Financial Stability: Some Issues*

Y. V. Reddy

Dear Governor Subbarao, Esteemed Mr. Jaime Caruana, Respected Governors of Central Banks of South Asian Association for Regional Co-operation (SAARC) region, distinguished central bankers and friends,

I am grateful to my friend and distinguished successor Governor Subbarao and the Reserve Bank for giving me this opportunity to be with this august gathering. The subject for the Symposium is very timely, and is of great significance for the central banks.

I want to congratulate the scholars in the Reserve Bank for outstanding concept papers. They are to the point, comprehensive, updated and, above all, very informative as well as analytical. I am delighted to endorse the papers. All the country papers are of very high standards, and provide deep insights into the relevant issues. I eagerly look forward to the discussions.

In my brief presentation today, I will address some inter-related issues on financial stability. First, what has been the thinking and what have been the actions of the Reserve Bank in regard to financial stability in recent years? Experience, both good and bad, can provide insights into this issue.

Second, is the global financial crisis behind us or ahead of us? Put differently, are we likely to be out of serious threats to financial stability in the near future, though no one can rule out a financial crisis for ever?

Third, what are the broader issues in regard to financial stability that ought to be addressed now?

Evolution of Policy on Financial Stability in India

India recorded impressive growth in 1980s, though the growth rate has been gradually accelerating since Independence, while simultaneously reducing volatility in output. The higher growth in 1980s was accompanied by a build-up of macro-economic imbalances, especially in regard to fiscal and external position as also, arguably, the health of the financial sector. The balance of payments crisis of 1991 was essentially a liquidity crisis caused by the impact on external trade due to collapse of USSR and Gulf crisis, almost simultaneously. However, the way out of the liquidity crisis, which was executed in an exemplary manner despite political uncertainties, warranted attention to a process of reversing the trend in macro-economic imbalances in the economy brought about by the strategy for growth in 1980s. The process of reform since 1991 thus addressed, simultaneously, external, fiscal, financial, and real economy.

It must be recognised that throughout 1980s and beginning of 1990s, despite the crisis in balance of payments front, there was virtually no issue of financial stability, due to the public ownership of banks, financial repression, and closed economy. Incidentally, one lesson from this crisis was that a closed economy by itself provides no insurance against all instability. Thus, the thrust of reforms in financial sector was not in the context of responding to a crisis or vulnerability in financial sector, but aimed at improving its efficiency. Its aims were to release the rigour of financial repression, improve regulation, promote competition, and increase openness of the economy. All measures taken in this regard, emphasisd gradualism, and a non-disruptive approach. As Reports of Committees on reform of external sector and financial sector indicate, the thrust of reform was on macroeconomic stability, especially in regard to external sector, and improvement in efficiency, while emphasising prudential regulation in regard to financial sector.

Attention to financial stability was first hinted in August 1997, in a speech (please see Appendix for extracts from speeches between August 1997 and 2008), in response to overvalued exchange rate of rupee and unhedged foreign currency exposures of some

*Speech by Dr. Y.V. Reddy, former Governor, Reserve Bank of India and Guest Speaker at the SAARCFINANCE Governors' Symposium 2011.

corporates. About this time, the link between fiscal, banking and external sector was highlighted in the report of Tarapore Committee on liberalisation of capital account. The pace of reforms in fiscal arena and improvements in regulation of banks was accelerated with a view to promoting overall efficiency, while active intervention in forex markets, both direct and indirect, became the norm in order to avoid excess volatility in financial markets.

The stress on financial stability as one of the objectives of monetary policy was articulated, perhaps for the first time, after Asian crisis and later due to crises in many other emerging market economies. The provocation was the possibility of impact of external developments on Indian economy in general, and in foreign exchange markets, in particular, with consequent impact on banking sector.

In 2001, the developments in equity markets affecting the health of a modern private sector bank as well as co-operative banks, brought to light the importance of liquidity in money markets, banks' dependence on money markets, and banks' exposures to capital markets as well as other intermediaries in capital markets. Consequently, financial stability gained attention of all regulators in financial sector, under the leadership of the Reserve Bank, and regulatory prescriptions included limits to bank's exposures to money markets and equity markets.

At a personal level, there was exposure to the operations of International Monetary Fund (IMF) in Turkey, Argentina and Brazil during 2002-03 which showed clearly that IMF's level of comfort in regard to financial sector and macro-management in Emerging Market Economies (EMEs) was not a dependable measure of signs of macro or financial stability. The limits to the support available from global financial architecture were all too evident, and hence a higher weight for avoiding serious instability, it was felt, was warranted. Since 2004-05, there were signs of excess global liquidity being transmitted to India. In India, the 'lazy-banking' was moving towards 'crazy banking' with pick-up in credit and money supply. Pre-emptive actions on monetary policy front at this stage were justified partly due to reasons of financial stability. Further, the increase in oil prices was not totally ignored by the Reserve Bank as a mere supply shock. There was also a reference to early signs of overheating, indicating a preference for countercyclical monetary policy.

The activities of financial conglomerates were expanding in India warranting formal mechanisms for identification and co-ordination among regulators. The rapidly expanding activities of non-bank finance companies and off-balance sheet exposures of banks domestically became a cause for concern in 2005-06. However, process of gradual liberalisation and deregulation continued but in a carefully calibrated fashion.

