

The US Sub-Prime Mortgage Crisis – Causes and Implications

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INTRODUCTION

The US sub-prime mortgage crisis has turned out to be a full-blown global financial crisis with experts terming it as a financial tsunami. Countries in the world have been witness to and suffered from the impact of the bursting of several such bubbles in the past such as the tulip bubble mania in 1630's, the South Sea Bubble and the Mississippi Bubble in the 18th Century, Florida's real estate bubble in 1920's, the stock market crash in 1929 and 1987 etc. The difference between the crisis witnessed in the past and the present one is that in the past, the negative impact was felt in a particular country or in a few of its neighbors, but with the globalization of financial markets, the financial crisis in the US has engulfed the entire world, the only difference being the level of its impact on various countries. Apart from the magnitude of the problem (losses due to the sub prime crisis are expected to be upwards of \$2 trillion), what really complicates it is the fact that to this date, the actual extent of losses cannot be gauged. For instance in July 2007, the Federal Reserve Chairman, Bernanke had said that sub prime losses would be less than \$100 billion but by August 2008 nearly \$500 billion of losses due to the crisis had been written off. The sub-prime mortgage crisis happened because the financial institutions in the US sacrificed morals and prudence at the altar of greed. Weak regulation, market fundamentalism and innovation with wrong intentions are the main reasons for the financial inferno. Galbraith, the famous economist had pointed out the cause for such bubbles several decades ago in his statement, "*seemingly imaginative, currently lucrative and eventually disastrous innovation in financial structures. The banks, needless to say, provided the money that financed the speculation that in each case preceded the crash.*" The crisis is a pointer to the fact that the world has not learnt its lessons from the past.

SHOCK AND AWE

The crisis emanating from US is a rude shock to many because the US financial system has for long been considered to be the pivot of the global financial architecture. It was perceived to epitomize structural strength, robust systems, strong but unobtrusive regulation and symbolized modernity and innovation. New instruments such as Credit Defaults Swaps (CDS), Collateralised Debt Obligations (CDO) etc., were the result of the financial re-engineering undertaken by firms which dotted its landscape. Investment banks such as Lehman Brothers, Bear Stearns, Merrill Lynch, Goldman Sachs and Morgan Stanley were known for their deals, earnings, fat bonuses (last year, the investment banks mentioned above had given a huge \$36 billion in bonuses to their employees) and perks that they doled out. Life was one long roller coaster ride for the firm and its employees. The events of the past year, especially in the last three months have turned the entire scenario upside down.

SUB-PRIME CRISIS – THE MEANING

Sub-prime loans refer to loans that have been advanced to individuals who are not eligible for receiving such loans in the normal course. These are loans which have been lent to persons who do not have any asset to provide as collateral nor the required earnings to repay the loan. In the present instance, mortgage loans had been provided to finance purchase of homes in the US without any thought about the likelihood of recovery. Commercial banks in collusion with mortgage brokers, credit rating agencies, insurance firms and investment banks had provided huge amount of such junk loans with the intention of earning high interest, fees and commission. When defaults began to happen, they were refinanced and payment obligations deferred. With the refinanced loans also turning out to be bad, the magnitude of losses began to mount, property prices began to crash which led to further defaults. The entire net worth of financial institutions was eroded and finally they had to go bankrupt or plead with the government for bailouts or sell themselves to other institutions.

WHAT LED TO THE CRISIS?

