Current Challenges to Monetary Policy Making in India

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Dr. Kannan, members of the Actuarial Society of India and distinguished delegates.

I am deeply honoured to be invited to address the 9th Global Conference of Actuaries today. Strong winds of change are sweeping across the Indian financial landscape. We therefore have to adapt ourselves appropriately to update our understanding of these changes. All stakeholders are involved in this silent transformation. As actuaries, your stake is significant since you will shape the architecture of your part of the financial system that will emerge from these shifts. Fortunately, this time around, we are all aware of the changes taking place and considerable work is already underway into fashioning our response to the unfolding of the future. This global conference bears testimony to this preparedness. On the way forward, the role of actuaries will become critical in defining the best practices of tomorrow. The road ahead is challenging and will test the best skills in every aspect. It is in this context that I thought I would share our perception of some of the challenges that are being faced in the conduct of monetary policy. I have chosen to talk to you on the Third Quarter Review of monetary policy, which we issued recently, to give you some sense of the thinking that went behind this statement.

In other fora, I have drawn attention to the apparent puzzles that confront contemporary monetary policy makers (Mohan, 2005; 2006). It is worthwhile to revisit them, for they seem to have become more real than before. We seem to be living in a world of extraordinary developments with several remarkable features defining the surrounding environment. First, financial markets are unperturbed: with the flattening of yield curves, the compression of risk spreads and the search for yields continues unabated. Second, global imbalances have actually increased with no fears of hard landing, but with some sense of readying for a bumpy soft landing. Movements in major exchange rates are not reflecting fundamentals in an environment of generalised elevation in asset prices and abundant liquidity. Third, strong global economic growth could be accompanied by emerging pressures on core inflation. This could eventually pose a major challenge to monetary policy makers in terms of both direction and magnitude. By end-January, 2007 i.e., at the time of formulating the Third Quarter Review of monetary policy, these dilemmas had become sharper and more testing than ever before. Taken together, global developments seemed in what could be described as a stable disequilibrium, and hence did not provide any definitive indication for a policy response. On the other hand, domestic developments seemed to dominate the outlook and clearly warranted closer scrutiny.

A distinctive feature of the Reserve Bank's communication strategy is to share its analysis with the public. Accordingly, I would like to highlight the analytical aspects of our assessment of the evolving scenario and the emerging issues that will condition the monetary policy response in the period ahead. The rest of my address is organised as follows: I will attempt to set out the environment in which we reviewed monetary policy. Against this backdrop, I will try to address the

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key issues that we had to grapple with as we fashioned the policy stance for the period ahead. I will conclude with a summary of the monetary policy stance and the measures taken in the Third Quarter Review.

II. The Backdrop

Perhaps the most distinguishing feature of recent domestic developments is the pace at which economic activity is expanding. On February 7, 2007 the advance estimates of the Central Statistical Organisation (CSO) placed India's real GDP at 9.2 per cent in 2006-07 on top of 9.0 per cent in 2005-06 and reaffirmed the robust optimism that has been building around India's macroeconomic performance. In retrospect, it is evident that there has been a pervasive sense of the gathering momentum of growth, reflected in the direction of revisions in projections by various forecasters during the year. For instance, real GDP growth projections of the Reserve Bank were raised from 7.5-8.0 per cent in the Annual Policy Statement of April, 2006 to 8.0 per cent in the Mid Term Review of October and further to 8.5-9.0 per cent in the Third Quarter Review. Similar revisions have also been made by various international observers and agencies. But actual growth has turned out to be ahead of all forecasts. Business confidence has been rising in successive rounds of surveys conducted by various agencies and there is considerable optimism on the outlook as reflected in order books, employment and profit margins. Viewed in an international perspective, the Indian economy seems to be well ahead of the synchronous global economic cycle that has enabled the world economy to record four per cent plus growth in an unprecedented run of five years to 2006.

There is growing evidence that the step-up in India's growth which set in during 2003-04 is strengthening into an upward shift in the underlying trend. This acceleration of growth has been accompanied by a significant moderation of volatility, particularly in the period 2003-07. There are also indications of small but important shifts in the composition of growth. The services sector continues to be the main stay of the economy, contributing 73 per cent of overall growth; however, services led growth is getting reinforced by a sustained resurgence in industrial activity after a long hiatus of slow down and restructuring during the period 1996-2003. The buoyancy in industrial performance has been the most heartening feature of India's growth story. Accordingly, industry's contribution to overall growth has improved noticeably from the 1990s. While the services sector has been the most stable despite high growth, the recent acceleration in industrial growth has also displayed lower volatility than in preceding years (Tables 1, 2 and 3).

