Borrowing and spending beyond ordinary limits largely explains how Americans got into such economic trouble. For decades, businesses and consumers feasted relentlessly, as if gravity, arithmetic and the tyranny of debt had been de-fanged by financial engineering. “It’s a tricky business,” says Allan H. Meltzer, an economist at Carnegie Mellon University, and a former economic adviser to President Reagan. “There’s no math model that tells us when to do it or how.” An asset bubble, financial inclusion and human greed combined to create the havoc visited on the financial system today. This is only a half-truth at best. Explosive growth in subprime loans and the collapse of a housing bubble cannot explain the sheer magnitude of the crisis we are facing today. It was the ‘marketisation’ of loans – the conversion of loans into tradeable securities – that created a crisis on such a scale. When loans were ‘marketised’, they moved into a netherworld in which regulation was not equal to the task. This is a world that bristles with problems that have been written about so much – incorrect credit ratings, large exposures on the part of highly leveraged institutions dependent on wholesale funding, mark-to-market accounting etc. The current crisis hit Wall Street hard but has not devastated the US economy. Things could be worse without an injection of federal bailout money into the system, which would offset some of the negative impact of the credit crunch. This unprecedented and ongoing, global financial crisis will have many lessons and consequences for India, most of which are currently obscured by the fog of financial destruction and upheaval still under way. Gone are all the theories that suggested that some countries, including India and China, may have decoupled their growth trajectories from the US and Europe. Many aspects of capitalism will be fine-tuned, modified and made less prone to shocks. One truth this crisis has brought home to the most ardent fundamentalists of market capitalism is that you cannot wish the state away even from a most pristine free market.

Anniversaries are usually pleasant occasions. But the 69th anniversary of the Great Depression is arousing disturbing feelings. Almost seven decades ago, on October 29, 1929, the US stock market had crashed. That ‘Black Tuesday’ signaled the onset of the most acute global economic downturn of modern times. Popular explanations of the
crisis (and there are several) hold irresponsible policies of the US Fed responsible for the debacle. Similar criticisms are being leveled at the Fed now too. There is no dearth of theories on what led to the collapse of the stock market and the subsequent disintegration of the financial system. President Roosevelt promised a ‘New Deal’ and lived up to the promise by announcing several radical measures. In spite of its criticism, the ‘New Deal’ left indelible impressions. The current meltdown is panning out in a world that is far more integrated than the 1930s and hence more vulnerable to shocks.

For the sake of analysis the paper has been organized into 7 sections. Section I explains the concept and mechanism; Section II gives the factors responsible for the crisis; Section III is devoted to the impact of the turmoil; Section IV narrates some of the policy initiatives; Section V highlights the lessons to be learnt; Section VI compares Asian crisis and Sub-prime crisis, and finally, Section VII gives the conclusion of the paper.

I: The Concept and mechanism

The market for credit is not like the market for commodities. Financial markets are substantially different. In essence the giving and taking of credit is a futures transaction. The borrower gets current purchasing power in return for a promise to repay with future purchasing power. Apart from the link between current prices and expectations of future prices, which can happen in commodity markets also, credit markets show two crucial differences. First, the trade takes place with provisions to guard against default which link the buyer and seller over time. Second, as a consequence, the buyer and seller cannot remain anonymous since trust and confidence, which lie at the heart of this transaction, require a direct and continuing relationship. An absolutely direct bilateral relationship between every saver and every investor is not possible in any complex economy and that is why financial intermediation develops. Most loan transactions originate in banks and other financial intermediaries who take on the responsibility of due diligence. There are also many institutional measures which can be undertaken to reduce the costs of default risk, e.g. the pledging of collateral, laws relating to debt recovery and credit ratings. But this does not dilute the fact that the
relationship between the lender and borrower stretches months and years into the future and that a specific judgement of default risk has to be made for each individual borrower.

A CDO (collateralized debt obligation), which typically included mixes of mortgage backed securities along with other assets; or a CDS (credit default swap) refers to some opaque financial instruments which have spread the contagion of billions of dollars of “sub-prime” (meaning “very risky”) mortgage loans in the US throughout that country’s financial system and to much of the industrial world. With US house prices falling over the last 20 months and sub-prime mortgages going sour, these CDOs and CDSs have wrought havoc on the US financial industry. The crisis, which has been simmering since July 2007, came to a boil. Fannie Mae and Freddie Mac in September 2007 resisted regulation. As mortgagers of last resort they should have been especially prudent. But they bought stacks of toxic mortgage paper CDOs seeking short-term profits that ultimately led to bankruptcy. Subprime loans were risky and had interest rates that rose over the life of the loans, driving up payments. Wall Street bought up these subprime loans, put them into pools, repackaged them, and sold them. Investors poured at least $1 trillion (Rs. 47 trillion) into these securities backed by subprime mortgages. Then the housing market slowed and home buyers defaulted in record numbers because they couldn’t keep up with mortgage payments. The value of mortgage-backed securities plummeted. Swaps are also backed by credit cards, car loans, business and other loans, and a long chain of swap transactions links investors in this $62 trillion market. Many of these bets were made with borrowed money. As losses mounted, panic swept through the financial system. Loans to businesses, banks and consumers became scarce and expensive, creating a credit crunch. Without loans, there is less spending, which causes the economy to slow. Credit swaps are the weapons of mass destruction.

Until 2007 when it became apparent that the quality of some of the loans in the residential mortgage pools might not be what they should have been. To understand what happened, we can look at a few selected pieces of information, starting with home prices. Normally, home prices are between 9 and 11 times the annual level of rent paid. That makes sense, as it implies an average user cost of housing of around 10 per cent. But
since 2000, prices have skyrocketed, leaving rents in the dust. The price-to-rent ratio peaked at the end of 2006, reaching the rather extraordinary level of 14.5, clearly suggesting the existence of a “bubble” in residential housing. *Home prices were at levels far higher than justified by fundamental values (or replacement costs).* The simplest way to convert housing wealth into consumption is to borrow as the value of residential real estate rose, mortgage borrowing increased even faster. *Securitization facilitated this increase in household leverage.*

Briefly, here’s how the process works. Instead of a lending to a home buyer and holding the mortgage on its own balance sheet, the lender makes the initial loan and puts it into a “pool” containing a large number of other similar mortgages. *This pool then services as collateral for what are called mortgage-backed securities (MBS).* The owners of these mortgage-backed securities (known also as “pass-through” securities) received the payments from the borrowers whose mortgages are in the pool. The mortgage-backed data are separated into two categories. The first are *Government-sponsored Enterprises, or GSEs, primarily the Federal National Mortgage Association (Fannie Mae) and the Federal National Mortgage Corporation (Freddie Mac).* The GSEs’ basic business is to insure mortgages, so buyers of the securities issued by GSEs can do so without fear of default on the underlying mortgages.