Prior to the Great Depression, banks also undertook broking activities. This led to conflict of interest between the banking and broking divisions and clients felt cheated. With the Great Depression (1929) and the resultant crash in the stock markets, the then US President, Franklin Roosevelt introduced several measures to avoid recurrence of such

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crisis. The measures included the passage of the Glass Steagall Act which provided for strict distinction between banking activity and investment broking activity. For instance, the Act broke up Morgan Stanley into Morgan Stanley and JP Morgan. The Act in order to protect the interest of depositors in a bank also founded the Federal Deposit Insurance Company for insuring bank deposits upto a limit. The Glass Steagall Act and various other regulations which were passed subsequently ensured transparency and financial prudence. The over reliance on market fundamentalism which characterized the Presidency of Ronald Reagan laid the seeds of the present financial turmoil. Heeding to the clamor of market participants, the process of deregulation of the US financial sector began without much thought about the implications of such a course of action. The Financial Services Modernisation Act was passed in the year 1999. The Act paved the way for scrapping of various well thought out restrictions considered necessary for the orderly and transparent functioning of financial markets. Amendments were made to the Glass Steagall Act and other important regulations. The idea was to enable commercial banks to earn huge profits by becoming financial super markets offering a wide range of financial services to their customers (Universal Banking). As a sequel, the walls that were originally built to separate commercial banking and investment banking in the interest of the investors were broken. The idea that 'greed is good' and over riding faith in market fundamentalism (markets will find their own equilibrium or government should not intervene in the markets because markets will self correct themselves to arrive at a fair price) started to gain increasing acceptance from this period. This process of deregulation continued in the later years to such an extent that transparency gave way to opacity, prudence to greed and new instruments which many did not understand were introduced as models of financial re-engineering and innovation.

CAUSES

The global savings glut resulted in huge quantity of funds flowing to the US. Many Central banks park their money in US treasury bonds, not because of the return, but because of safety. Another related cause is the Yen Carry Trade. The slow down in the Japanese economy coupled with the high savings rate of its population resulted in Japanese banks being flush with funds with very little demand for them in the form of loans. Therefore they offered loans with very low rates of interest. It was a common practice for financial institutions and investors to borrow cheap in Japan and invest in US government securities which offered higher interest. Though some of the funds were invested in emerging market economies, most of the funds were channelized to the US. Abundance of funds, with supply of funds exceeding demand, resulted in lower interest rates. Many would remember that the previous Federal Reserve Chairman, Alan Greenspan was known for successive interest rate cuts. For a long time in the US, home prices had shown an upward trend with the price of property increasing every year. The US financial firms, which were flush with funds wanted to capitalize on the appreciating property prices and wanted to earn more. They first started to offer mortgage loans to fund property purchases at lower rates of interest. Still they found themselves with huge quantum of funds at their disposal. Then they started to dilute their lending norms to a great extent and began to offer loans to all and sundry.

Banks appointed mortgage brokers to market the mortgage loans to customers in return for an attractive commission. In order to earn high commissions, the mortgage brokers marketed these loans aggressively and caution was thrown to the winds. Banks began to issue loans such as *Ninja Loans* (No Income, No Job, And No Asset Loans - that is loans given to those without any income, job or asset to offer as collateral) and *Liar's loans* (loans given on the basis of self-declaration, without any verification on the part of the lender). When the housing bubble burst, liar's loans accounted for nearly 39 per cent of the mortgages in the US. The easy availability of loans with low interest rates during the initial period of the loan enticed the public to buy homes financed by mortgages without any thought about repaying capacity. The borrowers took comfort in the fact that since property prices had been rising continuously, even if they are not able to repay, they can sell the house at a higher price in the future, repay the loan and still earn a profit. What started as an investment, later turned out to be speculation with certain families buying two or three houses with these easily available mortgage loans. At the height of the crisis, nearly 69 per cent of Americans owned a home and the US home mortgage market was worth around \$12 trillion as in August 2008. With the demand for loans increasing, firms started to employ high leverage. They created assets (loans) which were many times their equity and the average debt-equity ratio of the financial firms when the crisis erupted was an unthinkable 30:1. The fall in employment had its impact on the mortgage market and the tide of defaults began to grow. To create an imaginary picture that all is well, the financial firms refinanced the default loans and repayment obligations were deferred. The problem raised its ugly head in a few months with defaults happening on the refinanced loans also and what started as a tide turned into a mighty wave. The firms seized the property and put

them up for sale for recovery of the loan amount. When many properties were put up for sale, with no buyers in sight, property prices crashed. The crash in property prices got further accentuated when those who had bought houses out of these mortgages saw that the value of their property was less than their loan outstanding and just walked out of their homes. Financial institutions were left with property which had no takers. Their liquidity position worsened and in case of some of the firms, their entire net-worth was eroded. This led to a funny comment that in the financial statements of the US financial firms involved in the sub-prime crisis, nothing was right on the left (liabilities) and nothing was left on the right (assets).

