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A BROAD OVERVIEW OF SUB PRIME CRISIS, ITS CAUSES AND THE REPERCUSSIONS

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ABSTRACT

The subprime mortgage crisis also known as "mortgage meltdown" or "mortgage mess" came to the public attention due to the steep rise in home foreclosures in 2006 spiralled seemingly out of control in 2007, triggering a global financial crisis that went global within a year. The crisis coincided with the U.S. recession which took place between December 2007-June 2009. Decline in home prices leading to mortgage delinquencies and foreclosures and devaluation of housing related securities led to the crisis. Decline in residential investment preceded the recession and were followed by reductions in household spending and then business investment. Spending reductions were more prominent in areas with a combination of high household debt and larger housing price declines.

The household debts expansion was financed with mortgage-backed securities (MBS) and collateralized debt obligation (CDO), which initially offered attractive rates of return due to attractive rates on the mortgages. However, massive defaults were caused by lower credit quality. While elements of the crisis first became more evident during 2007, several major financial institutions collapsed in September 2008, with significant disturbance in the flow of credit from business to consumers and the onset of a severe global recession.

Keywords: Mortgage Meltdown, Financial Crisis, Recession, Collateralized Debt Obligation, Mortgage Backed Securities

I. INTRODUCTION

When U.S. home prices declined steeply after increasing in mid-2006, it became more difficult for borrowers to refinance the loans they had taken. More delinquencies soared as adjustable rate-mortgages began to reset at higher interest rates. Securities backed with mortgages, comprising subprime mortgages, lost most of their value which were widely held by financial firms globally. Global investors also reduced purchases of mortgage backed debt as part of the decline in the capacity and willingness of the private financial system to support lending. Concerns about the efficiency of U.S. credit and financial markets led to tightening credit around the world and slowing economic growth in U.S. and Europe.

The consequences were long lasting and severe for the U.S. and European economies. Nearly 9 million jobs were lost during 2008-2009, roughly 6% of the workforce when U.S. went through recession. 40% of 2007 gross domestic product was also lost. U.S. housing prices on an average fell nearly 30% and the U.S. stock

prices fell approximately 50% by early 2009. The U.S. stock market had recovered to its pre-crisis peak as of early 2013, but housing prices remained near their low point and employment remained elevated. Economic growth remained below the pre-crisis level. With elevated unemployment and severe banking impairments, Europe continued to struggle.

II. LITERATURE REVIEW

There were many causes of the crisis. Firstly, the commentators assigned different levels of blame to financial institutions, regulators and credit agencies, government housing policies and consumers. Rise in subprime lending was the proximate cause. The percentage of lower quality subprime mortgages originated during a given year rose from a historical 8% or lower range to approximately 20% from 2004 to 2006 and with much higher ratios in some parts of U.S. A high percentage of these subprime mortgages, over 90% in 2006 for example were adjustable rate mortgages. These two changes were a part of the broader trend of the lowered lending standards and higher risk mortgage products. Moreover, U.S. households had become increasingly indebted, with the ratio of debt to disposable personal income rising from 77% in 1990 to 127% by the end of 2007.

2.1 Causes

- Housing bubble

The bursting of the U.S. housing bubble that began in 2001 and reached its peak in 2005 led to the origin of the mortgage crisis. A housing bubble is an economic bubble that occurs in real estate markets at local and global level. It is defined as a rise in the valuations of real property rapidly until unsustainable levels are reached in relation to incomes and other indicators of affordability. The rapid increases are followed by decreases in house prices and the value of the property being lower than the mortgage debt.

The U.S. mortgage debt almost doubled between 2001-2007 and amount of per household mortgage debt rose more than 63% with constant wages. This credit and house price explosion led to a building boom which led to surplus of unsold homes which eventually led to increase in the housing priced and then decline in mid-2006. Adjustable rate mortgages were obtained by many subprime borrowers as they were encouraged by easy credit and belief that house prices would continue to appreciate.

