K C Chakrabarty: Global crisis – genesis, challenges and opportunities unleashed

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Mr. Ajith Nivard Cabraal, Governor, Central Bank of Sri Lanka; Mr. Ajantha Madurapperuma, President, Association of Professional Bankers – Sri Lanka; Distinguished guests and *members of the Association of Professional Bankers*, Ladies and Gentlemen:

It is a great pleasure and privilege for me to be here today for this 21st Anniversary Convention of the Association of Professional Bankers of Sri Lanka. At the outset, I would like to thank Mr. Ajantha Madurapperuma, the President of the Association and all its members for extending the invitation and providing me this opportunity to share my views on a theme which has tested the competence and conventional wisdom of policy makers, bankers and market participants all around the world, as the complex nature and severity of the global crisis has been truly unprecedented.

It is indeed heartening to note that Sri Lanka like many emerging markets, has weathered the crisis without any significant stress on its financial system, though, the country's growth outlook, like many other countries, was affected by the varied effects of the contagion from the crisis. In terms of financial outlook, according to the IMF, Sri Lanka's economic growth for 2009 could be around 3 percent compared to 6 percent in 2008, even though other estimates, including that of the Central Bank suggests that growth could remain in the range of 3.5 to 4.5 per cent. Inflation condition has also been improving, as the annual average inflation rate has continued to decline since November, 2008 and recorded a single digit level of 8.5 per cent in August 2009, which is the lowest since 2006. The recent revision in rating outlook by the S&P from "negative" to "stable" corroborates the improving outlook for the economy. I am optimistic that the Sri Lankan economy and the banking sector will perform well and will be on a high growth trajectory in time to come.

In this age of globalisation, sound national policies pursued in any country alone may not be enough to ensure sustainable high growth with stability. Understanding the opportunities and risks associated with globalisation and developing national and global architectures to enhance the benefits of globalisation while containing the risks, therefore, represent a major challenge for the policy makers. Every financial crisis, notwithstanding the associated ravages, has to be also seen in terms of the opportunities it offer like exposing the limitations of the existing systems, cleansing the financial systems of activities and markets entities that work towards misuse of the systems for maximizing personal returns, and certainly in this process open up new business opportunities. I would like to share with you certain important aspects of the crisis, before sharing with you the Indian experience in terms of the impact of the crisis and the way forward.

The genesis of the crisis

The sudden manifestation of the crisis in 2007 was the result of two important fundamental macroeconomic imbalances that persisted for too long; one, the monetary policy of the Fed Reserve in the Greenspan era and second, the growing global imbalances. Both these factors were clear precursors of unsustainable bubbles, which were ignored in general because of the pre-crisis phase of high global growth with low inflation.

Growing bubbles

The Fed's monetary policy stance before the crisis created the general impression over time that the interest of capital in a free market economy can never be at risk. That encouraged the use of high leverage as a source of sustainable high profits from bubbles. Fed's monetary policy has widely been highlighted by now for its role in supporting the growth of two most unpleasant things – speculation and leverage – which in turn contained the potential for a severe financial crisis.

The global imbalances

The safe haven appeal of the US dollar as the key international currency, and the assured high return on financial investment in the capital market in the US during the Greenspan era led to a situation where the US continuously maintained large and growing unsustainable current account deficits. Countries around the world with current account surpluses or large foreign exchange reserves kept investing in the US. Despite the crisis, and the resultant forced correction in imbalances to some extent, this global problem could persist even after the crisis.

The buildup to the crisis - role of more proximate factors

Leverage

Use of leverage merged as the sure means to maximize income in the US economy. American household and corporate debt had increased significantly before the crisis. One recent University of Chicago study highlights how the size of household debt and house prices moved together in the US, and every increase in house prices induced further growth in debt for consumption purpose. For every one dollar increase in house prices, the increase in debt-financed consumption rose by 25 to 30 cents. The wealth effect of asset price increases, thus, seemed to be much more significant than what was perceived earlier by the policy makers. Correction in asset prices, thus, led to an intense deleveraging process. *Assets prices and leverage represent two important variables that must be constantly monitored, as risk from both of them to the financial system could be significant.*

Deterioration in credit standards

The deterioration in credit standards facilitated by the sustained easy monetary policy stance and deregulation induced opportunity for shifting of credit risk through securitisation, contributed to growth in credit to sub-prime segments. It is often argued that easy access to liquidity alone could not have led to deterioration in credit standards. Securitisation and innovations linked to such securities opened up the option to shift credit risk in sub-prime loans to the markets and thereby free the pressure on banks' capital, which in turn led to the significant weakening in standards for credit assessment.