THE MODUS-OPERANDI

The US financial firms increased their lending to unsustainable levels and their liabilities are estimated to be over 116 per cent of the US GDP. Out of the US national debt of \$10 trillion, nearly \$1 trillion was added in the last one year alone. The point to be noted is that all these devious and dubious forms of financing were resorted to by firms with long years of experience, strong reputations and rich heritage. For instance, Lehman Brothers was started in the year 1850, Washington Mutual (WaMu) in 1889, Wachovia in 1908, Merrill Lynch in 1914, AIG in 1919 and Bear Stearns in 1923. The situation described above itself came to pass because of the recklessness and shady dealings indulged in by the financial institutions, which the average human mind would find complex to comprehend and extremely difficult to digest. Here is a step wise explanation:

Step 1 : The mortgage brokers appointed by the bank, market the home loans (Ninja loans, Liar's loans etc.,) in return for a commission. Nearly 68 per cent of the subprime loans were marketed by the brokers. The bank finances the mortgage to the buyer. These mortgages were known as Adjustable Rate Mortgages (ARM's) and Teaser Loans. In the case of these mortgages, the interest payment for the initial two to three years is at a low 3 to 4 percent and from the fourth year, the interest would shoot upto 10 per cent or more. During the beginning of the fourth year, if the price of the house increases, the buyer can renegotiate the loan at lower interest. If house prices fall, the interest rate would increase beyond 10 per cent. Since interest can either go up or come down, they were known as adjustable rate mortgages.

Step 2 : The bank securitizes the mortgage loan in order to have access to funds so that it can increase its lending. It would create a Special Purpose Vehicle (SPV) which is a separate entity by itself and sells the loan to the SPV (Loan on the books of the bank is transferred to the SPV). The SPV which would have bought many such loans would slice the loans and pool them according to their maturity and risk profile. Now the credit rating agencies come into the picture. The credit rating agencies would rate these loans in return for a fee. In order to present a rosy picture, what the credit rating agencies have done is that loans which had to be rated as default status or risky status were rated as those offering highest to moderate safety (AAA or BBB). The SPV would issue Pass Through Certificates, also known as Collateralised Debt Obligations (CDO's) which have the house as the collateralised debt. These are insured with the insurance agencies against risk of default (Default grade paper insured against the risk of default). AIG was one of the prime insurers of such transactions and its exposure to the subprime crisis was in excess of \$400 billion.

Step 3 : The SPV would tie up with investment banks such as Morgan Stanley, Merrill Lynch, Lehman Brothers, Goldman Sachs, Bear Stearns etc., to sell these pooled loans which come with a rating and also insurance backup. The investment banks would market these loans to pension funds, mutual funds and other investors in return for a fat commission (Loans are transferred from the books of the SPV to other investors). With the sale proceeds, the SPV would pay the bank that originated the loan and the bank would use the funds for further lending. While the investment banks began by selling these loans to investors in return for a commission, greed overtook and they started to undertake proprietary trading. They started to use their own funds for investing in this paper and also began to employ high leverage.

Step 4 : The investors who bought the loans marketed by the investment banks, issued securities to raise money in order to fund the purchase. The outlandish part in this whole episode is that the bank which originated the loan would itself buy the securities (the wheel has come a full circle. Loan in the books of originating Bank → SPV → Investors → Originating Bank which buys securities issued by the investors who purchased the loan issued by it).

At the end of this financial maze, magic or wizardry, ultimately no one knows who owes how much to whom.

