Learning from Crises¹

Ladies and Gentlemen,

The late John Kenneth Galbraith, *Harvard Economics Professor Emeritus*, attributed the longevity of his book The Great Crash 1929 – published in 1955 and never since out of print – to the tendency of history to threaten a repeat. "Each time it has been about to pass from bookstores," he wrote in a later foreword, "another speculative episode – another bubble or the ensuing misfortune – has stirred interest in the history of this, the great modern case of boom and collapse, which led on to an unforgiving depression." So here we are again. The financial crisis that has engulfed credit markets over the recent period has pushed the old Keynesian economist's book back into the Amazon charts.

"Bad distribution of income" is the first of five weaknesses of the U.S. economy that Galbraith cites in his definitive work on the stock market collapse. Though Galbraith says it was 5 percent, not 3 percent, of Americans who received one-third of personal income in 1929, he says this well-heeled group played a crucial role in the crash. "The collapse in securities values affected in the first instance the wealthy and the well-to-do. But in the world of 1929 this was a vital group. The members disposed of a large proportion of the consumer income; they were the source of the lion's share of personal savings and investment"

History has an eerie way of repeating itself and memory of the pain of busts, according to Galbraith, is perhaps the best regulator

In the latest best seller *The Ascent of Money*, Niall Ferguson has also highlighted the fact that the income of the median household in US has scarcely changed since 1980, increasing by just 7 per cent in the last 18 years

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¹ The 'Institute of Banking and Finance (IBF) Distinguished Speaker Series' lecture delivered by Mrs. Usha Thorat Deputy Governor, Reserve Bank of India at Singapore on October 12, 2009.

while their borrowings multiplied several times and made what seemed a sub prime mortgage crisis to a full blown global financial crisis.

In the current global crisis, no country has been spared be it big or small, developing or developed, relatively insulated or more open. The shock has impacted both the financial and real sectors although it was financial sector led. In India, the impact though significant, has not been to the same extent as in other parts. This is partly attributed to the curbs India still has on the capital account, but mainly to the dominance of domestic expenditure – consumption and investment – and high savings rate, leading to a balanced macro economy, having small current account deficits. Nevertheless, the impact has been felt by the domestic credit equity and forex markets leading to slowing down in the growth rate and employment generation. Still, the country is the second fastest growing economy in the world with over 6 % growth projected for the current year.

The topic of my talk is "Learning from crises". As Galbraith recalled it is amazing how the same mistakes get repeated. Hence I think we owe it to the system to recollect and recount lessons from crises. The key lessons are how to anticipate and take pre-emptive action and equally important, once you are in the middle of it, how to respond effectively viz. crisis management. Post crisis, the critical issues are - how do we put in systems and buffers that can cushion the impact of economic cycles and booms and busts that are so typical of market driven systems.

During the journey I have traversed in the RBI, I have been witness to many crisis situations of differing dimensions, especially since 1991. Delving into the past I feel veteran enough to share these experiences and draw lessons.

The BOP crisis of 1991

This was a major crisis in the country. In mid 1991, the foreign exchange reserves of the country were down to 11 days imports, even what

little reserves that remained were not unencumbered. While the crisis was triggered by increase in oil prices and the Gulf war, the underlying factors were the macro imbalance in the form of unmanageable current account and fiscal deficits. External debt servicing as a proportion of current receipts increased from 10.2 per cent in 1980-81 to 35.3 per cent of current receipts in 1990-91. The responses included curbing imports through a system of administrative controls for large value letters of credit, giving incentives for exports, pledging of gold reserves with Bank of England and Bank of Japan, devaluation of the Indian Rupee, issuing attractive bonds in foreign currency to Non-Resident Indians, encouraging return flow of capital, an amnesty scheme through gold bonds, borrowing from multilateral institutions, etc., and so on. The long term response included major reforms in trade industry foreign investment fiscal and financial sector paving the way for development of equity, forex money and government securities markets. There were fundamental changes in monetary management consequent upon stoppage of automatic monetisation of the government deficit and switch over to an auction based market borrowing for meeting the fiscal deficits.