Emergence of shadow banks – and the tendency to circumvent regulations

Many leading international banks started/sponsored off-balance sheet Structured Investment Vehicles (SIVs) to freely undertake activities which were not possible otherwise because of regulatory norms for banks, like capital adequacy and management of liquidity risks. The SIVs, in turn, faced no such constraints, and could borrow freely from the short-term Asset Backed Commercial Paper (ABCP) market and take large leveraged positions in papers like CDOs/CLOs whose valuation and liquidity were most unknown. In the pre-crisis period, these SIVs or shadow banks generated good profits for the sponsoring banks. Once the crisis started, the sponsoring banks had to take the losses of the SIVs. The tendency to circumvent regulation but still do something that is perfectly legal (like sponsoring SIVs to undertake

certain activities) suggests that regulation alone cannot address all sources of risks to the financial systems.

Financial innovations

Earlier, it was not easy to securitise any type of loan, like sub-prime loans, and create a market for them. The financial engineers of the Wall Street, however, found the answer in two things: First, by creating information asymmetry by converting the pool of difficult to market loans into Collateralised Debt Obligations (CDOs), and second, creating market for different tranches based on "ratings". Thus, a "AAA" rated CDO could be created out of cash-flows linked to sub-prime loans. *In the post crisis period, some have questioned the relevance of such innovations in any financial market. Innovations need to be encouraged for enhancing market efficiency, but market efficiency cannot be achieved without proper information.*

Financial systems became too complex and the potential vulnerabilities escaped supervisory focus

The role of complexity in financial systems in causing the crisis has been deftly explained by Landau (2009). Complexity increased from two sides, first, the structured products (whose valuation could be hard to establish), and second, the rising interdependence between financial institutions, market players and counterparties. The nature of this interdependence was too complex to be monitored by any regulator, and the dynamics of the interactions also kept changing in constant search of higher returns through new innovations and regulatory arbitrage.

Three points are particularly important to note in this context: (a) Information is critical for any advanced efficient market, however "Complexity" led to loss of information; some of the innovations in effect destroyed information; (b) Complexity gave rise to higher uncertainty, making financial systems highly unpredictable and (c) Uncertainty led to "flight to quality and hoarding of liquidity", which precipitated the crisis. *When everybody runs for cover to minimise the loss, the "collective action problem" accentuates the market stress.*

Pressure on capital and the severe credit squeeze

As the prices of toxic papers witnessed free fall (in some cases the value of certain CDOs fell to below 30 cents a dollar, and stock prices also fell significantly), the losses for the banks having exposure to such papers rose significantly, and the capital buffer turned increasingly inadequate, creating concerns of insolvency. Banks, given the capital adequacy requirement, have to either raise fresh capital, or contract their balance sheet size, when capital comes under pressure because of application of mark-to-market (MtM) related losses in a falling market for financial instruments held in the investment portfolio of banks. In the testimony of William M Isaac before the US sub-committee on Capital Markets, Insurance and Government Sponsored Enterprises dated March 12, 2009 it was pointed out that "…MtM losses destroyed $ 500 billion of capital in the financial system. Because banks can lend 10 times of capital, MtM losses destroyed $ 5 trillion of lending capacity", leading to a severe credit squeeze. The sub-prime crisis, thus, had all the ingredients to deliver a serious global recession.

From financial crisis to a synchronised global recession

In view of the strong interactions between the financial system and the real economy, a financial crisis often gives rise to an "adverse feedback loop". As risk taking capacity of the banks erodes with pressure on capital, and as greater risk aversion leads to tighter credit standards, flow of money for financing real activities becomes difficult. This was seen in both

money market and credit market in the advanced economies. When leading Wall Street banks were feared to fail, inter-bank market had to freeze, due to generalised lack of trust. The credit market, in turn, witnessed severe pressure on the capacity to lend; moreover, the deleveraging process gathered steam over time, where everybody wanted to minimise the losses. The real economic activity decelerated as aggregate demand, particularly private consumption and investment demand shrank under the pressure of deleveraging, wealth loss associated with falling asset prices, increasing unemployment, and deteriorating climate for investment and employment.

As the real effects of the financial crisis magnified over time and the initial decoupling perception turned out to be a myth, the IMF revised its global growth outlook for 2009 downwards repeatedly from 3.9 per cent in July 2008 to -1.4 per cent in July 2009. The volume of world trade has also been projected to contract by 12.1 per cent in 2009. It is the serious real costs of a financial crisis that has led to large scale use of fiscal and monetary policy stimulus all over the world.