Table 1: Patterns of Growth: Average Growth Rates

(Per cent)

	Agriculture	Industry	Services	Overall
1970s	0.6	4.7	4.1	2.9
1980s	4.4	7.4	6.4	5.8
1990s	3.0	5.9	7.4	5.8
2000-05	1.4	6.0	7.8	5.9
2005-06	6.0	8.0	10.3	9.0
2006-07	2.7	10.2	11.0	9.2
Memo				
2000-03	-0.2	5.2	6.6	4.6
2003-07	4.2	8.1	10.2	8.5

Source: RBI (2006) and CSO (2007a)

Table 2: Patterns of Growth: Coefficients of Variation

	Agriculture	Industry	Services	Overall
1970s	13.65	0.80	0.53	1.42
1980s	1.38	0.36	0.18	0.39
1990s	1.30	0.71	0.27	0.32
2000-05	4.71	0.35	0.25	0.33
Memo				
2000-03	- 26.21	0.47	0.13	0.22
2003-07	1.24	0.18	0.11	0.10

Source: RBI (2006) and CSO (2007a)

Table 3: Patterns of Growth: Weighted Contribution

	Agriculture	Industry	Services	Overall
		Weighted Contribution		
1970s	39.7	21.5	38.8	100.0
1980s	19.5	27.0	53.5	100.0
1990s	10.7	18.1	71.1	100.0
2000-05	0.1	21.5	78.3	100.0
2005-06	13.5	17.5	69.0	100.0
2006-07	5.8	21.4	72.7	100.0
Memo				
2000-03	-6.2	23.8	82.4	100.0
2003-07	9.7	18.7	71.6	100.0

Source: RBI (2006) and CSO (2007a)

Corporate balance sheets have strengthened considerably in an unprecedented run spanning seventeen quarters which began in the second half of 2002-03. Buoyant domestic demand and overseas markets have enabled corporates to scale up production and sales. Accordingly, profitability (net profits) has recorded growth consistently in the range of 25-60 per cent on a year-to-year basis. Internally generated resources have powered a massive expansion in investments in existing capacity as well as in building up new capacity, while economising on borrowings from the banking system. Accordingly, interest burden (interest to sales ratio) has tended to fall. (Table 4).

The optimism generated by India's recent macroeconomic performance has been somewhat marred by the setback to agriculture which has suffered substantial deceleration and instability. Shortfalls in key crops such as wheat (accompanied by depleting stocks), oilseeds and pulses have emerged and the supply situation in respect of these crops is further endangered on account of weather related adverse international conditions. The decline in the global production of wheat in 2006 has turned out to be the largest in ten years. Apart from poor harvests in key producing countries, their carry over stocks are declining and cereal acreage is losing out to the fast growing demand for bio-fuel production. Alongside, in the domestic economy, infrastructural bottlenecks are tightening. Managing the supply situation is emerging as a formidable challenge. In the current scenario, limitations on the supply response to the momentum of growth are showing up as excess demand pressures.

Table 4: Corporate Financial Performance											
(Growth rates in per cent)											
Item	2003-04	2004-05	2005-06	2005-06	2006-07			2005-06		2006-07	
				April-September		Q1	Q2	Q3	Q4	Q1	Q2
1	2	3	4	5	6	7	8	9	10	11	12
Sales	16.0	24.1	16.9	17.2	27.4	18.5	16.4	13.2	19.5	25.6	29.2
Expenditure	14.4	22.9	16.4	16.6	25.6	18.0	16.3	12.7	18.9	24.6	26.6
Gross Profits	25.0	32.5	20.3	26.7	39.8	32.0	19.1	21.2	16.6	33.9	45.9
Interest	-11.9	-5.8	1.9	-10.3	20.8	-13.5	-8.0	4.6	3.8	19.9	18.0
Profits After Tax	59.8	51.2	24.2	41.3	41.6	54.2	27.5	27.0	15.1	34.7	49.4
Memo: Interest to Sales Ratio	3.4	2.6	2.0	2.2	2.2	2.2	2.1	2.1	1.7	2.2	2.0

Note :
1. Growth rates are percentage change in the level for the period under reference over the corresponding period of the previous year.
2. Data in column (2) and (3) are based on audited balance sheets while those in column (4) onwards are based on the un audited/audited abridged results of the non Government non-financial companies.