Many valuable lessons were learnt from the crisis -

- Exchange rates should not be overvalued for long periods
- Providing exchange guarantees by the central bank or government are best avoided
- On the external account, liberalising equity flows first is a better option followed by commercial credit and longer term debt, while limiting the access to foreign debt by the financial sector
- Central bank funding of the government in the primary market should not be resorted to
- Excessively high remuneration on reserve requirements erodes monetary control.
- Financial sector repression excessive interest controls and credit rationing - is deleterious to growth.
- A strong financial sector requires prudential regulation and effective supervision
- Removing or reducing entry barriers to facilitate more competition

 Coordinated action by the Government and the central bank with a well knit professional team working together greatly facilitates the process

The Securities irregularities of 1992

The irregularities reflected speculative buying in the stock market funded by bank liquidity through repurchase transactions in government securities and bonds, facilitated by a nexus between brokers and banks. In part this reflected a way of earning higher yields in an otherwise administered interest rate structure. Such transactions were done against bank receipts where there were no underlying government securities. The events that led to these irregularities could be attributed to weaknesses and lack of transparency in the market infrastructure for government securities, excess liquidity with public sector undertakings, nexus between banks and brokers and inadequate internal controls that led to bank funds flowing to the stock markets fuelling abnormal stock price increase. Poor internal controls were reflective of low levels of computerisation and reliance on manual processing. Consequences resulted when a settlement failure triggered panic and the irregularities surfaced in the open. RBI had to undertake a series of investigations to unravel the irregular transactions and fix responsibility. A Joint Parliamentary Committee (JPC) constituted to investigate into these operations required enormous resources of the management.

There were several positive fall outs of this crisis:

- Acceleration of capital market reforms and introduction of screen based order matching systems with commensurate depository custody clearing and settlement arrangements that are continuously upgraded
- Institution of a delivery versus payment mechanism for settlement of trades in government securities initially in RBI but later led to establishment of a central counterparty in the form of CCIL (Clearing Corporation Of India) which today undertakes guaranteed

- settlement for government securities , repos in G Secs and forex market trades.
- Dissemination of information on all individual transactions in the government securities market on a daily basis and currently on real time basis
- Tightening of internal controls in investment transactions
- Removal of administered interest rates –currently only the savings bank deposit rate is fixed by the RBI, while all other deposit rates are deregulated
- Strengthening supervision over banks and other financial institutions and establishment of the Board for Financial Supervision (BFS) in 1994 with the primary objective of undertaking supervision of the financial sector comprising commercial banks, financial institutions and non-banking financial companies.
- Recognition of the possibility of systemic risk in the absence of proper assessment of counterparty risk and well functioning securities markets with greater transparency
- Focused attention on the role of the regulator which ensures adherence to regulations in letter and spirit and need for greater accountability

Imbroglio caused by dealings of Non-Banking Financial Companies in 1997

Non-Banking Financial Companies (NBFCs) have been historically subjected to a relatively lower degree of regulation *vis-à-vis* the banks, the higher rates of return on deposits they could offer enabled them to attract a large base of small savers and a potential threat to the stability of the financial system. Added to these was the fact that operations of NBFCs were characterised by several distinctive features viz. no entry barriers, no requirement for large investment in fixed assets and inventories, freedom to open branch offices, all of which led to their proliferation in an unbridled manner. A few such companies which were perceived as well-functioning, well-managed and financially healthy and consequently had a large depositor

base, defaulted in repayment of deposits, leading to the realisation that the extant framework was inadequate to monitor and regulate these companies. Though there were no systemic problems, confidence of the depositors in the NBFCs as a sector was eroded and the Reserve Bank faced the risk of loss of reputation. In a specific instance, the in-principle approval given by the Reserve Bank to start a bank was used by the entity to mobilise huge funds from the unsuspecting public and the payable-at-par cheques issued by the entity on a leading commercial bank resulted in a huge exposure and default to the bank because of the lag between the timing of payments and providing funds cover.

The learning points were:

- Recognition of the possibility of regulatory arbitrage between the entities regulated by banks and non banking financial companies and between the securities regulator and the bank regulator.
- Need for legal powers to regulate the activities of NBFCs, including framing of guidelines for compulsory registration, stringency in conditions for deposit-taking companies akin to banks, and applicability of prudential norms for such companies.

In the recent period, it has been noted that, even if not accepting deposits, these companies can contribute to systemic risk as they access public funds and participate in various markets (debt, equity and foreign exchange markets). Hence capital ratios and a quarterly system of reporting were introduced for large non-deposit taking NBFCs in 2007.

Asian Crisis of 1997 – the first global contagion

The South-East Asian crisis started with stock market and currency crashes followed by financial crisis which spilt over to the real sector. It changed irrevocably the way Asian countries look at issues of financial stability. The Indian market was not immune and even though there was a general belief that some correction in the rupee was required, the pressure on

the rupee in later part of the year required RBI to intervene to maintain orderly conditions. Withdrawal of funds by foreign institutional investors (FIIs) hit the equity and foreign exchange markets and the sale of foreign exchange by RBI also affected the money and bond markets. In addition to intervention, monetary and administrative measures had to be taken to stabilise markets. The impact on the domestic interest rates and liquidity was the cost to be paid for restoring stability. The government borrowing programme was managed through private placement and subsequent open market operations when the markets stabilised.