In view of the adverse feedback loop in the advanced economies, policies have aimed at addressing both financial stress and the economic recession, since addressing any one would not weaken the vicious loop. Lower interest rates, ample liquidity and fiscal stimulus have been used to contain the adverse real effects; while for restoring stability to the financial system, measures like raising the capital of banks and financial institutions and addressing the impaired assets have been adopted.

The Indian economy before the global crisis

India had emerged as a leading emerging market economy (EME) by the time when the sub-prime crisis started. The average GDP growth of 8.8 per cent during the 5 year period 2003-08 was not only one of the highest in the world in the recent period, but it had also permanently raised India's growth trajectory to a higher level. There was a clear structural transformation, driven by reforms, globalisation and significant increase in domestic savings and investment rates, which helped in boosting both investment and productivity driven growth in the system. More importantly, inflation in India averaged at about 5.3 per cent during this high growth period.

The macroeconomic environment remained stable and resilient to external shocks, despite rising degree of openness and significant reforms. Sustainable current account deficits in the balance of payments and surges in capital flows during this period had led to increase in the country's foreign exchange reserves to more than USD 315 billion by May 2008, which had significantly enhanced the capacity of India to face any potential external sector vulnerability arising from the global crisis. Domestic savings rate had increased from 23.5 per cent of GDP in 2001-02 to 37.7 per cent in 2007-08, which facilitated the step up in investment rate from 22.8 per cent to 39.1 per cent during the corresponding period. Because of the Fiscal Responsibility and Budget Management (FRBM) Act, the fiscal position was also on a healthy consolidation path. Given the sound macro-financial conditions, India was better placed than many EMEs to face the global crisis, even though over time it became evident that the perception of decoupling was a myth.

The impact of the global crisis on India

Three channels of contagion – namely trade, capital flows and deteriorating confidence – affected the real sector of the economy. The immediate concern after the Lehman bankruptcy, however, was to assess the exposure of the domestic financial system to the failing institutions and the falling asset prices in the financial systems of the advanced countries.

No direct and limited indirect exposure of the Indian banking system to the financial crisis

The banks in India did not have any direct exposure to the US sub-prime market. Some banks, however, had indirect exposure through their overseas branches and subsidiaries to the US sub-prime markets in the form of structured products, such as collateralised debt obligations (CDOs). Some of the banks, with exposures to credit derivatives, had to book MTM losses; the impact though was not very significant and banks had made adequate provisions to meet the MTM losses on such exposures. Moreover, the banks in general had maintained high levels of capital adequacy ratio.

Once the risk from the financial system was assessed to be limited, the policy priorities focused on dealing with the problem of global illiquidity spiral for ensuring orderly and well functioning markets. Given the strong interactions between financial markets, financial institutions and the real economy, ensuring normal functioning of markets assumed critical significance. The financial markets - in particular the stock market, the money market and the forex market – reflected the heat of the global contagion.

Liquidity pressure

Global liquidity scare and credit squeeze led to constrained access to funds for Indian entities, and some of the corporates shifted their demand for funds to local markets. The pressure on the balance of payments, led by net capital outflows in the third quarter of 2008-09 and the associated intervention sales by the RBI in the forex market also implied corresponding withdrawal of domestic liquidity from the banking system, which the RBI had to more than offset by expanding liquidity against domestic assets in its balance sheet. Net capital flows declined from US$ 108.0 billion in 2007-08 to US$ 9.1 billion in 2008-09. India's foreign exchange reserves declined by US$ 58.0 billion, of which US$ 37.9 billion was on account of valuation changes, and the remaining US$ 20.1 billion decline reflected the financing needs of the BoP. Thus, with less than 10 per cent of the available stock of forex reserves, the balance of payments pressures from a severe global contagion could be contained.

The liquidity demand, however, increased in general after the Lehman incident in September 2008. In view of the funding inter-linkages between NBFCs (non-banking financial companies), mutual funds and commercial banks, when the contagion from the global financial crisis created selling pressures in the stock markets in India, the liquidity needs of the financial system as a whole had to be addressed by the Reserve Bank. The global deleveraging process created selling pressures, as foreign investors could meet liquidity needs in the advanced markets by selling in domestic markets. Heavy redemption pressure on mutual funds started in September 2008, as several investors, especially institutional investors, started redeeming their investments in liquid funds/money market funds. Mutual funds are major subscribers to CPs and debentures issued by the NBFCs, besides CDs issued by banks. The rollover of maturing short-term instruments floated by NBFCs for having regular access to market funding became difficult. The tightening liquidity conditions also made banks somewhat reluctant to lend to NBFCs.

