorcycles, scooters, bicycles & parts	3.977	107.6	162.7	165.4	165.8	166.8	166.9	167.1	167.0	167.3	167.6

Source : Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end)

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Oct.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**117.1**	**195.8**	**206.6**	**208.4**	**212.3**	**212.8**	**213.9**	**213.9**	**215.1**	**215.1**
I. Primary Articles	**22.025**	**120.8**	**194.0**	**209.6**	**213.3**	**220.8**	**222.3**	**224.7**	**224.3**	**226.4**	**224.5**
(A) Food Articles	**15.402**	**114.9**	**195.7**	**211.1**	**217.5**	**220.3**	**221.2**	**223.1**	**223.4**	**225.8**	**224.4**
a. Foodgrains (Cereals + Pulses)	5.009	118.9	187.8	206.5	210.1	210.8	212.0	215.1	215.9	215.3	217.1
a1. Cereals	4.406	118.2	186.4	199.8	201.5	205.9	207.0	210.3	211.3	211.5	213.6
a2. Pulses	0.603	123.9	197.5	255.2	273.1	247.0	248.7	250.1	249.1	243.3	242.7
b. Fruits & Vegetables	2.917	103.1	218.6	228.6	256.0	243.9	234.0	250.0	247.3	261.1	243.2
b1. Vegetables	1.459	95.0	191.8	199.1	237.1	224.1	247.1	282.4	274.5	265.9	235.5
b2. Fruits	1.458	111.2	245.5	258.2	275.0	263.8	220.9	217.5	220.0	256.2	251.0
c. Milk	4.367	111.3	184.4	196.5	198.2	206.1	209.2	209.2	212.6	212.6	216.1
d. Eggs,meat & fish	2.208	122.1	218.1	227.6	220.7	**244.3**	250.0	236.7	231.8	232.8	235.1
e. Condiments & spices	0.662	131.6	177.6	230.0	243.5	226.6	237.6	235.6	243.2	240.4	242.3
f. Other food articles	0.239	127.4	130.4	154.8	153.7	153.2	162.8	153.3	153.4	152.0	152.0
(B) Non-Food Articles	**6.138**	**136.9**	**179.1**	**189.6**	**186.4**	**204.0**	**207.2**	**211.8**	**210.3**	**211.7**	**208.8**
a. Fibres	1.523	168.7	149.5	157.0	157.5	169.5	170.2	181.4	179.7	180.2	175.0
b. Oil seeds	2.666	127.8	167.0	178.0	171.3	204.5	215.1	217.5	214.8	217.1	211.2
c. Other non-food articles	1.949	124.4	218.8	231.0	229.5	230.4	225.3	227.7	228.1	228.9	231.8
(C) Minerals	**0.485**	**104.2**	**329.5**	**416.9**	**419.7**	**448.7**	**448.3**	**437.6**	**429.8**	**429.8**	**424.7**
a. Metallic minerals	0.297	102.5	464.0	604.7	610.1	656.1	655.4	638.0	622.7	622.7	618.2
b. Other minerals	0.188	107.0	117.1	120.4	119.0	121.2	121.3	121.0	125.2	125.2	119.2
II. Fuel, Power, Light & Lubricants	**14.226**	**109.1**	**307.4**	**324.0**	**329.5**	**322.1**	**322.0**	**321.9**	**322.4**	**322.0**	**323.7**
a. Coal mining	1.753	106.2	231.6	231.6	231.6	231.6	231.6	231.6	231.6	231.6	231.6
b. Minerals oils	6.990	106.2	361.0	388.3	394.8	383.6	383.3	383.1	384.1	383.3	386.9
c. Electricity	5.484	113.6	263.4	271.6	277.6	272.7	272.7	272.7	272.7	272.7	272.7
III. Manufactured Products	**63.749**	**117.6**	**171.5**	**179.3**	**179.7**	**184.9**	**185.1**	**186.1**	**186.1**	**187.4**	**187.6**
(A) Food Products	**11.538**	**113.2**	**176.9**	**182.9**	**182.6**	**183.4**	**184.3**	**187.3**	**187.0**	**189.3**	**189.6**
a. Dairy products	0.687	129.0	206.7	217.7	218.7	224.1	224.6	234.4	233.2	233.3	233.2
b. Canning, preserving & processing of fish	0.047	100.0	273.4	284.0	283.1	293.8	293.8	293.8	293.8	293.8	293.8

See 'Notes on Tables'.

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Contd.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Oct.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
c. Grain mill products	1.033	109.0	188.0	219.6	224.7	217.8	217.7	224.4	228.5	228.7	230.4
d. Bakery products	0.441	111.0	175.6	184.8	186.4	192.2	192.2	192.2	192.2	192.2	192.2
e. Sugar, khandsari & gur	3.929	109.5	179.0	179.2	183.1	158.2	155.6	155.1	155.5	156.2	156.4
f. Manufacture of common salts	0.021	114.1	236.9	222.8	211.8	218.0	218.0	217.6	219.3	219.3	219.3
g. Cocoa, chocolate, sugar & confectionery	0.087	124.1	177.5	183.1	183.0	188.1	188.1	188.1	188.1	188.1	188.1
h. Edible oils	2.775	118.4	145.9	155.1	154.7	166.6	170.1	171.1	171.1	171.0	173.0
i. Oil cakes	1.416	118.3	189.8	199.8	188.2	226.3	234.1	243.3	237.5	254.2	250.4
j. Tea & coffee proccessing	0.967	99.5	197.7	179.6	171.5	189.4	189.4	197.0	197.0	197.0	197.0
k. Other food products n.e.c.	0.154	117.3	190.1	198.4	198.7	214.7	214.7	214.7	214.7	214.7	214.7
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**124.3**	**227.2**	**243.9**	**242.5**	**264.9**	**264.7**	**265.0**	**265.1**	**265.1**	**265.1**
a. Wine Industries	0.269	163.5	247.5	289.8	287.4	306.9	306.9	308.8	308.8	308.8	308.8
b. Malt liquor	0.043	125.5	195.8	204.0	210.5	203.7	197.0	197.0	197.0	197.0	197.0
c. Soft drinks & carbonated water	0.053	109.1	164.8	176.2	171.0	186.7	186.7	186.7	188.1	188.1	188.1
d. Manufacture of bidi, cigarettes, tobacco & zarda	0.975	114.2	226.4	236.6	235.4	260.2	260.2	260.2	260.2	260.2	260.2
(C) Textiles	**9.800**	**128.1**	**129.6**	**132.3**	**134.2**	**133.1**	**132.0**	**132.8**	**133.1**	**132.8**	**132.2**
a. Cotton textiles	4.215	148.3	154.5	159.1	159.8	160.5	159.7	160.2	160.9	160.9	158.1
a1. Cotton yarn	3.312	152.1	150.2	156.3	157.2	158.0	157.0	157.6	159.1	159.1	155.5
a2. Cotton cloth (Mills)	0.903	134.4	169.6	169.4	169.4	169.8	169.8	169.8	167.5	167.5	167.5
b. Man made textiles	4.719	110.9	94.6	96.2	99.6	97.9	96.8	97.8	97.6	97.7	99.0
b1. Man made fibre	4.406	110.6	91.5	93.3	97.0	95.2	94.0	95.1	95.0	95.1	96.5
b2. Man made cloth	0.313	114.7	138.4	136.2	136.3	136.2	136.2	136.2	133.8	133.8	133.8
c. Woolen textiles	0.190	139.9	181.1	173.4	170.3	170.3	170.3	170.3	170.3	17.3	170.3
d. Jute, hemp & mesta textiles	0.376	120.5	207.0	218.4	217.3	207.6	200.9	206.9	210.5	201.1	199.5
e. Other misc. textiles	0.300	117.9	199.5	189.3	190.8	184.7	184.6	182.2	181.8	181.8	181.8
(D) Wood & Wood Products	**0.173**	**113.3**	**196.3**	**205.9**	**201.5**	**215.9**	**215.9**	**215.9**	**215.9**	**215.9**	**215.9**
(E) Paper & Paper Products	**2.044**	**117.0**	**178.5**	**190.9**	**191.9**	**192.7**	**192.8**	**194.5**	**194.9**	**195.1**	**194.8**
a. Paper & pulp	1.229	122.9	157.6	170.4	171.6	172.9	173.1	175.9	176.7	176.9	176.3
b. Manufacture of board	0.237	113.0	135.4	165.6	166.9	164.3	164.3	164.3	164.3	164.8	164.8
c. Printing & publishing of newspapers, periodicals *etc.*	0.578	106.2	240.7	244.7	245.2	246.3	246.3	246.3	246.3	246.3	246.3

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Contd.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Oct.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(F) Leather & Leather Products	**1.019**	**117.8**	**166.5**	**159.7**	**156.0**	**164.7**	**167.3**	**167.1**	**167.3**	**167.3**	**167.3**
(G) Rubber & Plastic Products	**2.388**	**117.0**	**139.2**	**148.8**	**151.9**	**155.0**	**154.5**	**154.5**	**154.6**	**159.8**	**160.1**
a. Tyres & tubes	1.286	119.6	131.3	142.3	144.4	150.2	150.2	150.2	150.2	160.1	160.1
a1. Tyres	1.144	120.3	122.6	131.0	132.1	136.8	136.8	136.8	136.8	147.6	147.6
a2. Tubes	0.142	114.1	201.7	233.6	243.7	258.0	258.0	258.0	258.0	261.2	261.2
b. Plastic products	0.937	108.8	139.1	147.0	151.6	153.0	151.8	151.8	152.1	151.8	152.5
c. Other rubber & plastic products	0.165	143.9	201.5	209.5	212.4	203.8	202.8	202.8	202.8	202.8	202.8
(H) Chemicals & Chemical Products	**11.931**	**121.6**	**188.7**	**194.1**	**192.8**	**201.9**	**201.8**	**202.1**	**202.8**	**203.9**	**203.7**
a. Basic heavy inorganic chemicals	1.446	125.6	174.5	170.8	169.4	169.6	170.8	174.7	178.3	185.2	186.5
b. Basic heavy organic chemicals	0.455	131.4	164.9	180.1	184.2	180.8	182.6	176.2	173.9	176.1	167.1
c. Fertilisers & pesticides	4.164	123.0	171.7	171.5	170.8	172.6	172.5	172.5	172.8	172.8	172.8
c1. Fertilisers	3.689	121.8	174.9	177.3	177.6	179.6	179.4	179.4	179.8	179.8	179.8
c2. Pesticides	0.475	132.5	146.4	126.2	117.9	118.6	118.6	118.5	118.5	118.5	118.5
d. Paints, varnishes & lacquers	0.496	101.4	124.3	128.3	127.7	137.1	136.9	136.9	146.4	146.4	146.4
e. Dyestuffs & indigo	0.175	115.0	110.9	105.6	105.2	105.2	105.3	112.7	112.7	112.7	112.7
f. Drugs & medicines	2.532	132.9	279.0	294.1	291.5	315.4	315.6	315.6	315.6	315.6	315.6
g. Perfumes, cosmetics, toiletries, *etc.*	0.978	119.0	206.0	224.0	221.1	238.4	238.4	238.4	238.4	238.4	238.6
h. Turpentine, synthetic resins, plastic materials etc.	0.746	111.9	132.0	132.9	128.3	148.4	143.6	143.0	140.5	143.6	143.9
i. Matches, explosives & other chemicals n.e.c.	0.940	96.3	128.9	136.1	137.4	142.6	142.6	142.6	142.2	142.2	142.2
(I) Non-Metallic Mineral Products	**2.516**	**122.4**	**170.5**	**192.0**	**191.0**	**204.4**	**205.7**	**206.3**	**207.9**	**207.4**	**210.7**
a. Structural clay products	0.230	101.4	189.8	195.3	195.8	211.7	211.7	211.7	211.7	211.7	211.7
b. Glass, earthernware, chinaware & their products	0.237	126.3	159.2	160.6	156.6	168.6	168.6	168.6	168.6	168.6	168.6
c. Cement	1.731	126.9	167.4	197.6	196.7	212.4	214.3	215.1	216.0	216.2	220.2
d. Cement, slate & graphite products	0.319	110.3	181.6	183.0	182.3	182.3	182.3	182.3	190.0	185.2	189.7

No. 40: Index Numbers of Wholesale Prices in India – by Groups and Sub-groups (Month-end/Year-end) *(Concld.)*

(Base : 1993-94 = 100)

Last Week of month / year ended Saturday	Weight	1994-95	2005-06	2006-07	2006	2007					
		April-March			Oct.	May	Jun.	Jul.	Aug.	Sep. (P)	Oct. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(J) Basic Metals Alloys & Metals Products	**8.342**	**115.6**	**218.1**	**233.8**	**237.1**	**244.7**	**243.9**	**244.8**	**242.9**	**247.3**	**247.1**
a. Basic metals & alloys	6.206	112.7	231.4	236.8	239.4	247.3	247.2	247.8	246.0	253.4	253.1
a1. Iron & steel	3.637	112.6	249.6	255.0	259.5	268.6	267.7	269.3	266.4	278.3	277.1
a2. Foundries for casting, forging & structurals	0.896	113.5	230.5	228.6	228.1	238.3	238.3	238.3	238.3	238.3	240.8
a3. Pipes, wires drawing & others	1.589	112.9	192.9	204.3	204.6	208.5	210.4	208.8	208.3	210.2	210.3
a4. Ferro alloys	0.085	102.9	184.5	148.5	150.7	154.1	154.1	154.1	156.2	156.2	156.2
b. Non-ferrous metals	1.466	130.8	195.8	259.5	267.5	275.2	271.3	272.6	269.5	263.0	263.1
b1. Aluminium	0.853	132.4	211.8	254.3	251.5	258.4	252.9	252.3	252.3	241.4	241.4
b2. Other non-ferrous metals	0.613	128.6	173.5	266.7	289.8	298.6	296.9	300.8	293.4	293.0	293.2
c. Metal Products	0.669	108.7	144.4	150.0	149.4	153.8	153.8	155.5	155.5	156.0	156.8
(K) Machinery & Machine Tools	**8.363**	**109.0**	**147.4**	**155.9**	**155.6**	**164.8**	**165.8**	**166.1**	**166.9**	**166.3**	**167.0**
a. Non-electrical machinery & parts	3.379	111.1	188.2	195.1	195.7	198.1	197.9	198.2	198.5	198.5	198.6
a1. Heavy machinery & parts	1.822	114.8	198.8	202.0	203.1	205.4	205.0	205.0	205.0	205.5	205.5
a2. Industrial machinery for textiles, etc.	0.568	108.4	246.1	255.3	255.2	259.9	259.9	260.9	260.9	260.9	260.9
a3. Refrigeration & other non-electrical machinery	0.989	106.0	135.2	147.6	147.8	149.0	149.1	149.5	150.7	149.7	150.0
b. Electrical machinery	4.985	107.5	119.8	129.4	128.5	142.2	144.0	144.4	145.4	144.4	145.5
b1. Electrical industrial machinery	1.811	108.8	142.8	150.5	150.4	154.7	159.0	159.6	163.9	159.6	162.0
b2. Wires & cables	1.076	119.0	146.4	180.8	175.4	229.7	230.0	231.3	231.3	233.7	234.2
b3. Dry & wet batteries	0.275	109.7	130.4	148.9	149.1	161.6	161.6	162.8	162.8	162.8	165.1
b4. Electrical apparatus & appliances & parts	1.823	99.2	79.7	75.3	75.9	75.2	75.7	75.1	73.7	73.7	73.7
(L) Transport Equipment & Parts	**4.295**	**110.6**	**160.0**	**162.5**	**163.5**	**163.7**	**164.7**	**164.7**	**164.9**	**165.1**	**165.7**
a. Locomotives, railway wagons & parts	0.318	105.4	125.1	125.0	127.5	122.2	131.6	131.6	131.6	131.6	135.3
b. Motor vehicles, motorcycles, scooters, bicycles & parts	3.977	111.0	162.7	165.5	166.4	167.0	167.3	167.3	167.6	167.8	168.1

Source : Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

Trade and Balance of Payments

No. 41: Foreign Trade (Annual and Monthly)

Year/ Month	Rupees crore			US dollar million			SDR million		
	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
1	2	3	4	5	6	7	8	9	10
2002-03	2,55,137	2,97,206	-42,069	52,719	61,412	-8,693	39,785	46,345	-6,560
2003-04	2,93,367	3,59,108	-65,741	63,843	78,149	-14,307	44,663	54,672	-10,009
2004-05	3,75,340	5,01,065	-1,25,725	83,536	1,11,517	-27,981	56,081	74,866	-18,785
2005-06	4,56,418	6,60,409	-2,03,991	1,03,091	1,49,166	-46,075	70,774	1,02,405	-31,631
2006-07	5,71,779	8,40,506	-2,68,727	1,26,361	1,85,749	-59,388	85,018	1,24,975	-39,957
2006-07 R									
April	38,627	56,342	-17,715	8,594	12,535	-3,941	5,917	8,630	-2,713
May	45,588	64,963	-19,375	10,040	14,307	-4,267	6,741	9,606	-2,865
June	47,922	64,683	-16,761	10,405	14,044	-3,639	7,040	9,502	-2,462
July	48,975	67,558	-18,583	10,542	14,542	-4,000	7,134	9,841	-2,707
August	49,649	68,658	-19,009	10,669	14,753	-4,085	7,173	9,920	-2,746
September	49,486	77,611	-28,125	10,730	16,829	-6,098	7,242	11,358	-4,116
October	44,589	76,048	-31,459	9,807	16,726	-6,919	6,655	11,350	-4,695
November	44,111	71,203	-27,092	9,835	15,876	-6,040	6,605	10,662	-4,057
December	46,468	69,546	-23,079	10,411	15,581	-5,171	6,904	10,333	-3,429
January	48,357	68,405	-20,049	10,908	15,430	-4,522	7,294	10,318	-3,024
February	46,484	62,470	-15,986	10,527	14,147	-3,620	7,030	9,448	-2,418
March	56,628	75,445	-18,817	12,862	17,137	-4,274	8,534	11,370	-2,836
2007-08 P									
April	46,414	74,898	-28,484	11012	17770	-6,758	7235	11675	-4,440
May	49,898	78,410	-28,511	12,236	19,227	-6,991	8,063	12,670	-4,607
June	48,386	78,268	-29,881	11,867	19,196	-7,329	7,853	12,702	-4,849
July	50,494	70,759	-20,266	12,494	17,509	-5,015	8,170	11,449	-3,279
August	51,787	79,884	-28,097	12,686	19,569	-6,883	8,292	12,791	-4,499
September	51,622	69,456	-17,834	12,797	17,218	-4,421	8,290	11,154	-2,864

R : Revised.

Source : DGCI & S & Ministry of Commerce and Industry.

Notes : 1. Data conversion has been done using period average exchange rates.
2. Monthly data may not add up to the annual data on account of revision in monthly figures.

Also see 'Notes on Tables'.