Mortgage lenders finance these mortgages not with the intention of garnering the interest and amortization flows associated with such lending, but because they can sell these mortgages to Wall Street banks. The Wall Street banks buy these mortgages because they can bundle assets with varying returns to create securities with differing probability of default that are then sold to a range of investors such as banks, mutual funds, pension funds and insurance companies. Needless to say, institutions at every level are not fully rid of risks but those risks are shared and rest in large measure with the final investors in the chain. And unfortunately all players were exposed to each other and to these toxic assets. When sub-prime defaults began this whole structure collapsed leading to a financial crisis of giant proportions.

Thus, at the heart of the current financial mess is what are called *credit default swaps (CDS),* a little-understood insurance cover, which feigned to be everything but an
insurance cover (for otherwise it would need to come under regulatory purview), for an even more esoteric underlying financial instrument, namely mortgage derivatives. CDS constituted as much as a $60 trillion market or four times the entire national debt of the United States, before they came crashing down. And no one knows till date who owns them or their exact number or transactions in them, for there was no depository to track them. “Sub-prime” problem soon spread and created a systemic crisis that soon bankrupted a host of mortgage finance companies, banks, investment banks and insurance companies, including big players like Bear Sterns, Lehman Brothers and AIG. The reasons this occurred are now well known. The increase in sub-prime credit occurred because of the complex nature of current-day finance that allows an array of agents to earn lucrative returns even while transferring the risk. Mortgage brokers seek out and find willing borrowers for a fee, taking on excess risk in search of volumes.

In the case of the sub-prime mortgage market it has created what is known as a “principal-agent” problem. Sub-prime mortgage originators act as the agents for the investors, who are the principals. And the principals failed to impose sufficient discipline on their agents. The result has been a myriad of increasingly complex and insufficiently transparent securities that virtually no one understands how to value. Unsophisticated investors purchased these assets without even realizing what questions they should be asking of the sellers. The result of this lack of discipline and transparency is that the securities were overpriced. Mortgage-backed securities are just one of a class of so-called “structured products”. Financial innovators have developed ways to slice and dice risk creating virtually any payment stream with any risk characteristics that a person wants. These financial engineers did not just stop at pooling mortgages. Among other things, they took a variety of mortgage-backed securities and recombined them into new pools. These products come under the general classification of “collateralized debt obligations” or CDOs. CDOs are commonly constructed from not only home mortgages, but also things like credit card debt and student loans. They are then cut up into tranches with different credit ratings – the AAA –rated, or senior tranches are paid first; then there might be a BBB-rated tranche paid, and eventually what is called the “equity” tranche that is paid last (and suffers the first default).
Ratings play an important role in all of this. The creation of structured financial products relies on the ratings agencies – Moody’s, Standard and Poors, and Fitch – to give their blessing to what is being sold. Without a AAA rating, the senior tranches of CDOs would command lower prices and might not be worth selling. These complex securities were extremely difficult to understand, and consequently hard to price. To recap, by the beginning of 2007:

(a) Home prices were at unprecedented levels;
(b) Home owners had more leverage than ever before;
(c) Mortgage quality had declined substantially; and
(d) Asset-backed securitizations had spread well beyond the GSEs. This sets the stage for the crisis.

The Crisis Hits: A complete chronology of the crisis might start in February 2007 when several large subprime mortgage lenders started to report losses and include a description of how spreads between risky and risk-free bonds "credit spreads" began widening in July. But the real trigger came on Thursday August 9, the day that the large French bank BNP Paribas temporarily halted redemptions from three of its funds that held assets backed by U.S. subprime mortgage debt. Another symptom of the crisis comes from looking at the average spread between US government agency securities – those issued by Fannie Mae, Freddie Mac and the like – and US Treasury’s of equivalent maturity. Normally, these securities are normally viewed as only very slightly more risky and less liquid than Treasury issues themselves. There was a flight to quality in which people shunned anything but US Treasury securities themselves.

Soon after the crisis started, it became clear that everyone, banks included, were having trouble valuing a broad range of assets. This is exactly what one expects to see in a crisis, and it has important consequences. Not knowing the value of what was on their own balance sheets, bankers were unsure of their own lending capacity. Adding to the problem is that increased volatility in markets drove up conventional measures of risk, forcing banks to reduce the overall size of their balance sheets, all else equal. Together, these led to a vastly reduced level of term lending. Looking at all of this, a picture of the crisis emerges in which opaque, difficult to value assets cannot be used as collateral to back either commercial paper issuance or lending. As a result, it became
impossible for some financial intermediaries to finance themselves through what had been accepted channels. Those that had issued commercial paper into financial markets could not; and those that had borrowed from their fellow financial intermediaries, could not either. No one knew what securities were worth, so there was no way to establish the value of collateral or the creditworthiness of borrower. Add to that the fact that banks did not want to lend because of the risk of hitting the constraint imposed by the regulatory capital requirement, and we have a severe financial crisis.

The sub-prime crisis arose because the relationship between lender and borrower was breached as the mortgage originators packaged loans with diverse risks and off-loaded them to others. In earlier days, when this was not easy, the mortgage lender had to make judgements about the borrower’s capacity over the period of the loan. But once this off-loading was facilitated by securitization (the packaging of individual loan transactions into a tradable financial instrument), they could decide simply on the basis of the immediate profit that they made on the transaction and leave someone else to worry about future repayment capacity. Securitization was facilitated by rating agencies that started rating intermediary financial assets. When a rating agency rates default risk for a corporation, it takes into account the real risks of business conditions changing or managerial weaknesses. But when it rates intermediary instruments, where the primary risk is hidden behind layers of borrowing and lending, it has little to go by other than the “reputation” of the issuer. Rating agencies clearly did not get it right as the bloodbath amongst the CDO holders suggests.

All the players in the landscape of American finance are responsible for the present situation in different degrees. They are:

Financial innovators. Their ideas provided cheap, easy credit, and helped stoke the global economic boom of 2003-08. Securitisation of mortgages provided an avalanche of capital for banks and mortgage companies to lend afresh. Unfortunately the new instruments were so complex that not even bankers realized their full risks. CDOs smuggled BBB mortgages into AAA securities, leaving investors with huge quantities of down-rated paper when the housing bubble burst. Financial innovators created credit default swaps (CDSs), which insured bonds against default. CDS issues swelled to a mind-boggling $60 trillion. When markets fell and defaults widened, those holding CDSs faced disaster.
Regulators. All major countries had regulators for banking, insurance and financial/stock markets. These were asleep at the wheel. No insurance regulator sought to check the runaway growth of the CDS market, or impose normal regulatory checks like capital adequacy. No financial regulator saw or checked the inherent risks in complex derivatives.

Banks and mortgage lenders. Instead of keeping mortgages on their own books, lenders packaged these into securities and sold them. So, they no longer had incentives to thoroughly check the creditworthiness of borrowers. Lending norms were constantly eased. Ultimately, banks were giving loans to people with no verification of income, jobs or assets. Some banks offered teaser loans – low starting interest rates, which reset at much high levels in later years – to lure unsuspecting borrowers.