Savings glut → flow of funds to US → Unrestrained credit growth and Faulty credit rating → dubious innovation and weak regulation → Housing bubble (asset price inflation) → default by borrowers → dubious re-engineering and innovation → foreclosure and fall in property prices (asset price deflation) → sub-prime crisis → financial markets meltdown in the US.

EVENTS AFTER THE FALL OUT

IndiMac which held assets of \$32 billion as on March end 2008 was on the verge of failure and was taken over by the US Government on July 11. It was the first casualty from the banking sector to fail because of the sub-prime crisis. Bear Stearns which was saddled with huge sub-prime mortgages losses was merged with JP Morgan Chase. Lehman Brothers, the fourth largest investment bank with \$60 billion of bad debts filed for bankruptcy and went bankrupt. Merrill Lynch, the third largest investment bank with \$40 billion of sub-prime loans was taken over by Bank of America. The US government provided \$85 billion credit to insurer AIG and acquired 79.9 per cent stake in it. The US government took over the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), government sponsored enterprises, which among them accounted for 60 per cent of the sub-prime mortgages. Federal Deposit Insurance Corporation seized Washington Mutual Bank and sold its assets to JP Morgan Chase. Morgan Stanley and Goldman Sachs have agreed to become bank holding companies. In London, Halifax Bank of Scotland, the largest British mortgage firm which was facing a similar crisis was taken over by Lloyds TSB. One of Britain's major mortgage providers, HBOS is under stress and there are plans to merge it with Lloyds TSB. The Russian government pumped in \$44 billion into the largest Russian bank. In Europe, the Dutch, Belgian and the government of Luxemburg had infused \$11.2 billion into the financial services giant, Fortis. South Korean government has decided to pledge \$130 billion in state government guarantees and capital infusion. The UAE government is expected to infuse 19.06 billion to guarantee long term bank deposits.

IMPACT FELT DUE TO THE US FINANCIAL MARKET MELTDOWN

(a) Many financial institutions in the US are in deep trouble with some of them going bankrupt. Financial institutions across the world which had invested in the derivative products of the failed US financial firms are expected to report huge losses. (b) Pessimism and deep distrust have replaced confidence. Many US banks are left holding property whose current value is a fraction of its original value. They are not able to find buyers even at these deflated prices and are facing a huge liquidity crisis. (c) Due to the financial crisis, even financially strong banks are wary of lending to other banks or to individuals. Credit has almost dried up. (d) The liquidity crisis has led to high interest rates. (e) Unemployment in the US is already at a high 7 per cent, the highest in many decades. (f) The rise in unemployment has led to a steep fall in retail sales in the US. US has already experienced a sharp fall in industrial production. (g) The stock markets not only in the US, but across the globe have crashed due to the financial meltdown in the US markets. The S&P Index has declined by 45 per cent from its peak; the Dow Jones is at its lowest level since June 2003. For the period January 1, 2008 to 24th October, 2008, all major indices across the world have reported negative returns. While Dow Jones reported a negative return of 34.5 per cent, it was 38.2 per cent for S&P 500, 40.5 per cent for FTSE 100 UK, 50 per cent for the Nikkei 225, 54.6 per cent for Hang Seng, 50.5 per cent for Kospi, 46.2 per cent for Taiex, 47.1 per cent for Bovespa and 57.1 per cent for the Sensex. \$30 trillion of investor wealth has been wiped out this year due to the market crash, with \$10 trillion being wiped out in October 2008 alone. With stock prices in a free fall, investors in the New York Stock Exchange (NYSE) alone have lost over \$1.2 trillion. (h) Huge fall in property prices have been reported. Recently in an eBay auction, an apartment was sold for as low as \$2. FII's have been pulling back their investments in many of the emerging markets and moving to safer havens. For instance in India, FII holdings which were around \$244 billion in January, 2008 have drastically fallen to \$60 billion as on October 25, 2008.