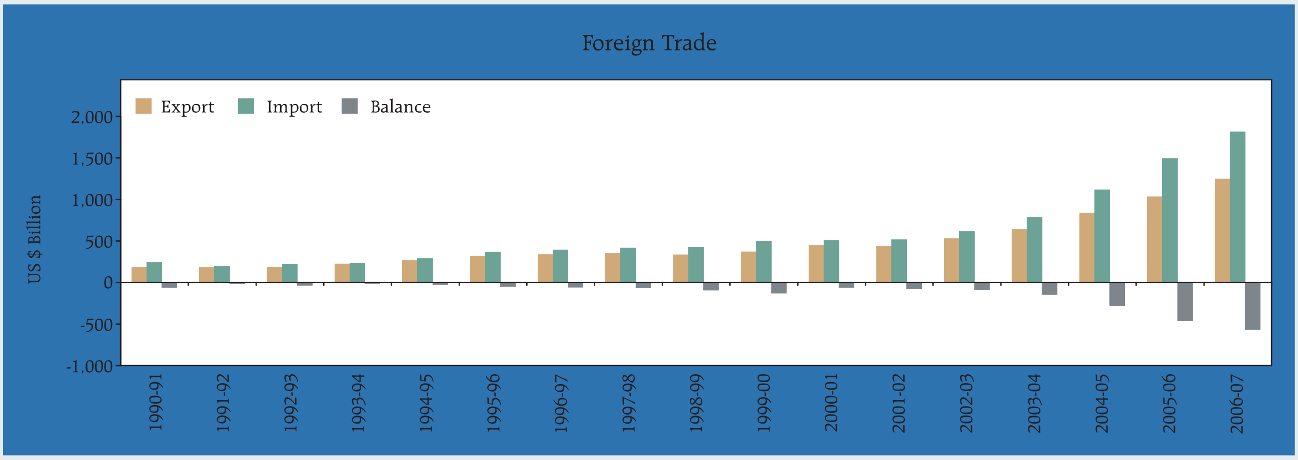


Table 42 : India's Overall Balance of Payments

(Rs. crore)

Items	2006-07 P			2005-06 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7
A. CURRENT ACCOUNT						
I. Merchandise	**574917**	**868675**	**-293758**	**465705**	**695131**	**-229426**
II. Invisibles (a+b+c)	**537769**	**288334**	**249435**	**409200**	**220496**	**188704**
a) Services	367111	219307	147804	272220	166601	105619
i) Travel	42477	32726	9751	34871	28673	6198
ii) Transportation	36481	40029	-3548	27874	34746	-6872
iii) Insurance	5425	2898	2527	4641	4572	69
iv) G.n.i.e.	1235	1888	-653	1374	2243	-869
v) Miscellaneous	281493	141766	139727	203460	96367	107093
of which						
Software Services	141356	11266	130090	104632	5954	98678
Business Services	105895	90960	14935	57124	46630	10494
Financial Services	14413	8234	6179	7551	5799	1752
Communication Services	9332	3252	6080	9695	3610	6085
b) Transfers	130159	6537	123622	111856	4183	107673
i) Official	2877	1890	987	2965	2152	813
ii) Private	127282	4647	122635	108891	2031	106860
c) Income	40499	62490	-21991	25124	49712	-24588
i) Investment Income	38707	58144	-19437	24344	46313	-21969
ii) Compensation of Employees	1792	4346	-2554	780	3399	-2619
Total Current Account (I+II)	**1112686**	**1157009**	**-44323**	**874905**	**915627**	**-40722**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**586584**	**516501**	**70083**	**337301**	**260982**	**76319**
a) Foreign Direct Investment (i+ii)	92092	53899	38193	35213	14251	20962
i) In India	88119	394	87725	34240	273	33967
Equity	72471	394	72077	25822	273	25549
Reinvested Earnings	13284	–	13284	7420	–	7420
Other Capital	2364	–	2364	998	–	998
ii) Abroad	3973	53505	-49532	973	13978	-13005
Equity	3973	46232	-42259	973	9142	-8169
Reinvested Earnings	–	3331	-3331	–	1612	-1612
Other Capital	–	3942	-3942	–	3224	-3224
b) Portfolio Investment	494492	462602	31890	302088	246731	55357
In India	494093	462463	31630	302088	246731	55357
Abroad	399	139	260	–	–	–
2. Loans (a+b+c)	**227511**	**132518**	**94993**	**166208**	**139650**	**26558**
a) External Assistance	16805	8854	7951	16116	8611	7505
i) By India	73	163	-90	89	460	-371
ii) To India	16732	8691	8041	16027	8151	7876
b) Commercial Borrowings (MT & LT)	95675	23468	72207	64387	52925	11462
i) By India	2954	4384	-1430	–	1058	-1058
ii) To India	92721	19084	73637	64387	51867	12520
c) Short Term To India	115031	100196	14835	85705	78114	7591
3. Banking Capital (a+b)	**165495**	**156302**	**9193**	**95988**	**90193**	**5795**
a) Commercial Banks	163657	155945	7712	91200	89569	1631
i) Assets	64972	78080	-13108	3369	17711	-14342
ii) Liabilities	98685	77865	20820	87831	71858	15973
of which: Non-Resident Deposits	87952	70311	17641	79190	66733	12457
b) Others	1838	357	1481	4788	624	4164
4. Rupee Debt Service	**–**	**725**	**-725**	**–**	**2557**	**-2557**
5. Other Capital	**45708**	**17017**	**28691**	**28979**	**32125**	**-3146**
Total Capital Account (1 to 5)	**1025298**	**823063**	**202235**	**628476**	**525507**	**102969**
C. ERRORS & OMISSIONS	**5722**	**–**	**5722**	**3649**	**–**	**3649**
D. OVERALL BALANCE (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**2143706**	**1980072**	**163634**	**1507030**	**1441134**	**65896**
E. MONETARY MOVEMENTS (i+ii)	**–**	**163634**	**-163634**	**–**	**65896**	**-65896**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	163634	-163634	–	65896	-65896

P : Preliminary. PR : Partially Revised.

No. 42: India's Overall Balance of Payments *(Contd.)*

(Rs. crore)

Items	Apr-Jun 2007 P			Apr-Jun 2006 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	8	9	10	11	12	13
A. CURRENT ACCOUNT						
I. Merchandise	**144155**	**233139**	**-88984**	**134930**	**211985**	**-77055**
II. Invisibles (a+b+c)	**129609**	**59992**	**69617**	**112054**	**55764**	**56290**
a) Services	82721	44991	37730	77328	41109	36219
i) Travel	8610	7756	854	7766	6766	1000
ii) Transportation	9105	11100	-1995	7885	9312	-1427
iii) Insurance	1719	759	960	1087	582	505
iv) G.n.i.e.	396	462	-66	259	368	-109
v) Miscellaneous	62891	24914	37977	60331	24081	36250
of which	34806	2297	32509	32007	1992	30015
Software Services						
Business Services	18469	14886	3583	20757	14432	6325
Financial Services	3641	3538	103	2828	1441	1387
Communication Services	2115	825	1290	2019	491	1528
b) Transfers	36121	1785	34336	27246	1364	25882
i) Official	631	684	-53	314	409	-95
ii) Private	35490	1101	34389	26932	955	25977
c) Income	10767	13216	-2449	7480	13291	-5811
i) Investment Income	10206	12210	-2004	7184	12400	-5216
ii) Compensation of Employees	561	1006	-445	296	891	-595
Total Current Account (I+II)	**273764**	**293131**	**-19367**	**246984**	**267749**	**-20765**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**169531**	**136879**	**32652**	**152041**	**147898**	**4143**
a) Foreign Direct Investment (i+ii)	26530	24630	1900	11886	5447	6439
i) In India	24345	87	24258	11586	36	11550
Equity	20737	87	20650	8376	36	8340
Reinvested Earnings	2919	–	2919	3174	–	3174
Other Capital	689	–	689	36	–	36
ii) Abroad	2185	24543	-22358	300	5411	-5111
Equity	2185	22807	-20622	300	3533	-3233
Reinvested Earnings	–	1117	-1117	–	837	-837
Other Capital	–	619	-619	–	1041	-1041
b) Portfolio Investment	143001	112249	30752	140155	142451	-2296
In India	142758	112224	30534	140055	142446	-2391
Abroad	243	25	218	100	5	95
2. Loans (a+b+c)	**65480**	**31034**	**34446**	**48831**	**28710**	**20121**
a) External Assistance	3109	2046	1063	2619	2396	223
i) By India	21	54	-33	18	41	-23
ii) To India	3088	1992	1096	2601	2355	246
b) Commercial Borrowings (MT & LT)	34282	5220	29062	22995	4993	18002
i) By India	1464	1196	268	414	1014	-600
ii) To India	32818	4024	28794	22581	3979	18602
c) Short Term To India	28089	23768	4321	23217	21321	1896
3. Banking Capital (a+b)	**30113**	**38856**	**-8743**	**44729**	**22040**	**22689**
a) Commercial Banks	30113	38831	-8718	44402	22040	22362
i) Assets	9001	10313	-1312	23904	8535	15369
ii) Liabilities	21112	28518	-7406	20498	13505	6993
of which: Non-Resident Deposits	19755	21599	-1844	18980	13382	5598
b) Others	–	25	-25	327	–	327
4. Rupee Debt Service	**–**	**177**	**-177**	**–**	**305**	**-305**
5. Other Capital	**13764**	**9014**	**4750**	**8121**	**6734**	**1387**
Total Capital Account (1 to 5)	**278888**	**215960**	**62928**	**253722**	**205687**	**48035**
C. ERRORS & OMISSIONS	**2622**	**–**	**2622**	**1736**	**–**	**1736**
D. OVERALL BALANCE (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**555274**	**509091**	**46183**	**502442**	**473436**	**29006**
E. MONETARY MOVEMENTS (i+ii)	**–**	**46183**	**-46183**	**–**	**29006**	**-29006**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	46183	-46183	–	29006	-29006

Table 43: India's Overall Balance of Payments

(US $ million)

Items	2006-07 P			2005-06 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7
A. CURRENT ACCOUNT						
I. Merchandise	**127090**	**191995**	**-64905**	**105152**	**156993**	**-51841**
II. Invisibles (a+b+c)	**119163**	**63867**	**55296**	**92294**	**49639**	**42655**
a) Services	81330	48603	32727	61404	37523	23881
i) Travel	9423	7235	2188	7853	6464	1389
ii) Transportation	8069	8857	-788	6291	7841	-1550
iii) Insurance	1200	641	559	1050	1028	22
iv) G.n.i.e.	273	417	-144	309	506	-197
v) Miscellaneous	62365	31453	30912	45901	21684	24217
of which						
Software Services	31300	2502	28798	23600	1338	22262
Business Services	23459	20200	3259	12858	10496	2362
Financial Services	3213	1832	1381	1704	1308	396
Communication Services	2068	719	1349	2182	808	1374
b) Transfers	28861	1446	27415	25228	944	24284
i) Official	638	418	220	668	486	182
ii) Private	28223	1028	27195	24560	458	24102
c) Income	8972	13818	-4846	5662	11172	-5510
i) Investment Income	8574	12856	-4282	5486	10407	-4921
ii) Compensation of Employees	398	962	-564	176	765	-589
Total Current Account (I+II)	**246253**	**255862**	**-9609**	**197446**	**206632**	**-9186**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**130035**	**114536**	**15499**	**76061**	**58837**	**17224**
a) Foreign Direct Investment (i+ii)	20414	11977	8437	7941	3211	4730
i) In India	19531	89	19442	7722	61	7661
Equity	16065	89	15976	5820	61	5759
Reinvested Earnings	2936	–	2936	1676	–	1676
Other Capital	530	–	530	226	–	226
ii) Abroad	883	11888	-11005	219	3150	-2931
Equity	883	10281	-9398	219	2060	-1841
Reinvested Earnings	–	736	-736	–	364	-364
Other Capital	–	871	-871	–	726	-726
b) Portfolio Investment	109621	102559	7062	68120	55626	12494
In India	109532	102528	7004	68120	55626	12494
Abroad	89	31	58	–	–	–
2. Loans (a+b+c)	**50469**	**29340**	**21129**	**37529**	**31416**	**6113**
a) External Assistance	3728	1958	1770	3627	1945	1682
i) By India	16	36	-20	20	104	-84
ii) To India	3712	1922	1790	3607	1841	1766
b) Commercial Borrowings (MT & LT)	21291	5207	16084	14547	11824	2723
i) By India	652	971	-319	–	240	-240
ii) To India	20639	4236	16403	14547	11584	2963
c) Short Term To India	25450	22175	3275	19355	17647	1708
3. Banking Capital (a+b)	**36768**	**34681**	**2087**	**21658**	**20285**	**1373**
a) Commercial Banks	36358	34603	1755	20586	20144	442
i) Assets	14466	17361	-2895	772	3947	-3175
ii) Liabilities	21892	17242	4650	19814	16197	3617
of which: Non-Resident Deposits	19473	15578	3895	17835	15046	2789
b) Others	410	78	332	1072	141	931
4. Rupee Debt Service	**–**	**162**	**-162**	**–**	**572**	**-572**
5. Other Capital	**10129**	**3738**	**6391**	**6505**	**7243**	**-738**
Total Capital Account (1 to 5)	**227401**	**182457**	**44944**	**141753**	**118353**	**23400**
C. ERRORS & OMISSIONS	**1271**	**–**	**1271**	**838**	**–**	**838**
D. OVERALL BALANCE (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**474925**	**438319**	**36606**	**340037**	**324985**	**15052**
E. MONETARY MOVEMENTS (i+ii)	**–**	**36606**	**-36606**	**–**	**15052**	**-15052**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	36606	-36606	–	15052	-15052

P : Preliminary. PR : Partially Revised.

No. 43: India's Overall Balance of Payments *(Contd.)*

(US $ million)

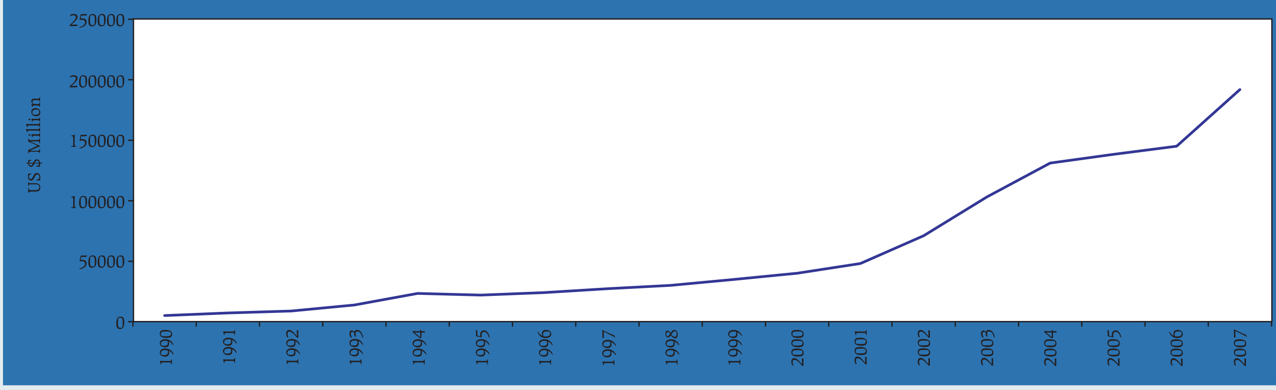
Items	Apr-Jun 2007 P			Apr-Jun 2006 PR		
	Credit	Debit	Net	Credit	Debit	Net
1	8	9	10	11	12	13
A. CURRENT ACCOUNT						
I. Merchandise	**34960**	**56540**	**-21580**	**29674**	**46620**	**-16946**
II. Invisibles (a+b+c)	**31432**	**14549**	**16883**	**24643**	**12264**	**12379**
a) Services	20061	10911	9150	17006	9041	7965
i) Travel	2088	1881	207	1708	1488	220
ii) Transportation	2208	2692	-484	1734	2048	-314
iii) Insurance	417	184	233	239	128	111
iv) G.n.i.e.	96	112	-16	57	81	-24
v) Miscellaneous	15252	6042	9210	13268	5296	7972
of which						
Software Services	8441	557	7884	7039	438	6601
Business Services	4479	3610	869	4565	3174	1391
Financial Services	883	858	25	622	317	305
Communication Services	513	200	313	444	108	336
b) Transfers	8760	433	8327	5992	300	5692
i) Official	153	166	-13	69	90	-21
ii) Private	8607	267	8340	5923	210	5713
c) Income	2611	3205	-594	1645	2923	-1278
i) Investment Income	2475	2961	-486	1580	2727	-1147
ii) Compensation of Employees	136	244	-108	65	196	-131
Total Current Account (I+II)	**66392**	**71089**	**-4697**	**54317**	**58884**	**-4567**
B. CAPITAL ACCOUNT						
1. Foreign Investment (a+b)	**41114**	**33195**	**7919**	**33437**	**32526**	**911**
a) Foreign Direct Investment (i+ii)	6434	5973	461	2614	1198	1416
i) In India	5904	21	5883	2548	8	2540
Equity	5029	21	5008	1842	8	1834
Reinvested Earnings	708	–	708	698	–	698
Other Capital	167	–	167	8	–	8
ii) Abroad	530	5952	-5422	66	1190	-1124
Equity	530	5531	-5001	66	777	-711
Reinvested Earnings	–	271	-271	–	184	-184
Other Capital	–	150	-150	–	229	-229
b) Portfolio Investment	34680	27222	7458	30823	31328	-505
In India	34621	27216	7405	30801	31327	-526
Abroad	59	6	53	22	1	21
2. Loans (a+b+c)	**15880**	**7526**	**8354**	**10739**	**6314**	**4425**
a) External Assistance	754	496	258	576	527	49
i) By India	5	13	-8	4	9	-5
ii) To India	749	483	266	572	518	54
b) Commercial Borrowings (MT & LT)	8314	1266	7048	5057	1098	3959
i) By India	355	290	65	91	223	-132
ii) To India	7959	976	6983	4966	875	4091
c) Short Term To India	6812	5764	1048	5106	4689	417
3. Banking Capital (a+b)	**7303**	**9423**	**-2120**	**9837**	**4847**	**4990**
a) Commercial Banks	7303	9417	-2114	9765	4847	4918
i) Assets	2183	2501	-318	5257	1877	3380
ii) Liabilities	5120	6916	-1796	4508	2970	1538
of which: Non-Resident Deposits	4791	5238	-447	4174	2943	1231
b) Others	–	6	-6	72	–	72
4. Rupee Debt Service	**–**	**43**	**-43**	**–**	**67**	**-67**
5. Other Capital	**3338**	**2186**	**1152**	**1786**	**1481**	**305**
Total Capital Account (1 to 5)	**67635**	**52373**	**15262**	**55799**	**45235**	**10564**
C. ERRORS & OMISSIONS	**635**	**–**	**635**	**382**	**–**	**382**
D. OVERALL BALANCE (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**134662**	**123462**	**11200**	**110498**	**104119**	**6379**
E. MONETARY MOVEMENTS (i+ii)	**–**	**11200**	**-11200**	**–**	**6379**	**-6379**
i) I.M.F.	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	11200	-11200	–	6379	-6379

No. 44: Foreign Exchange Reserves

End of	Foreign Currency Assets		Gold		SDRs			Reserve Tranche Position in IMF		**Total**	
	Rupees crore	In millions of US $	Rupees crore	In millions of US $	In millions of SDRs	Rupees crore	In millions of US $	Rupees crore	In millions of US $	**Rupees crore**	**In millions of US $**
1	2	3	4	5	6	7	8	9	10	**11=(2+4+7+9)**	**12=(3+5+8+10)**
2002-03	3,41,476	71,890	16,785	3,534	3	19	4	3,190	672	**3,61,470**	**76,100**
2003-04	4,66,215	1,07,448	18,216	4,198	2	10	2	5,688	1,311	**4,90,129**	**1,12,959**
2004-05	5,93,121	1,35,571	19,686	4,500	3	20	5	6,289	1,438	**6,19,116**	**1,41,514**
2005-06	6,47,327	1,45,108	25,674	5,755	2	12	3	3,374	756	**6,76,387**	**1,51,622**
2006-07	8,36,597	1,91,924	29,573	6,784	1	8	2	2,044	469	**8,68,222**	**1,99,179**
2006-07											
April	6,90,730	1,53,598	28,335	6,301	4	25	6	3,473	772	**7,22,563**	**1,60,677**
May	7,24,648	1,56,073	32,549	7,010	-	2	-	3,643	785	**7,60,842**	**1,63,868**
June	7,18,701	1,55,968	28,479	6,180	-	2	-	3,518	764	**7,50,700**	**1,62,912**
July	7,31,354	1,57,247	30,496	6,557	5	33	7	3,562	766	**7,65,445**	**1,64,577**
August	7,39,857	1,58,938	30,436	6,538	1	6	1	3,570	767	**7,73,869**	**1,66,244**
September	7,27,733	1,58,340	28,506	6,202	1	6	1	3,502	762	**7,59,747**	**1,65,305**
October	7,23,332	1,60,669	27,320	6,068	5	33	7	2,918	648	**7,53,603**	**1,67,392**
November	7,50,168	1,67,598	29,067	6,494	1	4	1	2,451	548	**7,81,690**	**1,74,641**
December	7,52,738	1,70,187	28,824	6,517	1	4	1	2,416	546	**7,83,982**	**1,77,251**
January	7,64,501	1,73,081	28,840	6,529	7	44	10	2,390	541	**7,95,775**	**1,80,161**
February	8,29,533	1,87,211	30,499	6,883	1	8	2	2,070	467	**8,62,110**	**1,94,563**
March	8,36,597	1,91,924	29,573	6,784	1	8	2	2,044	469	**8,68,222**	**1,99,179**
2007-08											
April	8,12,995	1,96,899	29,051	7,036	7	45	11	1,910	463	**8,44,001**	**2,04,409**
May	8,17,440	2,00,697	28,147	6,911	1	6	1	1,870	459	**8,47,463**	**2,08,068**
June	8,39,913	2,06,114	27,655	6,787	1	6	1	1,875	460	**8,69,449**	**2,13,362**
July	8,88,680	2,19,753	27,850	6,887	8	49	12	1,840	455	**9,18,419**	**2,27,107**
August	9,07,301	2,21,509	28,186	6,881	1	9	2	1,866	455	**9,37,362**	**2,28,847**
September	9,53,581	2,39,955	29,275	7,367	1	8	2	1,740	438	**9,84,604**	**2,47,762**
October	10,08,271	2,56,427	30,712	7,811	8	52	13	1,735	441	**10,40,770**	**2,64,692**
October 5, 2007	9,61,677	2,43,524	29,275	7,367	1	8	2	1,726	437	**9,92,686**	**2,51,330**
October 12, 2007	9,78,844	2,48,880	29,275	7,367	1	8	2	1,719	437	**10,09,846**	**2,56,686**
October 19, 2007	10,07,975	2,53,324	29,275	7,367	8	52	13	1,748	439	**10,39,050**	**2,61,143**
October 26, 2007	10,06,040	2,54,629	29,275	7,367	8	52	13	1,742	441	**10,37,109**	**2,62,450**
November 2, 2007	10,16,786	2,58,264	30,712	7,811	8	52	13	1,693	430	**10,49,243**	**2,66,518**
November 9, 2007	10,30,405	2,61,923	30,712	7,811	8	52	13	1,707	434	**10,62,876**	**2,70,181**

– : Negligible. See 'Notes on tables'.