Investment banks. Once, these institutions provided financial services such as underwriting, wealth management, and assistance with IPOs and mergers and acquisition. But more recently they began using borrowed money – with leverage of up to 30 times – to trade on their own account. Deservedly, all five top investment banks have disappeared. Lehman Brothers is bust, Bear Sterns and Merrill Lynch have been acquired by banks, and Morgan Stanley and Goldman Sachs have been converted into regular banks.

Rating agencies. Moody’s and Standard and Poor’s were not tough or alert enough to spot the rise in risk as leverage skyrocketed. They allowed BBB mortgages to be laundered into AAA mortgages through CDOs (see Figure 1)

The absence of regulation in some areas of finance and the excessive zeal with which others were deregulated did contribute to the eruption of the crisis. However, the roots of the turmoil go deeper and lie in the power that finance capital has come to acquire.
Structured finance instruments

Securitisations: Creation of Asset-Backed Securities (ABS)
- Short-term ABS: Asset-Backed Commercial Paper (ABCP)
  - Residential Mortgage-Backed Securities (RMBS)
    - Subprime
    - Prime
  - Commercial Mortgage-Backed Securities (CMBS)
- (Longer) term ABS (in a broad sense)
  - Mortgage-Backed Securities (MBS)
- ABS (in a narrow sense)
  - Credit card receivables ABS
  - Car loans ABS
  - Student loans ABS
  - Other ABS

“Pure” credit derivatives
- Credit default swaps (CDS)
- Other credit risk transfer instruments

Cash flow Collateralized Debt Obligations (CDO)
- Synthetic Collateralized Debt Obligations (CDO)

Resecuritization:
- Structured Collateralized Debt Obligations:
  - CDOs based on ABS in a narrow sense (ABS CDO)
  - Collateralized Mortgage Obligations (CMO), which is a CDO based on MBS
  - CDOs based on CDOs (CDO²)

Source: Criado, Sarai & Adrian van Rixtel (2008)
II: Factors responsible for crisis

The reasons for the sub-prime mortgage market failure of August 2007 seem to be in-built in the structure of the sub-prime mortgage market and market innovations. Similarly, the use of complex and non-transparent financial products such as collateralized debt obligations (CDOs) further aggravated the information asymmetries. The complexity and lack of knowledge about the reaction functions of such products during the crisis led hedge funds and institutional investors to withdraw liquidity from such markets. In a nutshell, the sub-prime mortgage market was throughout saddled with information asymmetries and negative externalities – the primary enabling criteria for state interference – which made the market unsustainable from within. Investment bankers have been blamed for all the excesses and errors of omission and commission.

The legendary Warren Buffet, in his letter to the shareholders in 2003, has described derivatives as ‘financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal’. While those fears appear to have come true in the global derivative arena and factors responsible for this are:

1. At first sight the finger does seem to point to the speculators. Speculators have long been blamed for volatile commodity prices and financiers for distorting prices. That the flood of money from pension funds, hedge funds and the like that has poured into commodity futures in recent years is distorting spot markets for physical commodities. Rather than helping producers and consumers to hedge their risks and set commodity prices more transparently and efficiently, futures markets have become dominated by hedge funds, sovereign wealth funds and so on seeking to diversify their portfolios. Speculators are distorting commodity prices rather than improving price discovery. Since commodities have become a popular alternative asset class for investors, on closer inspection, however, the speculation theory stands up less well and the case that speculators drove the commodity boom is weak. “World’s politicians, rather than point the finger at speculators, might look first at their own policies – and then at the mistakes of their central bankers “(The Economist, October 11, 2008).

2. Leftists claim that the global financial crisis was caused by reckless deregulation and greed. Rightists blame half-baked financial regulations and perverse incentives.
Swaminathan S. Anklesaria Aiyar (2008) is of the view that actually, the financial sector is deeply regulated, with major roles for both the state and markets. *It was not one or the other that failed but the combination.* Consumers, corporations, banks, politicians, the media – indeed everybody – was happy when housing prices boomed, stock markets boomed, and credit became cheap and easily available. Bubbles in all these areas grew in full public view. They were highlighted by analysts, but nobody wanted to stop the lovely party. Everybody liked easy money and rising asset prices. This trumped prudence across countries. *States, institutions, markets and everybody else was guilty.* When everybody loves bubbles, they are both irresistible and inevitable.

3. The criticisms are most often directed at the Fed. This is because America is the world’s biggest economy; because its interest-rate decisions affect prices across the world; because the Fed has shown a penchant for cheap money in recent years; and because America’s mortgage mess fed the financial crisis. *The Fed carries a disproportionately large weight among America’s patchwork of financial regulators.* *Supervision cannot work miracles, but the Fed clearly could have done better.* The Fed’s asymmetric approach towards monetary policy is equally responsible. By ignoring bubbles when they were inflating, whether in share prices or house prices, but slashing interest rates when those same bubbles burst, America’s central bankers have run a dangerously biased monetary policy – one that has *fuelled risk taking and credit excesses.* The Fed stands accused of three main errors:

(a) *To loosen the monetary reins too much for too long in the aftermath of the 2001 recession.* Fearing Japan-style deflation in 2002 and 2003, the Fed cut the federal funds rate to 1 per cent and left it there for a year;

(b) *To tighten too timidly between 2004 and 2006; and*

(c) *To lower the funds rate back to 2 per cent earlier 2008 in an effort to use monetary policy to alleviate financial panic.* The first two failures fuelled the housing bubble. The third aggravated the commodity-price surge.

4. Without doubt, modern finance has been found seriously wanting. Some banks seemed to assume that markets would be constantly liquid. *Risky behaviour garnered huge rewards; caution was punished.* Even the best bankers took crazy risks. On the last day of the last session of a lame duck 106th session of the US Congress in 2000, the
last agenda item introduced the euphemistically titled: ‘Commodity Futures Modernisation Act’, which removed the various capital constraints on lending and took away derivatives and CDS from the purview of all legislations. Further, they also ensured that no state laws could interfere in the functioning of the CDS, even if it was already prosecutable under any state law. Various Wall Street giants created more and more sophisticated models to try and justify lending to those who were inherently not creditworthy, it started a race to the bottom. And most of this was leverage through derivative positions taken to fund positions taken in fancy structured derivatives. The result is that the systemic leverage shot up and now the process of deleveraging is going to be long and painful. In 2000 when Congress introduced the new legislation, the size of the credit default swaps market was $100 billion. It stands at a staggering $60 trillion in 2008! Lack of regulation encouraged this gambling. Financial innovation in derivatives soared ahead of the rule-setters.