IMPACT LIKELY TO BE FELT

(a) Slow down in global economic growth. The Trade and Development Report of the UNCTAD for 2008 has predicted that the world economy is expected to slow down to 3 per cent. (b) Asian economies are also expected to be under pressure and underperform because of the slow down in the US and Europe (private consumption accounts for 71 per cent of the GDP of US and 57 per cent of the GDP of Europe). The reason is exports constitute 43 per cent of Asia's GDP and foreign capital inflows which has been the major reason for development of infrastructure and large scale industrialization is expected to dry up. (c) Recession is expected to set in. (d) Revenue and margins of many firms would come under pressure and survival of some of them would be a question mark. (e) Fall in demand is expected to have a negative impact on production and employment levels. Retrenchment is expected to increase, leading to increase in unemployment levels. According to the ILO (International Labour Organisation), nearly 20

million people are expected to lose their jobs from now till the end of 2009 because of the financial crisis and by the end of 2009 the ranks of the unemployed will swell to 210 million people. The number of working poor living on less than one dollar a day is expected to increase by more than 40 million (f) The focus on achieving the Millennium Development Goals as also taking steps to resolve the food crisis in African countries would receive a setback. This would result in more number of poverty deaths and the incidence of disease, malnutrition and illiteracy would only rise. (g) Financial institutions are expected to report losses and closure of some of them might not come as a surprise. (h) The Federal Deposit Insurance Corporation which was created to insure bank deposits upto a limit in the US, after rescuing quite a few banks is left with just \$45.2 billion, its lowest fund base in several years. What this effectively means is that if there are bank failures in the future, the funds available with FDIC may not be sufficient to pay out to depositors and the US Government has to bail them out.

THE US BAILOUT PACKAGE

The US government has created a rescue package of \$700 billion, out of which \$250 billion would be provided to infuse capital into banks. It has passed the Housing and Economic Recovery Act 2008 which authorizes Federal Housing Administration to guarantee upto \$300 billion for sub-prime borrowers for new 30 year fixed mortgages. A pertinent aspect to be noted is that the bailout package would result in the US national debt crossing \$11.3 trillion.

The originally formulated bail out plan involved buying up the junk (sub-prime mortgage) assets of US banks and creating a market for it. This was severely criticized because it would mean funds being used for buying worthless assets and hence the plan was ridiculed as financial sophistry, privatization of profits and socialization of losses, C for T (Cash for Trash) and POTA (Paper Out of Thin Air). Later, emulating the British government's action, the modified bail out plan involves recapitalization of banks in return for warrants. Once the financial health of the banks improves, these warrants can be converted into shares at the price prevailing on the date of conversion. If the financial health of banks improves, automatically their share prices would appreciate and therefore if the warrants get converted at the appreciated price, the US tax payer whose funds are being used for the bailout would not get any benefit. Contrast this with what Warren Buffet has done. When he invested \$5 billion in Goldman Sachs, he got warrants which allow him to convert them into shares at a price which is actually lower than the price prevailing on the date of his investment. If the financial system regains its health, the shares of Goldman Sachs would definitely appreciate and since Buffet had bought the right to convert at a very low price, he is set to make a fortune. There have also been questions regarding why the US government saved AIG, Freddie Mac and Fannie Mae and not Lehman Brothers. The reason is Freddie Mac and Fannie Mae are government sponsored enterprises, and many countries across the world have invested in their securities. Allowing them to fail would have serious repercussions on the status of US in the global arena. Similarly, allowing AIG to fail would have resulted in serious counter party risks.

INDIAN SCENARIO AND GOVERNMENT RESPONSE

As a fall out of the global financial crisis, the stock markets had a free fall. The BSE Sensex fell below 9,000 (first time since July 2005) after having reached an intra day high of 21,206 on January 10, 2008. Since the beginning of January to April, stock markets fell by 25 per cent and from April till October, markets fell by over 33 per cent. For the month of October alone, the Sensex fell by 23.59 per cent while the Nifty fell by 22.18 per cent. All the sectoral indices have reported sharp declines. There has been heavy redemptions from mutual funds (Rs.12,191 crore) and many sectors are facing a liquidity squeeze.