THE HOUSING PRICE CRASH

Graph clearly denote the bursting of the housing bubble and crash of housing prices

The home ownership rate in U.S. increased from 64% in 1994 to all time high of 69.2% in 2004. Borrowers who would not be able to make the higher payments once the grace period came to an end, were thinking of refinancing their mortgage after a year of appreciation. Due to depreciating housing prices, the ability of borrowers to refinance became more difficult. Borrowers, who were unable to pay the high monthly payments, began to default.

With lesser number of borrowers repaying their mortgage payments, supply and foreclosures of homes for sale increased which further reduced the housing prices and the value of mortgage based securities. This vicious cycle is at the heart of the crisis.

- Historically low interest rates

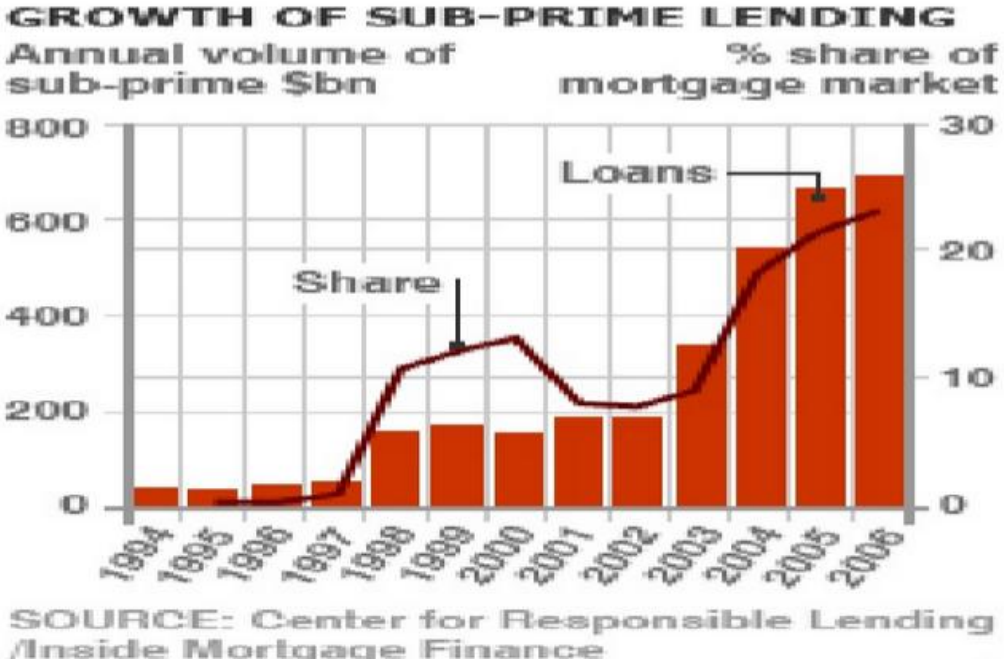
  It is believed by many economists that the U.S. housing bubble was caused in parts by historically low interest rates. The Federal Reserve Board cut short term interest rates from about 6.5% to 1% in response to the crash of the dotcom bubble in 2000 and the recession that followed in 2001.

- The rise of subprime lending

High default rates on subprime, “Alt-A” , adjustable rate and other mortgage loans made to higher-risk borrowers with lower income or lesser credit history than “prime” borrowers came with the collapse of the housing bubble. Alt-A is a classification of mortgages where in the risk profile falls between prime and subprime. The borrowers behind these mortgages generally will have clean credit histories, but the mortgage itself generally will have some issues that increase its risk profile. These issues comprise higher loan-to-value and debt-to-income ratios or inadequate documentation of the borrower's income.

According to Forbes, the share of subprime mortgages to total originations increased from 9 % in 1996 to 20 % in 2006. Accounting for approximately one-fifth of the U.S. home loan market subprime mortgages totalled $600 billion in 2006. An estimated $1.3 trillion in subprime loans are outstanding.

Lenders took more risksas the rising number of subprime loans rose due to rising real estate values. Some experts believe that Wall Street encouraged this type of behaviour by bundling the loans into securities that were sold to pension funds and other institutional investors seeking higher returns.