5. Yet the failures of modern finance cannot be blamed on deregulation alone. After all, the American mortgage market is one of the most regulated parts of finance anywhere: dominated by two government sponsored agencies, Fannie Mae and Freddie Mac, and guided by congressional schemes to increase home-ownership. The macroeconomic condition that set up the crisis stemmed in part from policy choices: the Federal Reserve ignored the housing bubble and kept short-term interest rates too low for too long. It would be a mistake to blame today’s mess only, or even mainly, on modern finance and “free-market fundamentalism”. Governments bear direct responsibility for some of today’s troubles. Misguided subsidies, on everything from biofuels to mortgage interest, have distorted markets. Loose monetary policy helped to inflate a global credit bubble. The emerging world’s determination to accumulate reserves, especially China’s decision to hold down its exchange rate, sent a wash of capital into America.

6. The trouble is that because of its large current account deficit America is heavily reliant on foreign funding. It has the advantage that the dollar is the world’s reserve currency, and as the financial turmoil has spread the dollar has strengthened. But today’s crisis is also testing many of the foundations on which foreigners’ faith in the dollar is
based, such as limited government and stable capital markets. If foreigners ever flee the dollar, America will face the twin nightmares that haunt emerging countries in a financial collapse: *simultaneous banking and currency crises*. America’s debts, unlike those in many emerging economies, are denominated in its own currency, but a collapse of the dollar would still be a catastrophe.

7. India’s Prime Minister Dr. Manmohan Singh reminded the leaders of 44 key Asian and European nations summit of Keynes’ dictum that speculators did no harm as bubbles on a steady stream of enterprise. *But the position is serious when enterprise becomes the bubble on a whirlpool of speculation.* When the capital development of a country becomes a byproduct of the activities of a casino, the job is likely to be ill-done. He emphasised three factors for the international financial crisis, *on the failure of:* (i) regulation and supervision in major developed countries, (ii) risk management in private financial institutions, and (iii) the market discipline mechanism. “The sad truth is that in this age of globalisation we have a global economy of sorts but it is not supported by a global polity to provide effective governance”.

The following seven triggers (some interlinked) seem to summarise the immoral pillars that shoulder responsibility for the crisis (*Rajendra Chitale* (2008)): (i) *Reckless sub-prime lending*; (ii) *Originate, securitise and service model, also called the origination and distribution (O&D) model*; (iii) *Proliferating credit derivatives market without central counter-party*; (iv) *Excessive leverage, permissive regulatory framework*; (v) *US housing market downturn*; (vi) *Valuation challenges of complex derivative products*; and (vii) *Low probability extreme events – Underestimation Verus Panic*.

It is futile to look for the single cause without which the financial system would not have blown up in our faces. A comforting thought is that this was a case of a “perfect storm”, a rare failure that required a large number of stars to be in alignment simultaneously. So what will the post-mortem on Wall Street show? *That it was a case of suicide? Murder? Accidental death? Or was it a rare instance of generalized organ failure?* We will likely never know. The regulations and precautions that lawmakers will enact to prevent its recurrence will therefore necessarily remain blunt and of uncertain effectiveness (*Dani Rodrik*, 2008).
III: Impact of global turmoil and India

The crisis had a number of consequences in the developed countries. It made households whose homes were now worth much less more cautious in their spending and borrowing behaviour, resulting in a collapse of consumption spending. It made banks and financial institutions hit by default more cautious in their lending, resulting in a credit crunch that bankrupted businesses. It resulted in a collapse in the value of the assets held by banks and financial institutions, pushing them into insolvency. All this resulted in a huge pull out of capital from the emerging markets: Net private flows of capital to developing countries are projected to decline to $530 billion in 2009, from $1 trillion in 2007. The effects this had on credit and demand combined with a sharp fall in exports, to transmit the recession to developing countries. All of these effects soon translated into a collapse of demand and a crisis in the real economy with falling output and rising unemployment. This is only worsening the financial crisis even further.

It was first described as the subprime crisis, then it became known as the credit crisis, and after that the financial crisis. Now it is time for a new nomenclature: the *global economic crisis*. The bad news is no longer restricted to dealing rooms and stock tickers. The real economy of output and jobs is looking shaky in many parts of the world. Japan has already been spooked by expectations of bad corporate results. The macro data, too, is glum. China has said its industrial output is growing at its slowest rate in seven years. Germany is officially in recession. The US and the UK are not far behind. World trade is expected to shrink for the first time in 27 years. The lives and livelihoods of ordinary citizens are now at stake.

The global meltdown is deeply entrenched and no country is being spared the fallout. As Haberler said in *Prosperity and Depression* (1937), the seeds of a depression are laid in the preceding boom; thus, the present melt-down is the retribution for the sins of the past. Paul Krugman calls it a “*nasty recession*” which is perhaps a euphemism for “*Depression*”. The “D” word is still taboo, but it would be prudent to avoid facile solutions (*S.S. Tarapore*, 2008).

What will be the long-term effect of this mess on the global economy? Some of the possible impact will be:
(1) Even in the absence of a calamity, ‘the direction of globalisation will change’. The freeing of trade and capital flows and the deregulation of domestic industry and finance have both spurred globalisation and come to symbolise it. *Global integration, in large part, has been about the triumph of markets over governments.* That process is now being reversed in three important ways:

(a) Western finance will be re-regulated. Rules on capital will be overhauled to reduce leverage and enhance the system’s resilience. America’s labyrinth of overlapping regulators will be reordered. How much control will be imposed will depend less on ideology than on the severity of the economic downturn. The Depression, in contrast, not only refashioned the structure of American finance but brought regulation to whole swathes of the economy.

(b) The balance between state and market is changing in areas other than finance. The sub-prime crisis has brought to the fore the age-old debate between market and state regulation. Should the sub-prime crisis be seen as a case of complete market failure or failure of regulatory oversight? Or are both responsible?

(c) Now economic liberty is under attack and capitalism, the system which embodies it, is at bay. Capitalism has always engendered crises, and always will. The world should use the latest one, to learn how to manage it better. In the short term defending capitalism means, paradoxically, state intervention. If confidence and credit continue to dry up, a near-certain recession will become a depression, a calamity for everybody. Even if it staves off disaster, the bail-out will cause huge problems. It creates moral hazard: such a visible safety net encourages risky behaviour. It may also politicize lending. Governments will need to minimize these risks. But governments need to avoid populist gestures. Given this, it is inevitable that the line between governments and markets will in the short term move towards the former. The public sector and its debt will take up a bigger portion of the economy in many countries. But in the longer term a lot depends on how blame for this catastrophe is allocated. Finance needs regulation. It has always been prone to panics, crashes and bubbles. Because the rest of the economy cannot work without it, governments have always been heavily involved.

(2) Heavy regulation would not inoculate the world against future crises. Two of the worst in recent times, in Japan and South Korea, occurred in highly rule-bound systems. *What’s needed is not more government but better government. In some areas, that means more rules.* Capital requirements need to be revamped so that banks accumulate more reserves during the good times. More often it simply means different rules: central
banks need to take asset prices more into account in their decisions. But there are plenty of examples where regulation could be counter-productive: a permanent ban on short-selling, for instance, would make markets more volatile. Sadly another lesson of history is that in politics economic reason does not always prevail. Capitalism is at bay, but those who believe in it must fight for it. For all its flaws, it is the best economic system man has invented yet (The Economist, October 18, 2008).