The Central Government, RBI and SEBI have announced the following measures to ease the tight liquidity conditions and improve market sentiments:

- Banks have been allowed to participate in the foreign exchange market. The RBI has increased the interest rate on term deposits in foreign currency Non-Resident Deposit and Non Resident External Account.
- The overseas borrowing limit for infrastructure companies has been increased from \$100 million to \$500 million. Mining, exploration and refining companies have also been included under infrastructure companies and they can now borrow upto \$500 million against their earlier limit of \$50 million.
- The restriction on issue of Participatory Notes (PN's) by FII's which was in force from October 25, 2007 has been lifted by SEBI.

□ The growing risk aversion among banks and financial institutions has resulted in drying up of liquidity which has had a negative impact on the growth plans of the corporate sector. The rise in interest rates led to lower credit off-take leading to lower consumer spending and stagnation in property markets. To infuse liquidity and confidence into the system, the government has reduced the CRR (the amount of deposits that banks have to mandatorily park with the RBI) by 250 basis points, and reduced the repo rate (rate at which banks borrow from the RBI) by 100 basis points. The repo rate cut is the first since 2004 and the CRR currently is at 6.5 per cent and the repo at 8 per cent. Banks have been allowed to avail additional liquidity of upto 1 per cent of their deposits and market borrowing. These measures have infused liquidity of Rs.1,20,000 crores into the system and a few banks have already announced rate cuts.

□ To help mutual funds which have faced huge redemptions, banks have been allowed to borrow for 14 days at 9 per cent interest per annum and these funds have to be lent to mutual funds against their holding of Certificate of Deposits(CD's) in public sector banks.

CHALLENGES AND OPPORTUNITIES IN THE INDIAN CONTEXT

Challenges

□ According to Bloomberg data, Indian companies have raised \$7.96 billion in 2007 through FCCB's against \$5.2 billion raised in 2006, which was an increase of 53%. This makes Indian companies the largest issuer of convertible bonds in Asia, outside Japan accounting for nearly a third (31.3%) of total issuances; surpassing Korea (\$4.1 billion) and Singapore (\$3.5 billion). On maturity of the FCCB, the buyer is entitled to convert his holding into shares at a pre-determined price (fixed at the time of issue of the FCCB) or ask for repayment of his investment. Due to the stock market crash, the share prices of many of the Indian companies who have issued FCCB's are way below the originally agreed conversion price. In this situation, the foreign buyer would not exercise the option of converting his holding into shares and rather would claim the return of his investment. In this tight liquidity situation, Indian companies would find it difficult to repay the loan in foreign currency.

□ The outbound FDI (Funds invested by Indian firms to start new ventures abroad or acquire foreign firms), has exceeded the inbound FDI (Funds invested by foreign firms to start new ventures in India or acquire Indian companies) for the first time since Independence in May 2008. This signifies that Indian companies are looking at a global footprint and are active in the M&A space. Due to the global financial turmoil, many Indian firms such as Tata Motors and Hindalco which have announced foreign acquisitions would find it difficult to fund them because of the tight liquidity condition prevailing in the markets.

□ SEBI has recently lifted the restriction on FII issue of Participatory Notes (PN's) against underlying securities which came into force on October 25, 2007. Participatory Notes are derivative instruments issued by FII's to market participants. Moreover the earlier restriction that FII's can issue PN's only to the extent of 40 per cent of total assets under custody has been done away with. Money routed through these PN's was cited as the primary cause of the Ketan Parekh scam in 2001 and the stock market scam in 2004. PN's need not adhere to international disclosure standards and nobody knows the source or destination of these funds. With such high levels of opacity, the PN route could be used to route black money or channelize funds from terror networks (money laundering). Taking into account the above risk factors, SEBI needs to have a thorough rethink on the issue.