- Declining risk premiums

According to a Federal Reserve study in 2007, the average difference in mortgage interest rates between subprime and prime mortgages declined from 2.8 percentage points in 2001 to 1.3 percentage points in 2007. This shows that the risk premium required bylenders to offer a subprime loan had declined. This decline occurred even though loan characteristics and subprime borrower declined overall during the 2001-2006 period, which should have had an opposite effect. Instead, the decline of the risk premium led the lenders to consider higher-risk borrowers for loans.

- New kind of lender emerges

Some economists blame the emergence of a new kind of specialized mortgage lender in the boom years for fuelling the mortgage crisis. These lenders were not regulated like the traditional banks. In the mid-1970s, approximately 60 percent of the mortgage market was carried by the traditional lenders. Today, such lenders hold about 10 percent. During this time period, the share held by commercial banks had grown from virtually zero to approximately 40 percent of the market.

- Risky mortgage products and lax lending standards

The rise of unregulated lenders was accompanied with a rise in the kinds of subprime loans that economists say have sounded an alarm. The large number of interest-only mortgages, adjustable rate mortgages and "stated income" loans are an example of this thinking. "Stated income" loans, also called "no doc" loans and sarcastically referred as, "liar loans," are a subset of Alt-A loans. The borrower does not have to provide documentation to substantiate the income stated on the application to finance home purchases. Such loans should have raised concerns about the quality of the loans if the borrower became unable to pay the mortgage or the interest rates increased.

In many areas of U.S., especially those areas with the highest appreciation during the bubble days, such non-standard loans went from being almost unheard of to prevalent. Eighty percent of all mortgages initiated in San Diego County in 2004 were adjustable-rate, and 47 percent were interest-only loans.

Programs such as seller-funded down payment assistance programs (DPA) also came into being during the boom years. DPAs are programs in which a seller gives money to a charitable organization that then gives the money to buyers. From 2000 to 2006, more than 650,000 buyers got their down payments via nonprofits. According to the Government Accountability Office (GAO), there are much higher default and foreclosure rates for these types of mortgages. A GAO study also determined that the sellers in DPA programs inflated home prices to recoup their contributions to the nonprofits.In May 2006, the Internal Revenue Service ruled that DPA plans are no longer eligible for non-profit status because of "the circular nature of the cash flows, in which the seller pays the charity a 'fee' after closing." On October 31, 2007, the Department of Housing and Urban Development adopted regulations banning seller-funded down payment programs.

- Securitization

Securitization is a structured finance process in which assets, financial instruments or receivables are acquired, categorised into pools and offered as collateral for third-party investment. Due to securitization, investor appetite formortgage-backed securities (MBS) and the tendency of rating agencies to allot investment-grade ratings to MBS which are loans with a high risk of default could be originated, packaged and the risk can be easily transferred to others.

Asset securitization began with the structured financing of mortgage pools in the 1970s, according to the Office of the Comptroller of the Currency's Asset Securitization Comptroller's Handbook. The securitized share of subprime mortgages, those passed to third-party investors, increased from 54 percent in 2001, to 75 percent in 2006.

- Credit rating agencies

Credit rating agencies are now under scrutiny for giving investment-grade ratings to securitization transactions holding subprime mortgages. Higher ratings theoretically were due to the multiple, independent mortgages held in the mortgage-backed securities, according to the agencies. Critics claim that conflicts of interest were involved, as rating agencies are paid by those companies selling the MBS to investors, for e.g. the investment banks.

As of November 2007, credit rating agencies had downgraded over $50 billion in highly- rated collateralized debt obligations and more such downgrades are possible. Since certain institutional investors are allowed to only carry higher-quality assets, there is an increased risk of forced asset sales, which could lead to further devaluation.

Ratings agencies such as Standard & Poor's Corp., Moody's Investors Service Inc. and Fitch Ratings have been criticised for being slow to lower their ratings on securities based on mortgage loans to U.S. borrowers with poor credit records.