But the journey to stability can be eased and shortened through state assistance, which has actually taken place. Hence, injection of liquidity by central banks and bailing out of certain banks and non-banks should not be construed as breaking down of market system and usurpation of financial system by the state. It is an attempt, a short-term measure by the state to restore long-term investor confidence in the financial system that a financial crisis generally erodes. In fact, given the increasing share of the financial sector in domestic GDP and the rising integration between financial markets worldwide, restoration of financial stability has itself become a core fiduciary sector activity, just like maintenance of law and order and public infrastructure. Ultimately, the question is not about a trade-off between the state and the market but about a delicate co-ordination between the two institutions to enable smooth functioning of the financial market system. Governments across the emerging world extended their reach, increasing subsidies, fixing prices, banning exports of key commodities and, in India’s case, restricting futures trading. Concern about food security, particularly in India and China, was one of the main reasons why the Doha round of trade negotiations collapsed this summer (Indrani Manna, 2008).

(3) Further, America is losing economic clout and intellectual authority. “Globally the United States will not enjoy the hegemonic position it has occupied until now… America’s ability to shape the world through trade pacts and the IMF (International Monetary Fund) and World Bank will be diminished, as will (its) financial resources. And in many parts of the world, American ideas, advice and even aid will be less welcome than they are now”. Every single indicator of the US economy relating to unemployment, job losses, retail sales and home values, implies that the worst may not be over. No one denies that the ongoing recession can be compared only to the Great
Depression of the 1930s. Just as emerging economies are shaping the direction of global trade, so they will increasingly shape the future of finance. That is particularly true of capital-rich creditor countries such as China. Deleveraging in Western economies will be less painful if savings rich Asian countries and oil-exporters inject more capital. Influence will increase along with economic heft.

What was a recession in 2008 could turn into a depression in 2009. Looking back, 2008 was a year when the recession unfolded. The recession in the US, reports indicate, is not recent but about a year old and ongoing. The Business Cycle Dating Committee of the National Bureau of Economic Research, which adopts a more comprehensive set of measures to decide whether or not the economy has entered a recessionary phase, has recently announced that the recession in the US economy had begun as early as December 2007. That already makes the recession 12 months long, which has been the average length of recessions during the post-war period.

The question that is being asked is whether this recession will be longer, wider and deeper than previous economic downturns that took place a generation ago. Frankly, no one knows the answer. There is much pessimism on how long this recession would last as well. Thus, growth in developing countries as a whole is expected to fall from 6.3 per cent in 2008 to 4.5 per cent in 2009, only to recover to 6.1 per cent in 2010. This is mainly due to China and India without which the figures are a more disappointing. In fact, expectations now are generally that developing countries would grow at relatively high rates in normal times.

Impact on Indian economy: Prime Minister Manmohan Singh had stated as early as October 24, 2008 that “we cannot remain totally unaffected…our stock markets and the exchange rate of the rupee are under pressure due to capital outflow of foreign institutional investors”. He had further admitted the rate of growth in India would slow down because of the international ambience. Commerce minister Kamal Nath is on record that India’s exports have declined because of the economic crisis faced by the developed capitalist countries. The Indian economy is now a relatively open economy, despite the capital account not being fully open. While encouraging foreign investment flows, especially direct investment inflows, a more cautious, nuanced approach has been
adopted in regard to debt flows. Debt flows in the form of external commercial borrowings are subject to ceilings and some end-use restrictions, which are modulated from time to time taking into account evolving macroeconomic and monetary conditions. Similarly, portfolio investment in government securities and corporate bonds are also subject to macro ceilings, which are also modulated from time to time. Thus, prudential policies have attempted to prevent excessive recourse to foreign borrowings and dollarisation of the economy. In regard to capital outflows, the policy framework has been progressively liberalised to enable the non-financial corporate sector to invest abroad and to acquire companies in the overseas market. Resident individuals are also permitted outflows subject to reasonable limits. In brief, the Indian approach has focused on gradual, phased and calibrated opening of the domestic financial and external sectors, taking into cognizance reforms in the other sectors of the economy. Coupled with ample forex reserves coverage and the growing underlying strength of the Indian economy reduce the susceptibility of the Indian economy to global turbulence.

In India, the adverse effects have so far been mainly in the equity markets because of reversal of portfolio equity flows, and the concomitant effects on the domestic forex market and liquidity conditions. The macro effects have so far been muted due to the overall strength of domestic demand, the healthy balance sheets of the Indian corporate sector and the predominant domestic financing of investment. The main impact of the global financial turmoil in India has emanated from the significant change experienced in the capital account. Portfolio investments by foreign institutional investors (FIIs) witnessed a net outflow. The combined impact of the reversal of portfolio equity flows, the reduced availability of international capital both debt and equity, the perceived increase in the price of equity with lower equity valuations, and pressure on the exchange rate, growth in the Indian corporate sector is likely to feel some impact of the global financial turmoil.

There has been significant pressure on the Indian exchange rate in recent months. The financial crisis in the advanced economies and the likely slowdown in these economies could have some impact on the IT sector. About 15 per cent to 18 per cent of the business coming to Indian outsourcers includes projects from banking, insurance, and
the financial services sector which is now uncertain. The country’s diamond-capital, Surat, where the economic melt-down in America has had a direct, lethal impact. The processing units there, and adjoining areas in Maharashtra, are likely to terminate the services of 125,000 workers, after giving them a much-extended Diwali holiday. There are just no orders to execute, indeed unsold items are being returned as people in the US struggle to retain their jobs and homes. Experts see no sparkle in business prospects until the US economy revives. That could take quite a few years. Another example of an Indian industry failing to grow beyond servicing a specific market?

“India has by-and-large been spared of global financial contagion due to the sub-prime turmoil for a variety of reasons. India’s growth process has been largely domestic demand driven and its reliance on foreign savings has remained around 1.5 per cent in recent period. It also has a very comfortable level of forex reserves. The credit derivatives market is in an embryonic stage; the originate-to-distribute model in India is not comparable to the ones prevailing in advanced markets; there are restrictions on investments by residents in such products issued abroad; and regulatory guidelines on securitisation do not permit immediate profit recognition. Financial stability in India has been achieved through perseverance of prudential policies which prevent institutions from excessive risk taking, and financial markets from becoming extremely volatile and turbulent” [Rakesh Mohan, 2008].