Foreign Exchange Reserves



No.: 45 NRI Deposits- Outstanding and Inflows (+) /Outflows (-) @

(As at End March) (US $ million)

Scheme	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. FCNR(A) *	7,051	4,255	2,306	1	–	–	–	–	–	–	–	–	–
2. FCNR(B) **	3,063	5,720	7,496	8,467	7,835	8,172	9,076	9,673	10,199	10,961	11,452	13,064	15,129
3. NR(E)RA	4,556	3,916	4,983	5,637	6,045	6,758	7,147	8,449	14,923	20,559	21,291	22,070	24,495
4. NR(NR)RD +	2,486	3,542	5,604	6,262	6,618	6,754	6,849	7,052	3,407	1,746	232	–	–
5. NRO	–	–	–	–	–	–	–	–	–	–	–	1,148	1,616
Total	**17,156**	**17,433**	**20,389**	**20,367**	**20,498**	**21,684**	**23,072**	**25,174**	**28,529**	**33,266**	**32,975**	**36,282**	**41,240**

(US $ million)

Scheme	2006-07 R (End Month)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
1. FCNR(B)	13,296	13,477	13,560	13,680	13,825	13,906	14,044	14,245	14,656	14,746	14,841	15,129
2. NR(E)RA	21,905	21,780	22,091	22,005	22,117	22,609	22,981	23,532	23,976	24,117	24,057	24,495
3. NRO	1,187	1,188	1,180	1,193	1,253	1,295	1,334	1,376	1,576	1,507	1,550	1,616
Total	**36,388**	**36,445**	**36,831**	**36,878**	**37,195**	**37,810**	**38,359**	**39,153**	**40,208**	**40,370**	**40,448**	**41,240**

(US $ million)

Scheme	2007-08 P (End Month)					
	Apr.	May	Jun.	Jul.	Aug.	Sep.
1	2	3	4	5	6	7
1. FCNR(B)	15,170	15,124	15,319	15,397	15,234	15,366
2. NR(E)RA	25,675	25,694	25,438	25,801	25,377	26,259
3. NRO	1,739	1,767	1,846	1,887	2,134	2,018
Total	**42,584**	**42,585**	**42,603**	**43,085**	**42,745**	**43,643**

Inflow (+) /Outflow (–) During the Month (US $ million)

Scheme	2006-07 R												
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.- Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. FCNR(B)	232	181	83	120	145	81	139	200	411	89	96	288	2,065
	(87)	(-155)	(13)	(-51)	(165)	(-34)	(79)	(-136)	(400)	(732)	(119)	(393)	(1,612)
2. NR(E)RA	21	294	420	139	99	213	-1	375	112	135	-36	59	1,830
	(33)	(-83)	(-3)	(37)	(-10)	(234)	(-14)	(314)	(238)	(-165)	(226)	(370)	(1,177)
3. NRO	49	23	-2	25	60	26	17	32	179	-69	44	42	426
	(-42)	(246)	(-27)	(-50)	(391)	(85)	(152)	(39)	(42)	(115)	(-54)	(33)	(930)
Total	**302**	**498**	**501**	**284**	**304**	**320**	**155**	**607**	**702**	**155**	**104**	**389**	**4,321**
	(78)	**(8)**	**(-17)**	**(-64)**	**(546)**	**(285)**	**(217)**	**(217)**	**(680)**	**(682)**	**(291)**	**(796)**	**(3,719)**

(US $ million)

Scheme	2007-08 P						
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Apr.-Sep.
1	2	3	4	5	6	7	
1. FCNR(B)	41	-46	195	78	-163	132	237
	(232)	(181)	(83)	(120)	(145)	(81)	(842)
2. NR(E)RA	-320	-265	-167	187	-122	101	-586
	(21)	(294)	(420)	(139)	(99)	(213)	(1,186)
3. NRO	22	9	85	29	269	-178	236
	(49)	(23)	(-2)	(25)	(60)	(26)	(181)
Total	**-257**	**-302**	**113**	**294**	**-16**	**55**	**-113**
	(302)	**(498)**	**(501)**	**(284)**	**(304)**	**(320)**	**(2,209)**

@ : All figures are inclusive of accrued interest. * : Withdrawn effective August 1994. ** : Introduced in May 1993.

+ : Introduced in June 1992 and discontinued w.e.f April 2002. – : Not available.

Notes : 1. FCNR(A) : Foreign Currency Non-Resident (Accounts). 2. FCNR(B) : Foreign Currency Non-Resident (Banks).

3. NR(E)RA : Non-Resident (External) Rupee Accounts. 4. NR(NR)RD : Non-Resident (Non-Repatriable) Rupee Deposits.

5. NRO : Non-Resident Ordinary Rupee Account.

6. Figures in the brackets represent inflows (+)/outflows(–) during the corresponding month/period of the previous year.

No. 46: Foreign Investment Inflows

(US $ million)

Item	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06(P)	2006-07(P)
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Direct Investment (I+II+III)	**2,144**	**2,821**	**3,557**	**2,462**	**2,155**	**4,029**	**6,130**	**5,035**	**4,322**	**6,051**	**7,722**	**19,531**
I. Equity (a+b+c+d+e)	2,144	2,821	3,557	2,462	2,155	2,400	4,095	2,764	2,229	3,778	5,820	16,065
a. Government (SIA/FIPB)	1,249	1,922	2,754	1,821	1,410	1,456	2,221	919	928	1,062	1,126	2,156
b. RBI	169	135	202	179	171	454	767	739	534	1,258	2,233	7,151
c. NRI	715	639	241	62	84	67	35	–	–	–	–	–
d. Acquisition of shares *	11	125	360	400	490	362	881	916	735	930	2,181	6,278 ‡
e. Equity capital of unincorporated bodies #	..	..	..	..	..	61	191	190	32	528	280	480
II. Reinvested earnings +	..	..	..	..	..	1,350	1,645	1,833	1,460	1,904	1,676	2,936
III. Other capital + +	..	..	..	..	..	279	390	438	633	369	226	530
B. Portfolio Investment (a+b+c)	**2,748**	**3,312**	**1,828**	**-61**	**3,026**	**2,760**	**2,021**	**979**	**11,377**	**9,315**	**12,492**	**7,003**
a. GDRs/ADRs # #	683	1,366	645	270	768	831	477	600	459	613	2,552	3,776
b. FIIs **	2,009	1,926	979	-390	2,135	1,847	1,505	377	10,918	8,686	9,926	3,225
c. Offshore funds and others	56	20	204	59	123	82	39	2	–	16	14	2
Total (A+B)	**4,892**	**6,133**	**5,385**	**2,401**	**5,181**	**6,789**	**8,151**	**6,014**	**15,699**	**15,366**	**20,214**	**26,534**

(US $ million)

Item	2006-07 (P)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Direct Investment (I+II+III)	**661**	**538**	**523**	**1,127**	**619**	**916**	**1,698**	**1,151**	**5,130**	**1,921**	**698**	**603**
I. Equity (a+b+c+d+e)	661	538	523	1,127	619	916	1,698	1,151	5,130	1,921	698	603
a. Government (SIA/FIPB)	124	162	124	105	41	87	619	60	22	451	301	60
b. RBI	482	355	348	581	436	332	676	1,045	1,956	204	322	414
c. NRI	–	–	–	–	–	–	–	–	–	–	–	–
d. Acquisition of shares *	55	21	51	441	142	497	403	46	3,152 ‡	1,266	75	129
e. Equity capital of unincorporated bodies #	..	..	..	..	..	..	..	..	..	..	..	..
II. Reinvested earnings +	..	..	..	..	..	..	..	..	..	..	..	..
III. Other capital + +	..	..	..	..	..	..	..	..	..	..	..	..
B. Portfolio Investment (a+b+c)	**3,711**	**-3,334**	**-903**	**-309**	**1,212**	**1,238**	**1,755**	**2,236**	**-429**	**1,602**	**2,630**	**-2,406**
a. GDRs/ADRs # #	435	572	254	286	–	174	52	77	78	1,578	245	25
b. FIIs **	3,276	-3,906	-1,157	-595	1,212	1,064	1,703	2,159	-507	24	2,385	-2,433
c. Offshore funds and others	–	–	–	–	–	–	–	–	–	–	–	2
Total (A+B)	**4,372**	**-2,796**	**-380**	**818**	**1,831**	**2,154**	**3,453**	**3,387**	**4,701**	**3,523**	**3,328**	**-1,803**

(US $ million)

Item	2007-08 (P)						
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Apr.-Sep.
1	2	3	4	5	6	7	8
A. Direct Investment (I+II+III)	**1,643**	**2,120**	**1,238**	**705**	**831**	**713**	**8,245**
I. Equity (a+b+c+d+e)	1,643	2,120	1,238	705	831	713	7,370
a. Government (SIA/FIPB)	76	847	177	177	76	117	1,470
b. RBI	699	1,050	912	515	512	201	3,889
c. NRI	–	–	–	–	–	–	–
d. Acquisition of shares *	868	223	149	13	243	395	1,891
e. Equity capital of unincorporated bodies #	..	..	..	..	..	..	120
II. Reinvested earnings +	..	..	..	..	..	..	708
III. Other capital + +	..	..	..	..	..	..	167
B. Portfolio Investment (a+b+c)	**1,974**	**1,852**	**3,656**	**6,713**	**-2,875**	**7,081**	**18,401**
a. GDRs/ADRs # #	11	5	292	2,028	448	1	2,785
b. FIIs **	1,963	1,847	3,279	4,685	-3,323	7,057	15,508
c. Offshore funds and others	–	–	85	–	–	23	108
Total (A+B)	**3,617**	**3,972**	**4,894**	**7,418**	**-2,044**	**7,794**	**26,646**

* : Relates to acquisition of shares of Indian companies by non-residents under Section 6 of FEMA, 1999. Data on such acquisitions have been included as part of FDI since January 1996.

** : Represents inflow of funds (net) by Foreign Institutional Investors (FIIs).

\# : Figures for equity capital of unincorporated bodies for 2005-06 and 2006-07 are estimates.

\# # : Represents the amount raised by Indian Corporates through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

\+ : Data for 2005-06 and 2006-07 are estimated as average of previous two years. ++ : Data pertain to inter company debt transactions of FDI entities.

‡ : Include Swap of shares of US $ 3.1 billion.

Notes : 1. Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices.
2. These data, therefore, are not comparable with FDI data for previous years.
3. Also see 'Notes on Tables 'of Table No 42 & 43.

No. 47: Daily Foreign Exchange Spot Rates

(Rupees per Unit of Foreign Currency)

Date	RBI's Reference Rate Rs. Per Foreign Currency		FEDAI Indicative Rates							
			US Dollar		Pound Sterling		Euro		One Hundred Japanese Yen	
	US Dollar	Euro	Buying	Selling	Buying	Selling	Buying	Selling	Buying	Selling
1	2	3	4	5	6	7	8	9	10	11
October 1, 2007	39.7300	56.6300	39.7400	39.7500	81.3950	81.4275	56.6500	56.6725	34.5225	34.5350
October 2, 2007 +										
October 3, 2007	39.7900	56.4100	39.7750	39.7850	81.1975	81.2325	56.3850	56.4025	34.3275	34.3450
October 4, 2007	39.5600	55.7600	39.5500	39.5600	80.2750	80.3100	55.7450	55.7725	33.9250	33.9450
October 5, 2007	39.4900	55.7600	39.4800	39.4900	80.3825	80.4125	55.7375	55.7650	33.8625	33.8800
October 8, 2007	39.4300	55.6600	39.4250	39.4350	80.4275	80.4675	55.6600	55.6775	33.6275	33.6475
October 9, 2007	39.5500	55.4900	39.5450	39.5550	80.4300	80.4675	55.4975	55.5275	33.7050	33.7175
October 10, 2007	39.3400	55.5100	39.3400	39.3500	80.1600	80.1950	55.4975	55.5225	33.5200	33.5350
October 11, 2007	39.3100	55.7600	39.3000	39.3100	80.0700	80.1050	55.7400	55.7650	33.5050	33.5175
October 12, 2007	39.3300	55.7400	39.3150	39.3250	79.7000	79.7325	55.7200	55.7475	33.5150	33.5250
October 15, 2007	39.3100	55.7100	39.3000	39.3100	80.0425	80.0750	55.7350	55.7525	33.4300	33.4450
October 16, 2007	39.3100	55.8600	39.3150	39.3250	80.2075	80.2475	55.8500	55.8700	33.4875	33.5000
October 17, 2007	39.6800	56.2300	39.6700	39.6800	80.5700	80.6100	56.2800	56.3050	34.0475	34.0650
October 18, 2007	39.4700	56.1800	39.4550	39.4650	80.5225	80.5550	56.1400	56.1675	33.8275	33.8650
October 19, 2007	39.7900	56.8700	39.7800	39.7900	81.3700	81.4075	56.8650	56.8950	34.6225	34.6450
October 22, 2007	39.7900	56.9800	39.7800	39.7900	81.6050	81.6400	56.9700	56.9950	34.8425	34.8575
October 23, 2007	39.6900	56.4200	39.6800	39.6900	80.8750	80.9125	56.3975	56.4275	34.5775	34.6025
October 24, 2007	39.5700	56.3500	39.5750	39.5850	81.0250	81.0650	56.3700	56.3975	34.5500	34.5700
October 25, 2007	39.5400	56.4200	39.5400	39.5500	80.9550	80.9900	56.4150	56.4350	34.6700	34.6875
October 26, 2007	39.5100	56.7600	39.5000	39.5100	81.1375	81.1725	56.7050	56.7250	34.5225	34.5400
October 29, 2007	39.3800	56.8100	39.3850	39.3950	80.9625	81.0000	56.8175	56.8350	34.4775	34.5025
October 30 2007	39.4000	56.6900	39.3750	39.3850	81.0450	81.0825	56.6500	56.6750	34.3850	34.4100
October 31 2007	39.3200	56.7500	39.3150	39.3250	81.3350	81.3675	56.7550	56.7775	34.2725	34.2975

FEDAI : Foreign Exchange Dealers' Association of India.   + : Market closed.

Note : Euro Reference rate was announced by RBI with effect from January 1, 2002.

Source : FEDAI for FEDAI rates.

No. 48: Sale/Purchase of U.S. Dollar by The Reserve Bank of India

Month		Foreign Currency (US $ million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end-April 2006)		Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ million)
		Purchase (+)	Sale (-)	Net (+/-)		(US $ million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2006-07								
April	2006	4,305.00	–	(+) 4,305.00	(+) 19,277.25	(+) 4,305.00	(+) 19,277.25	–
May	2006	504.00	–	(+) 504.00	(+) 2,268.05	(+) 4,809.00	(+) 21,545.31	–
June	2006	–	–	–	–	(+) 4,809.00	(+) 21,545.31	–
July	2006	–	–	–	–	(+) 4,809.00	(+) 21,545.31	–
August	2006	–	–	–	–	(+) 4,809.00	(+) 21,545.31	–
September	2006	–	–	–	–	(+) 4,809.00	(+) 21,545.31	–
October	2006	–	–	–	–	(+) 4,809.00	(+) 21,545.31	–
November	2006	3,198.00	–	(+) 3,198.00	(+) 14,355.56	(+) 8,007.00	(+) 35,900.87	–
December	2006	1,818.00	–	(+) 1,818.00	(+) 8,105.13	(+) 9,825.00	(+) 44,006.00	–
January	2007	2,830.00	–	(+) 2,830.00	(+) 12,537.05	(+)12,655.00	(+) 56,543.05	–
February	2007	11,862.00	–	(+)11,862.00	(+) 52,343.00	(+)24,517.00	(+)1,08,886.05	–
March	2007	2,307.00	–	(+) 2,307.00	(+) 10,108.41	(+)26,824.00	(+)1,18,994.46	–

Month		Foreign Currency (US $ million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end-April 2007)		Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ million)
		Purchase (+)	Sale (-)	Net (+/-)		(US $ million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2007-08								
April	2007	2,055.00	–	(+) 2,055.00	(+) 8,835.47	(+) 2,055.00	(+) 8,835.47	–
May	2007	4,426.00	–	(+) 4,426.00	(+) 17,959.97	(+) 6,481.00	(+) 26,795.44	–
June	2007	3,192.00	–	(+) 3,192.00	(+) 12,995.99	(+) 9,673.00	(+) 39,791.42	–
July	2007	11,428.00	–	(+)11,428.00	(+) 46,143.00	(+) 21,101.00	(+) 85,934.81	–
August	2007	1,815.00	–	(+) 1,815.00	(+) 7,333.69	(+) 22,916.00	(+) 93,268.50	–
September	2007	11,867.00	–	(+)11,867.00	(+) 47,418.00	(+) 34,783.00	(+)1,40,686.87	–
October	2007	12,544.00	–	(+)12,544.00	(+) 49,581.07	(+) 47,327.00	(+)1,90,267.94	–

(+) : Implies Purchase including purchase leg under swaps and outright forwards.
(-) : Implies Sales including sale leg under swaps and outright forwards.
Note : This table is based on value dates.