Monetary and financial conditions are reflecting these demand supply gaps as well as the onset of a durable pick-up in aggregate spending. Banks' non-food credit is expanding above 30 per cent for the fourth year in succession, driving up money supply and squeezing overall liquidity. The growth of bank credit has favoured retail lending, particularly housing, real estate, trade transport and professional services and non-banking financial companies – sectors which hitherto were not priced into the credit market. While banks' exposures to these new sectors is still relatively small, given the low base, the high rates of growth have raised worries about the quality of these assets and potential non-performance. Default rates in regard to credit card receivables and personal loans have been rising. While buoyant deposit growth has, to an extent, alleviated the financial constraints on banks, credit deposit ratios remain high and investments in gilts have been drawn down to close to the statutory minimum of the SLR. These developments are likely to pose challenges to banks in managing liquidity.

Financial markets have, by and large, remained stable. Money markets experienced generally orderly conditions along with spells of tightening of liquidity in November and again from mid-December. During these episodes, contrasting conditions have often been observed when short-term interest rates have firmed up despite LAF absorptions but long-term rates have declined in the Government securities market. In December, there was an inversion of the yield curve and a narrowing of yield spreads. Forward premia have firmed up in November and December across the board in concert with the hardening of short-term interest rates in the domestic money market segments. On the other hand, asset prices, particularly equity prices, have risen to record highs.

Another significant feature of recent domestic developments is the firming up of inflation through the year. Currently hovering above 6 per cent, inflation, in terms of the wholesale price index, is ruling above indicative projections and represents a key concern in the evolving macroeconomic outlook. In terms of consumer prices, inflation is even higher in the range of 7-8 per cent.

In crafting appropriate monetary policy in these conditions, it is important to undertake a careful assessment of the manner in which inflation is evolving. Primary articles, unlike in recent years, have contributed significantly to WPI during 2006-07. Accounting for a third of headline inflation, they can be interpreted to originate from supply side pressures. Furthermore, in 2006, there has been a surge in the international prices of cereals. International futures prices of foodgrains have climbed to record levels due to substantial reductions in crop production estimates. At the same time, prices of manufactured products account for over half of current headline inflation (Table 5). Domestic prices are firming up in sympathy with international prices. Metal prices have risen by 53.6 per cent in 2006. Low stock levels and continuing demand has kept most metal prices high and elevated levels are likely to persist in the near term. In conjunction with emerging strains on capacity, elevated asset prices and the surging demand for bank credit, the rising prices of manufactures constitute the demand pressures on inflation.

The silver lining to the cloud is the improvement in public finances and the decline in international crude prices, and consequently in domestic prices of petroleum products. Excluding the beneficial effect of this softening of fuel prices results in inflation exceeding the headline in terms of wholesale prices. Globally too, headline inflation has been moderating mainly on account of the decline in international crude prices, while core inflation has generally remained firm and is likely to shape inflation expectations.

Table 5: Wholesale Prices and Constituents

(Year-on-year changes in Per cent)

Commodity			2005-06 (March 25)		2005-06 (Jan.14)		2006-07 (Jan. 13)	
		Weight	Inflation	WC	Inflation	WC	Inflation	WC
1		2	3	4	5	6	7	8
All	**Commodities**	**100.0**	**4.1**	**100.0**	**4.2**	**100.0**	**6.0**	**100.0**
1.	**Primary Articles**	**22.0**	**5.4**	**28.3**	**5.6**	**28.7**	**9.3**	**34.1**
	Food Articles	15.4	6.6	24.2	7.4	26.5	8.5	22.0
	Non-Food Articles	6.1	-1.9	-2.7	-2.4	-3.3	9.6	8.9
	Minerals	0.5	43.6	6.8	34.8	5.7	20.6	3.0
2.	**Fuel, Power, Light and Lubricants**	**14.2**	**8.9**	**47.9**	**7.9**	**41.1**	**3.7**	**14.0**
3.	**Manufactured Products**	**63.8**	**1.7**	**23.2**	**2.2**	**29.9**	**5.6**	**52.3**
	Memo:							
	Food Items (Composite)	**26.9**	**4.2**	**26.5**	**4.6**	**28.6**	**6.2**	**26.8**
	WPI Excluding Food	**73.1**	**4.0**	**73.5**	**4.0**	**71.4**	**5.9**	**73.2**
	WPI Excluding Fuel	**85.8**	**2.7**	**52.1**	**3.2**	**58.9**	**6.6**	**86.0**