The preoccupation of overall policy at this stage was global economic imbalances and risks arising out of very lax monetary policies, including rise in asset prices. In 2005-06, it was clear that the global economy was in a state of 'stable disequilibrium' with dissonance between perceptions of markets and policy. The importance of analysis of balance sheets of households, corporates, banks, government and central banks to monitor threats to financial stability was recognised at the sign of early symptoms of excess leverage in global financial markets.

During 2005-06 and in particular during 2006-07, there were signs of exuberance in real estate and consumer credit, in addition to boom in equity markets in India. At the same time, there were simultaneous pressures on exchange rate, interest rates and liquidity due to massive capital flows, despite efforts by the Reserve Bank to contain it through management of capital account. Hence, regulations in regard to banks, non-bank finance companies, money markets, derivatives, *etc*, were tightened and supervisory review of select overstretched banks and non-banks undertaken. The annual policy of 2006 was a turning point when the quality of credit gained attention.

During the year 2006-07, it was clear that there were excessively leveraged operations in global markets along with issues of setting of trades, and ignorance on where risks lie, *etc.* There were fears about uncertainties in trades in credit derivatives, structured products and their settlement.

Thus, in the years leading to the global financial crisis, the focus of measures to counter threats to financial stability were no longer confined to global factors, but included domestically induced factors. Provisioning for standard assets and risk weights were increased in sensitive sectors. The 'excesses' of domestic financial sector in a way reflecting the excesses of global factors, warranted several monetary tightening, regulatory, and supervisory measures which were resented by market participants. They were supported by preference of the political economy for growth and short-term gains.

Since the beginning of 2007-08, the anticipation of threats to financial stability, due to both domestic and external factors was unambiguous. Further, determination to counter threats to financial stability through what had been described as 'unconventional measures' was demonstrated in speeches and in monetary policy statements. In addition, contingency plans in the event of sudden and significant reversal of capital flows were prepared and hinted at in the first week of January 2008, indicating a set of detailed precautionary measures.

What were the challenges faced by policy-making in the process of promoting growth, containing inflation and taking precautionary measures against instability?

It is difficult to consider macro-stability and financial stability as distinct and different. Often, weaknesses in macro situation may warrant greater stress on stability in financial sector, and vice versa. The sources of instability cannot be easily predicted, but continuous vigilance helps the process of identification.

A major challenge in administering the regulatory restrictions on 'exuberance' and 'excesses' in financial markets was to make a distinction between 'growth enhancing' credit and finance, and 'speculation enhancing' ones. The distinction required discrimination based on end-use and products, virtually amounting to selective credit controls; and, often, judgments were required on instruments and magnitudes of interventions. In brief, operationally, pursuit of financial stability could not be divorced from promoting of development, both for short-term and over medium-term.

Yet another challenge was the calibration of pace and extent of reform in financial sector on the basis of evolving global uncertainties and domestic vulnerabilities such as slow progress in fiscal consolidation and in removing structural rigidities in real economy. When it was felt that domestic vulnerabilities coincided with global uncertainties, precautionary measures and recalibrating pace of reform financial sector were resorted to more vigorously.

It may be observed that most of the actions taken were on the basis of close observation of evolving developments in macro economy, multiple indicators of such developments and also practices of market participants. Anything out of the ordinary was not necessarily a good innovation or a positive development but needed to be continuously evaluated in terms of impact on efficiency and stability, and in that, judgements were inevitable.

It is worth noting that the design of instruments, whether Market Stabilisation Scheme or increaseing provisioning and risk weights, had to be explicitly used to counter threat to stability from both excesses and deficiencies. It was considered wise to keep all the tools of intervention on the table and insist on options to use them always and at any time. Keeping options by itself does not curb efficiency of markets, but its exercise had to be based on continuous vigilance.

A wide range of tools to a central bank to intervene in the functioning of the financial markets, institutions, and instruments seems to have made the task of ensuring growth with stability.

Financial Instability: Behind or Still with Us?

There was indeed a threat of depression when serious instability in financial sector in 2008 occurred. This event was followed by recession in most countries leading to the current stage of uneven or multi-speed recovery.

There are debates about the firmness or fragility of current phase of recovery. There are also some

academics and a few analysts who hold that there could be a recurrence of a financial crisis, not necessarily as part of such episodes that seem to recur periodically but simply as a consequence of the manner in which the global financial crisis has been managed so far and its proximate causes addressed. When an important market participant adds his voice to such sentiments, there is merit in analysing the prospects of another crisis, as an extension or a fall-out of the recent crisis in global finance.

A report in Economic Times last week, partly sourced from Bloomberg reads as follows:

Mark Mobius, executive chairman of Templeton Asset Management's Emerging Markets Group, said another financial crisis is inevitable because the causes of the previous one haven't been resolved.

"There is definitely going to be another financial crisis around the corner because we haven't solved any of the things that caused the previous crisis," Mobius said at the Foreign Correspondents' Club of Japan in Tokyo in response to a question about price swings.

It is useful to briefly review whether the causes have been addressed, assuming that the main causes relate to macro-economic imbalances, regulation of financial sector and global financial architecture.