India, with its strong internal drivers for growth, may escape the worst consequences of the global financial crisis. Indian banks have very limited exposure to the US mortgage market, directly or through derivatives, and to the failed and stressed financial institutions. The equity and the forex markets provide the channels through which the global crisis can spread to the Indian system. The other three segments of the financial markets – money, debt and credit markets – could be impacted indirectly. Risk aversion, deleveraging and frozen money markets have not only raised the cost of funds for Indian corporates but also its availability in the international markets. This will mean additional demand for domestic bank credit in the near term. Reduced investor interest in emerging economies could impact capital flows significantly. The impending recession will also impact on Indian exports.
IV: Policy initiatives

The outbreak of the Great Depression saw a Democrat being ushered into office. Franklin Roosevelt was the 32nd US President. His ‘New Deal’ changed the thoughts shaping world development. As the US prepares for its 44th President, another Democrat is elected. Is another ‘New’ Deal in the offing? Policy makers are under pressure to take note of various remedial measures:

1. According to Ross Levine, an economist at Brown University, growth is boosted not because savings rise but because capital is allocated more efficiently, improving productivity. The most promising avenue of reform is to go directly after the chief villain: excessive and excessively procyclical leverage. That is why regulators are now rethinking the rules on banks’ capital ratios to encourage greater prudence during booms and cushion deleveraging during a bust. It also makes sense for financial supervisors to look beyond individual firms, to the stability of the financial system as a whole – and not just at the national level.

2. Governments should stop subsidizing leveraging. America, for example, should no longer allow homeowners to deduct mortgage interest payments from their taxable income. And governments should stop giving preferential treatment to corporate borrowing as well. The bigger point is that governments should not view financial reform in a vacuum. Modern finance arose in an environment created by regulators and politicians.

3. America’s government made its most dramatic interventions in financial markets since the 1930s. The Federal Reserve and the Treasury between them nationalized the country’s two mortgage giants, Fannie Mae and Freddie Mac; took over AIG, the world’s largest insurance company; in effect extended government deposit insurance to $3.4 trillion in money-market funds; temporarily banned short-selling in over 900 mostly financial stocks; and, most dramatic of all, pledged to take up to $700 billion of toxic mortgage-related assets on to its books. The Fed and the Treasury were determined to prevent the kind of banking catastrophe that precipitated the Depression.

4. The immediate task facing the world was the declogging of credit markets the world over. This, in turn, required coordinated global action to restore confidence in
these markets. In terms of concrete proposals let us consider: (i) the International Monetary Fund and World Bank had to provide assistance to vulnerable countries “with less service conditionalities and greater flexibility”; (ii) countries with strong foreign exchange positions could make additional resources available to the international financial institutions; (iii) as a counter-cyclical device, increased infrastructure investments in developing countries, if backed by increased resources flows from multilateral financial institutions, can act as a powerful stabilizer; and (iv) the IMF should consider creating liquidity through a fresh allocation of Special Drawing Rights (SDRs) in favour of multilateral development finance institutions.

5. The current search for better financial regulation and a global surveillance mechanism of checks and balances is a welcome step. But we must reach beyond the financial system. *This is not simply a crisis on Wall Street; it is a crisis on all streets.* We need an economic rescue plan for working people and the real economy, with rules and policies that deliver decent work and productive enterprises. *We must better link productivity to salaries and growth to employment. People must have trust that the economy is working for them.* In order to keep economies and societies open, relevant international organisations must come together to develop a new multilateral framework for a fair and sustainable globalisation.

6. Textbook dicta against “moral hazard” and central bank lending to non-banks have been ignored. In the face of financial meltdown, pragmatism has been the order of the day. Two principles seem to have guided these policies; *let market punish shareholders of the failing institutions, but bail out those posing high systemic risk.* Second, the speed and apparent effectiveness of coordination between the Treasury, Fed, SEC and others has been impressive. *The recent events also point to the need for far greater expertise and specialization on the part of the regulators: they need to be more knowledgeable, than the institutions they regulate.* In this context, UK’s Prime Minister Gordon Brown is to be commended for his leadership in rallying his counterparts to consider reform of the international economic institutions. Brown is right to emphasise *the importance of an early-warning system for financial crises.* He is also spot on in his call for standard rules for transparency of banks, and standard rules for global supervision
and write-offs that are similar for all countries. Recognizing the importance of international coordination to achieve these goals, he has issued a call for the establishment of a ‘New Bretton Woods’.

7. In trying to balance innovation and caution, policymakers might be aided by a few key principles (Khore Hoe Ee and Kee Ruixiong, 2008):

(a) Credit standards must be maintained at all times but especially in times of abundant liquidity and strong economic growth.

(b) Transparency is critical for financial supervision and market discipline to be effective.

(c) Financial linkages must be understood. The subprime crisis and credit turmoil illustrate the increasing complexity and connectivity of financial markets and products. Economic fundamentals are essential. Weak economic fundamentals, such as highly leveraged corporate balance sheets and large current account deficits, led to a loss of confidence in 1997. Strong economic fundamentals in 2007-08 have enabled Asia to remain relatively resilient in the current turmoil.

Economy is going to be in difficulties. The US is going to get worse before it gets better. We need a reform of the global reserve system. That we need to create a multilateral reserve currency. Keynes talked about this, since the dollar is not a stable store of value. And that’s why in the new world of globalization it makes so much sense to have a global currency. “The task now is not to make a completely new system, which is appealing politically, but it isn’t what the doctor ordered”. According to Jacques Polak today’s crisis will require finding consensus on global regulations and supervision of financial markets, as well as giving emerging market economies a bigger stake in IMF and the World Bank. “It should distribute the work to think about these controls of regulatory issues that are so important”. Then the other matter is what do we do about giving a proper role for India, Russia and China?”

The rapid slowdown of the global economy consequent on the intensification of the financial crisis since has posed extraordinary challenges for economic policy-makers everywhere. Fiscal measures to stimulate the slowing economies are the flavour of the season. United Nations economists have called for deep reforms of the global financial system to prevent a recurrence of the current crisis, including stronger regulation of
financial institutions, adequate international liquidity provisioning, an overhaul of the international reserve system and a more inclusive global economic governance. They wanted coordinated global economic stimulus packages, linked with sustainable development measures, beyond liquidity and recapitalization steps already taken, to counter the world-wide economic meltdown. The UN economists recommend a broad range of steps including: (i) Fundamental revision of the governance structure and functions of the International Monetary Fund (IMF) and the World Bank for enhanced international policy coordination and more inclusive participation of major developing countries; (ii) Fundamental reforms of existing systems of financial regulation and supervision to stem past excesses; (iii) Reform of the present international reserve system, away from the almost exclusive reliance on the US dollar and towards a multilaterally backed multi-currency system; (iv) Reforms of liquidity provisioning and compensatory financing mechanisms backed, among other things, by better multilateral and regional pooling of national foreign exchange reserves, and (v) avoiding onerous policy conditionality.

“Although developed market economies shaped the present course of events, the fallout is global. Redefining the role of the state and multilateral economic institutions is the most critical corrective needed if the world is to emerge more stable. Also apparent from the massive bailout packages across the world is the state’s ability to muster economic strength and come to the rescue whenever warranted. This economic agility will be more productive if shown on a continual basis, rather than in spurts in times of crisis. While moving towards a more active role, the state should check itself from becoming an absolutist regulator in a way that hampers growth. Multilateral economic institutions need to re-evaluate their working in the light of the new economic difficulties as conditional assistance, often set close to free-market principles, distorts the ideals of equitable economic growth. The world will be richer from an ideal mean that balances market-economics and state-supported, inclusive economic growth” (The Hindu, December 1, 2008).