WC : Weighted Contribution.
Source: RBI (2007a)

India's interface with the global economy has been another distinguishing feature of macroeconomic developments. The strength and resilience reflected in India's balance of payments has to be assessed in the context of global economic and financial developments. Global real GDP growth on a purchasing power parity basis is expected to have accelerated to above 5 per cent in 2006 but with a shift away from the US and towards Europe, Japan and the emerging world, all of which have distinctive features. In China, for instance, there are concerns that high levels of growth might be unsustainable and that some parts of the economy are becoming overheated. In Korea, there are concerns about a relatively rapid growth in house prices along with a rise in household indebtedness. In Thailand, concerted efforts have been taken to stem strong capital inflows into the economy over the past few months.

Global financial markets have been reasonably stable while re-pricing risks. Short-term interest rates have firmed up since October, but long-term bond yields have fallen, translating into a steeper inversion of the yield curve. Foreign exchange markets have been recording lower levels of volatility in recent weeks than before. Global equity markets have posted steady gains. In line with developments in the major markets, emerging equity markets in Asia and Latin America have continued to recover from the May-June sell-off. The markets which suffered the largest losses have more than recouped earlier losses.

Against this backdrop, India's merchandise export growth has resumed strongly from a dip in October, 2006. At the same time, imports of POL increased sizeably as in the previous year, but reflecting a sharp increase in import volume in the current year. Non-oil import growth, which remained subdued in the early months of 2006-07, has picked up during the third quarter in consonance with industrial activity. There are also reports of a substantial pick up in bullion imports in October-November. While the merchandise trade deficit has consequently widened, the sustained surplus on account of invisibles is expected to contain the current account deficit at well under two per cent of the GDP. The capital flows to India have recovered from the moderation during May-June 2006. Accordingly, the current account deficit is expected to be comfortably financed in the remaining part of the year.

To sum up the assessment, global growth continues to be strong but is exhibiting mixed patterns. In the global financial markets, current indications suggest that the risks remain under-priced and more diversified. Consequently, there is an increasing discomfort of the possibility of tail risk materialising. Geo-political risks remain significant. There is a growing recognition of the need to contain extreme volatility in capital flows. More importantly, on the domestic front, demand pressures appear to have intensified alongside robust growth and there are increased supply side pressures in evidence. Macroeconomic management will be constrained by the lagged response of productive capacity and infrastructure to the ongoing expansion in investment.

III. The Challenges

The foregoing analysis provides some evidence, though still formative, that a structural change could be taking place in the Indian economy. There is a gathering confidence that the economy is possibly poised on the threshold of a step-up in the growth trajectory. The central theme of the Third Quarter Review is the challenge of managing the transition to higher growth path, accompanied by low and stable inflation and well anchored inflation expectations. The objective is to firmly entrench potential output and productivity and thereby create the conditions for a further acceleration of growth. The role of monetary policy is to continue to maintain stability and so contribute to growth on an enduring basis.

It is in the context of sensitising the public to the dilemmas and trade-offs involved in managing this change that the Mid Term Review of October, 2006 explained the concept of overheating i.e., a situation in which current output is running above potential output. In the current environment, and in the presence of structural change, the task of identifying overheating becomes difficult for the monetary authority. For the conduct of monetary policy, however, it is crucial to monitor all available information for signs of overheating with a view to keeping inflation expectations stable and ensuring that the gains from high growth are consolidated. Accordingly, sensing how close is the economy to its potential growth is the vital judgment that has to be made to set the timing and direction of monetary policy.

What is potential growth is thus the question that holds the key. There is general agreement among policy makers that the level and pace of potential growth is becoming increasingly difficult to diagnose. Open trade has expanded the supply potential of several economies. Moreover, for a country undergoing structural transformation with large unemployment/under employment of resources, the concept of potential growth becomes even more fuzzy. For instance, the **Economist** (February 3, 2007) observes: "India is undergoing a paradigm shift and so backward-looking historical data are now irrelevant for assessing future growth". Nevertheless, monetary policy decisions have to be made and the closest approximation of potential growth must be identified in terms of a rate of growth which is associated with non-accelerating inflation.