The learning points were:

- Need for complementarity between macroeconomic stability and financial stability and exchange rate management for preserving competitiveness and confidence in the economy
- Need for closer supervision and regulation of banks and other financial institutions
- During asset price booms it is important to ensure that banks' exposure to capital markets and real estate is not excessive and to understand that banks can be subject to foreign exchange risk even without any currency mismatches in their books, when their constituents have huge unhedged exposures
- Management of capital account is important for countries having chronic CAD and where inflation and interest rates are persistently over global levels.
- Dollarisation of the domestic market or internationalisation of the domestic currency can both require careful management.
- Financial stability emerged as a specific objective of policy as the cost of instability to the real sector is huge especially on the vulnerable segments of society.

Urban Co-operative Banks – the Weak Link

The tightening of regulation over the banking and NBFC sectors saw the gravitation of risk to the lightly regulated Urban Co-operative Banks (UCBs) which were under dual regulation of the RBI and the registrar of cooperative societies. The stock market crash in 2002 triggered a payments problem and it was found that the nexus between the broker and a large UCB (Madhavpura Mercantile Co-operative Bank) led to huge exposure to the broker and the bank collapsed. The systemic implication was that hundreds of small UCBs had exposure to this bank and the collapse of these banks would have been very disruptive though confined to a small region. The Deposit Insurance and Credit Guarantee Corporation (DICGC) had to make a large payout to the collapsed bank under a restructuring package and averted the domino effect. But the Madhavpura Bank collapse led to erosion in public confidence and there were a series of UCB failures across the country. The immediate measures taken were to ban connected lending, exposure to share-brokers and inter-UCB deposits. The supervisory system – both on-site and off-site – was triggered and strengthened. In 2004, all new branch and bank expansion was stopped and a vision document was put out in 2005 which provided for a MoU with the state governments to work out a way for non-disruptive exit of weak UCBs while simultaneously incentivising the growth of strong banks. Subsequently various resolution options have been provided such as merger with or without support from DICGC, restructuring of liabilities, introduction of new capital-like instruments, and transfer of assets and liabilities. The UCB sector has seen a reduction in the number of weak banks from 725 to 496. 102 banks have gone out of the system through mergers and liquidation. DICGC has also strengthened its claim payments system to ensure that prompt relief is given to small depositors of failed banks.

The lessons learnt were:

- In dealing with a crisis arising out of interconnectedness, breathing time needs to be provided through liquidity injection.
- Reduce interconnectedness within the financial system as it leads to a 'moral hazard' problem of 'too interconnected to fail'
- The most lightly regulated entity in the financial system becomes the weakest link. The system's weakest link becomes a source of reputation risk and erosion in public confidence

 Even though under dual regulation, the bank regulator has to use its powers more effectively and take steps to resolve weak banks.

Failure of a fairly significant mid sized commercial bank in 2004

The Global Trust Bank Ltd, a private sector bank had reported substantial growth and was growing too fast. The bank's balance sheet was flawed and disclosures inadequate. Very large capital market exposures and shortfall in provisioning were the causes for downfall of the bank. The common depositor does not have the wherewithal to study bank balance sheets before making a deposit, but even the institutional investors seem to be gullible investors. It was also realised that even though insolvent, a bank can carry on without a run as long as it has adequate liquidity or access to liquidity. Interestingly, even at the time of moratorium, the bank had huge inter-bank borrowings and deposits reflecting the confidence placed by other banks and institutional investors or the moral hazard view that banks will not be allowed to fail. Auditor accountability came under focus. The problem had to be dealt with heads on when all avenues and options for revival by the promoters and directors failed. Compulsory amalgamation with a public sector bank was resorted to.

This experience gave us valuable lessons of how to deal with a bank run.

- The process of resolution should be swift and decisive and preferably over the weekend
- In a computerised system with 24/7 banking, and large retail base, the preparation for a moratorium has to be much more meticulous than in traditional banking.
- Role of media is critical and in any crisis management media management has to be given priority. We actually had to go on media to give out reassurances about the bank to stop the run
- Adequate liquidity and currency needs to be kept ready to stem a run once the resolution strategy is decided

 A moratorium is useful to give breathing time to put a resolution package in place but hardship requests can become tedious to handle.

Institutional factors

This decade has been one of challenges in managing capital flows both inflows and outflows. Both monetary policies and prudential policies have been used through a variety of instruments to manage the macro economic and financial stability challenges arising out of large capital flows, external shocks such as 9/11, political uncertainty, geo political events, and have called for vigilance and prompt actions. While evolving policy instruments to manage these conditions such as the Market Stabilisation Scheme for sterilising the impact of inflows are important I would like to flag a few critical institutional factors which I think are required to be encouraged and made part of the automatic trigger mechanisms in the system. I would like to turn to these -

Problem Recognition – The meaning of being vigilant is to be able to constantly scan the horizon and recognise that a problem is brewing and take pre-emptive action before the problem becomes disruptive. The indicators could be asset values, excess credit growth, large unhedged exposures, continuing current account deficits financed by short term credit, weakly regulated entities in the system, opportunities for regulatory arbitrage, large leveraged positions, prolonged periods of liquidity excesses or shortages; or the tendencies of entities to leverage, especially by exploiting the interlinkages in the financial system.