The roots of the crisis do not lie only within the financial system and that avoiding a future breakdown will require not only better financial regulation and risk-
management but also global macroeconomic cooperation. A lot more needs to be learned about global imbalances. “I am not one who says just reforms the IMF and let them deal with imbalances. You have to have sovereign nations…understand the system.” (Henry Paulson, ex-US Treasury Secretary)

V: Lessons learnt

The present global financial crisis demands an “intelligent” response but the measures taken so far to tackle the turmoil are not good enough (Nobel laureate Amartya Sen). According to Noble laureate Joseph Stiglitz globalisation had failed primarily because it was based on a flawed economic ideology. Globalization requires a larger role for the state in providing social protection… Making out a case for a global regulatory authority, he said there was a need to design a new global system to develop immunity or at least limit the consequences of failure. Failure was contagious in the present brand of globalisation as a result of which the U.S. was exporting its recession to the rest of the world. While there was recognition of the importance of a coordinated global fiscal and monetary response, the required reforms went deeper, and include creating a new global reserve system and a new global financial regulatory authority. And he underlined globalisation had to ensure the maximum good for the maximum numbers and not just the privileged few who got richer under the existing regime. About bailout packages, he likened it to giving mass blood transfusion to a patient who was haemorrhaging from internal bleeding. Worse, he added, there was still no change in the mindset. As for American banks’ refrain on self-regulation, Prof. Stiglitz said: “Self-regulation is an oxymoron. Banks said they knew how to manage risk and needed no regulation. What they knew was how to create risk. There is so much of blame to go around that they can all lay claim to it.”

Crisis is also a time to introspect on what went wrong. There has been a breakdown of trust in inter-bank and inter-institutional lending. There is the problem of contagion – across markets, across institutions and across countries, the crisis spreading to a newer part of the world or to a newer institution. This according to D. Subrao (2008), is an unprecedented crisis and one should draw lessons from the crisis to prevent its recurrence. He focuses on the following lessons:
(i) Financial supervision has drawn widespread critique. The stereotype perception is that risk management and supervisory practices lagged behind financial innovations and emerging new business models. The present crisis underscores the need for regulation staying ahead of the curve, and for continually upgrading the skills and instruments for financial regulation and supervision. However, there is a distinct risk that in trying to stay ahead of innovation, regulation may get so stringent that it stifles innovation. This is a risk one must guard against;

(ii) The inter-agency coordination. The origins of the current crisis can be traced to both the build up of macro-global imbalances as well as the mispricing of risks in the financial system, which in turn, was encouraged by prolonged easy monetary policy and excess liquidity. The respective roles of central banks, regulators, supervisors, and fiscal authorities regarding financial stability needs to be revisited. Central banks should play a central role in maintaining financial stability and should have the necessary informational base to do so effectively. This implies close co-operation among all the agencies entrusted with the risk of maintaining financial stability;

(iii) The large scale bail-out packages will have implications for the regulatory architecture of the financial system and for the fisc of countries. Besides, the rescue packages offered by one country could have ramifications for other countries, even when they are far from the epicenter of the crisis. A relevant issue in this context is the efficacy and coverage of deposit insurance. What should deposit insurance cover? How are small deposits to be defined? Apart from small deposits, should in a crisis situation like this, consider extending guarantees to the money markets and mutual funds?

(iv) The unfolding crisis has revealed the weaknesses of structured products and derivatives in the credit markets. This throws up questions about the appropriateness of various structured products like credit derivatives and their financial stability implications. Are exchange traded derivatives superior to over the counter (OTC) derivatives? Do there is need to focus on
prescribing and instituting appropriate clearing and settlement practices even for OTC products? In what way can eliminate the shortcomings of the “originate-to-distribute” model?

(v) The near meltdown of the US financial sector is seen by some as evidence that markets and competition do not work. This is clearly the wrong lesson to draw. The right lesson to draw is that markets and institutions do succumb occasionally to excesses, which is why regulators have to be vigilant, constantly finding the right balance between attenuating risk-taking and inhibiting growth.

The great lesson of the past year crisis is how little we understand and can control the economy. This ignorance has bred today’s insecurity, which in turn is now a governing reality of the crisis. Who then thought that the federal government would rescue Citigroup or the insurance giant AIG; or that the Federal Reserve, striving to prevent a financial collapse, would pump out more than $1 trillion in new credit; or that Congress would allocate $700 billion to the Treasury for the same purpose; or that General Motors would flirt with bankruptcy? Many fashionable theories have crashed. It was once believed that the crisis of “subprime” mortgages – loans to weaker borrowers – would be limited, because these loans represent only 12 per cent of all home mortgages. Subprime mortgage losses triggered a full-blown financial crisis. Confidence evaporated, because subprime loans were embedded in complex securities whose values and ownership were hard to determine. It was once believed that the rest of the world would “decouple” from the United States. The crisis has gone global; economic growth in 2009 will be the lowest since at least 1980. Even China has slowed; The crisis has spread through two channels: reduced money flows and reduced trade. Global financial markets are interconnected. So much that was unexpected has happened that the boom and bust’s origins are obscured. “In the current crisis, as in past crises, we can learn much, and policy in the future will be informed by these lessons” (Alan Greenspan, 2008).

VI: Asian crisis and Subprime crisis

Securitization, subprime mortgages, and collateralized debt obligations (CDOs) seem radically different from the currency pegs, excessive corporate borrowing, and
foreign debt that dominated the Asian financial crisis. But the underlying causes of both episodes are similar. Each was triggered by investor panic in the face of uncertainty over the security and valuation of assets, and each featured a liquidity run and rising insolvency in the banking system. How can policymakers better identify pre-crisis warning signals? And how can they pinpoint the recurring problems that, if tackled during tranquil times, could mitigate the risk and cushion the impact of future crises? A common backdrop to both crises was abundant liquidity and excessive, imprudent credit expansion (Khor Hoe Ee & Kee Rui Xiong, 2008).

Similarly, the current crisis was preceded by massive flows of capital into the United States to finance its current account deficits. That abundant liquidity was intermediated by financial institutions into consumer credit and mortgages, which were converted into mortgage-backed securities (MBSs) and CDOs. The search for yield fueled demand for these structured products by investors, many of whom based their decisions solely on the strength of the AAA ratings afforded by credit rating agencies. There was also a search for yield by lenders, and the abundance of liquidity tended to lead to lax credit standards. In the Asian financial crisis, credit imprudence came in the form of connected lending to large corporate entities or to mega-projects and property developments that were of dubious commercial viability. In the subprime crisis, that search led to the proliferation of mortgage loans in the subprime category, the so-called ninja (no income, no job, and no assets) loans.