□ The impending slow down in global economic growth (from 5 per cent to 3 per cent) as well as the recessionary conditions likely to prevail in the markets of India's two major trading partners, US and Europe (US and Europe are expected to grow at 0.1 per cent and 0.2 per cent respectively), is sure to have a negative impact on the Indian economy. The RBI has predicted a lower GDP growth of 7.5 to 8 per cent for the current year. While the estimated growth rates for the Indian economy is quite good when compared to the global situation, it is lesser than the 9 per cent plus growth reported in the previous three years. The slow down in major countries across the world would affect Indian exports (which have consistently exceeded the target in the past three years and was \$162 billion for 2007-08), FDI is expected to slow down and FII activity is estimated to be quite low. The IIP numbers have already reflected this trend. The Index of Industrial Production, IIP was at 4.9 for the period, April to August 2008 down from 10 for the corresponding period in the previous year. The decline in exports is expected to affect the textiles, gems and jewellery, chemicals, leather, automobile, engineering goods sector and their allied industries resulting in sluggish demand, lower profits and likely retrenchment of workers.

□ The expected decline in export revenues would further widen the trade deficit which is already at a high \$31.6 billion up from \$20.7 billion in the corresponding period last year. The soaring current account deficit (\$10.7 billion for the first quarter of 2008-09 compared to \$6.7 billion for the corresponding period last year) would further get accentuated with the depreciation of the rupee and worsen the already weak Balance of Payments (BOP) position.

□ Interest payment obligations on foreign loans, already quite high accounting for a major portion of government expenditure, would further rise with the external debt increasing by 30.4 per cent to reach Rs.8,84,516 crore with ECB's accounting for 28 per cent of the total debt. Though interest obligations on ECB's would be met by the corporates, there would be more demand for the dollar in order to service the debt. This would mean further downward pressure on the rupee, which is already at its life time low against the dollar.

□ The Indian IT and BPO growth story might face a roadblock. The BFSI (Banking, Financial Services and Insurance) sector which is the worst affected in the current crisis, accounts for 40 per cent of Indian software exports. With some companies operating in this sector going bankrupt, with others grappling with losses, their technology spend is expected to fall steeply. Another disconcerting fact is the anti-outsourcing rhetoric by both the candidates vying for the US Presidency.

□ Though non-food credit has grown by 29 per cent as on October 2008 as compared to 23 per cent for the corresponding period in the previous year, it has not resulted in increase in real investment in the economy. The real Gross Fixed Capital Formation (GFCF) has declined to 9 percent from 13 per cent last fiscal. Since investments are the foundation for sustained economic growth, decline in investments does not portend well for the economy.

□ To counter the depreciation of the rupee (Rs.49.3 to a US dollar in October 10, 2008 year as compared to 39.33 in October 30, 2007), the RBI in June and July 2008 alone has sold \$11.4 billion worth of dollars. This step along with the FII withdrawals (FII's have withdrawn Rs.44,750 crore of their investments from Indian markets as compared to their investments of around Rs.45,000 crore last year, Rs.32,000 crore in 2006 and 40,000 crore in 2005) has resulted in a liquidity squeeze.

□ Foreign exchange reserves which were \$315 billion in January 2008 have come down to \$274 billion. Though the forex reserves are in quite a comfortable position even after the decline, the continuing FII outflows, rising imports and expected decline in exports is expected to further deplete the forex reserves.

□ The sharp depreciation of the rupee would greatly impact corporates who have borrowed from abroad. Their interest obligations would be much more than what was budgeted for and with the expected decline in revenues due to the economic slow down, their profit margins would come under great pressure.

Opportunities

□ **Financing Infrastructure:** To sustain high economic growth, the nation has to rapidly scale up its investments in infrastructure. According to a consultation paper prepared by the Planning Commission, \$500 billion is required for investment in infrastructure during 2007-11. The latest UNCTAD report has predicted that foreign investment is expected to slow down by 15 to 20 per cent, which effectively means that foreign investment may not be forthcoming in infrastructure projects in this crisis situation. Therefore, the government should pull back its investment in US Treasury bonds and also issue infrastructure bonds with a 10 or 15 year tenure with attractive interest and tax breaks. This measure would provide a safe investment avenue for risk averse investors and also ensure that infrastructure investments are on track.