No. 49: Turnover in Foreign Exchange Market

(US $ million)

Position Date	Merchant						Inter-bank					
	FCY / INR			FCY / FCY			FCY/INR			FCY/FCY		
	Spot	Forward	Forward Cancellation	Spot	Forward	Forward Cancellation	Spot	Swap	Forward	Spot	Swap	Forward
1	2	3	4	5	6	7	8	9	10	11	12	13
Purchases												
Oct. 1, 2007	2,831	784	283	1,894	1,639	2,342	4,190	6,947	496	5,340	2,353	234
Oct. 3, 2007	4,114	856	704	2,198	1,581	2,208	4,976	8,341	339	7,098	2,252	103
Oct. 4, 2007	2,036	1,315	384	1,176	1,235	1,726	5,975	7,270	1,033	5,041	1,803	196
Oct. 5, 2007	2,357	1,142	233	1,524	991	655	4,399	6,698	405	5,190	991	203
Oct. 8, 2007	2,016	895	331	2,309	1,894	1,682	3,403	4,186	267	4,251	1,413	164
Oct. 9, 2007	2,376	1,194	433	1,405	1,370	1,771	5,201	5,185	235	4,290	2,294	234
Oct. 10, 2007	2,505	2,124	726	1,367	1,108	2,010	5,715	8,280	689	5,964	1,886	67
Oct. 11, 2007	3,036	1,520	328	1,208	1,183	1,318	4,664	9,653	1,452	4,274	1,473	124
Oct. 12, 2007	2,906	1,169	448	1,496	1,118	1,546	4,806	7,266	532	5,730	1,699	196
Oct. 15, 2007	3,388	1,130	182	1,533	940	1,780	4,729	7,797	432	4,127	1,703	73
Oct. 16, 2007	2,273	1,203	868	2,013	1,184	1,157	3,778	7,011	343	5,328	1,794	111
Oct. 17, 2007	3,206	3,279	961	2,264	1,302	2,651	8,195	8,793	461	3,741	2,805	42
Oct. 18, 2007	2,783	1,815	522	1,865	1,082	1,573	6,149	5,082	533	6,465	1,808	158
Oct. 19, 2007	5,680	1,375	446	2,399	1,270	2,795	6,094	6,302	516	4,875	2,344	181
Oct. 22, 2007	2,761	1,576	696	3,292	1,417	2,094	5,064	7,898	479	6,115	2,486	62
Oct. 23, 2007	2,627	916	619	1,738	1,665	3,201	4,035	6,544	208	5,665	1,735	143
Oct. 24, 2007	2,766	1,116	709	958	696	1,198	4,369	6,363	290	4,022	1,662	53
Oct. 25, 2007	2,978	832	583	854	761	1,423	4,303	7,482	583	4,478	1,812	100
Oct. 26, 2007	2,565	934	238	1,246	904	1,775	3,879	4,879	336	3,714	1,964	138
Oct. 29, 2007	2,944	1,224	1,902	1,105	1,450	1,817	4,497	6,308	397	4,139	2,396	293
Oct. 30, 2007	2,638	1,008	558	1,210	1,333	1,349	4,123	8,524	353	3,316	2,625	221
Oct. 31, 2007	3,444	1,449	941	483	602	984	4,990	8,184	657	3,141	1,410	270
Sales												
Oct. 1, 2007	2,147	466	386	1,779	1,654	2,374	4,886	7,157	798	5,424	2,050	249
Oct. 3, 2007	2,523	1,327	473	2,116	1,280	2,330	4,976	8,646	493	6,970	2,077	272
Oct. 4, 2007	1,695	1,094	735	1,182	1,314	1,735	6,654	6,817	1,055	4,953	1,891	201
Oct. 5, 2007	1,752	637	418	1,608	869	679	5,113	7,434	654	5,196	879	209
Oct. 8, 2007	1,399	863	391	2,297	1,917	1,788	4,328	4,457	234	4,291	1,472	184
Oct. 9, 2007	2,241	847	482	1,079	1,324	1,991	5,427	5,646	649	4,503	2,361	235
Oct. 10, 2007	1,892	616	949	1,306	970	2,250	7,579	7,871	1,108	5,834	1,913	96
Oct. 11, 2007	1,703	824	358	1,159	1,039	1,241	6,739	8,542	1,509	4,402	1,247	145
Oct. 12, 2007	2,172	727	720	1,502	1,036	1,522	5,101	7,646	931	5,691	1,458	240
Oct. 15, 2007	2,149	753	258	1,305	901	1,982	6,100	6,457	928	4,145	1,643	110
Oct. 16, 2007	2,048	948	315	1,380	1,124	1,147	3,662	7,024	384	6,018	1,734	129
Oct. 17, 2007	2,529	3,870	1,629	1,568	1,212	2,788	8,092	8,767	607	3,744	2,225	64
Oct. 18, 2007	2,955	1,747	713	1,445	1,104	2,296	5,742	5,289	700	6,357	2,058	173
Oct. 19, 2007	3,333	2,572	633	1,212	1,258	2,753	6,109	5,975	741	5,822	2,348	217
Oct. 22, 2007	3,056	1,604	448	1,518	1,227	2,503	4,940	8,453	582	6,371	3,735	51
Oct. 23, 2007	2,374	1,172	403	1,757	1,655	3,283	4,201	6,338	508	5,513	1,795	187
Oct. 24, 2007	2,246	1,395	406	975	678	1,194	4,173	6,576	445	3,999	1,565	123
Oct. 25, 2007	2,700	1,290	762	864	755	1,393	4,376	6,762	557	4,480	1,769	112
Oct. 26, 2007	2,954	584	648	1,253	883	1,828	3,571	5,429	384	3,623	1,849	142
Oct. 29, 2007	3,119	1,654	1,381	1,102	1,029	1,797	4,150	5,887	648	3,794	2,160	446
Oct. 30, 2007	2,317	1,039	785	1,383	1,282	1,331	4,055	8,558	585	3,003	2,784	218
Oct. 31, 2007	2,407	1,254	1,107	580	710	1,002	6,754	8,391	907	3,072	1,712	269

FCY : Foreign Currency. INR : Indian Rupees.

Note : Data relate to sales and purchases of foreign exchange on account of merchant and inter-bank transactions. Data are provisional.

No. 50: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

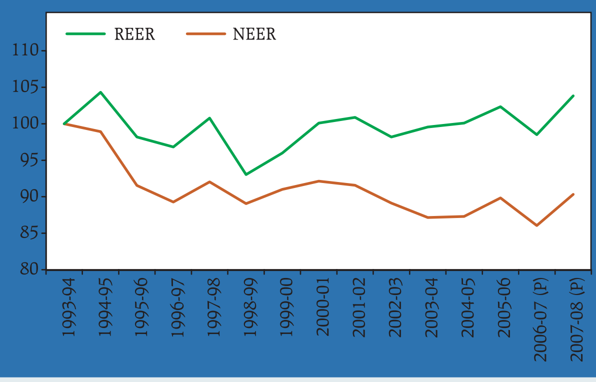
(36-Currency Export and Trade Based Weights)
(Base: 1993-94 = 100)*

Year	Trade Based Weights		Export Based Weights	
	REER	NEER	REER	NEER
1	2	3	4	5
1993-94	100.00	100.00	100.00	100.00
1994-95	104.32	98.91	104.88	98.18
1995-96	98.19	91.54	100.10	90.94
1996-97	96.83	89.27	98.95	89.03
1997-98	100.77	92.04	103.07	91.97
1998-99	93.04	89.05	94.34	90.34
1999-00	95.99	91.02	95.28	90.42
2000-01	100.09	92.12	98.67	90.12
2001-02	100.86	91.58	98.59	89.08
2002-03	98.18	89.12	95.99	87.01
2003-04	99.56	87.14	99.07	87.89
2004-05	100.09	87.31	98.30	88.41
2005-06	102.35	89.85	100.54	91.17
2006-07 (P)	98.51	85.89	97.44	87.46
2007-08 (P) (Apr.-Sep.)	106.75	92.97	105.77	95.40

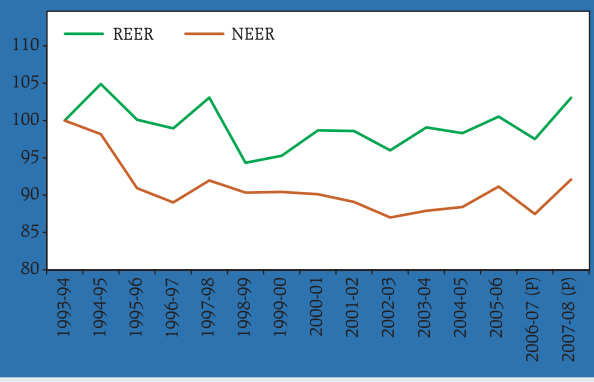
Year	Trade Based Weights		Export Based Weights	
	REER	NEER	REER	NEER
1	2	3	4	5
2005-06				
April	100.57	88.97	99.14	90.63
May	102.07	90.03	100.50	91.60
June	103.70	91.24	101.83	92.56
July	105.02	92.07	102.96	93.23
August	104.01	90.95	102.19	92.32
September	103.91	90.38	101.99	91.73
October	102.54	89.42	100.55	90.57
November	101.37	88.30	99.36	89.33
December	100.59	88.06	98.69	89.18
January	101.47	89.41	99.78	90.80
February	101.74	89.88	100.01	91.22
March	101.25	89.52	99.53	90.88
2006-07 (P)				
April	98.19	87.73	97.14	89.17
May	96.42	85.43	95.64	87.11
June	96.57	85.11	95.55	86.60
July	95.73	84.22	94.75	85.73
August	95.61	83.61	94.61	85.12
September	97.98	84.65	96.74	86.04
October	99.94	86.18	98.59	87.52
November	100.32	86.50	99.24	88.11
December	99.16	85.89	98.24	87.67
January	100.74	87.05	99.56	88.71
February	100.71	87.20	99.57	88.86
March	100.74	87.11	99.60	88.84
2007-08 (P)				
April	103.79	91.50	102.90	92.88
May	107.21	94.38	106.27	95.83
June	107.27	93.24	106.15	96.07
July	107.47	93.09	106.48	96.08
August	106.95	92.64	105.88	95.52
September	107.83	93.00	106.94	96.03

* : For "Note on Methodology" and time series data on the indices presented here, please see December 2005 issue of this Bulletin.

Indices of REER and NEER of the Indian Rupee (Trade Based Weights)



Indices of REER and NEER of the Indian Rupee (Export Based Weights)



No. 51: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

(6-Currency Trade Based Weights)

Year/Month/Day		Base: 1993-94 (April-March) = 100		Base: 2005-2006 (April-March) = 100	
		NEER	REER	NEER	REER
1993-94		100.00	100.00	138.40	93.24
1994-95		96.96	105.82	134.13	98.62
1995-96		88.56	101.27	122.52	94.38
1996-97		86.85	101.11	120.15	94.24
1997-98		87.94	104.41	121.66	97.31
1998-99		77.49	96.14	107.20	89.61
1999-00		77.16	97.69	106.75	91.04
2000-01		77.43	102.82	107.11	95.83
2001-02		76.04	102.71	105.20	95.72
2002-03		71.27	97.68	98.60	91.04
2003-04		69.97	99.17	96.79	92.43
2004-05		69.58	101.78	96.26	94.86
2005-06		72.28	107.30	100.00	100.00
2006-07 (P)		68.93	105.47	95.36	98.30
2005-06	April	71.16	104.38	98.44	97.28
	May	72.11	106.28	99.76	99.05
	June	73.29	108.20	101.40	100.84
	July	73.94	109.43	102.29	101.99
	August	72.95	108.33	100.93	100.96
	September	72.45	108.19	100.22	100.83
	October	71.75	107.20	99.26	99.91
	November	71.09	106.85	98.34	99.58
	December	71.03	106.36	98.27	99.13
	January	72.31	107.05	100.04	99.77
	February	72.88	107.91	100.82	100.57
	March	72.45	107.41	100.24	100.10
2006-07 (P)	April	71.04	105.75	98.28	98.56
	May	68.79	103.48	95.16	96.44
	June	68.21	103.06	94.36	96.05
	July	67.59	102.25	93.50	95.30
	August	67.08	102.14	92.81	95.19
	September	67.84	104.75	93.85	97.62
	October	69.11	107.25	95.61	99.96
	November	69.34	107.82	95.93	100.49
	December	68.82	106.39	95.21	99.15
	January	69.77	107.70	96.52	100.38
	February	69.88	107.71	96.68	100.39
	March	69.70	107.41	96.42	100.10
2007-08 (P)	April	72.18	111.59	99.86	104.01
	May	74.64	115.67	103.26	107.80
	June	74.83	115.28	103.52	107.44
	July	74.62	115.27	103.23	107.43
	August	73.91	114.24	102.25	106.47
	September	74.11	114.93	102.53	107.11
	October	74.92	116.05	103.65	108.16
	As on				
	October 26, 2007	74.59	115.60	103.20	107.73
	November 2, 2007	74.55	115.53	103.14	107.68
	November 8, 2007	74.06	115.04	102.46	107.22
	November 16, 2007	74.16	115.19	102.60	107.36

Notes : 1. Rise in indices indicate appreciation of rupee and vice versa.
2. For “Note on Methodology” on the indices presented here, please see December 2005 issue of this Bulletin.
3. Base year 2005-06 is a moving one, which gets updated every year.

Quarterly Tables

No 52: Savings Deposits with Commercial Banks

(Rs. crore)

Last Friday / Last Reporting Friday (in case of March)		Scheduled Commercial Banks			Non-Scheduled Commercial Banks
		All	Indian	Foreign	
1		2	3	4	5
1990-91		50,501	49,542	959	31
2000-01		2,22,982	2,17,452	5,531	..
2001-02		2,79,107	2,72,119	6,988	..
2002-03		3,11,565	3,02,817	8,748	..
2003-04		3,85,369	3,73,137	12,232	..
2004-05		4,58,619	4,43,573	15,045	..
2005-06		5,75,130	5,56,303	18,827	..
2006-07		6,71,425	6,49,586	21,839	..
August	2005	5,02,534	4,86,356	16,178	..
September	2005	5,18,483	5,01,484	17,000	..
October	2005	5,19,595	5,02,408	17,187	..
November	2005	5,20,260	5,03,173	17,087	..
December	2005	5,39,017	5,21,123	17,894	..
January	2006	5,42,504	5,24,970	17,534	..
February	2006	5,50,382	5,32,769	17,613	..
March	2006	5,75,130	5,56,303	18,827	..
April	2006	5,75,173	5,56,334	18,839	..
May	2006	5,85,425	5,67,164	18,262	..
June	2006	5,89,426	5,70,918	18,508	..
July	2006	6,05,338	5,86,232	19,106	..
August	2006	5,95,650	5,76,308	19,343	..
September	2006	6,35,659	6,14,920	20,739	..
October	2006	6,23,018	6,02,998	20,019	..
November	2006	6,29,867	6,09,703	20,164	..
December	2006	6,47,146	6,25,857	21,289	..
January	2007	6,48,943	6,28,103	20,840	..
February	2007	6,55,274	6,34,618	20,656	..
March	2007	6,71,425	6,49,586	21,839	..
April	2007	6,64,613	6,45,440	21,173	..
May	2007	6,63,516	6,42,473	21,043	..
June	2007	6,80,478	6,56,315	24,163	..
July	2007	6,80,720	6,58,608	22,111	..
August	2007	6,97,274	6,74,332	22,942	..

No. 53: Short and Medium Term Advances of the Nabard to the State Co-operative Banks

(Rs. crore)

Year / Month		Short Term													
		Agricultural Operations		Marketing of crops including cotton and kapas		Purchase and distribution of chemical fertilisers		Financing of cottage and small scale industries						Working capital requirements of co-operative sugar factories	
								Weavers' co-operative societies				Production and marketing activities of other groups of industries including financing of individual rural artisans through PACS			
								Trading in yarn by apex /regional weavers' societies		Production and marketing Purposes					
		Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out standing
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
1990-91		2,565	1,602	–	–	120	32	97	10	1,025	324	15	15	–	–
2001-02		7,556	5,036	7	7	11	5	15	4	789	437	28	19	–	–
2002-03		7,476	4,888	–	–	–	–	9	9	358	270	33	25	–	–
2003-04		7,970	4,628	28	9	3	3	9	9	418	247	11	11	–	–
2004-05		12,504	6,791	7	4	3	–	2	2	315	91	11	26	–	–
2005-06		11,095	7,228	20	3	–	4	4	4	180	152	17	17	–	–
2006-07		15,142	10,150	–	–	–	–	–	–	230	181	16	15	–	–
Sep.	2005	773	5,865	–	5	–	–	–	–	–	86	–	1	–	–
Oct.	2005	322	5,538	–	5	–	–	–	–	–	86	–	1	–	–
Nov.	2005	1,150	5,607	–	5	–	–	–	–	–	86	–	1	–	–
Dec.	2005	1,057	6,189	–	5	–	–	–	–	–	59	–	1	–	–
Jan.	2006	1,761	6,537	–	10	–	–	–	–	20	47	–	1	–	–
Feb.	2006	1,167	6,932	15	10	–	–	–	–	36	55	–	1	–	–
Mar.	2006	1,071	7,228	–	3	–	4	4	4	117	152	17	17	–	–
Apr.	2006	178	6,726	–	2	–	–	–	4	–	143	–	11	–	–
May	2006	779	5,891	–	1	–	–	–	4	–	136	–	7	–	–
Jun.	2006	2,691	7,162	–	1	–	–	–	4	–	136	–	6	–	–
Jul.	2006	–	7,002	–	1	–	–	–	–	–	136	–	6	–	–
Aug.	2006	369	6,760	–	1	–	–	–	–	–	136	–	1	–	–
Sep.	2006	1,528	7,626	–	1	–	–	–	–	–	136	–	1	–	–
Oct.	2006	1,584	8,746	–	1	–	–	–	–	–	139	–	1	–	–
Nov.	2006	3,224	9,272	–	1	–	–	–	–	–	138	–	1	–	–
Dec.	2006	1,485	10,244	–	–	–	–	–	–	56	192	–	1	–	–
Jan.	2007	1,468	11,164	–	–	–	–	–	–	–	171	–	–	–	–
Feb.	2007	769	11,135	–	–	–	–	–	–	63	225	–	–	–	–
Mar.	2007	1,067	10,150	–	–	–	–	–	–	111	181	16	15	–	–
Apr.	2007	230	10,087	–	–	–	–	–	–	–	165	–	14	–	–
May	2007	827	10,078	–	–	–	–	–	–	–	–	–	–	–	–
Jun.	2007	414	9,209	–	–	–	–	–	–	–	157	–	–	–	–
Jul.	2007	722	10,941	–	84	–	–	–	156	–	–	–	14	–	–
Aug.	2007	2,186	12,724	–	84	–	–	–	136	–	–	–	–	–	–
Sep.	2007	1,051	12,824	–	44	–	–	–	119	–	–	–	–	–	–

See 'Notes on Tables'.