The financial market pressures

Global illiquidity spiral increased volatility in the financial markets, and restoring orderly conditions in the financial markets became critical to contain the spread of contagion into other sectors of the economy. The Indian rupee, which stood at 39.99 per US dollar as at end-March 2008, depreciated and moved in a narrow range of Rs. 42-43 per US dollar from the third week of May to the middle of August 2008. It depreciated sharply thereafter, breaching the level of Rs.50 per US dollar on October 27, 2008, and touching the low of Rs. 52.09 per US dollar on March 5, 2009. The BSE Sensex fell to a low of 8160 on March 9, 2009, witnessing a decline of 60.9 per cent from the peak of 20,873 on January 8, 2008. The

overnight call money rate, which had jumped to 13 per cent on September 16, 2008 touched a peak of 19.8 per cent on October 10, 2008, and the access to liquidity from the RBI through LAF (Liquidity Adjustment Facility) repo crossed Rs. 900 billion. The RBI, thus, had to meet the liquidity needs, in both domestic and foreign currency so as to ensure smooth functioning of the markets.

The response from the Reserve Bank of India

We are aware that a central bank must pay attention to money and credit growth. The crisis has also brought to the fore that asset prices have a significant role in the economy and the price buildup cannot be ignored by a central bank. It is important that sub-sectors which are displaying incipient problems be treated differently. Preserving soundness of the regulated financial institutions, ensuring orderly market conditions and containing the pace of deceleration in growth warranted introduction of adequate and timely policy measures by the RBI. As WPI headline inflation declined sharply from the peak of 12.9 per cent in August 2008 (to 0.8 per cent by end-March 2009 and then to the negative territory since June 2009), that created enough space for the RBI to pursue the objectives of growth and financial stability, by creating and sustaining ample liquidity in the market. Measures aimed at expanding the rupee liquidity included significant reduction in the cash reserve ratio (CRR), reduction of the statutory liquidity ratio (SLR), opening a special repo window under the liquidity adjustment facility (LAF) for banks for on-lending to the non-banking financial companies (NBFCs), housing finance companies (HFCs) and mutual funds (MFs), and extending a special refinance facility, which banks can access without any collateral.

Measures aimed at managing forex liquidity included upward adjustment of the interest rate ceilings on the foreign currency non-resident (banks) [FCNR(B)] and non-resident (external) rupee account [NR(E)RA] deposits, substantially relaxing the external commercial borrowings (ECB) regime, allowing the NBFCs and HFCs access to foreign borrowing and allowing corporates to buy back foreign currency convertible bonds (FCCBs). In response to the knock-on effects of the global economic crisis on the Indian economy, between October 11, 2008 and June 29, 2009 the Reserve Bank reduced CRR by a cumulative 400 basis points to 5.0 per cent of NDTL (injecting thereby Rs.1.6 trillion to the banking system), lowered repo rate by 425 basis points to 4.75 per cent from 9 per cent, and adjusted the reverse repo rate downwards by 275 basis points from 6.0 per cent to 3.25 per cent. Potential liquidity made available by RBI is about Rs.5.6 trillion, or equivalent of 9 percent of India's GDP.

The impact of RBI's measures in restoring orderly conditions in the financial markets

Responding to the ample liquidity created and sustained by the RBI, the interbank call rate reverted to within the LAF corridor, and since November 2008 the RBI is again into absorption mode, signifying the persistence of surplus in the market. In the recent months the daily average reverse repo absorption has been about Rs.1.2 trillion. The exchange rate has also appreciated from the low of around Rs.52 per US dollar in March 2009 to around Rs. 48 per US dollar in last few months. Quick restoration of normalcy to money and forex market, thus, contributed significantly to avoid any stress in the financial system as a source of risk to the real economy. Despite a sound financial system and normally functioning markets, however, the global contagion affected the growth prospects of the economy.