Macro-economic Imbalances

There has been considerable discussion on macro-economic imbalances in policy circles, and G20 has arrived at an agreement on indicators of macro-economic imbalances. These include public debt, fiscal deficits, private savings and debt, and external imbalances composed of several factors including fiscal, monetary and other related policies. Both structural and statistical approaches are proposed to be adopted. The G20 has also identified countries or economies which have spillover effects on global economy. It is useful to speculate how some of the major countries stand with reference to these criteria.

In the USA, structurally, there are disturbing signs of fiscal deficit but current policy debate is on desirability of permitting fiscal deficit to spur growth. There is also a view that any effort to contain fiscal deficit would warrant further monetary easing over and above QE2 with spillover concerns. It is not clear as to how the stated policy of strong dollar would be consistent with its stand on current account deficit/surplus. The outlook for the USA at this stage is still mixed. Contrary to the position of the USA on fiscal stimulus, the UK has opted for fiscal austerity. Eurozone, as a whole, does not contribute to economic imbalance in relation to the rest of the world in terms of current account deficits. However, the surpluses of Germany and deficits of the southern European countries warrant greater economic integration within the zone over the medium-term but there is still lack of clarity about managing the fiscal and debt sustainability issues of several countries. If the route of debt restructuring of some countries, in some form or other, is resorted to, the spillover effects on global financial markets are likely to be severe. Japan has huge public debt and it can legitimately claim that its holders and currency are such that it has little spillover effect on the rest of the world. China has committed to shift in policy towards increased domestic consumption, but the role of exchange rate in the process of correction of imbalance is still contentious. In any case, such a shift cannot occur in the very short-term. India has a large public debt and fiscal deficit, but it will be difficult to establish that it has contributed or is likely to contribute to global economic imbalances on this account. Current account deficit is on all accounts reasonable. Briefly stated, there is no evidence of agreement on corrective policy actions and, hence, there could be an undesirable sense of unease on way forward in systemically important countries.

No doubt, there are positives of these initiatives. First, spillover effects of national policy have been recognised. Second, the principle of unlevel playing field for conduct of surveillance and implicit imperatives for corrective actions at national level has been accepted. Third, whether the peers are willing to honour peer pressure or not is not yet clear, but the domestic opinions or forces that support responsible policies consistent with interests of global economy, do get strengthened through such multilateral exercises.

There are several question marks on the thinking and prospects for unwinding of imbalances. First, *prima facie*, as is evident from earlier narrative, indicators provide partial truths, and solutions are not self-evident. Second, the IMF framework, including indicators, is based on economic theories and models that have proved inadequate so far. The recent seminar on macro-economic policies by IMF recognises the limitations of current models, but the search for alternate model is still in progress. Some of the areas where empirical evidence seems to contradict IMF framework is, openness of capital account and role of volatile flows; role of domestic savings in financing public debt; possible benefits of financial repression in promoting growth or managing public debt; structural shifts in tolerable inflation; and possible benefits of public sector ownership in financial sector – since financial crisis. Third, the dominant role of global financial markets, especially large financial conglomerates as also that of credit rating agencies with their infirmities continues. Fourth, the most fundamental issue of international monetary system, and in particular reserve currency, remains unresolved. There is, as yet, no market discipline and no rules of issue, on the issuer of dominant global reserve currency.

There are some scholars who refer to several fundamental causes of global economic imbalances, and these have been in some form or other recognised as relevant in policy debates. These relate to growing inequality and its impact on savings/investment balances, excessive financialisation with incentives to multiply financial transaction for the benefit of participants with no social value added, and lack of distinction between massive gross financial flows and net flows, which impart volatility. These have not been addressed but one should recognise that their link to the causes of the crisis are not fully established.

Appendix
Financial Stability Policy In India

1. (a) There is a considerable discussion as to whether the rupee is overvalued or not. As per the REER, it would certainly appear so, irrespective of the base chosen. The overvaluation has got exacerbated with the sharp appreciation of the US $ against other major currencies, *viz.*, the DM and the Yen.

   (b) Hence, the management of rate fluctuations becomes passive, *i.e.*, one of preventing undue appreciation in the context of large inflows and providing supply of dollars in the market to prevent sharp depreciation.

   (c) Our financial sector, is therefore, less vulnerable than many of the East Asian economies notwithstanding the fact that there are corporates operating with unhedged positions.

   (XIth National Assembly Forex Association of India, August 15, 1997).

2. We have to learn from global experience and respond to global developments from time to time. For instance, the recent policy makes a pointed reference to guidelines to banks on asset-liability management in recognition of the recent internationally demonstrated link between the soundness of the financial system and maintaining macroeconomic stability.

   (Discussion Meeting organised by Indian Merchants' Chamber Economic Research and Training Foundation, November 17, 1997).

3. There appears to be little doubt, that the (Asian) crisis was caused by failure of private sector (and not really public sector). The failure was related more to financial system than fiscal or monetary policy. Further, it was a failure of global financial markets to ensure an optimal allocation of global capital. Finally, it was also a failure of regulatory systems in developing countries, major financial centers and global institutions.