No. 53: Short and Medium Term Advances of the Nabard to the State Co-operative Banks *(Concld.)*

(Rs. crore)

Year / Month		Short term (concld.)		Medium Term						Total	
		Advances against Government and other trustee securities representing the Agricultural Credit Stabilisation Funds of state co-operative banks		Conversion of ST into MT loans		Approved agricultural purposes		Purchase of shares in co-operative societies			
		Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	Amount drawn	Out-standing	**Amount drawn**	**Out-standing**
1		16	17	18	19	20	21	22	23	**24**	**25**
1990-91		–	6	155	342	4	17	–	2	**3,983**	**2,352(1)**
2001-02		–	–	316	467	–	–	–	–	**8,723**	**5,976**
2002-03		–	–	18	356	–	–	–	–	**7,894**	**5,548**
2003-04		–	–	575	630	207	166	–	–	**9,221**	**5,702**
2004-05		–	–	790	790	137	124	–	–	**13,768**	**8,190**
2005-06		–	–	1,108	1,864	386	489	–	–	**12,810**	**9,761**
2006-07		–	–	60	1,863	123	288	–	–	**15,571**	**12,497**
Sep.	2005	–	–	–	1,736	146	517	–	–	**920**	**8,212**
Oct.	2005	–	–	78	1,814	36	538	–	–	**436**	**7,983**
Nov.	2005	–	–	–	1,814	1	500	–	–	**1,151**	**8,013**
Dec.	2005	–	–	64	1,873	–	478	–	–	**1,123**	**8,605**
Jan.	2006	–	–	–	1,872	70	527	–	–	**1,851**	**8,994**
Feb.	2006	–	–	–	1,872	2	464	–	–	**1,220**	**9,334**
Mar.	2006	–	–	19	1,864	74	489	–	–	**1,302**	**9,761**
Apr.	2006	–	–	–	1,864	–	409	–	–	**178**	**9,159**
May	2006	–	–	–	1,864	–	349	–	–	**779**	**8,252**
Jun.	2006	–	–	–	1,863	–	313	–	–	**2,691**	**9,485**
Jul.	2006	–	–	–	1,864	–	313	–	–	–	**9,322**
Aug.	2006	–	–	–	1,864	–	313	–	–	**369**	**9,075**
Sep.	2006	–	–	–	1,864	–	269	–	–	**1,528**	**9,897**
Oct.	2006	–	–	–	1,864	–	219	–	–	**1,584**	**10,970**
Nov.	2006	–	–	–	1,864	12	207	–	–	**3,236**	**11,483**
Dec.	2006	–	–	–	1,864	20	185	–	–	**1,561**	**12,486**
Jan.	2007	–	–	60	1,864	19	244	–	–	**1,547**	**13,443**
Feb.	2007	–	–	–	1,864	10	287	–	–	**842**	**13,511**
Mar.	2007	–	–	–	1,864	62	288	–	–	**1,256**	**12,497**
Apr.	2007	–	–	–	1,864	–	–	–	–	**230**	**12,311**
May.	2007	–	–	–	1,864	–	–	–	–	**827**	**10,260**
Jun.	2007	–	–	—	1,864	–	–	–	–	**1,348**	**9,390**
Jul.	2007	–	–	–	1,864	–	151	–	–	**722**	**13,210**
Aug.	2007	–	–	–	1,861	–	151	–	–	**2,186**	**14,958**
Sep.	2007	–	–	22	1,884	–	132	–	–	**1,073**	**15,003**

Source : National Bank for Agriculture and Rural Development (NABARD).

No. 54: Small Savings

(Rs. crore)

Year / Month	Post Office Saving Bank Deposits (1)		National Saving Scheme, 1987		National Saving Scheme, 1992		Monthly Income Scheme		Senior Citizen Scheme	
	Receipts	Out-standing	Receipts	Out-standing	Receipts	Out-standing	Receipts	Out-standing	Receipts	Out-standing
1	2	3	4	5	6	7	8	9	10	11
1990-91	4,253	4,205	2,085	4,592	–	–	873	2,340	–	–
2001-02	14,077	10,045	548	3,032	67	785	18,798	57,335	–	–
2002-03	17,612	11,594	508	3,235	177	791	27,641	80,915	–	–
2003-04	21,720	13,367	454	3,380	55	763	38,851	1,13,386	–	–
2004-05	24,824	14,870	231	3,216	98	736	48,457	1,51,026	8,474	5,436
2005-06	31,432	16,790	290	3,383	2	674	47,273	1,83,077	7,436	15,916
2006-07	36,067	18,565	364	4,202	34	655	26,461	1,89,440	7,239	22,284
2005-06										
April	2,170	15,328	25	3,439	–	743	3,533	1,53,993	596	9,358
May	2,342	15,362	1	3,399	13	750	4,135	1,56,926	701	10,054
June	2,564	15,452	6	3,371	1	745	4,250	1,59,941	613	10,658
July	2,752	15,783	-7	3,355	-7	733	4,508	1,63,300	646	11,266
August	2,634	15,962	23	3,349	-10	718	4,508	1,66,234	651	11,916
September	2,520	16,145	-12	3,313	–	702	4,113	1,69,010	580	12,483
October	2,598	16,239	2	2,880	60	756	3,765	1,71,366	536	12,967
November	2,526	16,310	3	3,265	16	768	3,884	1,73,898	493	13,463
December	2,940	16,343	8	3,249	-19	743	4,476	1,76,735	575	14,024
January	2,801	16,413	22	3,245	3	741	4,029	1,79,340	531	14,457
February	2,425	16,393	9	3,223	9	736	3,474	1,81,617	576	15,025
March	3,160	16,790	210	3,383	-64	674	2,598	1,83,077	938	15,916
2006-07										
April	2,148	16,703	4	3,336	2	656	1,824	1,83,540	752	16,585
May	2,442	16,625	12	3,298	-1	642	2,498	1,84,571	887	17,439
June	2,560	16,694	6	3,268	9	643	2,530	1,85,430	702	18,109
July	2,819	16,882	16	3,254	-1	613	2,978	1,86,578	701	18,689
August	2,845	17,034	34	3,257	9	617	2,688	1,87,591	637	19,312
September	2,707	17,192	35	3,266	-1	609	2,214	1,88,210	559	19,829
October	2,937	17,369	-12	3,231	1	565	2,146	1,88,818	547	20,229
November	3,202	17,553	6	3,212	–	559	2,547	1,89,536	638	20,824
December	3,173	17,784	27	3,203	4	536	1,999	1,90,105	514	21,287
January	3,568	18,161	-4	3,189	–	532	2,084	1,90,174	535	21,669
February	3,288	18,272	27	3,190	–	496	1,499	1,89,672	462	22,114
March	4,378	18,565	213	4,202	12	655	1,454	1,89,440	305	22,284
2007-08 (P)										
April	3,048	18,448	1	5,094	1	781	990	1,88,767	183	22,177
May	3,587	18,502	4	5,035	–	769	1,222	1,88,027	276	22,337
June	3,534	18,599	5	4,032	1	607	1,061	1,87,151	156	22,377
July	3,934	18,771	10	3,997	1	600	1,125	1,86,321	170	22,143
August	3,761	18,897	7	3,968	–	601	1,144	1,85,540	171	22,185
September	3,275	18,953	3	3,934	1	594	1,167	1,85,013	162	22,256

See 'Notes on Tables'.

No. 54: Small Savings *(Contd.)*

(Rs. crore)

Year / Month	Post Office Time Deposits (Total)		*Of which:* 1 year Post Office Time Deposits	2 year Post Office Time Deposits	3 year Post Office Time Deposits	5 year Post Office Time Deposits	Post Office Recurring Deposits		Post Office Cumulative Time Deposits (2), (6)
	Receipts	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Receipts	Outstanding	Outstanding
1	12	13	14	15	16	17	18	19	20
1990-91	746	2,973	414	95	54	2,410	1,428	2,638	274
2001-02	6,445	10,261	4,025	628	1,013	4,595	11,811	23,648	-48
2002-03	10,283	15,608	6,419	1,411	1,811	5,967	13,993	28,084	-32
2003-04	16,339	24,067	9,922	2,030	3,272	8,843	16,645	33,963	-29
2004-05	20,253	31,994	12,943	2,374	4,674	12,003	19,979	41,102	-26
2005-06	20,526	38,879	16,459	2,520	5,830	12,070	23,488	50,188	41
2006-07	19,798	36,714	17,830	1,989	5,781	11,114	26,339	60,228	21
2005-06									
April	1,402	32,501	13,179	2,400	4,791	12,131	1,506	41,894	-23
May	1,836	33,155	13,489	2,429	4,930	12,307	1,804	42,753	18
June	1,930	33,718	13,822	2,465	5,070	12,361	1,923	43,654	18
July	1,917	34,166	14,192	2,518	5,195	12,261	1,946	44,391	18
August	1,862	34,746	14,544	2,580	5,319	12,303	1,992	45,141	18
September	1,722	35,213	14,837	2,623	5,441	12,312	1,881	45,852	18
October	1,491	35,537	15,105	2,623	5,525	12,284	1,988	46,601	21
November	1,593	36,016	15,452	2,615	5,609	12,340	1,911	47,399	26
December	1,873	36,410	15,834	2,586	5,693	12,297	2,089	48,401	25
January	1,652	36,764	16,123	2,571	5,746	12,324	2,013	40,602	33
February	1,512	36,775	16,263	2,561	5,778	12,173	1,966	48,901	32
March	1,736	36,879	16,459	2,520	5,830	12,070	2,469	50,188	41
2006-07									
April	1,261	36,957	16,520	2,486	5,851	12,100	1,691	50,965	49
May	1,683	37,081	16,688	2,457	5,893	12,043	2,140	52,070	58
June	1,790	37,286	16,858	2,425	5,940	12,063	2,083	53,111	62
July	1,997	37,450	17,054	2,384	5,995	12,017	2,216	54,078	62
August	1,930	37,713	17,299	2,342	6,037	12,035	2,285	55,142	22
September	1,659	37,799	17,458	2,299	6,018	12,024	2,087	55,993	18
October	1,541	37,708	17,593	2,272	6,025	11,818	2,155	56,881	18
November	1,821	37,848	17,810	2,236	6,027	11,775	2,285	57,799	19
December	1,694	37,845	17,919	2,189	6,016	11,721	2,202	58,697	19
January	1,668	37,576	18,010	2,136	5,971	11,459	2,222	58,983	19
February	1,298	37,211	17,971	2,077	5,878	11,285	2,275	59,279	22
March	1,456	36,714	17,830	1,989	5,781	11,114	2,698	60,228	21
2007-08 (P)									
April	999	36,280	17,622	1,916	5,684	11,058	1,876	60,822	21
May	1,317	35,760	17,343	1,853	5,585	10,979	2,379	61,834	21
June	1,234	35,243	17,026	1,780	5,478	10,959	2,187	62,687	25
July	1,350	34,655	16,731	1,715	5,376	10,833	2,325	63,400	27
August	1,351	33,982	16,470	1,644	5,281	10,587	2,305	63,957	31
September	1,192	33,432	16,160	1,575	5,160	10,537	2,220	64,444	34

No. 54: Small Savings *(Contd.)*

(Rs. crore)

Year / Month	Other Deposits	Total Deposits		National Saving Certificate VIII issue		Indira Vikas Patras		Kisan Vikas Patras	
	Outstanding	Receipts	Outstanding	Receipts	Outstanding	Receipts	Outstanding	Receipts	Outstanding
1	21	22	23	24	25	26	27	28	29
1990-91	..	9,455	17,022	1,609	3,135	2,469	8,709	4,136	9,514
2001-02	20	51,746	1,05,078	7,840	40,205	17	7,911	20,221	1,02,751
2002-03	21	70,214	1,40,216	9,583	44,525	98	6,096	23,234	1,13,675
2003-04	20	94,272	1,88,907	11,397	50,633	3	2,438	27,796	1,22,188
2004-05	11	1,22,616	2,51,665	10,097	55,128	-35	787	23,398	1,36,449
2005-06	20	1,30,447	3,06,968	10,541	58,541	-4	-947	29,282	1,46,607
2006-07	21	1,16,303	3,32,130	8,912	58,913	2,062	1,276	23,495	1,52,767
2005-06									
April	18	9,232	2,57,251	577	55,097	–	554	1,840	1,37,241
May	18	10,832	2,62,435	592	55,323	1	295	2,407	1,38,156
June	28	11,287	2,67,585	606	55,596	-6	4	2,839	1,39,237
July	18	11,755	2,73,030	655	55,916	-1	-487	2,929	1,40,173
August	18	11,660	2,78,102	679	56,246	–	-604	2,799	1,40,978
September	20	10,804	2,82,756	620	56,550	–	-668	2,561	1,41,705
October	20	10,440	2,86,387	612	56,841	–	-714	2,401	1,42,287
November	20	10,426	2,91,165	682	57,136	–	-751	2,541	1,42,848
December	20	11,942	2,95,950	904	57,456	6	-782	2,947	1,43,413
January	20	11,051	2,99,615	1,055	57,955	-6	-814	2,396	1,44,187
February	20	9,971	3,02,722	1,221	58,147	–	-930	1,772	1,45,293
March	20	11,047	3,06,986	2,338	58,541	2	-927	1,850	1,46,607
2006-07									
April	26	7,682	3,08,817	554	58,321	2	-936	1,234	1,47,462
May	18	9,661	3,11,802	558	58,342	-2	-944	1,628	1,48,669
June	18	9,680	3,14,621	554	58,429	4	-952	1,643	1,49,922
July	20	10,726	3,17,626	645	58,550	–	-1,006	1,868	1,51,173
August	20	10,428	3,20,708	678	58,693	–	-1,013	2,313	1,51,953
September	21	9,260	3,22,937	452	58,693	-22	-1,044	1,897	1,52,432
October	21	9,315	3,24,840	761	58,839	18	-1,041	2,152	1,52,867
November	21	10,499	3,27,371	680	58,894	–	-982	2,634	1,53,467
December	20	9,613	3,29,496	745	59,115	6	-917	2,261	1,53,729
January	20	10,073	3,30,323	944	59,210	2	-931	2,261	1,53,874
February	20	8,849	3,30,276	1,002	59,110	-9	-945	1,819	1,53,636
March	21	10,517	3,32,130	1,339	58,913	2,063	1,276	1,785	1,52,767
2007-08 (P)									
April	18	7,098	3,32,408	408	58,557	–	1,265	1,423	1,52,326
May	18	8,785	3,32,303	441	58,474	–	1,259	1,991	1,51,853
June	19	8,181	3,30,740	372	58,426	–	1,270	1,661	1,51,592
July	21	8,918	3,29,935	425	58,386	–	1,264	1,974	1,50,905
August	19	8,742	3,29,180	427	58,355	–	1,259	1,865	1,50,257
September	19	8,023	3,28,679	365	58,281	1	1,256	1,228	1,50,128

No. 54: Small Savings *(Concld.)*

(Rs. crore)

Year / Month	National Saving Certificate VI issue (6)	National Saving Certificate VII issue (6)	Other Certificates(6)	Total Certificates		Public Provident Fund (3)		Total	
	Outstanding	Outstanding	Outstanding	Receipts	Outstanding	Receipts	Outstanding	Receipts	Outstanding
1	30	31	32	33	34	35	36	37	38
1990-91	11,137	737	25 (4)	8,214	33,257	..	..	**17,700 (5)**	**50,279 (5)**
2001-02	-852	-178	-170	28,078	1,49,667	1,929	8,111	**81,753**	**2,62,856**
2002-03	-734	-64	-77	33,051	1,63,421	2,337	10,156	**1,05,601**	**3,13,793**
2003-04	-558	-63	-75	39,170	1,74,563	2,528	12,267	**1,35,970**	**3,75,737**
2004-05	-430	-69	-71	33,369	1,91,794	2,534	14,273	**1,58,519**	**4,57,732**
2005-06	-403	-61	14	39,812	2,03,771	3,024	16,872	**1,73,283**	**5,27,611**
2006-07	-160	-74	63	34,532	2,12,785	4,065	19,457	**1,54,836**	**5,64,372**
2005-06									
April	-428	-70	11	2,417	1,92,405	186	14,765	**11,835**	**4,64,421**
May	-429	-69	10	3,000	1,93,286	170	14,798	**14,002**	**4,70,519**
June	-429	-69	10	3,439	1,94,349	182	14,879	**14,908**	**4,76,813**
July	-430	-71	8	3,582	1,95,109	204	15,001	**15,541**	**4,83,140**
August	-431	-72	8	3,478	1,96,125	154	15,099	**15,292**	**4,89,326**
September	-430	-74	8	3,181	1,97,091	127	15,171	**14,112**	**4,95,018**
October	-429	-75	10	3,007	1,97,920	116	15,236	**13,563**	**4,99,543**
November	-420	-54	11	3,223	1,98,770	110	15,312	**13,759**	**5,05,247**
December	-409	-58	14	3,857	1,99,634	158	15,423	**15,957**	**5,11,007**
January	-411	-61	13	3,445	2,00,869	269	15,562	**14,765**	**5,16,136**
February	-411	-57	13	2,993	2,02,055	232	15,832	**13,196**	**5,20,609**
March	-461	-61	14	4,190	2,03,771	1,116	16,872	**16,353**	**5,27,611**
2006-07									
April	-406	-65	13	1,790	2,04,389	209	16,736	**9,681**	**5,29,942**
May	-404	-70	11	2,184	2,05,604	192	16,764	**12,037**	**5,34,170**
June	-405	-72	15	2,201	2,06,937	188	16,842	**12,069**	**5,38,400**
July	-405	-73	13	2,513	2,08,252	188	16,976	**13,427**	**5,42,854**
August	-407	-74	19	2,991	2,09,171	508	17,418	**13,927**	**5,47,297**
September	-410	-75	19	2,327	2,09,615	157	17,521	**11,744**	**5,50,073**
October	-410	-79	20	2,931	2,10,196	118	17,592	**12,364**	**5,52,628**
November	-409	-79	18	3,314	2,10,909	151	17,689	**13,964**	**5,55,969**
December	-389	-72	19	3,011	2,11,485	222	17,789	**12,847**	**5,58,770**
January	-381	-74	19	3,207	2,11,717	209	17,997	**13,489**	**5,60,037**
February	-380	-80	21	2,813	2,11,362	350	18,294	**12,011**	**5,59,932**
March	-160	-74	63	5,250	2,12,785	1,573	19,457	**17,276**	**5,64,372**
2007-08 (P)									
April	50	-74	61	1,831	2,12,185	247	19,329	**9,176**	**5,63,922**
May	47	-74	61	2,432	2,11,620	224	19,264	**11,441**	**5,63,187**
June	47	-74	-150	2,033	2,11,111	168	19,313	**10,379**	**5,61,164**
July	46	-74	-150	2,399	2,10,377	148	19,365	**11,462**	**5,59,677**
August	45	-78	-150	2,292	2,09,688	153	19,437	**11,184**	**5,58,305**
September	-60	-78	60	1,699	2,09,587	117	19,488	**9,731**	**5,57,754**

Source : Accountant General, Post & Telegraph.