At the current juncture, the challenge facing us is to judge the compatibility of the current pace of growth with non-accelerating inflation. In this context, I would like to draw your attention to the new estimates of gross domestic saving and capital formation in India in 2005-06, released on January 31, 2007, the same day as the Third Quarter Review. Close analysis of these numbers reveals the underpinnings of the recent growth experience. The rate of gross domestic saving (GDS), which was earlier estimated at 29.1 per cent of GDP in 2004-05, has been revised upwards by a clear 2 per cent of GDP. The rate of gross domestic investment (GDI) for that year has also been raised by 1.4 per cent of GDP to 31.5 per cent. The significant improvement in GDS in 2004-05 is attributable mainly to a distinct increase in saving by the corporate sector. The revision is consistent with the observed improvement in corporate profitability and internally generated resources that has been sustained over the period 2003-07, and to which we have been drawing attention for some time. Corporate profitability has remained strong despite a sharp rise in input costs and in interest payments (Table 6). There is some evidence to suggest that the corporate sector performance is being powered by rising productivity. Accordingly, the increase in corporate saving during 2004-05 can be expected to be the onset of a longer trend, supporting high rates of GDS on a sustained basis.

Table 6: Non-Government Non-financial Public Limited Companies

(Per cent)

	1990-95	1996-2000	2001-05
Gross profits to total net assets	10.00	8.54	8.62
Gross profits to sales	11.80	11.90	10.72
Profits after tax to net worth	12.04	8.68	10.14
Tax provision to profits before tax	29.22	27.68	30.54
Profits retained to profits after tax	63.74	60.10	53.3
Dividends to net worth	4.26	3.20	4.2
Ordinary dividends to ordinary paid-up capital	19.14	18.70	21.64

Source: RBI Bulletin, various issues.

Household saving remains the predominant component of domestic saving and would increase even further as incomes grow and social security reforms take shape. The improvement in GDS has particularly benefited form the turnaround in public sector saving. After turning negative between 1998-99 and 2002-03, public sector saving has turned positive from 2003-04 onwards, mainly reflecting the ongoing fiscal consolidation. Public sector saving will continue to have a significant role in further improvement in the GDS. The CSO's estimates for 2005-06 indicate that these signs are firming up with GDS placed above 32 per cent of GDP and GDI close to 34 per cent (Tables 7 and 8). Against the background of these developments, it is plausible that GDS could rise to a range of 34-35 per cent of GDP by 2007-08. With a current account deficit of below 2 per cent of GDP, GDI could rise to a range of 36-37 per cent. Given an incremental capital output ratio – a summary measure of the productivity of capital – of around 3.5 to 4.3, sustaining real GDP growth rates in the range of 8 to 9 per cent in the medium term appears eminently realisable.

Table 7: Domestic Saving Rates in India

(Per cent)

Period/Year	**Household Sector**	**Private Corporate Sector**	**Public Sector**	**Total**
		Saving		
1970s	12.2	1.6	3.7	17.5
1980s	14.6	1.8	3.0	19.4
1990s	18.5	3.7	1.0	23.2
2000-05	22.2	4.8	-0.2	26.8
Memo				
2004-05	21.6	7.1	2.4	31.1
2005-06	22.3	8.1	2.0	32.4

Source: RBI (2006) and CSO (2007b)

Table 8: Domestic Investment Rates in India

(Per cent)

Period/Year	Household Sector	Private Corporate Sector	Public Sector	Total
		Investment		
1970s	7.6	2.4	8.2	17.6
1980s	7.8	4.2	10.0	21.2
1990s	8.5	6.7	7.8	24.5
2000-05	11.6	6.8	6.6	26.3
Memo				
2004-05	11.4	9.9	7.1	31.5
2005-06	10.7	12.9	7.4	33.8

Source: RBI (2006) and CSO (2007b)

The Mid Term Appraisal of the Tenth Five Year Plan provides interesting estimates of assessed capacity or potential output in various sectors of the economy. The existence of high excess capacity in agriculture and allied activities, registered manufacturing, electricity, storage, public administration and other services suggests that the focus needs to shift from an 'investment only' approach to a more comprehensive one. In all these sectors capacity utilisation has undoubtedly improved but there remains ample scope for high growth. Under capitalisation, which has traditionally characterised the services sector, is beginning to change with the emergence of more organised service activities.