   Second, private-sector failures, beyond the point when they impose systemic risks, will become the responsibility of the public-sector. The private institutions may not be too large to be allowed to fail and in the process, they may even become too expensive to save. That markets bear the total risk of failure may not be true beyond a point. We should, therefore, review the balance between public and private sector.

   Third, globalisation has immense advantages, but there are accompanying risks. If there are no credible international systems to minimize unbearable risks, the relationships between national policies and international obligations need to be reviewed. The outcome of the current search for new international architecture should be addressing this issue. The nature and extent of capital account liberalisation will be dictated by this outcome. More specifically, the relationship between national regulations and international obligations need to be reviewed in the light of this outcome, especially, on the issue of lender of last resort.

   (Asian Crisis: Asking Right Questions – India International Center, May 1, 1998)

4. Against the backdrop of Asian crisis, a new reality in the sphere of management of financial risk for the economy is the need to recognize and monitor off-balance sheet liabilities, whether these are due to banks or Governments.

   (Outline of presentation made to the Eleventh Finance Commission in the meeting of select economists, December 4, 1998).

5. More generally, RBI has been in the forefront in advocating caution in use of ratings in the New Accord on Banking Supervision. There has been a widespread appreciation and indeed acceptance of our cautionary stand on the subject – especially the consequences of a short-end bias in rating. Such a bias has a potential to encourage short-term liabilities and in the process imparts some instability to financial systems inherent in excessive short-term liabilities.

   (Nagaraj Memorial Lecture, April 8, 2000).

Appendix

Financial Stability Policy In India *(Contd.)*

6. Second, there is a trade-off in the short run between financial stability and efficiency which all policy makers are aware of. More the prudential regulations, greater is the cost of intermediation, though in the long-term it is the stability that imparts efficiency. In search of higher efficiency gains in one stage of development, a country may accept the risk of greater volatility. But, the trade-off has to be viewed in a contextual sense in relation to both domestic policy stance and the international environment. There is an impression that in the light of the Asian experience, policy choice should in future tilt totally in favour of stability at the cost of efficiency. While the crisis has drawn attention to the risks, and inadequacies in international financial systems, there is a greater global awareness of the issues now. In other words, the relative weights to efficiency and stability needs to be constantly reviewed with reference to both domestic and international developments.

   (Seminar on Capital Account Liberalisation: The Developing Country Perspective, June 21, 2000).

7. It is clear that avoiding crisis is ultimately a national responsibility. The impact of instability in times of crisis appears at this stage of global environment to largely be borne by the home or domestic public sector rather than the global private sector. Moreover, the burden of such an asymmetrical impact is more painful on developing countries, especially the poorer ones. Hence, in this context, the distinct preference for stability, on the part of some developing countries needs to be appreciated. Such a preference towards stability also argues for managing their capital account regime. Such regimes could have a mix of control, regulatory and liberal elements as appear most appropriate from time to time, to the national authorities who are accountable to the people for possible crises. In such a mix, there is merit in avoiding controls, but taking recourse to regulatory measures, while pursuing the liberalisation objectives.

   (World Bank Conference on Developing Countries and Global Financial Architecture, June 23, 2000).

8. (a) In the area of maintaining price stability, the role of a central bank is undisputed though several issues continue to remain unresolved, *viz.*, whether price stability should be the sole or one of the objectives; what is appropriate rate/range of inflation; what is a dependable measure of inflation and the role of asset prices; the relative importance of rules and discretion; tradeoff between employment and output; increasing asymmetry between market perceptions of economic fundamentals and that of public authorities, especially central banks; and above all, independence versus accountability of central banks. What is strikingly new, however, is the increasing preoccupation of central banks in recent years with maintenance of overall financial stability – in the face of increasing globalisation of financial flows and threat of contagion.

   (b) What is new in the new millennium would certainly be a shift in focus to maintenance of financial stability and a corresponding concern with macroeconomic management.

   (Valedictory address at the Bank Economists' Conference, New Delhi, January 17, 2001).

9. There is, however, need to recognize the criticality of financial sector stability, especially of financial markets for which the RBI is assuming increasing responsibility and should exercise its independence from governmental priorities in that direction, whenever warranted. In other words, while the issue of the central bank's independence and accountability were debated in the past in the context of price stability and money creation, the emerging issues warrant a broader view of exercise of independence from several sources to meet emerging challenges like

Appendix
Financial Stability Policy In India *(Contd.)*

financial sector and markets stability while enlarging the concept of accountability through greater recourse to transparency.

(Second Foundation Day Lecture, Indian Institute of Management, Indore, October 3, 2001).

10. Of late, however, considerations of financial stability have assumed increasing importance in monetary policy. The most serious economic downturns in the recent years appear to be generally associated with financial instability. The important questions for policy in the context of financial instability are the origin and the transmission of different types of shocks in the financial system, the nature and the extent of feedback in policy and the effectiveness of difference policy instruments.

    (Invited Lecture at the 88th Annual Conference of The Indian Econometric Society, January 15, 2002).

11. (a) Recent crises have shown that countries can be faced with liquidity problems not only because of the foreign assets and liabilities of the government and central bank, but also because of the foreign currency liabilities of the banks and even the corporate sector. A crucial difference between domestic and foreign currency debt is that the authorities can provide virtually unlimited domestic currency liquidity, but are tightly constrained in their provision of foreign currency liquidity. This has led to consideration of a broad concept of "national liquidity".