No. 55: Details of Central Government Market Borrowings

Medium and Long Term Borrowing

(Rs. crore)

Date of		Notified Amount	Maturity		Bids Received				Bids Accepted				Devolvement/ on Primary Dealers	Devolvement/ Private placement on RBI	Indicative YTM at cut-off price/ reissue price/ coupon rate	Nomenclature of Loan
					Competitive		Non-Competitive		Competitive		Non-Competitive					
Auction	Issue		Period/ Residual period	Year	Number	Value	Number	Value	Number	Value	Number	Value				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2007-08																
4-Apr-07	5-Apr-07	6,000	3.11	2010	201	14,415.00	1	0.38	77	5,999.62	1	0.38	–	–	98.12/ 8.2431	7.55% GS, 2010 (1),(10),(12)
12-Apr-07	13-Apr-07	6,000	8.39	2015	274	11,277.00	11	8.62	181	5,991.38	11	8.62	–	–	95.31/ 8.1609	7.38% GS, 2015 (1),(10)
12-Apr-07	13-Apr-07	4,000	29.15	2036	261	10,642.00	8	8.06	81	3,991.94	8	8.06	–	–	97.37/ 8.5752	8.33% GS, 2036 (1),(10)
18-Apr-07	19-Apr-07	3,000	3.07	2010	153	13,225.00	4	2.76	23	2,997.24	4	2.76	–	–	98.35/ 8.1652	7.55% GS, 2010 (1),(10),(12)
27-Apr-07	30-Apr-07	6,000	9.71	2017	330	12,925.93	11	10.22	243	5,989.78	11	10.22	–	–	99.40/ 8.1577	8.07% GS, 2017 (1),(10)
9-May-07	10-May-07	2,000	3.01	2010	165	9,365.00	–	–	14	2,000.00	–	–	–	–	98.74/ 8.0288	7.55% GS, 2010 (1)(10)(12)
11-May-07	14-May-07	6,000	9.92	2017	228	9,454.00	5	4.04	181	5,995.96	5	4.04	–	–	94.51/ 8.3118	7.49% GS, 2017 (1)(10)
11-May-07	14-May-07	4,000	29.06	2036	244	10,047.94	3	2.51	39	3,997.50	3	2.51	–	–	96.71/ 8.6399	8.33% GS, 2036 (1)(10)
16-May-07	17-May-07	6,000	2.99	2010	235	16,605.34	–	–	10	6,000.00	–	–	–	–	98.64/ 8.0703	7.55% GS, 2010 (1)(10)(12)
25-May-07	28-May-07	5,000	8.26	2015	292	17,864.00	4	8.00	50	4,992.00	4	8.00	–	–	94.90/ 8.2399	7.38% GS, 2015 (1)(10)
25-May-07	28-May -07	3,000	14.96	2022	258	8,556.00	12	20.00	45	2,980.00	12	20.00	–	–	99.51/ 8.4074	8.35% GS, 2022 (1)(10)
5-June-07	6-June -07	6,000	9.86	2017	331	14,982.50	5	5.80	139	5,994.20	5	5.80	–	–	95.40/ 8.1763	7.49% GS, 2017 (1)(10)
5-June-07	6-June -07	3,000	29.00	2036	199	7,265.75	5	8.50	84	2,991.50	5	8.50	–	–	97.96/ 8.5207	8.33% GS, 2036 (1)(10)
6-June-07	7-June-07	5,000	1.83	2009	210	12,105.00	–	–	96	5,000.00	–	–	–	–	97.80/ 7.9583	6.65% GS, 2009 (1)(10)(12)
12-June-07	13-June -07	5,000	9.84	2017	405	16,505.25	5	7.20	88	4,992.80	5	7.20	–	–	93.72/ 8.4395	7.49% GS, 2017 (1)(10)

No. 55: Details of Central Government Market Borrowings *(Contd.)*

Medium and Long Term Borrowing (Rs. crore)

Date of		Notified Amount	Maturity		Bids Received				Bids Accepted				Devolvement/ on Primary Dealers	Devolvement/ Private placement on RBI	Indicative YTM at cut-off price/ reissue price/ coupon rate	Nomenclature of Loan
					Competitive		Non-Competitive		Competitive		Non-Competitive					
Auction	Issue		Period/ Residual period	Year	Number	Value	Number	Value	Number	Value	Number	Value				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
15-Jun-07	18-Jun-07	6,000	9.83	2017	410	28,577.17	15	22.72	31	5,977.28	15	22.72	–	–	94.27/ 8.3536	7.49% GS, 2017 (1)(10)
6-July -07	9-Jul-07	6,000	10.00	2017	308	18,088.00	14	21.48	101	5,978.52	14	21.48	–	–	7.99	7.99% GS, 2017 (1)(4)(10)
6-July-07	9-Jul-07	4,000	28.91	2036	215	8,271.00	9	14.70	134	3,985.30	9	14.70	–	–	98.72/ 8.4478	8.33% GS, 2036 (1)(10)
18-July-07	19-July-07	5,000	1.71	2009	204	20,934.28	3	5.00	24	4,995.00	3	5.00	–	–	99.30/ 7.0827	6.65% GS, 2009 (1)(10)(12)
20-July-07	23-July-07	6,000	6.11	2013	227	13,972.50	9	15.57	114	5,984.43	9	15.57	–	–	98.47/ 7.5851	7.27% GS, 2013 (1)(10)
20-July-07	23-July-07	3,000	25.10	2032	235	11,285.00	6	9.50	40	2,990.50	6	9.50	–	–	95.82/ 8.3425	7.95% GS, 2032 (1)(10)
25-July-07	26-July-07	2,000	2.80	2010	108	5,505.00	1	1.00	26	1,999.00	1	1.00	–	–	101.27/ 7.0361	7.55% GS, 2010 (1)(10) (12)
1-Aug-07	2-Aug-07	5,000	1.86	2009	111	5,705.00	–	–	107	5,000.00	–	–	–	–	96.14/ 7.7407	5.48% GS, 2009 (1)(10) (12)
3-Aug-07	6-Aug-07	6,000	9.93	2017	380	19,947.82	7	12.250	86	5,987.75	7	12.25	–	–	100.40/ 7.9296	7.99% GS, 2017 (1)(10)
3-Aug-07	6-Aug-07	4,000	25.06	2032	210	9,812.00	5	5.350	85	3,994.65	5	5.35	–	–	94.83/ 8.4487	7.95% GS, 2032 (1)(10)
8-Aug-07	9-Aug-07	4,000	1.84	2009	203	17,630.00	–	–	65	4,000.00	–	–	–	–	96.21/ 7.7205	5.48% GS, 2009 (1)(10) (12)
16-Aug-07	17-Aug-07	4,000	1.82	2009	147	8,215.00	–	–	55	4,000.00	–	–	–	–	95.82/ 7.9864	5.48% GS, 2009 (1)(10) (12)
22-Aug-07	23-Aug-07	4,000	1.80	2009	176	14,813.00	–	–	37	4,000.00	–	–	–	–	95.97/ 7.9149	5.48% GS, 2009 (1)(10) (12)
24-Aug-07	27-Aug-07	5,000	6.02	2013	224	14,481.81	7	12.000	32	4,988.00	7	12.00	–	–	97.16/ 7.8712	7.27% GS, 2013 (1)(10)
24-Aug-07	27-Aug-07	2,000	9.89	2017	194	5,854.50	10	13.700	69	1,986.30	10	13.70	–	–	100.53/ 7.9094	7.99% GS, 2017 (1)(10)
7-Sep-07	10-Sep-07	4,000	14.43	2022	211	15,358.62	9	8.515	13	3,991.49	9	8.52	–	–	100.35/ 8.1571	8.20% GS, 2022 (1)(10)

No. 55: Details of Central Government Market Borrowings *(Concld.)*

Medium and Long Term Borrowing (Rs. crore)

Date of		Notified Amount	Maturity		Bids Received				Bids Accepted				Devolvement/ on Primary Dealers	Devolvement/ Private placement on RBI	Indicative YTM at cut-off price/ reissue price/ coupon rate	Nomenclature of Loan
					Competitive		Non-Competitive		Competitive		Non-Competitive					
Auction	Issue		Period/ Residual period	Year	Number	Value	Number	Value	Number	Value	Number	Value				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
7-Sep-07	10-Sep-07	3,000	28.74	2036	207	8,673.25	7	11.500	80	2,988.50	7	11.50	–	–	99.13/ 8.4087	8.33% GS, 2036 (1)(10)
26-Sep-07	27-Sep-07	5,000	1.71	2009	210	12,501.40	–	–	72	5,000.00	–	–	–	–	96.36/ 7.7887	5.48% GS, 2009 (1)(10) (12)
26-Sep-07	27-Sep-07	5,000	2.26	2010	150	11,874.59	–	–	49	5,000.00	–	–	–	–	95.93/ 7.8606	5.87% GS, 2010 (1)(10) (12)
3-Oct-07	4-Oct-07	4,000	2.24	2010	178	10,696.09	–	–	56	4,000.00	–	–	–	–	96.08/ 7.8007	5.87% GS, 2010 (1)(10) (12)
3-Oct-07	4-Oct-07	3,000	2.82	2010	105	9,675.00	1	0.900	12	2,999.10	1	0.90	–	–	108.57/ 7.8400	11.30% GS, 2010 (1)(10) (12)
11-Oct-07	12-Oct-07	4,000	2.22	2010	164	12,343.00	2	3.600	40	3,996.40	2	3.60	–	–	96.15/ 7.7832	5.87% GS, 2010 (1)(10) (12)
11-Oct-07	12-Oct-07	4,000	2.79	2010	106	9,347.50	2	0.600	45	3,999.40	2	0.60	–	–	108.57/ 7.8162	11.30% GS, 2010 (1)(10) (12)
12-Oct-07	15-Oct-07	6,000	9.73	2017	277	16,425.60	11	15.520	93	5,984.48	11	15.52	–	–	100.54/ 7.9065	7.99% GS, 2017 (1)(10)
12-Oct-07	15-Oct-07	4,000	24.87	2032	213	10,257.57	5	8.000	79	3,992.00	5	8.00	–	–	94.82/ 8.4503	7.95% GS, 2032 (1)(10)
18-Oct-07	19-Oct-07	5,000	2.20	2010	175	15,375.00	1	2.000	25	4,998.00	1	2.00	–	–	96.15/ 7.7992	5.87% GS, 2010 (1)(10) (12)
18-Oct-07	19-Oct-07	5,000	2.77	2010	90	7,865.00	2	2.500	40	4,997.50	2	2.50	–	–	108.41/ 7.8571	11.30% GS, 2010 (1)(10) (12)
25-Oct-07	26-Oct-07	3,000	2.18	2010	156	11,890.00	2	3.000	31	2,997.00	2	3.00	–	–	96.45/ 7.6601	5.87% GS, 2010 (1)(10) (12)
25-Oct-07	26-Oct-07	3,000	2.76	2010	116	9,110.00	3	4.000	37	2,996.00	3	4.00	–	–	108.66/ 7.7391	11.30% GS, 2010 (1)(10) (12)
26-Oct-07	29-Oct-07	4,000	5.84	2013	218	11,772.00	5	8.500	102	3,991.50	5	8.50	–	–	97.80/ 7.7419	7.27% GS, 2013 (1)(10)
26-Oct-07	29-Oct-07	4,000	14.54	2022	169	14,348.70	9	11.520	24	3,988.48	9	11.52	–	–	101.81/ 8.1347	8.35% GS, 2022 (1)(10)

GS : Government Stock.
Also see 'Notes on Tables'.

No. 55 A: Details of State Government Market Borrowings

(Amount in Rs. crore)

State	2007-08									
	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions
	19/4/2007	10 Years	10/5/2007	10 Years	17/5/2007	10 Years	19/6/2007	10 Years	26/7/2007	10 Years
1	2	3	4	5	6	7	8	9	10	11
1. Andhra Pradesh	–		–		400.00	8.40	600.00	8.45	600.00	8.00
2. Arunachal Pradesh	–		–		–		20.00	8.48	–	
3. Assam	–		–		–		401.00	8.52	–	
4. Bihar	–		–		–		–		–	
5. Chhattisgarh	–		–		–		–		–	
6. Goa	–		–		–		–		–	
7. Gujarat	400.00	8.30	–		–		–		400.00	8.00
8. Haryana	–		–		–		–		–	
9. Himachal Pradesh	–		–		–		–		–	
10. Jammu & Kashmir	–		–		–		100.00	8.57	122.02	8.25
11. Jharkhand	–		–		–		–		192.18	8.04
12. Karnataka	–		–		–		–		–	
13. Kerala	–		350.00	8.34	–		300.00	8.45	–	
14. Madhya Pradesh	–		–		–		625.00	8.49	–	
15. Maharashtra	500.00	8.30	–		–		–		–	
16. Manipur	–		–		–		–		–	
17. Meghalaya	–		–		–		55.00	8.48	–	
18. Mizoram	47.00	8.30	–		–		–		–	
19. Nagaland	140.00	8.30	–		–		–		74.96	8.04
20. Orissa	–		–		–		–		–	
21. Punjab	–		–		–		–		–	
22. Rajasthan	750.00	8.30	–		–		500.00	8.46	–	
23. Sikkim	–		–		–		–		–	
24. Tamil nadu	–		–		–		–		–	
25. Tripura	–		–		–		–		–	
26. Uttar Pradesh	–		–		–		–		–	
27. Uttaranchal	–		–		–		–		–	
28. West Bengal	–		–		1,000.00	8.40	964.59	8.48	–	
Total	**1,837.00**		**350.00**		**1,400.00**		**3,565.59**		**1,389.16**	

Note : Amounts are at face value.

No. 55 A: Details of State Government Market Borrowings *(Concld.)*

(Amount in Rs. crore)

State	2007-08								Total raised so far
	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	Amount raised through auctions on	Cut-off rate in the auctions	
	16/8/2007	10 Years	20/9/2007	10 Years	4/10/2007	10 Years	8/10/2007	10 Years	
1	12	13	14	15	16	17	18	19	20
1. Andhra Pradesh	–		–		–		–		1,600.00
2. Arunachal Pradesh	–		–		–		–		20.00
3. Assam	–		116.13	8.20	–		–		517.13
4. Bihar	–		–		–		–		–
5. Chhattisgarh	–		–		–		–		–
6. Goa	–		–		–		–		–
7. Gujarat	–		475.00	8.20	–		1,000.00	8.32	2,275.00
8. Haryana	–		–		–		–		–
9. Himachal Pradesh	–		300.00	8.16	–		–		300.00
10. Jammu & Kashmir	371.86	8.90	134.51	8.50	–		–		728.40
11. Jharkhand	–		–		–		–		192.18
12. Karnataka	–		–		–		–		–
13. Kerala	350.00	8.36	436.00	8.19	590.23	8.20	–		2,026.23
14. Madhya Pradesh	750.00	8.40	–		–		–		1,375.00
15. Maharashtra	–		–		–		722.31		1,222.31
16. Manipur	85.67	8.35	–		–		–	8.31	85.67
17. Meghalaya	–		–		–		–		55.00
18. Mizoram	28.84	8.35	–		–		–		75.84
19. Nagaland	–		–		–		–		214.96
20. Orissa	–		–		–		–		–
21. Punjab	500.00	8.35	1,000.00	8.22	–		–		1,500.00
22. Rajasthan	–		–		–		950.00	8.32	2,200.00
23. Sikkim	–		112.11	8.20	–		–		112.11
24. Tamil nadu	300.00	8.30	500.00	8.14	–		–		800.00
25. Tripura	–		–		–		–		–
26. Uttar Pradesh	–		–		–		–		–
27. Uttaranchal	–		–		–		–		–
28. West Bengal	1,098.06	8.39	–		–		2,000.00	8.40	5,062.65
Total	**3,484.43**		**3,073.74**		**590.23**		**4,672.31**		**20,362.47**

Notes on Tables

Table No. 1

(1) Annual data are averages of the months.

(2) Figures relate to last Friday of the month / year.

(3) Total of Rupee Securities held in Issue and Banking Departments.

(4) Relates to loans and advances only.

(5) Figures relate to the last Friday / last reporting Friday (in case of March).

(6) Total for Mumbai, Chennai, Kolkata and New Delhi only.

(7) Figures relate to last reporting Friday / March 31.

(8) Rates presented as low / high for the period indicated. The source of data prior to April 2000 issue of the Bulletin has been DFHI. The data from April 2000 issue of the Bulletin are not strictly comparable with that pertaining to earlier periods due to wider coverage of Call Market business.

(9) Relating to major banks.

(10) Relating to five major banks. PLR concept was introduced with effect from October 1994.

(11) Monthly data are averages of the weeks and annual data are averages of the months.

(12) Figures relate to the end of the month / year.

(13) Data relate to January – December.

(14) Cash Reserve Ratio of Scheduled Commercial Banks (excluding Regional Rural Banks).

Table No. 2

The gold reserves of Issue Department were valued at Rs.84.39 per 10 grams up to October 16, 1990 and from October 17, 1990 they are valued close to international market prices.

(1) Includes Government of India one rupee notes issued from July 1940.

(2) Includes (i) Paid-up Capital of Rs.5 crore (ii) Reserve Fund of Rs.6,500 crore (iii) National Industrial Credit (Long-Term Operations): Fund of Rs.16 crore and (iv) National Housing Credit (Long-Term Operations) Fund of Rs.190 crore from the week ended November 30, 2007.

(3) Includes cash, short-term securities and fixed deposits.

(4) Includes temporary overdrafts to State Governments.

(5) Figures in bracket indicate the value of gold held under other assets.

Table Nos. 3 & 4

The expression ‘Banking System’ or ‘Banks’ means (a) State Bank of India and its associates (b) Nationalised Banks (c) Banking companies as defined in clause ‘C’ of Section 5 of the Banking Regulation Act, 1949 (d) Co-operative banks (as far as scheduled co-operative banks are concerned) (e) Regional Rural Banks and (f) any other financial institution notified by the Central Government in this regard.

(1) Excludes borrowings of any scheduled state co-operative bank from the State Government and any Reserve Fund deposit required to be maintained with such bank by any co-operative society within the area of operation of such bank.

(2) Deposits of co-operative banks with scheduled state co-operative banks are excluded from this item but are included under 'Aggregate deposits'.

(3) Excludes borrowings of regional rural banks from their sponsor banks.

(4) Wherever it has not been possible to provide the data against the item 'Other demand and time liabilities' under 'Liabilities to the Banking System' separately, the same has been included in the item 'Other demand and time liabilities' under 'Liabilities to others'.

(5) Data reflect redemption of India Millennium Deposits (IMDs) on December 29, 2005.

(6) Other than from the Reserve Bank of India, NABARD and Export-Import Bank of India.

(7) Figures relating to scheduled banks' borrowings in India are those shown in the statement of affairs of the Reserve Bank of India. Borrowings against usance bills and/or promissory notes are under section 17(4) of the Reserve Bank of India Act, 1934.

(8) Includes borrowings by scheduled state co-operative banks under Section 17(4AA) of the Reserve Bank of India Act, 1934.

(9) As per the Statement of Affairs of the Reserve Bank of India.

(10) Advances granted by scheduled state co-operative banks to co-operative banks are excluded from this item but included under 'Loans, cash-credits and overdrafts'.

(11) At book value; it includes treasury bills and treasury receipts, treasury savings certificates and postal obligations.

(12) Includes participation certificates (PCs) issued by scheduled commercial banks to other banks and financial institutions.

(13) Includes participation certificates (PCs) issued by scheduled commercial banks to others.

(14) Figures in brackets relate to advances of scheduled commercial banks for financing food procurement operations.

Table No. 6

(1) Total of demand and time deposits from 'Others'.

(2) Includes borrowings from the Industrial Development Bank of India and National Bank for Agriculture and Rural Development.

(3) At book value; includes treasury bills and treasury receipts, treasury savings certificates and postal obligations.

(4) Total of 'Loans, cash credits and overdrafts' and 'Bills purchased and discounted'.

(5) Includes advances of scheduled state co-operative banks to central co-operative banks and primary co-operative banks.

Table No. 7

With a view to enable the banks to meet any unanticipated additional demand for liquidity in the context of the century date change, a 'Special Liquidity Support' (SLS) facility was made available to all scheduled commercial banks (excluding RRBs) for a temporary period from December 1, 1999 to January 31, 2000.

(1) With effect from April 13,1996, banks are provided export credit refinance against their rupee export credit and post-shipment export credit denominated in U.S. Dollars taken together.

(2) General Refinance Facility was replaced by Collateralised Lending Facility (CLF)/Additional Collateralised Facility (ACLF) effective April 21, 1999. ACLF was withdrawn with the introduction of Liquidity Adjustment Facility (LAF), effective June 5, 2000. CLF was withdrawn completely effective October 5, 2002.

(3) Special Liquidity Support Facility which was introduced effective September 17, 1998 was available upto March 31, 1999.

(4) Post-shipment credit denominated in US dollars (PSCFC) scheme was withdrawn effective February 8, 1996 and the refinance facility thereagainst was withdrawn effective April 13, 1996. The scheme of government securities refinance was terminated effective July 6, 1996.

Table No. 8

a) The data includes cheque clearing for both i.e. clearing houses managed by Reserve Bank of India and clearing houses managed by other banks. Separate paper based inter-bank clearing has been discontinueed at all the centres, from last June, 2005.

The other MICR Centres are Agra, Allahabad, Amritsar, Arungabad, Baroda, Bhilwara, Coimbatore, Dehradun, Ernakulam, Erode,Gorakhpur, Gwalior, Hubli, Indore, Jabalpur, Jalandhar, Jameshedpur, Jammu, Jodhpur, Kolhapur, Kozhikode, Lucknow, Ludhiana, Madurai, Mangalore, Mysore, Nasik, Panaji, Pondicherry, Pune, Raipur, Rajkot, Ranchi, Salem, Solapur, Surat, Tiruchirapalli, Tirupur, Thrissur, Udaipur, Varansi, Vijaywada and Vishakhapatnam.

b) Graphs: The graphs 3 and 4 on Paper and Electronic payments - the Electronic Payment System data include RTGS (customer and inter-bank) and CCIL operated systems

Table No. 9A

The data pertains to retail electronic payment.