Growth deceleration and the fiscal stimulus

In the last two quarters of 2008-09, GDP growth in India decelerated to 5.8 per cent, driven by sharp moderation in private consumption demand and weakness in investment demand, primarily on account of the impact of heightened uncertainty on consumer and investment

confidence. Given the capacity already created for about 9 per cent growth, decline in aggregate demand widened the output-gap (i.e. the actual fell below the potential), which warranted adequate expansion in Government demand to moderate the pace of the slowdown. This, though, involved deliberate temporary deviation from the fiscal consolidation process embodied in the Fiscal Responsibility and Budget Management (FRBM) Act. The deviation from the fiscal consolidation path was evident from the revision to the Centre's fiscal deficit target from 2.5 per cent of GDP in the budget to 6.2 per cent in the budget for 2008-09. The combined fiscal deficit (Centre and States), including the special securities issued to oil marketing and fertiliser companies, reached 10.7 per cent of GDP in 2008-09. The net market borrowings of the Centre and States jumped to Rs.3.46 trillion (7.0 per cent of GDP) in 2008-09 from Rs.1.66 trillion (3.8 per cent of GDP) in 2007-08. The expansionary fiscal stance had to be sustained in 2009-10 to support a faster economic recovery, which was reflected in further increase in budgeted net borrowing programme (of the Centre and states taken together) to Rs.5.38 trillion in 2009-10.

The Reserve Bank, as the manager of the borrowing programme of the Government, has ensured smooth completion of the large borrowings so far, and its accommodative monetary stance, given the subdued demand for credit from the private sector has largely helped in this regard. To help in faster recovery, revival in demand for credit from the private sector would be important, and the RBI has been highlighting to the commercial banks the need for improving the flow of credit for all genuine productive activities, without compromising on credit quality. Certain counter-cyclical regulatory changes have also been effected to support this objective, which include reduction in general provisioning requirement, relaxation on risk weights for certain assets, and temporary restructuring option for certain loans.

The emerging policy challenges and the balance of risks to the growth outlook

Early return to the fiscal consolidation path, and exit from the expansionary fiscal and accommodative monetary policy remain the key challenge. The challenge has to be seen, however, in the context of the ultimate objective, which is faster and durable recovery in growth. The costs of delay in timely exit are being discussed now; but there are costs of delay in economic recovery as well. The policy choices are becoming increasingly complex for the RBI, as signs of recovery in growth are still tentative, whereas inflation is clearly firming up.

In terms of recent signs of improving growth prospects, one could see the recovery in industrial output during April-July 2009, GDP growth for the first quarter of 2009-10 at 6.1 per cent turning out to be better than 5.8 per cent experienced during the last two quarters of 2008-09, higher relative growth in core infrastructure sector during April-July 2009, revival in capital inflows, strong recovery in the stock market over the end March 2009 level, and increasing IPOs with large over-subscription. The downside risks include the impact of the deficient monsoon on agricultural growth, decline in exports for the 10th successive month up to July 2009 because of the persistent global recession, decline in tourist arrivals in August 2009-partly on account of the swine flu fear, and more importantly the rising inflationary pressures that could limit the scope for sustained growth supportive monetary policy stance. The RBI's current growth outlook remains at 6 per cent with an upward bias. The medium-term objective, though, is to revert to the high growth path of around 9 per cent. This growth trajectory also should be inclusive with low and stable inflation.

Opportunities in the post crisis period

Every major crisis exposes the limitations and rigidities of the existing systems, thereby creating compelling pressures on the authorities to reform and restructure. This global financial crisis will provide the trigger for major revamping of the financial stability architectures around the world, besides fostering better governance of the globalization

process and encouraging relevant cooperation among national policy makers. The key areas that could strengthen the financial stability architecture, as agreed in the recent G-20 meeting in London, include:

- More and better quality capital as the best first line of defense against financial crisis; introduction of countercyclical buffers during good times to strengthen resilience during bad times; and use of a leverage ratio as an element of the Basel framework while further strengthening the risk based capital requirement.
- Consistent and coordinated implementation of international standards, including Basel II, to prevent the emergence of new risks and regulatory arbitrage, particularly with regard to Central Counterparties for credit derivatives, oversight of credit ratings agencies and hedge funds, and quantitative retention requirements for securitisation.
- Convergence towards a single set of high-quality, global, independent accounting standards on financial instruments, loan-loss provisioning, off-balance sheet exposures and the impairment and valuation of financial assets.
- Stronger regulation and oversight for systemically important firms.