    (b) Private sector external debt decisions have, in fact, impinged on fiscal management and balance sheets of official sector in several ways in the context of recent crises. Thus, an important policy aspect if the question of whether and how the official sector should take account of the maturity and currency mismatches of the private sector in structuring its own foreign assets and liabilities.

    (c) The concept of a national balance sheet, of course, raises several tricky questions relating to private sector foreign assets offsetting liabilities, and the extent to which their foreign exchange exposures fully capture vulnerability.

    (Special Lecture at National Council of Applied Economic Research, New Delhi, May 10, 2002).

12. It is important to note that banking crisis invariably results in heavy costs to the Government, whether they are publicly owned, privately owned, domestically owned or foreign owned. The fiscal costs of banking crises are ownership-neutral.

    (Twenty-Fifth Bank Economists Conference-2003, December 11, 2003).

13. The concept of financial stability needs to be understood contextually also. For us in India, it means: (a) ensuring uninterrupted financial transaction; (b) maintenance of a level of confidence in the financial system amongst all the participants and stakeholders; and (c) absence of excess volatility that unduly and adversely affects real economic activity. Such financial stability has to be particularly ensured when the financial system is undergoing structural changes to promote efficiently the structural changes relate to ownership, regulation and competition, both, domestic as well as external competition. Integration of financial markets is another dimension of the process: the integration of domestic financial markets is one aspect while global financial integration is another though a related aspect.

    (Zurich University, Zurich, Switzerland on June 27, 2004)

14. Third, price-based measure such as taxes could be examined though their effectiveness is arguable and hence may not be desirable.

    (the release function of India Development Report of IGIDRS January 1, 2005)

15. Traditional, central banks have pursued the twin objectives of price stability and growth. Central banks to keep in view the considerations of

Appendix
Financial Stability Policy In India *(Contd.)*

exchange rate stability and financial stability also in pursuing the basic objective.

(Andhra Pradesh Economic Association, on February 12, 2005)

16. (a) Volatility in financial markets could adversely affect the EMEs in many ways, and also in complex and interrelated fashion. For convenience of analysis, the impact may be classified broadly into: (i) the impact on the financing conditions in which EMEs operate; (ii) impairment of the balance sheets of the banking sector, and (iii) hampering of the growth prospects in the real sector. Even within the same EMEs, the impact could vary across different entities such as the Government, the corporate sector, the households and the financial sector, depending upon the country-specific and institution-specific operating environment, the stages of development and the degree of integration with and exposure to the international financial markets. In view of the diversity of the EMEs and the complexity of impact of any unpredictable unwinding of global imbalance, it is proposed to analyse the possible implications, illustratively, with reference to India.

    (b) Against this background, it may be useful to analyse the implications of global financial imbalance for India in terms of the likely impact on four separate balance sheets of the government, of the Reserve Bank of India, of the corporate sector and of the banking sector.

    (Round table discussion at the International Symposium organised by the Banque de France on November 4, 2005)

17. (a) The problem is not the existence of current account deficits or surpluses *per se*, but it is persistence of large current account deficits and large current account surplus, particularly in large and systemically important economies, which give rise to fear of unsustainability and disruptive unwinding.

    (b) We have viewed, like many others here, that the sustained and increasing imbalances in the current account positions across the globe could entail serious risks for the functioning with many moving parts that involve all the major actors in the global economy. The successful execution of rebalancing will require a careful application of traditional macro policies- monetary, fiscal, and currency policies as well as implementation of comprehensive micro agenda of structural reforms.

    (c) A significant part of the debate seems to be on relative weights to be accorded by each country to the various elements of the package and the aspects of coordination among the countries that are appropriate.

    (d) In this context, it is appropriate to view the evidence that the policies followed by India have not in any way contributed to the widening of the current global imbalances.

    (e) India does not depend on the international capital market for financing the fiscal deficit and consequence to some extent adverse consequences of the global developments would be muted.

    (f) Similarly, any abrupt adjustment in global imbalances may affect corporates, banks and households in India though the impact may be less than some other emerging economies.

    (g) In view of complex nature of global imbalances and the way forward to minimize of disorderly adjustments, it may be useful to explore possible agenda for further analysis.

    (h) It would therefore be useful to analyze the impact of global imbalances on various balance sheets within the country such as the government sector, financial sector including banks and financial institutions, non-financial private sector including corporate and households.

    (j) What is the evolving role of viewing exchange rate regime in influencing domestic economy? It

Appendix
Financial Stability Policy In India *(Contd.)*

is argued by some that the emerging evidence indicates that domestic price movements remain somewhat immune to considerable exchange rate movements. If so, the possibility of bringing about global rebalancing through exchange rate adjustment by itself may not be very encouraging. No doubt exchange rate would have an important role to play in global rebalancing, but the issue is its relationship with other components of the whole package like saving-investment, fiscal deficits, raising investment, structural reforms and domestic output as well as employment. The linkages among the various components described here could be very country specific.