Table No. 9B

The data pertains to Large Value Payment Systems. The figures for CCIL, the operations pertains to selected services, are taken from the CCIL published data.

Table No. 10

(a) For details of money stock measures according to the revised series, reference may be made to January 1977 issue of this Bulletin (pages 70-134).

(b) Banks include commercial and co-operative banks.

(c) Financial year data relate to March 31, except scheduled commercial banks' data which relate to the last reporting Friday of March. For details, see the note on page S 963 of October 1991 issue of this Bulletin.

(d) Scheduled commercial banks' time deposits reflect redemption of Resurgent India Bonds (RIBs), since October 1, 2003 and of India Millennium Deposits (IMDs) since December 29, 2005.

(e) Data are provisional.

(1) Net of return of about Rs.43 crore of Indian notes from Pakistan upto April 1985.

(2) Estimated : ten-rupee commemorative coins issued since October 1969, two-rupee coins issued since November 1982 and five-rupee coins issued since November 1985 are included under rupee coins.

(3) Exclude balances held in IMF Account No.1, Reserve Bank of India Employees' Provident Fund, Pension Fund, Gratuity and Superannuation Fund and Co-operative Guarantee Fund, the amount collected under the Additional Emoluments (Compulsory Deposit) Act, 1974 and the Compulsory Deposit Scheme (Income-Tax Payers') Act.

(f) Revised in line with the new accounting standards and consistent with the Methodology of Compilation (June 1998). The revision is in respect of pension and provident funds with commercial banks which are classified as other demand and time liabilities and includes those banks which have reported such changes so far.

Table Nos. 11 & 13

(a) On the establishment of National Bank for Agriculture and Rural Development (NABARD), on July 12, 1982, certain assets and liabilities of the Reserve Bank were transferred to NABARD, necessitating some reclassification of aggregates in the sources of money stock from that date.

(b) Please see item (c) of notes to Table 10.

(c) Data are provisional.

(1) Includes special securities and also includes Rs.751.64 crore (equivalent of SDRs 211.95 million) incurred on account of Reserve Assets subscription to the IMF towards the quota increase effective December 11, 1992.

(2) Represents investments in bonds/shares of financial institutions, loans to them and holdings of internal bills purchased and discounted. Excludes since the establishment of NABARD, its refinance to banks.

(3) Inclusive of appreciation in the value of gold following its revaluation close to international market price effective October 17, 1990. Such appreciation has a corresponding effect on Reserve Bank's net non-monetary liabilities.

Table No. 11A

The conceptual basis of the compilation of the Commercial Bank Survey are available in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998, which recommended changes in the reporting system of commercial banks and the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

(1) Time Deposits of Residents : These do not reckon non-residents' foreign currency repatriable fixed deposits (such as FCNR(B) deposits, Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs)) based on the residency criterion and exclude banks' pension and provident funds because they are in the nature of other liabilities and are included under 'other demand and time liabilities'.

(2) Short-term Time Deposits : Refers to contractual maturity of time deposits of up to and including one year. This is presently estimated at 45.0 per cent of total domestic time deposits.

(3) Domestic Credit : It includes investments of banks in non-SLR securities, comprising commercial paper, shares and bonds issued by the public sector undertakings, private sector and public financial institutions and net lending to primary dealers in the call/term money market, apart from investment in government and other approved securities and conventional bank credit (by way of loans, cash credit, overdrafts and bills purchased and discounted).

(4) Net Foreign Currency Assets of Commercial Banks : Represent their gross foreign currency assets netted for foreign currency liabilities to non-residents.

(5) Capital Account : It consists of paid-up capital and reserves.

(6) Other Items (net) : It is the residual balancing the components and sources of the Commercial Banking Survey and includes scheduled commercial banks' other demand and time liabilities, net branch adjustments, net inter-bank liabilities *etc.*

Table No. 11B

The conceptual basis of the compilation of new monetary aggregates are available in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998. A link series between the old and present monetary series has been published in the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

(1) NM_2 and NM_3 : Based on the residency concept and hence does not directly reckon non-resident foreign currency repatriable fixed deposits in the form of FCNR(B) deposits, Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs).

(2) NM_2 : This includes M_1 and residents' short-term time deposits (including and up to the contractual maturity of one year) with commercial banks.

(3) Domestic Credit : Consistent with the new definition of bank credit which includes investments of banks in non-SLR securities, comprising of commercial paper, shares and bonds issued by the public sector undertakings, private sector and public financial institutions and net lending to primary dealers in the call/term money market. The RBI's loans and advances to NABARD would be included in the RBI credit to commercial sector. Other components such as credit to Government, investments in other approved securities and conventional bank credit remain unchanged.

(4) Net Foreign Assets of The Banking Sector : It comprises the RBI's net foreign assets and scheduled commercial banks' net foreign currency assets (refer to note 4 of Table 11A).

(5) Capital Account : It consists of paid-up capital and reserves.

(6) Other Items (net) of the Banking System : It is the residual balancing the components and sources of money stock, representing other demand and time liabilities *etc.* of the banking system.

Table No. 11C

The conceptual basis of the compilation of the Reserve Bank Survey is given in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), RBI Bulletin, July 1998 and the article "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999. The components of reserve money (to be referred as M_0) remain unchanged. On the sources side, the RBI's refinance to the National Bank for Agriculture and Rural Development (NABARD), which was hitherto part of RBI's claims on banks has been classified as part of RBI credit to commercial sector. The Reserve Bank's net non-monetary liabilities are classified into capital account (comprising capital and reserves) and other items (net).

Table No. 12

Please see item (c) of notes to Table 10.

Table No. 27C

(a) Month-end yields for different integer valued residual maturities are estimated using interpolation technique on weighted average yields of select indicative securities derived from SGL transactions data on government securities observed during a select month-end day. Yield corresponding to each transaction in a security is calculated from the following Yield to Maturity (YTM) and price relationship.

$$\Sigma$$

Where,

P = price of the bond

bpi = broken period interest

c = annual coupon payment

y = yield to maturity

v = number of coupon payments in a year

n = number of coupon payments till maturity

F = Redemption payment of the bond

t_i = time period in year till i^{th} coupon payment

(b) The weighted average yield corresponding to each traded security on that particular day is calculated from the yields of all transactions on that security using amount (Face Value) traded as the weights.

(c) Broken period (number of days) is based on day count convention of 30 days a month and 360 days a year.

Table Nos. 29 & 30

Table 29 presents Index Numbers of Industrial Production (Sectoral and Use-based Classification). Due to revision of the indices of the mining sector and also the deletion of four items, *viz.*, radio receivers, photosensitised paper, chassis (assembly) for HCVs (bus, truck) and engines from the item–basket of the manufacturing sector, the IIP data have been revised from 1994-95 onwards. This has also resulted in the change in redistribution of weights in use-based classification of IIP. Table 30 contains data on manufacturing sector at two digit level of 17 groups along with general index and sectoral indices, *viz.*, Mining and Quarrying, Manufacturing and Electricity.

Table No. 31

(a) Figures exclude data on private placement and offer for sale but include amounts raised by private financial institutions.

(b) Equity shares exclude bonus shares.

(c) Preference shares include cumulative convertible preference shares and equi-preference shares.

(d) Debentures include bonds.

(e) Convertible debentures include partly convertible debentures.

(f) Non-convertible debentures include secured premium notes and secured deep discount bonds.

(g) Figures in brackets indicate data in respect of premium on capital issues which are included in respective totals.

Table No. 35

The ban on forward trading in gold and silver, effective November 14, 1962 and January 10, 1963, has been lifted with effect from April 1, 2003.

(1) In case Friday is a holiday, prices relate to the preceding working day.

Table No. 36

Annual data relate to average of the months April to March.

(1) The new series of index numbers with base 2001=100 was introduced from January 2006 and with that the compilation of the index numbers with the base year 1982 was discontinued. The linking factor can be used to work out the index numbers with the base year 2001 for data from January 2006 onwards.

(2) Based on indices relating to 78 centres.

Table No. 37

Annual data relate to average of the months April to March. The new series of index numbers with base 1984-85=100 was introduced from November 1987.

(1) Based on indices relating to 59 centres.

Table No. 38

Annual data relate to the average of the months July to June.

(1) With respect to base: July 1960-June 1961=100.

(2) The new series of index numbers with base : July 1986 to June 1987 = 100 was introduced from November 1995 and with that the compilation of index numbers with base : July 1960 to June 1961 was discontinued. The linking factor given in this column can be used to work out the index numbers with old base (i.e., 1960-61 = 100) for November 1995 and subsequent months.

(3) In the case of Assam, the old series (i.e., with base 1960-61 = 100) was being compiled for the composite region viz. Assam, Manipur, Meghalaya and Tripura while the index of the new series (i.e., with base 1986-87 = 100) has been compiled for each of the constituent States separately. The index for Assam region on old base can be estimated from the corresponding indices of the new series as under :

$$I^{A}_{O} = 5.89\ [\ (0.8126 \text{ X } I^{A}_{N}) + (0.0491 \text{ X } I^{Ma}_{N}) + (0.0645 \text{ X } I^{Me}_{N}) + (0.0738 \text{ X } I^{T}_{N})]$$

where I_O and I_N represent the index numbers for old and new series, respectively, and superscripts A, Ma, Me and T indicate Assam, Manipur, Meghalaya and Tripura, respectively.

(4) Similarly, in the case of Punjab, where the old series (i.e., with base 1960-61 = 100) was being compiled for the composite region, viz., Punjab, Haryana and Himachal Pradesh, the index for the Punjab region on old base can be estimated as under :

$$I^{P}_{O} = 6.36\ [(0.6123 \text{ X } I^{P}_{N}) + (0.3677 \text{ X } I^{Ha}_{N}) + (0.0200 \text{ X } I^{Hi}_{N})]$$

where I_O and I_N represent the index numbers for old and new series, respectively, and superscripts P, Ha and Hi indicate Punjab, Haryana and Himachal Pradesh, respectively.

(5) Indices for the State compiled for the first time from November, 1995.

(6) Consumer Price Index for Rural Labourers (including agricultural labourers) are compiled from November 1995 only.

(7) Average of 8 months (November 1995 - June 1996).

Table Nos. 39 & 40

The new series of index numbers with base 1993-94=100 was introduced in April 2000. Details regarding the scope and coverage of new series are published in June 2000 issue of the Bulletin.

Table No. 41

(a) The foreign trade data relate to total sea, air and land trade, on private and government accounts. Exports are on f.o.b. basis and imports are on c.i.f. basis. Exports include re-exports of foreign merchandise previously imported to India and imports relate to foreign merchandise whether intended for home consumption, bonding or re-exportation. Direct transit trade, transshipment trade, passengers baggage, ship's stores, defence goods and transactions in treasure i.e. gold and current coins and notes, diplomatic goods, "proscribed substances" under Atomic Energy Act, 1962, are excluded from the trade data, while indirect transit trade, transactions in silver (other than current coins) and in notes and coins not yet in circulation or withdrawn from circulation are included.

(b) In the case of data in rupee terms, monthly figures may not add up to the annual total due to rounding off.

(c) Monthly data in US dollar and SDR terms may not add up to the annual total due to the exchange rate factor.

Table Nos. 42 & 43

(1) Data up to 1980-81 are final, subsequent data are preliminary actuals.

(2) Interest accrued during the year and credited to NRI deposits has been treated as notional outflow under invisible payments and added as reinvestment in NRI deposits under Banking Capital – NRD.

(3) The item "Non-monetary Gold Movement" has been deleted from Invisibles in conformity with the IMF Manual on BOP (5th edition) from May 1993 onwards; these entries have been included under merchandise.

(4) Since 1990-91 the value of defence related imports are recorded under imports (merchandise debit) with credits financing such imports shown under "Loans (External commercial Borrowings to India)" in the capital account. Interest payments on defence debt owed to the General Currency Area (GCA) are recorded under Investment Income debit and principal repayments under debit to "Loans (External commercial Borrowings to India)". In the case of the Rupee Payment Area (RPA), interest payment on and principal repayment of debt is clubbed together and shown separately under the item "Rupee Debt Service" in the capital account. This is in line with the recommendations of the High Level Committee on Balance of Payments (Chairman : Dr. C. Rangarajan).

(5) In accordance with the provisions of IMF's Balance of Payments Manual (5th Edition), gold purchased from the Government of India by the RBI has been excluded from the BOP statistics. Data from the

earlier years have, therefore, been amended by making suitable adjustments in "Other Capital Receipts" and "Foreign Exchange Reserves". Similarly, item "SDR Allocation" has been deleted from the table.

(6) In accordance with the recommendations of the Report of the Technical Group on Reconciling of Balance of Payments and DGCI & S Data on Merchandise Trade, data on gold and silver brought in by the Indians returning from abroad have been included under import payments with contra entry under Private Transfer Receipts since 1992-93.

(7) In accordance with the IMF's Balance of Payments Manual (5th edition), 'compensation of employees' has been shown under head, "income" with effect from 1997-98; earlier, 'compensation of employees' was recorded under the head "Services – miscellaneous".

(8) Since April 1998, the sales and purchases of foreign currency by the Full Fledged Money Changers (FFMC) are included under "travel" in services.

(9) Exchange Rates : Foreign currency transactions have been converted into rupees at the par/central rates up to June 1972 and on the basis of average of the Bank's spot buying and selling rates for sterling and the monthly averages of cross rates of non-sterling currencies based on London market thereafter. Effective March 1993, conversion is made by crossing average spot buying and selling rate for US dollar in the forex market and the monthly averages of cross rates of non-dollar currencies based on the London market.

Explanatory Notes

Balance of payments is a statistical statement that systematically summarises, for a specific time period, the economic transactions of an economy with the rest of the world.

Merchandise credit relate to export of goods while ***merchandise debit*** represent import of goods.

Travel covers expenditure incurred by non-resident travellers during their stay in the country and expenditure incurred by resident travellers abroad.

Transportation covers receipts and payments on account of international transportation services.

Insurance comprises receipts and payments relating to all types of insurance services as well as reinsurance.

Government not included elsewhere (G.n.i.e.) relates to receipts and payments on government account not included elsewhere as well as receipts and payments on account of maintenance of embassies and diplomatic missions and offices of international institutions.

Miscellaneous covers receipts and payments in respect of all other services such as communication services, construction services, software services, technical know-how, royalties etc.

Transfers (official, private) represent receipts and payments without a quid pro quo.

Investment Income transactions are in the form of interest, dividend, profit and others for servicing of capital transactions. Investment income receipts comprise interest received on loans to non-residents, dividend/profit received by Indians on foreign investment, reinvested earnings of Indian FDI companies abroad, interest received on debentures, floating rate notes (FRNs), Commercial Papers (CPs), fixed deposits and funds held abroad by ADs out of foreign currency loans/export proceeds, payment of taxes by non-residents/refunds of taxes by foreign governments, interest/discount earnings on RBI investment etc. Investment income payments comprise payment of interest on non-resident deposits, payment of interest on loans from non-residents, payment of dividend/profit to non-resident share holders, reinvested earnings of the FDI companies, payment of interest on debentures, FRNs, CPs, fixed deposits, Government securities, charges on Special Drawing Rights (SDRs) etc.

Foreign investment has two components, namely, foreign direct investment and portfolio investment.

Foreign direct investment (FDI) to and by India up to 1999-2000 comprise mainly equity capital. In line with international best practices, the coverage of FDI has been expanded since 2000-01 to include, besides equity capital reinvested earnings (retained earnings of FDI companies) and 'other direct capital' (inter-corporate debt transactions between related entities). Data on equity capital include equity of unincorporated entities (mainly foreign bank branches in India and Indian bank branches operating abroad) besides equity of incorporated bodies. Data on reinvested earnings for the latest year are estimated as average of the previous two years as these data are available with a time lag of one year. In view of the above revision, FDI data are not comparable with similar data for the previous years. In terms of standard practice of BoP compilation, the above revision of FDI data would not affect India's overall BoP position as the accretion to the foreign exchange reserves would not undergo any change. The composition of BoP, however, would undergo changes. These changes relate to investment income, external commercial borrowings and errors and omissions. In case of reinvested earnings, there would be a contra entry (debit) of equal magnitude under investment income in the current account. 'Other Capital' reported as part of FDI inflow has been carved out from the figure reported under external commercial borrowings by the same amount. 'Other Capital' by Indian companies abroad and equity capital of unincorporated entities have been adjusted against the errors and omissions for 2000-01 and 2001-02.

Portfolio investment mainly includes FIIs' investment, funds raised through ADRs/GDRs by Indian companies and through offshore funds. Data on investment abroad, hitherto reported, have been split into equity capital and portfolio investment since 2000-01.

External assistance by India denotes aid extended by India to other foreign Governments under various agreements and repayment of such loans. External Assistance to India denotes multilateral and bilateral loans received under the agreements between Government of India and other Governments/International institutions and repayments of such loans by India, except loan repayment to erstwhile "Rupee area" countries that are covered under the Rupee Debt Service.

Commercial borrowings covers all medium/long term loans. Commercial Borrowings by India denote loans extended by the Export Import Bank of India (EXIM bank) to various countries and repayment of such loans. Commercial Borrowings to India denote drawals/repayment of loans including buyers' credit, suppliers' credit, floating rate notes (FRNs), commercial paper (CP), bonds, foreign currency convertible bonds (FCCBs) issued abroad by the Indian corporate etc. It also includes India Development Bonds (IDBs), Resurgent India Bonds (RIBs), India Millennium Deposits (IMDs).

Short term loans denotes drawals in respect of loans, utilized and repayments with a maturity of less than one year.

Banking capital comprises of three components : a) foreign assets of commercial banks (ADs), b) foreign liabilities of commercial banks (ADs), and c) others. 'Foreign assets' of commercial banks consist of (i) foreign currency holdings, and (ii) rupee overdrafts to non-resident banks. 'Foreign liabilities' of commercial banks consists of (i) Non-resident deposits, which comprises receipt and redemption of various non-resident deposit schemes, and (ii) liabilities other than non-resident deposits which comprises rupee and foreign currency liabilities to non-resident banks and official and semi-official institutions. 'Others' under banking capital include movement in balances of foreign central banks and international institutions like IBRD, IDA, ADB, IFC, IFAD etc. maintained with RBI as well as movement in balances held abroad by the embassies of India in London and Tokyo.

Rupee debt service includes principal repayments on account of civilian and non-civilian debt in respect of Rupee Payment Area (RPA) and interest payment thereof.

Other capital comprises mainly the leads and lags in export receipts (difference between the custom data and the banking channel data). Besides this, other items included are funds held abroad, India's subscription to international institutions, quota payments to IMF, remittances towards recouping the losses of branches/subsidiaries and residual item of other capital transactions not included elsewhere.

Movement in reserves comprises changes in the foreign currency assets held by the RBI and SDR balances held by the Government of India. These are recorded after excluding changes on account of valuation. Valuation changes arise because foreign currency assets are expressed in US dollar terms and they include the effect of appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen) held in reserves.

Table No. 44

1. Gold is valued at average London market price during the month.
2. Conversion of SDRs into US dollars is done at exchange rates released by the International Monetary Fund (IMF).
3. Conversion of foreign currency assets into US dollars is done at week-end (for week-end figures) and month-end (for month-end figures) New York closing exchange rates.
4. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI Holding rates.
5. Reserve Tranche Position (RTP) in IMF has been included in foreign exchange reserves from April 2, 2004 to match the international best practices. Foreign exchange reserves figures have accordingly been revised for 2002-03 and 2003-04 to include RTP position in the IMF.