Another sign of trouble prior to both crises was the rapid increases in property asset prices. The result is a sudden pullback in financing and a crash. Such financial instability is apparent in both crises. Subprime mortgage growth, representing speculative and Ponzi borrowing, could have trapped the United States in a superficially virtuous but insidiously vicious housing price cycle. While house prices were rising, creditors felt safe lending on appreciating collateral, which in turn fed housing demand and prices.

According to Khor Ho Ee and Kee Rui Xiong (2008) “Asset market bubbles are notoriously hard to pin down while they are happening. It is also difficult to judge the point at which credit growth changes from being good to being excessive. Nevertheless,
the two crises seem to suggest that prolonged upswings in asset (especially property) prices and rapid credit growth should trigger enhanced surveillance efforts, as well as a search for possible market distortions. Alongside common symptoms, the subprime crisis and the Asian crisis exhibited common problems, which could be viewed as underlying illnesses. To begin with, the credit imprudence shown by lenders in both crises reflected the classic *principal-agent problem*. Lenders were seeking to maximize the fee income from securitization rather than the interest income from loans. *With little or no ownership of the underlying loans, credit standards dropped sharply*, leading to higher default rates when the property market turned down. There were also classic cases of *moral hazard*, because lenders and borrowers faced little if any risk from their activities encouraging the banks to lend without regard for the commercial viability of the projects. *The recurring problems of agency and moral hazard in all crises may be an indication that they are systemic. Nevertheless, it is the responsibility of policymakers to design systems and policies that minimize such risks and mitigate their impact.*

*What is striking is how different the policy response is now from the one of a decade ago.* In the subprime crisis, major central banks have intervened aggressively to provide liquidity to contain disruptions and contagion in financial markets. At the same time, the US Federal Reserve has cut interest rates substantially to ease monetary conditions, and the US Congress has approved a fiscal stimulus package. In the Asian crisis, monetary and fiscal policies were initially tightened to support exchange rates because of massive capital outflows and a run on foreign reserves, which contributed to a downward spiral in the real economy. Only after exchange rates had stabilized at a lower level did governments adopt more expansionary fiscal policies to support the real economies. During the Asian crisis, many governments took over non-performing loans and injected new capital into the banks, while the IMF topped up the depleted foreign reserves of the central banks. In the current crisis, the main recapitalization of banks has come through direct placements or through capital injections by sovereign wealth funds. Two notable exceptions were Northern Rock, which was nationalized by the UK government, and the Bear Stearns rescue, which exposed the US Federal Reserve to potential losses from Bear Stearns’ impaired assets. However, if the subprime crisis
worsens, governments will likely be forced to take a greater and more direct role in stabilizing the economy and the banking system.

VII: Conclusion

“To complete the chain from subprime loans to a financial crisis, several links have to be brought in: incorrect credit rating, holding of illiquid securities by leveraged institutions dependent on wholesale funds, flawed mark-to-market accounting and poor design of managerial incentives. *It is the securitisation of subprime loans, not subprime loans themselves, that explains why we have a crisis on the present scale*” (*T.T. Ram Mohan*, 2008).

The logic of a globally interdependent age demands that effective collective global interventions be made for finding solutions to the international financial crisis. The current economic problems are seen as overwhelmingly a financial crisis, when in fact there are major problems in the real economy that are dragging the economy into a serious recession. In other words, even if the problems in the financial sector are resolved, it would not prevent this recession from deepening. “*The world economy seems to have recognized what the ‘Summit on Financial Markets and the World Economy’ was all about: part showmanship, part international initiative and part rich world jockeying on how to tackle the global economic crisis*”. The proposal to convene a “Bretton Woods II” conference only raised expectations to unrealistic levels. Yet, a measure of credit must be given to the leaders of the G-20 for seeing to it that the communiqué goes beyond the generalities and diplomatic language. The communiqué has an “*Action Plan to Implement Principles for Reform*” which identifies seven areas of action in the governance of financial markets: (i) *transparency and accountability*, (ii) *regulatory regimes*, (iii) *prudential oversight*, (iv) *risk management*, (v) *integrity in financial markets*, (vi) *international cooperation*, and (vii) *international financial institutions*. What is unusual for such large summits is that the G-20 has drawn up a programme of action in each of these areas, broken up into an immediate agenda that is to be implemented before 31st March, 2009 and a medium-term list of items.

With global financial crisis expected to last for “several more quarters”, the International Monetary Fund has called for a large and timely fiscal stimulus with
targeted tax cuts, increased spending and even insurance cover from governments. Pointing out that action should be immediate and there should be a collective effort and that each country that has fiscal space should contribute. “The optimal fiscal package should be timely, large, lasting, diversified, contingent, collective, and sustainable: *timely*, because the need for action is immediate; *large*, because the current and expected decrease in private demand is exceptionally large; *collective*, since each country that has fiscal space should contribute; and sustainable, so as not to lead to a debt explosion and adverse reactions of financial markets.” Looking at the content of the fiscal package, in the current circumstances, spending increases, and targeted tax cuts and transfers, are likely to have the highest multipliers. General tax cuts or subsidies, either for consumers or for firms, are likely to have lower multipliers. IMF has asserted that to fight the current credit turmoil, there needs to be policy measures to repair the financial system and steps to increase demand. The current crisis calls for two main sets of policy measures. *First*, measures to repair the financial system. *Second*, measures to increase demand and restore confidence (*The Statesman*, December 31, 2008).
### Parallel paths

The 1997 Asian crisis and the current subprime crisis followed similar courses

<table>
<thead>
<tr>
<th>Path of crisis</th>
<th>Asian crisis</th>
<th>Subprime crisis</th>
</tr>
</thead>
</table>
| Credit expansion/ Abundant liquidity | • Capital inflows  
• Abundant liquidity  
• Easy credit | • Capital inflows  
• Abundant liquidity  
• Easy credit  
• Securitization of loans |
| Investors  
Search aggressively for years | • Invest in high-yielding Asian securities  
• Invest in US dollar-denominated debt instruments | • Invest in long-duration, complex structured products such as CDOs and MBSs, using short-term funds |
| Principal-agent problem | • Bank management ignored shareholders’ interests  
• Government-directed lending | • Originate and distribute model: banks have no incentive to uphold credit standards on behalf of investors |
| Lenders  
Credit imprudence | • Banks believed they had defacto bailout guarantees from governments  
• Foreign currency debt relying on peg | • Banks borrow to invest on assumption of ample liquidity (with central bank as a backstop liquidity provider) |
| Asset markets bubbles form | • Inflated property prices  
• Equity markets rose on economic prospects | • Inflated property prices  
• Low spreads and volatility on credit products  
• High equity prices |

*Source: Khor Hoe Ee and Kee Rui Xiong, 2008*
### SELECT REFERENCES

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenspan, Alan (2008)</td>
<td>We will never have a perfect model of risk</td>
<td><em>The Financial Times</em>, March 16.</td>
</tr>
</tbody>
</table>