(k) One wonders whether there is a dissonance between the perception of financial markets and that of the policy makers in regard to global imbalances. The policy makers appear to give some signals of concern, but the response of the financial markets is often out of alignment with the signals. Interestingly, anecdotal evidence shows that analysts in financial intermediaries are sensitive to the downside risk of imbalances, but the conduct of the participants does not reflect the awareness. No doubt, this sense of dissonance is not new, as for example, stock market went up after Mr. Alan Greenspan's statement regarding irrational exuberance. If such dissonance is true, and persists, what would be the effectiveness of public policy initiatives?

(l) Is there an advantage in assessing the non-quantifiable factor to explain the persistence of what has been stated as a stable disequilibrium to describe the current status of global economy? For example, signature value of United States in terms of confidence of financial markets as a lasting safe-haven status could be a factor, though the issue is whether it will be valid interminably. The perception of continuing productivity gains in the US due to its proven flexibilities could be another. Lack of alternatives to deploy global savings, which are expanding may also be relevant. No doubt, these are not quantifiable, but do not cease to be relevant for analysis and assessment.

(m) Is it possible that there are several intermediate scenarios between orderly adjustments and disruptive or disorderly adjustment?

(n) While India by itself hardly contributes to the current global financial imbalances, any large and rapid adjustments in major currencies and related interest rates or current accounts of trading partners could indirectly, but significantly, impact the Indian economy.

(The Financing for Development Office, Department of Economics and Social Affairs, United Nations, New York on May 11, 2006)

18. (a) Our experience in regarding to development and regulation of financial markets differs from that of developed economies. The latter experienced a co-development of markets, regulations, and practices within the economies and at a latter stage, through a process of evolution, integrated first domestically, and finally, globally. In our case, non-existent or underdeveloped had to develop the requisite skills, and the self-regulatory organizations needed to be founded and strengthened. All these had take place with narrower degrees of freedom and in a shorter time-span, in view of global developments and financial integration with its pre-disposed as well as preferred frameworks. The constant plea for the country context in reforms in the financial sector may be viewed in this analytical framework.

(b) The balancing of efficiency considerations with stability will be critical in India's successful integration into global economy. While several observers, especially in the financial sector, hold that India is risk-averse, there are others who assert that a risk-sensitive approach has paid rich dividends both in terms of efficiency as well as stability. Two illustrations may suffice.

(Council on Foreign Relations at New York on May 12, 2006)

Appendix
Financial Stability Policy In India *(Contd.)*

19. (a) In terms of objective, it is true there is a convergence in the thinking of all central bankers toward a primary objective such as price stability. It is useful to note that, more recently, a strong trade-off between volatility in growth and inflation masks or understates the equally important consideration of financial stability. In India, along with price stability, growth objective is demonstrably subsumed in the objective of meeting genuine credit demand and in communications and policy measures; a clear focus on financial stability has assumed added significance in recent years.

    (b) Secondly, I agree with the point that the central banks have a better design than before and also gained a distinct identity in last two decades. But without satisfactory fiscal rules, implementation of any monetary rule becomes difficulty as also the autonomy or independence of central banks and its accountability.

    (c) The highly leveraged lending operations in the backdrop of asset price bubbles might require adjustments in margins and risk-based capital requirements. In India, noticing the unusual movements in several assets price in recent years, we have been enhancing risk weights and provisioning requirements by banks for certain categories of assets.

    (d) Secondly, excessive leveraging in any condition of financial markets is a source of potential instability. Since leveraging is influenced by the cost of financing, the decisions affecting the cost and availability of credit do influence aggregate demand conditions. Even if the source of financing is not bank funding, the interest rate condition in the market definitely influence the opportunity cost of even internal resources of firms.

    (e) In general, it may be held that in less developed financial market, by using direct monetary instruments in conjunction with market-based instruments, the overall policy effectiveness can be improved.

    (f) The issue of significance here is whether the neutral rate in respect of emerging market economies, which has been coming down in tandem with global rates, will tend to be distinctly higher than in development economies. If so, how higher would be appropriate?

    (Central Bank Governor's Symposium, organised by the Bank of England at London on June 23, 2006)

20. Thus, the comfort level of reserves should not be viewed with respect to the current situations alone but should also reckon the assessment of the emerging risks. Moreover, at this moment, the global economy has not been tested on the eventuality of a not-so-orderly correction of the current global imbalances. In that eventuality, as the experts caution, disruption in financial markets in the form of large cross-currency volatility and sharp rise in interest rates are not unlikely in the global economy.

    (2006 Program of Seminars in Singapore during September 16 to 18 on the Theme "The World in Asia, Asia in the World")

21. (a) Financial stability considerations may require the use of interest rate tool, in conjunction with other prudential measures. Some time, there could be even a trade-off between raising the short-term interest rate and tightening of prudential norms, if the risks are perceived to originate from, certain segments of the market. The highly leveraged lending operations in the backdrop of asset-price bubbles might require adjustments in this regard is the extent to which these should be considered akin to the erstwhile selective credit controls.

    (b) There are some uncertainties associated with the settling of trades in newer types of over-the counter (OTC) derivatives, particularly credit derivatives. As part of recent financial innovations, the credit-derivatives and structured-credit markets have grown rapidly during the past few years, allowing dispersion of credit risk by

Appendix

Financial Stability Policy In India *(Contd.)*

financial players. Perhaps, it is necessary to evolve mechanisms to ascertain the size and structure of risk components, the scale and direction of risk transfer and therefore the distribution of risk within the economy.