Table No. 51

The 5-country indices of REER/NEER were replaced with new 6-currency indices in December 2005. The RBI Bulletin December 2005 carried a detailed article on the rationale and methodology for the replacement. A revision has now been undertaken in the construction of the 6-currency REER indices. This revision was necessitated by a sudden spurt in Chinese inflation indices during April-May, 2006. It may be mentioned that Chinese inflation indices are not readily available in the public domain. The National Bureau of Statistics provides only point-to-point inflation rates on a monthly basis in the public domain. In view of this, inflation indices were constructed taking into account the inflation rates with 1993-94 as the base year. It may be further mentioned that the period from January 1993 to December 1995 was marked by continuous double digit inflation rates in China. This lent an upward bias to the Chinese inflation indices (base: 1993-94 = 100) leading to a sharp fall in the value of 6-currency REER in April 2006. In order to remove the distortion in REER on account of sudden spurt in Chinese inflation numbers, a new series of Chinese inflation indices has been constructed taking 1990 as the base year (a year with much less volatility in inflation rates). Subsequently, the base year of the new series of Chinese inflation indices has been changed from 1990 to 1993-94 through splicing to facilitate the construction of the 6-currency REER (base 1993-94 = 100).

Table No. 53

(a) In terms of Government of India's notification No. 10(45)/82-AC(5) dated July 6, 1982, loans and advances granted by the RBI to state co-operative banks and regional rural banks under section 17 [except subclause (a) of clause(4)] of RBI Act, 1934 and outstanding as on July 11, 1982 would be deemed to be loans and advances granted by NABARD under section 21 of NABARD Act, 1981. With effect from the date of the establishment of NABARD, i.e. July 12, 1982, RBI does not grant loans and advances to state co-operative banks except (i)for the purpose of general banking business against the pledge of Government and other approved securities under section 17(4)(a) of the RBI Act, 1934 and (ii) on behalf of urban co-operative banks under section 17(2)(bb) of the RBI Act, 1934. Loans and advances granted by the Reserve Bank of India to the state co-operative banks under section 17(4)(a) of the Reserve Bank of India Act, 1934 are not covered in this table.

(b) Advances are made under various sub-sections of Sections 21, 22 and 24 of the NABARD Act, 1981. Outstanding are as at the end of the period.

(1) Includes an amount of Rs.10 lakh advance for marketing of minor forest produce.

Table No. 54

Outstanding relate to end of period and include Indian Union's share of the pre-partition liabilities and repayments include those from the pre-partition holding of Indian investors.

(1) Receipts and Outstanding include interest credited to depositors' account from time to time. Outstanding include the balances under Dead Savings Bank Accounts.

(2) Relate to 5-year, 10-year and 15-year cumulative time deposits.

(3) Data on Public Provident Fund (PPF) relate to Post Office transactions and do not include PPF mobilised by banks.

(4) Relate to Social Securities Certificates only.

(5) Excluding Public Provident Fund.

(6) Negative figures are due to rectification of misclassification.

Table No. 55

Amounts are at face value.

(1) Indicates reissued security at price-based auctions.
(2) Fresh issues through price based auctions.
(3) Tap issue closed on May 23, 2000.
(4) Yield based auctions.
(5) Private Placement with the RBI.
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xv) 2003-04		2004	275 300 * 250 **	30 □ 20 *	
xvi) 2004-05		2005	325 350 * 275 ** 250 ***	30 □ 20*	
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(a) CD-ROM			210 250 *	55 □ 20 *	
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	Vol. 1 to 31, 1972 to 2002 DISC 1 & 2			475 *	27 *	
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	iii) March 1997		1999	25 *		
	iv) March 1998		1999	25 *		
	v) March 1999		2000	25 *		
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	iii) 1992-93			1998	135 200 *	50	
	iv) 1994-95			1997	125 185 *	45	
	v) 1995-96			1998	125 185 *	45	
	vi) 1996-97			1999	130 180 *	50	
	vii) 1997-98			1999	130 180 *	50	
	viii) 1998-99			1999	130 180 *	50	
	ix) 1999-00			2000	175 225 *	50	
	x) 2000-01	(a) Print version		2001	150 200 *	50	
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	xi) 2001-02	(a) Print version		2002	150 200 *	50	
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	xii) 2002-03	(a) Print version		2003	200 250 *	50 *	
		(b) CD-ROM		2003	200 250 *	50 *	
	xiii) 2003-04	(a) Print version		2004	230 280 *	25 □ 15 *	
		(b) CD-ROM		2004	175 225 *	25 □ 15 *	
	xiv) 2004-05	(a) Print version		2005	190 240*	55 □ 20*	
		(b) CD-ROM			200 250*	55 □ 20*	
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16.	Selected Banking Indicators 1981 to 2002 (On CD-ROM)	do	2003	250 300 *	75	
17.	Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks 1981-2003 (on CD-ROM)	do	2004	185 240 *	55 □ 20 *	
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	i) 2004-05	do	2005	100 130 *	20 *	
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21.	Report of the committee to examine the adequacy of institutional credit to the SSI sector & related aspects (Nayak committee report)	RPCD	1993 (Reprint)	55	9	300	20
22.	Review of the agricultural credit system in India (Khusro committee report)	do	1993 (Reprint)	270 315 *	80		
23.	Report of the committee to enquire into securities transactions of banks and financial institutions (Jankiraman committee report)	PRD	1994	85 £ 100 *			
24.	Committee on technology issues relating to payments system, cheque clearing and securities settlement in the banking industry (Saraf committee report) (Hindi Edition)	DIT	1994	50 *£	20		
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26.	Report of the working group for examining the schemes and incentives available to NRIs for investment in India (Sodhani Committee Report)	FED	1995	50 *£	10		
27.	Report of the expert group for designing a supervisory framework for non-banking financial companies (Khanna Committee Report)	DBOD	1996	35		307	21
28.	Report of the committee for proposing legislation on electronic funds transfer and other electronic payments (Shere Committee Report)	DIT	1996	150	15	333	21
29.	Report of the Committee on Capital Account Convertibility (Tarapore Committee Report)	DEIO	1997	100 *	35		
30.	Money Supply : Analystics and Methodology of Compilation-Report of the working group (Reddy Committee Report)	DEAP	1998	35 £	20		
31.	Report of the high level Committee on agricultural credit through commercial banks(Gupta Committee Report)	RPCD	1998	30 £		200	19
32.	Report of the high level Committee on credit to SSI (Kapur Committee Report)	do	1998	50 £	10	277	20
33.	Report of the Technical Committee on external debt (Nair Committee Report)	DEAP	1998	20 * £	15		
34.	Report of the Committee on Banking Sector Reforms (Narasimham Committee Report)	DBOD	1998	32		244	20
35.	Report of the Working Group on Euro (Subramanyam Committee Report)	DEIO	1998	100 £	30		
36.	Report of the Committee on Hedging through International Commodity Exchange (Gupta Committee Report)	FED	1998	100 *	50		
37.	Report of the Committee on Tecnnology Upgradation in the Banking Sector (Vasudevan Committee Report)	DIT	1999	100 *	25		
38.	Report of the High Power Committee on Urban Co-operative Banks (Madhava Rao Committee Report)	UBD	1999	80		490	22

Reserve Bank of India Publications

	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.
	1	2	3	4	5	6
39.	Report of the Advisory Group on Payment and Settlement System Part (I) June 2000	MPD	2000	40 * 30 **	15	
40.	Report of the Advisory Group on Payment and Settlement System (Part II)	do	2000	20 * 15 **	10	
41.	Report of the Advisory Group on Payment and Settlement System (Part III)	do	2001	20 * 15 **	10	
42.	Report of the Advisory Group on “Transparency in Monetary and Financial Policies”.	do	2001	45 * 35 **	20	
43.	Report of the Advisory Group on Corporate Governance	do	2001	40 * 30 **	15	
44.	Report of the Advisory Group on Fiscal Transperency	do	2001	30 * 20 **	 15	
45.	Report of the Advisory Group on Data Dissemination	do	2001	35 * 25 **	20	
46.	Report of the Advisory Group on Banking Supervision	do	2001	90 * 60 **	40	
47.	Report of the Advisory Group on Securities Market Regulation	do	2001	25 * 20 **	10	
48.	Report of the Advisory group on Bankruptcy Laws (Volume-I & II)	do	2001	90 * 75 **	45	
49 .	Report of the Advisory Group on Insurance Regulation	do	2001	35 * 25 **	20	
50.	Report of the Advisory group on Accounting & Auditing	do	2001	40 *	20	
51.	Report of the Technical Group on Market Integrity	do	2002	65 * 50 **	20	
52.	Standing Committee on International Financial Standards and Codes on CD-ROM	do	2002	200 *	60 150 **	
53.	Report of the Standing Committee on International Financial Standards and Codes	do	2002	65 * 50 **	20	
54.	The Standing Advisory Committee for Urban Co-operative Banks	UBD				
	i) First meeting		1983	5		200 19
	ii) Second meeting		1984	6 £		200 19
	iii) Third meeting		1985	6		200 19
	iv) Fourth meeting		1985	9		300 20
	v) Fifth meeting		1986	9 £		200 19
	vi) Sixth meeting		1988	12 £		200 19
	vii) Seventh meeting		1989	12		200 19
	viii) Eighth meeting		1990	21		300 20
	ix) Ninth meeting (Bilingual edition)		1992	24		200 19
	x) Tenth meeting		1994	95		300 20
	xi) Eleventh meeting		1995	90		300 20
	xii) Twelfth meeting		1996	52		100 19

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Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
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E. Manuals						
1. Manual for urban co-operative banks	UBD	1984	15 £		400	21
2. Manual on costing exercise in commercial banks	MSD	1987	5 £		200	19
3. Manual on costing exercises in private sector and urban banks (Reprint)	do	1989	27 £		200	19
4. RBI-Exchange Control Manual- (Reprint of 1993 edition) (Vol.I & II) (updated upto July, 1998)	FED	1998	400 £		2200	39
i) RBI - Exchange Control Manual on floppy Disc - size 3.5 (Upadated upto June, 1999)		1999	400 £			
ii) RBI - Exchange Control Manual - on C.D. Rom (updated upto 31st May, 2000)		1999	400 £			
F. Compendium of Circulars						
1. i) Compendium of A.D. (M.A. Series) circulars No. 1	do	1997	75 £			
ii) Compendium of A.D. (M.A. Series) circulars No. 2		1998	120 £			
iii) Compendium of A.D. (M.A. Series) circulars No. 3		1999	200			
2. A. D. (M.A. Series) Circular No. 11 Foreign Exchange Management Act 1999	do	2000	185		900	26
3. CPC / MPD Circulars						
i) August 1970 to December 1981 - Vol. I	MPD	1989	75 *			
ii) January 1982 to March 1989 - Vol.II		1989	75 *			
iii) April 1989 to April 1995 Vol.III		1996	200		1530	33
4. i) Circulars on Monetary and Credit Policy Vol. 4 (From May 1995 to April 1997)	do	2002	165 * 130 **	50		
ii) Circular on Monetary and Credit Policy Vol. No. 5 (From May 1997 to March 1999)		2002	235 422 * 372 ** 185 ***	70		
iii) Circulars on Monetary and Credit Policy Vol. No. 6. Part I & II (from April 1999 to March 2003) (English & Hindi) A set of four books		2003	900 1300 * 1100 ** 700 ***	170		
iv) Circulars on Monetary and Credit Policy Vol. No. 6 (from April 1999 to March 2003) On CD-Rom		2003	400 * 300 **	80		
v) Circulars on Monetary and Credit Policy Vol. No. 7 (from April 2003 to March 2004) (English & Hindi)		2004	250 275 * 200 **	25 □ 20 *		
vi) Circulars on Monetary and Credit Policy Vol. No. 7 (from April 2003 to March 2004) (On CD-Rom)		2004	180 200 * 140 **	15 □ 12 *		
vii) Circulars on Monetary and Credit Policy Vol. No. 8 (from April 2004 to March 2005)		2005				
(a) Print Version (Billingual)			375 400 * 280 **	30 *		
(b) CD-ROM			180 200 * 140 **	15 *		
viii) Compendium of MPD Circulars - Vol. 9 (April 2005 - March 2006) (Billingual)		2006	480 500 * 375 **	35 *		

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5.	IECD circulars	IECD					
	i) July 1978 to June 1986 bilingual (Vol.I & II)		1993	250	10	2114	39
	ii) 1986-89		1990	70		1325	31
	iii) 1989-94 (Vol. I&II)		1995	250 £		2295	40
	iv) 1994-95		1995	80		700	24
	v) 1995-96		1996	55		380	21
	vi) 1996-97		1997	65		445	22
6.	Rural Planning and Credit Department (RPCD) Circulars (Bilingual edition)	RPCD					
	i) July 1994 to June 1995 (Vol. X)		1998	180 200 *			
	ii) July 1995 to June 1996 (Vol. XI)			180 £ 200 *			
	iii) July 1996 to June 1997 (Vol. XII)		1999	180 200 *			
	iv) July 1997 to June 1998 (Vol. XIII)		1999	180 200 *			
	v) July 1998 to June 1999 (Vol. XIV)		2000	180 200 *			
	vii) July 1999 to June 2000 (Vo. XV)		2001	210 240 *			
7.	Compendium of Circulars on Small Scale Industries	do	2000	120 150 *	25		
8.	RPCD Circular (on CD-ROM) (1st July 1982 to 31 March 2004)	do	2004	120 150 *			
9.	RPCD Circulars on Small Scale Industries (upto 30-09-2004) on CD-ROM	do	2004	120 150 *			
10.	UBD circulars	UBD					
	i) June 1985		1986	115		274	20
	ii) 1985-1992 (Vol.I & II)		1995	250		3195	49
	iii) 1992-1994		1995	165		1792	35
	iv) 1995-96		1997	55		735	25
11.	i) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (July 1996-December 1997)	do	2000	85		742	25
	ii) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (January 1998-December 1999)		2003	100 £		1032	68
	iii) Compendium of Instructions/Guidelines issued by RBI for Primary Co-operative Banks (January 2000-December 2001)		2003	120 £		1300	68

G. Memorandum

	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
1.	Memorandum of Exchange Control Manual, 1993 containing detailed procedural instructions	FED					
	a) Relating to general insurance in India (GIM)		1994	20		70	19
	b) Relating to channeling transactions through Asian Clearing Union (ACM)		1996	20		70	19
	c) Relating to co-operative/commercial banks (other than authorised dealers) authorised to maintain non-resident rupee accounts (ABM)		1994	20 £			

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	d) Memorandum of Instructions to full-fledged money changers (FLM)	FED	1999	30 £		110 19
	e) Memorandum of Instructions to restricted money changers (RLM)		1999	30 £		90 19
	f) Memorandum of Instruction on project & service exports (PEM)		1997	40 £		280 20
2.	Memorandum of Exchange Control Regulations Relating to general insurance in India (GIM)	do	2002	30		26
3.	Memorandum of instructions to Authorised Money Changers (AMC)	do	2002	30		
4.	Memorandum of Procedure for channelling transaction through Asian Clearing Union (ACU) Memorandum ACM	do	2003	30		21
5.	Memorandum of Instructions on Project and Service Exports (PEM)	do	2003	40		
H.	**Reserve Bank of India Occasional Papers (Quarterly)**	DEAP	–			
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	iii) 1996 (Yearly four issues)			35 *@	25 @	
	iv) 1997 (Three issues)			35 *@	25 @	
	v) (Combined issue June-September, 1997)			70 *	50	
	vi) 1998 (Yearly four issues)			40 *@	25 @	
	vii) 1999 (Yearly 3 issues)			50 *@	30 @	
	viii) 2000 (Yearly 2 issues) Summer - Vol. 21 No. 1			80 *@	45 @	
	ix) (Monsoon & Winter Combined Issue) - Vol. 21 No. 2 & 3			80 *@	45 @	
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I.	**Others Important Publications**					
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3.	Question/Answer New NBFC Policy	do	1998	10		50 19
4.	Payment Systems in India	DIT	1998	60 * 150 *	10	
5.	Mechanised Cheque Processing Using MICR Technology Procedural Guidelines.	do	1999	50 *£		
6.	Mechanised Cheque Processing using MICR Technology Procedural Guidelines. (Second Edition)	do	2002	50 *		
7.	Indian Financial Network Banking Applications Message Formats (INFINET)	do	2000	100 *		
8.	Indian Financial Network (INFINET) Banking Applications Messages Formats Vol. II	do	2002	100 *		
9.	Balance of Payments compilation	DEAP	1987	45 *	30	
10.	New Series on Wholesale Price Index Numbers	do	1990	11 * £		

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	Title of the Publication	Department	Year of publication	Price (Rs.)	Price US $	Weight in gms. & RBP Charges of Single copy in Rs.	
	1	2	3	4	5	6	
11.	India's Balance of Payments monograph – 1948-49 to 1988-89	DEAP	1993	90	40		
12.	Centenary Commemorative Volume (C.D. Deshmukh Memorial Lecture series)	do	1996	100	25	400	21
13.	50 years of Central Banking : Governors Speak	do	1997	400		800	25
14.	Indian Economy – Basic Statistics – 1997	do	1997	4			
15.	External Debt-Management : Issues, Lessons and Preventive Measures	do	1999	250 *	20		
16.	Foreign Collaboration in Indian Industry - Sixth Survey Report	do	1999	60 *	20		
17.	Flow of Funds Accounts of the Indian Economy 1951-52 to 1995-96	do	2000	75 *	20		
18.	Exchange facilities for foreign travel	FED	1996	8 £		35	19
19.	Exchange facilities for resident Indians	do	1997	15		32	19
20.	Indian Overseas Investment Handbook of Policies and Procedures	do	1998	100 £ 125 *			
21.	Facilities for Non-resident Indians	do	1999	35 £ 50 *	8		
22.	RBI Remittance Facilities Scheme - 1975	DGBA	1989	3 £		25	
23.	Karyalayeen Shabdavli (English-Hindi)	DAPM	1994	15		166	19
24.	Directory of Bank Offices 1993 (English)	DBOD	1996	485 568 *	 36		
25.	Computer Paribhasha Kosh (Hindi)	do	1999	100		528	23
26.	Your Guide to Money Matters	DCM	1999	5 £		44	
27.	The Paper & The Promise: A Brief History of Currency & Bank notes in India	do	2001	100 £	15		36
28.	Functions and Working of RBI (Hindi)	CO	1984	30 £		719	25
29.	RBI 50 years - 1935-85	do	1985	50 £ 35 **	15	428	22
30.	Banking Glossary (English-Hindi)	Rajbhasha	1995	38		471	22
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(3) Please indicate, with reference to the answer given for (2) above, your suggestions for improvements in regard to items other than the 'Current Statistics' portion of the Bulletin.

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(6) If the answer to Q.(5) is Yes, do you think it would be sufficient to have a Quarterly Bulletin of articles, speeches, and policy measures ?

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Editor

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– Editor

RBI provides Web based Access to its Database on Indian Economy

The Reserve Bank of India has released a number of long time series data on several aspects of Indian economy covering key macro economic aggregates to the public in user-friendly manner through dynamic web based application.

Objective : The Database on Indian Economy is built for the convenience of researchers, analysts and other users. It is created to provide the public with an access to the published data series, with additional details on some series as available in the Reserve Bank of India's enterprise wide data warehouse.

Coverage : Data available on published time series, can be accessed through a completely browser based software include data on:

- financial sector,
- real sector,
- financial market,
- external sector,
- public finance and
- corporate finance

Features :

- All the data series are accompanied with data definitions, i.e. metadata, which allow the user to view the definitions/concepts of the underlying variables;
- The data definitions provides search feature;
- Extract data through standard reports which allows the users to select and view the preformatted reports or
- Dynamic 'data query', which enables user to define list of data series and allows the user to choose the time period for data extraction.
- Data files can be downloaded in the form of CSV / pdf format.

Access : The data can be accessed from the home page of the RBI website (www.rbi.org.in) through the static headline "Database on Indian Economy" List of data series available on the site is available on the homepage of the site, i.e. Database on Indian Economy.

This list will be proggressively enlarged on the basis of feedback received and availability of relevant data series in the RBI data warehouse. Feedback may please be sent to dbiehelpdesk@rbi.org.in or through the feedback option on the home page of the website.

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