Yet another factor that needs to be taken into account in the assessment of potential growth is the trends in productivity. While the empirical evidence remains somewhat ambiguous, there are indications that trade liberalization has had a positive impact on total factor productivity since 1991. At the sectoral level, there is evidence of improved productivity for exporting sectors relative to non-exporting sectors. Some studies also throw up evidence of an increase in the growth of labour productivity (Goldman Sachs, 2007 and Economic Intelligence Unit, 2007). Thus, it is clear that micro structural reforms undertaken over the years have enabled continuing productivity gains, particularly in the manufacturing sector, with enhanced access of Indian business to technology, increased competition, greater attention to research and development and other productivity enhancing activities. Widening and deepening of the financial sector, along with improved regulation and supervision, has also contributed to improvement in productivity.

An important challenge for the monetary policy authority is to judge the durability of the recent upsurge in growth. While there is some evidence, as documented, that the acceleration of growth has been supported by structural factors such as improvement in gross domestic saving and investment rates, productivity gains, the demographic dividend and capital accumulation including skill formation, it is important to disentangle the structural and cyclical components underlying the growth process. It is necessary to note that a cyclical upswing is also underway in India since 2003-04 after a prolonged trough which began in 1996. There is also some sense that this upturn is part of a synchronized global economic cycle which has seen five consecutive years of accelerated global growth. In the event of a judgment that the current growth momentum is more cyclical than structural, the stance of monetary policy would need to reflect a sensitivity to the inevitability of a downturn. On the other hand, the judgment that structural factors predominate would warrant a different policy stance.

An overriding concern faced by the Reserve Bank is the persistently high growth of bank credit, with attendant worries relating to the quality of bank credit. In this context, the Reserve Bank has consistently emphasized diligent monitoring of the health of credit portfolios and non-performing assets, the need for counter-cyclical provisioning and sensitivity to risks. The sharp increase in credit to sectors such as housing, commercial real estate and retail loans have also been worrisome on account of the vulnerability of banks to credit concentration risks. The important question however relates to the sustainability of the credit expansion and its compatibility with the overall acceleration of growth. Credit penetration in India remains low even by emerging economy standards (Table 9). Consequently, growing financial intermediation could possible be reflected in high credit growth. The Mid Term Review of October 2006 reported empirical evidence of a structural break in the evolution of the elasticity of bank credit with respect to output with an upward shift since the end of the 1990s. Faster credit growth is also a reflection of the wider dispersal across the economy. Viewed in a holistic perspective, it is difficult to arrive at a clear judgment as to what rate of credit growth is too high in relation to potential growth.

Table 9: Cross Country Comparisons of Bank Credit Indicators

(Per cent)

	Average growth rate (Real)		Domestic Credit as % of GDP		Real bank credit growth to private sector		
	1995-99	2000-04	1999	2005	1995-99	2000-04	2005
1. Latin America	3.6	4.5	42	45	-0.2	-1.1	18.4
2. China	17.1	13.3	130	169	16.0	12.5	9.4
3. India	6.1	14.6	51	65	6.9	13.5	30.0
4. Hong Kong SAR, Singapore	1.4	3.4	130	122	0.6	2.2	-3.2
5. Other Asia	-0.3	4.7	89	80	4.0	5.9	8.2
6. Central Europe	9.6	8.1	40	42	8.8	3.8	8.0
Total	7.8	9.6	78	92	6.9	8.9	15.8
Memo							
United States	10.1	3.3	80	92	5.6	5.1	10.9

Source: Mohanty et al (2006)

In the presence of the kind of structural changes that I have described above, even when the macro availability of resources is adequate to fund the increase in demand arising from both consumption and investment, there could be micro imbalances that lead to observation of excess demand and overheating. It is in this context that monetary management has to also look at imbalances that could be transitional. The challenge before us at the present time is to manage the transition to a higher growth path, in the presence of some structural rigidities, in such a way that actual inflation and inflation expectations are contained and do not become mutually reinforcing.

Our assessment is that while expansion of capacity is underway, the realisation, particularly in sectors like infrastructure could be constrained over the next two years. Indeed, the difficulties with improving the supply response are more complex and challenging than aggregate demand management. Supply management will need to encompass wide areas including labour markets, land laws and the content of regulation in each sector. As long as supply responses are less than elastic, they could show up as excess demand, causing inflationary pressures and raising inflation expectations. To reiterate, managing structural change while keeping inflation low without dampening the growth momentum is the quintessential challenge to monetary policy in the period ahead.