(c) Yet, the question that is often asked is whether the emerging economies have facilitated holding of interest rates at very low level by the central banks in developed countries. In fact of the consequent build-up of liquidity, elevated asset price and soaring consumer indebtedness, is there a dark side to the future? The intellectual edifice on which monetary policy is founded is rooted in the management of aggregate demand. But a supply shock arising from globalization can produce vastly different growth-inflation outcomes, which monetary policy by itself is not fully equipped to manage. Indeed, a question that has been asked in this context is whether price stability is enough as a goal of monetary policy and how sacrosanct it is when, for instance, central banks have to contend with financial imbalance even if it means an overshooting of inflation targets.

(d) Financial development contributes to growth in either a supply-leading or a demand-following sequence; that is, either the financial sector development creates the conditions for growth or the growth generates demand for financial services. It is important to recognize that the financial sector in India is no longer a constraint on growth and its strength and resilience are acknowledged, though improvements need to take place. On the other hand, without the real sector development in terms of physical infrastructure and improvement in supply elasticities, the financial sector can even misallocate resources, potentially generate bubbles and possibly amplify the risks.

(FICCI-IBA Conference held in Mumbai on September 28, 2006)

22. (a) Financial stability considerations may require the use of monetary policy measures, in conjunction with other prudential measures. Sometimes, there could be even a trade-off between raising the short-term interest rate and tightening of prudential norms, if the risks are perceived to originate from certain segment of market. The highly leveraged lending operation in the backdrop of asset-price bubbles might require adjustments in leading margins and risk-based capital requirements.

(b) In terms of financial satiability, some new challenges are emerging. The international financial markets are currently dominated by private equity funds like hedge funds, which are largely operating outside the 'Know-your-customer'/'Know-your-investor' (KYC/KYI) norms. Hedge funds have long used arrangements that allow them to execute trades with several dealers but there is now an increasing tendency on their part to consolidate the clearing and settlement of their trades at a single firm, the 'prime broker', prime brokerage poses some unique challenges for the management of counterparty credit and operating risk. Recent events have reinforced the possible adverse impact of their risks. Further, it is commonly observed at the global level that hedge funds are 'opaque' – that is, information about their portfolios is typically limited and infrequently provided. From a policy perspective, transparency to investors is largely an issue of investor protection, but the need for counterparties to have adequate information is a risk-management issue.

(c) There are some uncertainties associated with the settling of trades in newer types of over-the-counter (OTC) derivatives, particularly credit derivatives. As part of recent financial innovations, the credit-derivative and structured-credit markets have grown rapidly during the past few years, allowing dispersion of credit risk by financial players. As we are aware, the impact of instability in the emerging economies in times of crisis appears to be borne by the home or domestic public sector also, along with the global private sector. Avoiding crisis is ultimately a

Appendix

Financial Stability Policy In India *(Contd.)*

national responsibility. In such a milieu, the policy makers are often confronted with competing positions and make choices in the face daunting dilemmas.

(Conference on 'Advances in Open Economy Macroeconomics' organised by Center for Economics and Development, Northwestern Universities, USA on March 19, 2007 and the Indira Gandhi Institution of Development Research, Mumbai)

23. The relative emphasis placed on price stability and economic growth is modulated according to the circumstances prevailing at a particular point in time and is clearly spelt out, from time to time, in the policy statement of the Reserve Bank. Of late, considerations of macroeconomic and financial stability have assumed an added importance in view of increasing openness of the Indian economy.

(Bank of Greece, Athens on April 2, 2007)

24. Since the overall objective of maintaining price stability in the context of economic growth and financial stability will remain, the effort will be to harmonize the deregulation and liberalization of financial market with domestic developments in real as well as fiscal sectors and global developments in international financial architecture.

(Symposium on Current India at the Institute for Indian Economic Studies, Waseda University, Nikkei, Shinbun on May 28, 2007)

25. (a) In the emerging market economies, growth has continued to be firm on account of adoption of sound macro policies and structural reforms. These were complemented by global factors such as strong commodity price and abundant global liquidity. Concerns have, however, arisen regarding the sustainability of some of these factors. High investment growth, excessive lending, overhang of liquidity, strengthening retail demand and imbalances in trade and international payments are some of the factors causing concern in some of the EMEs.

(b) In addition, there are a number of downside risks emanating from the behavior of oil prices, adverse developments in US housing market, persistence of global imbalances, large leveraged position in financial markets and possible emergence of inflationary pressures. It is important to recognize the risk of an abrupt and disorderly adjustment of global payments imbalances. The exposure of emerging markets to risky financial assets of the mature markets has increased, and therefore the overall global financial risks have increased. In the event of loss of or moderation in the risk appetite and the consequent unwinding of leveraged position, there could be serious adverse impact on the emerging markets.

(Central Bank of Argentina, Buenos Aries, on June 4 2007 at a conference on 'Monetary Policy under Uncertainty')

26. (a) Monetary policy statement and other messages from RBI have been, since 2005, drawing attention to global imbalance, 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 favorable 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 stability and growth momentum in the unconventional international policy responses to the development in those financial markets.