Committee Approach – As part of crisis management, it is necessary to have a harmonised approach. First it is essential to have close coordination with the Government. As in 1991, this was an important requirement in responding to the recent crisis. Putting in place an institutional mechanism and systems that can facilitate continuous dialogue and co-ordination between those in charge of monetary policy, debt management, foreign

exchange management, regulation and supervision of banking entities, supervision of non-banking entities, securities markets regulation and the like is a sine-qua-non. Within each of these segments it is crucial to be in sync. We have a Financial Markets Committee (FMC) in the central bank consisting of senior executives responsible for monetary policy and operations, debt management and foreign exchange reserves management. The FMC meets at least once every day in the morning and emergent meetings are also convened when there are episodes of sharp volatility in equity markets, or when any of the other markets are significantly affected. Other regulatory departments including the department responsible for payment system also get involved during such times. The Committee keeps in touch with the securities regulator (SEBI), the stock exchanges especially the clearing and settlement corporation of the exchanges, the Clearing Corporation of India Ltd. (CCIL) and the like. We also have a Crisis Management Group that meets whenever a crisis is anticipated or occurs.

Inter-regulatory Co-ordination — Financial sector harmonisation among the securities, insurance, pension fund and bank regulators is enabled through the High Level Co-ordination Committee on Financial Markets (HLCCFM). The HLCCFM is headed by the Governor, RBI and meets as and when felt required. The Ministry of Finance provides the secretariat. Subcommittees / groups formed among SEBI, IRDA, PFRDA and RBI, meet to discuss and sort out issues relating to developments in the financial markets having implications cutting across different regulators. Institutionalised and formal approach to decision making in a crisis has the benefit of building on the experience of the members.

Consultative Approach – we have also reaped the advantages of using external experts in our policy making. We have a Technical Advisory Committee for Monetary Policy consisting of academicians, practitioners and experts, which tenders advice to RBI on monetary policy stance. There is also a Technical Advisory Committee that consists of financial sector experts from areas such as banking, academics, government, stock exchanges, credit rating agencies and market representatives. This committee meets once a

quarter to deliberate on developments in money, foreign exchange and government-securities markets and offers advice on policies for regulation, growth and further reforms in financial markets, including products, practices and institutional arrangements.

Capacity Building – Equally crucial is the need to develop people and systems to deal with scenarios and contingencies, which can be achieved only through a sustained process of capacity building. Giving exposure through participation in meetings at local and international levels, allowing officers even at fairly junior levels to be part of the dialogue process at the top levels in various co-ordination fora, enormously helps in nurturing talent. A consultative and participative approach to decision making through setting-up of working groups consisting of a mix of internal and external people with clearly set tasks and time-lines not only casts responsibility but also aids developing expertise. Emphasis in these groups is on harnessing collective wisdom and balanced judgement, typical of a college-like atmosphere for decision making.

Robust Infrastructure – I am referring to the development of sound market infrastructure for payments and settlement for all financial transactions as also market infrastructure for trading reporting information dissemination and clearing settlement. CCPs for clearing and settlement of equity government securities forex and money markets are in place following the best practices laid down by IOSCO/CPSS. The infrastructure for electronic payments and RTGS are now taken for granted.

Summing up

A lot has been talked about the current crisis and the response. Most of these talks are on the website. I would just like to say that the major learning from this crisis is that globalization has meant that no country is immune from the happenings in global financial markets. Also, at one level, the presence of complex and interconnected financial entities across several jurisdictions with regulators at the national level has posed huge challenges in ensuring that there is no regulatory arbitrage and that there is coordination amongst

regulators. Even within a jurisdiction, it is recognized that all regulators have to deal with systemic risk and there is need for inter regulatory dialogue and vigilance.

At the macro level, Asian countries and Latin American countries have learnt lessons from their own past currency and financial crises and have built up reserves and have strengthened their financial systems apart from consciously developing their financial markets. But they have been careful to ensure that their banks are not involved excessively in toxic assets or innovative transactions. Even so, the countries have had to face the consequences of falling global trade and GDP and unemployment and slowing credit growth. Macro economic imbalances continue though they have reduced. Savings is increasing in the western world and consumption increasing in the East.

Ultimately, we all have to be concerned about the real sector and recognize that financial sector development is not a goal by itself but is intended to enable the growth, not just of the rich, but more importantly inclusive growth cutting across all segments of the society and regions. As regulators and central banks, it is our duty to ensure this.