□ **IT and BPO Sectors - Enticing home market:** The IT sector could face fall in revenue growth since 40 per cent of the revenue stream of the Indian IT companies is from the BFSI (Banking, Financial Services and Insurance) segment. The meltdown of the US financial firms and the overall recessionary conditions could result in decline in outsourcing. One silver lining is that India is one of the fastest growing software markets and is set to register a CAGR of 16.3 per cent growth for the period 2007-12 according to Gartner. With the impending slowdown in global IT spending and outsourcing, it is time the Indian IT and BPO firms focus on the attractive local market and also actively scout for opportunities outside the US and Europe.

□ **Driving efficiencies:** With the possibility of global slow down, Indian firms would have to provide the best quality innovative products in a cost effective manner in order to compete for a falling global market pie. Since revenue growth would not be robust as in the past, to sustain margins, they need to cut down flab and focus on efficiencies in a sustained manner.

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□ **Cut in repo and reverse repo rates:** To infuse liquidity into the system, the government has reduced CRR by 250 basis points and cut the repo rate by 100 basis points. For the industry it is not only the availability of funds but also the cost of funds that matters. Since lending rates are still high, the government should cut the repo rate by another 100 basis points and also reduce the SLR. This would provide additional liquidity and also lower the interest rate on borrowing for the corporates.

□ **Increased Insurance on Bank Deposits:** Currently deposits of an investor in a bank are insured to the extent of Rs.1 lakh by the Deposit Insurance and Credit Guarantee Corporation (DICGC) and currently 961.72 million accounts (92.6 per cent of deposits) are insured. Considering the fact that the insurance limit has not been increased in the past fourteen years and taking into account the inflation during this period, the limit should be enhanced to at least Rs.5 lakh. This would further shore up investor's confidence in the Indian banking system and to a great extent reduce the negative impact of the rumors regarding the strength of Indian banks.

□ **Prudent Hedging strategy:** With the rupee depreciating to a low of Rs. 49, on the surface it may seem that exporters would be a happy lot, but we must also understand that Indian exports have a high import component. The depreciating rupee would certainly mean costlier imports which would have a definite impact on the price of export. To tide over this situation, companies should hedge their positions in a prudent manner. Hedging should be used as a risk mitigation measure and not as a means to speculate. Some Indian firms used hedging as a means of speculation and incurred huge losses in the recent past. This tendency should be avoided.

□ **Mergers and Acquisitions:** In these troubled times, many global companies with advanced proprietary technology, robust systems, access to captive sources of raw materials and global customer base may be available at cheap valuations. This is an opportune time for Indian companies to scout for such value buying opportunities which would provide them sustained growth and profitability in the future.

CONCLUSION

The unprecedented global financial turmoil caused by the US sub-prime crisis clearly brings home the fact that with the globalization of financial markets, there needs to be a robust regulatory mechanism in place to monitor the global flow of funds. There has to be a serious re-look into the current methods of functioning of existing regulatory agencies and the efficacy of credit rating institutions. The leaders of the world should spend serious time and effort to devise ways and means to reform financial markets which have been turned into large scale casinos. The financial markets should once again be made as agents of aiding economic growth and development in an equitable manner. As far as Indian financial system is concerned, the problem is not with regard to solvency but of liquidity and confidence. Our banks have high Capital Adequacy Ratios (CAR), much higher than the Basel II norms, the mandatory CRR and SLR requirements provide an additional safety cushion and exposure to derivative losses are low. The fundamentals are strong and the economy has the capacity to absorb capital and generate good returns. The economic slow down and tight labour market conditions might lead to defaults in retail loans. Therefore, the Indian banks would do well to take measures to expand credit without diluting lending norms.