(b) 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'.

Appendix
Financial Stability Policy In India *(Contd.)*

The major reason for extraordinary vigilance by RBI is what I would describe as simultaneous volatilities in several global significant markets, namely, money, credit and currency markets; asset price; 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.

(c) There are several reasons why Indian banking system may not invite disturbances akin to subprime. 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 includes 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 exposure 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.

(Banker's Conference 2007 on November 27, 2007, at Mumbai)

27. While the immediate focus is on managing the excess capital inflows and some volatility in regard to the excess, I believe that it will be prudent not to exclude the possibility of some change in course, due to any abrupt changes in sentiments or global liquidity conditions, despite strong underlying fundamentals of the Indian economy. Strategic management of capital account would warrant preparedness for all situations, and the challenge for managing the capital account in such unexpected turn of events would normally be quite different.

(Annual Conference of the Indian Econometric Society, Hyderabad on January 3, 2008)

28. (a) Recent turbulence in financial markets/ institutions and the importance of harmonised and coordinated response of public policies indicate the significance of countercyclical fiscal and monetary policies. Is it possible to argue that similar harmonization between monetary policy and prudential policies would be of some value as part of counter cyclical measure?

(b) In this regards to regulation and supervision over banks, it is useful to explore whether the special status of banks in the financial system and the need for active coordination among regulators/supervisors needs to be reaffirmed.

(c) In regards, the scope of and limit to global harmonization of banking regulations in a convincing and enforceable manner may have to be continuously assessed so that the national regulators appropriately build into their regulatory regimes the requisite global requirements and domestic compulsions of reasonable expectation from the common person that ought to govern the public policy.

(International Symposium of the Banque de France on Globalization, Inflation and Monetary Policy, in Paris on March 7, 2008)

29. Consequently, the central banks in EMEs, in their pursuit of financial stability, have additional challenges. First, to manage the transition in their own economies, which has socio-economic as well as political dimensions; second, to keep a watch on the sentiments affecting foreign capital flows – which could change for reason other than domestic. The challenges for communication policy are considerably more complex for the central banks in the EMEs has to evolve over time consistent with progress in financial

Appendix
Financial Stability Policy In India *(Concld.)*

sophisticated. Further, in a globalised world, the communications by a central bank in advanced economies have a great impact on financial markets in EMEs. Communications, include scope for pre-commitment in policy, may have to factor-in these complexities.

(7th BIS Annual Conference at Luzern, Switzerland on June 26, 2008)

30. (a) It is necessary to clarify that while the measures mentioned above are aimed at fostering financial stability, in order to enhance efficiency several other initiatives have been taken to liberalise the macro-policy environment in which banks operate through a re-orientation of regulatory prescription by replacing micro regulations with macroprudential regulations, providing an enabling environment for universal banking, improved corporate governance in private sector banks, and enabling consolidation of banks in the private sector. Some other important measures that promoted a vibrant and robust operating environment and framework for the banking system that promoted growth and business opportunities pricing for government securities; disbanding of some of he administered interest rate; auction-based repos-reverse repos for short-term liquidity management; facilitation of improved payments and settlements mechanism; setting up of the Clearing Corporation of India Limited (CCIL) to act as central counter party for facilitating payments and settlements system relating to fixed income securities, money markets instruments and foreign exchange transactions; setting up of INFINET as the communication backbone for the financial sector; introduction of Negotiated Dealing System (NDS) for screen-based trading in government securities; introduction of Real Time Gross Settlement (RTGS) System; debt recovery tribunals, asset reconstruction companies settlement advisory committees, corporate debt restructuring mechanism, *etc.* for quicker recovery/restructuring of stressed assets; promulgation of Securitisation and Reconstruction of Financial Assets and Enforcement of Securities Interest (SARFAESI) Act 2002 and its subsequent amendments to ensure creditors rights, setting up of Credit Information Bureau of India Limited (CIBIL) for information sharing on defaulters as also other borrowers. These growth oriented initiatives have appropriately complemented the stability oriented initiatives.

(b) In the context of the rapidly evolving financial landscape, the RBI has also been suitably reorienting its regulatory and supervisory framework to meet the needs of the common man. It has also been the endeavour of the RBI to improve credit delivery and customer service by banks. The RBI has simultaneously focused on financial inclusion and extension of banking services to the unbanked areas of the economy.

(c) While monetary policy influence aggregates, reality is often dis-aggregated. Hence, the RBI uses prudential regulatory policies t complement the monetary policy measures and objectives. It is pertinent that the lender of last resort functions is not separate either from monetary and liquidity managements or from financial regulation. This both monetary policy and prudential regulations are used as complementary tools to achieve the central bank objectives and they both support and reinforce each other.

(d) To conclude, on the way forward, to exit the current financial turbulence and fortify against future similar episodes, we may need to look beyond reforms within the financial sector and address broader related issues that impinge on the balance between the sovereign, the regulators, the financial institutions and the markets.

(Meeting of the Task Force on Financial Markets Regulations organised by the Initiative for Policy Dialogue at Manchester, United Kingdom, on July 1, 2008)