- Government and federal regulatory policies

Some economists have suggested that government policy encouraged the development of the subprime meltdown through legislation like the Community Reinvestment Act, which they claim forces banks to lend to uncreditworthy consumers. Economist Robert Kuttner criticized the repeal of the Glass-Steagall Act as

contributing to the mortgage crisis. Others have noted that a taxpayer-funded government bailout related to mortgages during the Savings and Loan crisis may have created the above-mentioned moral hazard and acted as encouragement to lenders to make similar higher-risk loans.Changes in the reserve requirements of U.S. banks and the creation in 1994 of special "sweep" accounts that link commercial checking and investment accounts allowed banks greater liquidity. This meant that they could offer more credit.

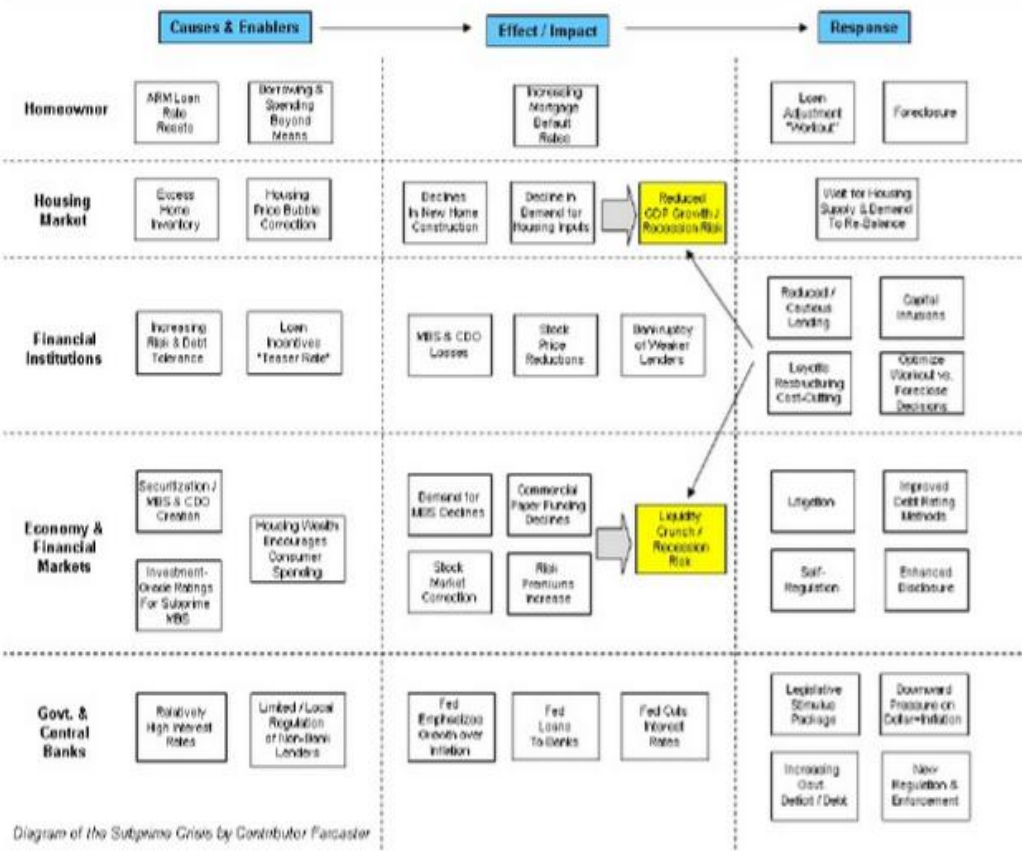
Objectives of the study-

- To study the concept of sub-prime crisis
- To study the causes of sub-prime crisis
- To study the impact of sub-prime crisis
- To study the actions taken to manage the crisis
- To suggest the ways to manage crisis

III. RESEARCH METHODOLOGY

This study is analytical and comprises secondary data which is collected from books and periodicals, journals, literature review and content analysis, Websites of Delhi State Government, e-articles and newspapers.