Illustratively, given the growth in consumption demand, rising incomes and high growth in sectors such as information technology (IT), it is not surprising that there is a huge actual demand for housing, retail activity and office space from the burgeoning services sector. It is also not surprising that there would be associated problems on the supply side including availability of land, zoning and other land regulations, and social concerns about the conversion of land from agricultural purposes to other uses. Therefore, monetary policy has to be creative in addressing these problems in a non-disruptive manner. It is in this context that prudential and other measures such as provisioning and risk weights on bank loans to specific sectors are being used so as to enhance the sensitivity to risks emanating from these sectors rather than standard monetary policy responses that address aggregate demand. The task before monetary policy is thus rendered complex, requiring that both macro issues and sectoral problems be addressed in a specific manner.

IV. The Monetary Policy Response

It is well known that monetary policy operates cumulatively and with lags that can range between 12 to 18 months, depending on the specifics of the economy. It is in this context that beginning in mid 2003, the Reserve Bank started a graduated withdrawal of accommodation. Since September, 2004 repo/reverse repo rates have been increased by 125/150 basis points, the CRR has been raised by 100 basis points, risk weights have been raised in the case of housing loans (from 50 per cent to 75 per cent), commercial real estate (from 100 per cent to 150 per cent) and consumer credit (from 100 per cent to 125 per cent) and general provisioning requirement for standard advances in specific sectors has been raised to 1.0 per cent of standard advances.

At the time of the Third Quarter Review, the combination of macroeconomic developments embodied in high growth and firming inflation, escalating asset prices and the enduring strength of capital flows, a three-pronged approach was envisaged. A measured increase in policy interest rates to assuage demand pressures was considered necessary in conjunction with some modulation of capital flows and the need to fortify banks' balance sheets by precautionary provisioning and a greater sensitivity to underlying risks. Accordingly, in the Third Quarter Review, it was decided to increase the fixed repo rate under the liquidity adjustment facility (LAF) of the Reserve Bank by 25 basis points to 7.50 per cent. The LAF reverse repo rate, the Bank rate and the cash reserve ratio were kept unchanged. Furthermore, the provisioning requirement in respect of standard assets in the real estate sector, outstanding credit card receivables, loans and advances qualifying as capital market exposure, personal loans and systemically important non-deposit taking non-banking financial companies (NBFCs) was raised to 2 per cent. Risk weights for banks' exposure to such NBFCs was increased from 100 per cent to 125 per cent. Interest rates on non-resident deposit schemes, which have been recording sizeable inflows, were reduced by 50 basis points for rupee deposits and by 25 basis points for foreign currency deposits. Banks were also restrained from granting fresh loans in excess of Rs.20 lakhs against non-resident deposits.

The Reserve Bank has indicated that over the remaining part of the year, liquidity management would receive the highest priority. All policy instruments would be deployed to ensure appropriate modulation of liquidity. The stance of monetary policy was set out as:

- To reinforce the emphasis on price stability and well-anchored inflation expectations while ensuring a monetary and interest rate environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum.

- To re-emphasise credit quality and orderly conditions in financial markets for securing macroeconomic and, in particular, financial stability while simultaneously pursuing greater credit penetration and financial inclusion.

- To respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectations and the growth momentum.

It is important to note that monetary policy authorities all over the world over are expressing similar sentiments in terms of an uncertain outlook, concerns about persistent underlying inflation and some nervousness about visitations of financial volatility. Accordingly, several central banks have shown a readiness to respond asymmetrically to any signs of price and financial instability. The ECB, the Bank of England, the Reserve Bank of Australia, the People's Bank of China and the Bank of Korea raised policy rates. In order to contain financial market volatility arising from large liquidity flows, several central banks have tended to tighten monetary policy, even at relatively low current inflation rates, as in Thailand, Turkey, Saudi Arabia and Iceland. On the other hand, some central banks have paused in their policy cycles, particularly the US Fed, the Bank of Canada, the Bank of Japan, Bank Negara Malaysia and the Banco de Mexico. Some other central banks have cut back their policy rates in recent months.

In India, it is recognised that inflation is a tax on the poor against which there are no hedges available. Consequently, ensuring price stability is a societal compulsion to which monetary policy as a arm of public policy must be committed. The measures taken in the Third Quarter Review needs to be seen as sustaining and supporting the growth process while ensuring a minimum social insurance by delivery of a tolerable rate of inflation.

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