For countries like India and Sri Lanka, the growth opportunities are almost limitless, given our current levels of development from where we have to catch up with the welfare and income levels of the advanced economies. Large sections of the population contribute much below their potential because of lack of opportunities, and if the policy environment could recognize the gaps and provide the right opportunities with appropriate incentives, the growth prospects could improve significantly. A global crisis of this magnitude does not help in creating and expanding opportunities for around more than 2 billion population in the world who live under abject poverty. That is an important reason why countries like India and Sri Lanka must demand a better global governance system to manage the challenges of globalisation. Moreover, the ambitious fail-proof financial stability architecture that may emerge in the post-crisis period should also emphasize financial inclusion, since financial system is a potential key channel for offering the opportunity that could make a large section of the population realise their potential. India has the opportunity to reap the demographic dividend, because of its demography in favour of a large young population; estimates suggest that by 2020 average age of the Indian population could be as low as 30. The demographic dividend, it has been viewed, could become a demographic curse, unless opportunities are created for everybody, with a sense of participation by all in the development process. Finance, therefore, has a key role in addressing this challenge, unlike the role of finance we experienced in the financial systems of the advanced economies where a few could maximize individual returns but easily socialize the costs of their actions.

Concluding observations

We have a collective responsibility in ensuring a sound and stable financial system, so as to be able to contribute better to sustainable growth and economic development. The link between finance and growth must be strengthened, and we must realise that finance is a means to economic growth and development; it is not an end in itself. The tendency among some to use the financial systems as a casino must be curbed, both through strengthened regulations and better management of distorted incentives among market participants.

It is not easy to draw the optimal line between right regulations andfree markets. No regulator would deliberately stifle financial innovations unless the perceived risks outweigh the benefits. In a free market economy, however, financial innovations may be driven by what the market wants, rather than by what may be necessary for the economy. Freedom increases the scope for misuse, but freedom is also necessary for promoting growth and providing opportunities. Financial crises have been the results of actions of human beings, who are driven by greed and the dangerous drive to remain ahead of the peers in the

financial market by maximizing returns through destructive financial engineering. No amount of regulatory response, whether at the national or global level, thus, could be a guarantee against future crises as long as human beings have to manage and run the financial systems.

Way back in 1936 Keynes had highlighted the role of "Animal Spirit" in human beings, i.e. their spontaneous optimism, the spontaneous urge for action rather than inaction. In 2009, we have now the book by Akerlof and Shiller titled "Animal Spirits: How human psychology drives the economy, and why it matters for global capitalism", where they highlight the role of "non-economic motives" in explaining the crisis. Much of the prosperity in market economies has been possible because of the animal spirit, and regulations should not suppress animal spirit, just because of the potential risks of instability and crisis. The excesses in the financial systems often create a natural process of creative destruction, which surfaces in the form of a crisis to ensure a forced clean-up of the systems. In the process of evolution of financial systems, regulatory and supervisory architectures help in preventing crises as long as sound principles are generally adhered to. When unsound practices lead to a crisis, the creative destruction process makes the systems not only to recover from the crisis but also to become more robust and full-proof. The global crisis has offered the opportunity to revisit the conventional wisdom in many areas and the future approach to financial sector reforms as well as supervision must be guided by the primary objective of making the financial sector serve the needs of the real economy. I do hope that all of us will take advantage of the opportunities unleashed in various sectors and move towards the direction of "inclusive growth".

Thank you.

References

Akerlof, George A. and Robert J. Shiller (2009), "*Animal Spirits: How human psychology drives the economy, and why it matters for the global capitalism*", Princeton University Press.

Batra, Ravi (2005), "*Greenspan's Fraud: How two decades of his policies have undermined the global economy*", Macmillan.

Fleckenstein, William A (2008), "*Greenspan Bubbles: The Age of Ignorance at the Federal Reserve*", McGraw Hill.

Greenspan, Alan (2009), www.centralbanking.com (Central Banking News Desk, 09.09.09).

Keynes, John Maynard (1936), "*The General Theory of Employment, Interest and Money*", London and New York.

Landau, Jean-Pierre (2009), "*Complexity and the Financial Crisis*", Deputy Governor of the Bank of France, Speech delivered at the Conference organized by Bank of France and the Deutsche Bundesbank on June 08, 2009.

Mian, Atif R and Amir Sufi (2009), "*House Prices, home equity based borrowing, and the US household leverage crisis*", Chicago Booth Research Paper No.09-20, July 5.

Smaghi, Lorenzo Bini (2008), "*Financial Stability and Monetary Policy- Challenges in the Current Turmoil*", Speech delivered at the ECB, CEPS joint event with Harvard law School on the EU-US Financial System at New York on April 04, 2008.

Subbarao, D. (2009), "*Global financial crisis – questing the questions*", JRD Tata Memorial Lecture at the meeting of The Associated Chambers of Commerce and Industry of Indio at New Delhi on July 31, 2009.