Typical model of Subprime crisis in United States Of America :



IV. IMPACTS OF SUBPRIME CRISIS

- Impact on U.S.A

➢ The real gross domestic product of U.S.A started declining during the third quarter of 2008. The real U.S GDP was 5.5% below the optimum level in February 2013 and it is estimated that it would not return to its potential level by 2017.

➢ S&P 500 the U.S. stock index was 45% down from its high in 2007. There was an increase in stock prices thereafter and it hit record levels in 2013.

➢ With an increase in the interest for refinancing due to decline in house prices after the housing bubble, a number of homes had to be sold in foreclosures. The homeowners turned to home renters. There was a decline in the house prices, nearly 30% of the prices during mid-2006 to mid-2009 and continued to be almost constant till March 2013.

➢ The rate of unemployment grew from 5% in 2008 to 10% in mid-2009 and then dropped to 7.6% in 2013.

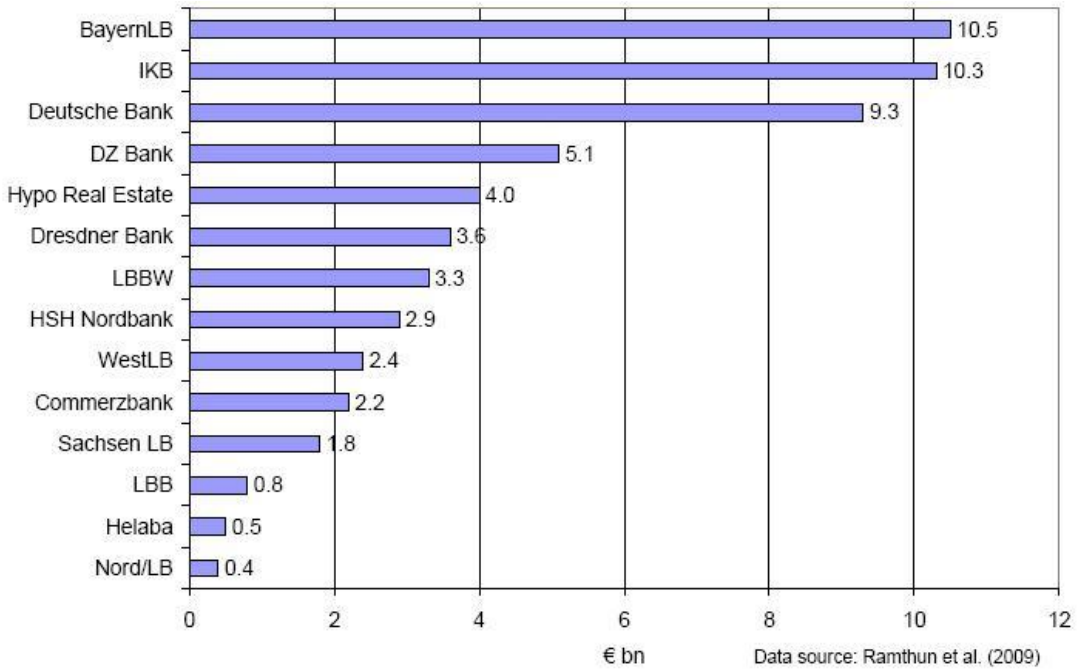
➢ U.S. national debt increased from 66% of GDP in 2008 to 103% of GDP by 2012.

- Impact on Europe

The progression in crisis in Europe took place through the banking system crisis to the sovereign debt crisis. The most affected country was Germany. This was mainly because of the fact that the German banks issued bonds mortgages were not transferred to a legal entity but the banks kept them instead, unlike USA and UK. The banks sold these bonds at low interest rates due to their liquidity and safety as they were constantly monitored by the bank.

The real estate market remained stable with a growth of 5.9% during the period 2003 to 2006 unlike the other European countries (Ireland 153% and Greece 148%). Due to this reason Germany saved itself from the first wave of the crisis created by the rapid downfall of real estate prices. The second wave created as a result of the bankruptcy of big investment banks and loss of the value of the bonds (issued based on mortgages) could not keep Germany immune to the global crisis.

The banks reported gigantic losses and decline in the value of equity. BayernLB, IKB, Deutsche Bank and others all suffered with this problem.



The graph shows the list of German banks that showed losses during 2008-2012.

The banks tightened the perquisites for lending and increased the interest rates. The savings increased to 14.6% during 2007-2008 and investment fell. As a result the inter-banking loans decreased complicating the problem further and increasing liquidity problem. The unemployment rates in UK, Ireland, Spain, Portugal and Greece declined from 2010-2011, according to CIA World Factbook. Eurostat reported that Eurozone unemployment reached record levels in September 2012 at 11.60%, up from 10.30% the prior year.

The economy in Iceland was dependent on the financial sector and as a result was hit hard by the crisis. With the gradual collapse of the banking system, the government had to borrow money from their neighbours and IMF to save the economy. The public dissatisfaction grew which led to the downfall of the government.

Impact on Asia

Most of the Asian nations are developing and have witnessed wealth creation in recent years. This led to huge investments in western countries and rising foreign investment in these Asian countries especially from West. The crisis had knock-on effects on Asia.

India and China are among the fastest growing nation. Indian economy grew by 9% during 2007-2008 most of it being fuelled by the domestic market. India seemed insulated by the crisis and the Reserve Bank of India raised interest rates until August 2008 with the motive of bringing down the GDP growth rate. But this was not sufficient to shield the effect of the global financial crisis after the collapse of the Lehman Brothers on 23 September 2008 and the growth rate reduced to 7.1%. The speed of the drop in the rate was a big concern for the economy. The impact of the crisis can be classified into two categories: (i) direct or immediate impact on the financial sector and (ii) indirect impact on economic activities.

Fortunate for India, the banks were not overly exposed to the subprime lending which helped in avoiding the first round of adverse effects. ICICI (Industrial Credit and Investment Corporation of India), one of the larger private sector banks was partly exposed but with the help of the government and a strong balance sheet, it was able to tackle this problem. The banking sector remained financially sound and the in the third quarter of

FY2008-2009, the banks in India announced good results and increased their profitability while the global financial institutions lived in a nightmare.

The indirect impacts were however, quiet significant. Massive outflow of foreign investment along with the shift in the credit demand of the banks and the corporations from external sources to the domestic banking sector had serious implications which were caused by the liquidity squeeze in global markets following the collapse of Lehman Brothers. A credit crunch occurred due to pressure on the domestic market. The credit expansion in the domestic market was hurt due to this credit crunch coupled with lack of general confidence.

Indian exports in major markets collapsed. During October 2008 to May 2009, the Merchandise exports reduced by more than 17%. Growth in the service exports reduced to 5.9% during the third quarter of FY 2008-2009 from 34% in the corresponding period of the same year. Inflows from insurance, travel and transportation also dropped.

Despites negative contribution of net exports to GDP growth and reduced trade to GDP ratios, India differentiated from most East Asian economies in terms of relative importance of services both in terms of contribution and trade.

Table 1: Year-on-Year Quarterly GDP Growth Rates (%)

	2008				2009		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
India	8.6	7.8	7.7	5.8	5.8	6.1	7.9
People's Republic of China	10.6	10.1	9	6.8	6.1	7.9	8.9
Republic of Korea	1.1	0.4	0.2	-5.1	0.1	2.6	3.2
Singapore	6.66	2.51	0.04	-4.23	-9.51	-3.31	0.56
Thailand	5.97	5.28	3.90	-4.20	-6.73	-4.94	-3.51
Philippines	3.66	4.84	4.19	1.84	0.59	0.77	0.76
Malaysia	7.41	6.56	4.77	0.13	-6.25	-3.94	-1.25
Indonesia	6.25	6.42	6.40	5.18	4.45	4.04	4.21

Source: Central Statistics Office (2009–2010), National Bureau of Statistics, PRC; Central Bank of Korea (2009); and ASEAN Finance and Macro-economic Surveillance Unit Database (http://www.aseansec.org/18135.htm [accessed on 18 February 2010]).

Service sector in East Asian economies such as Singapore, Japan, Korea and Philippines has an equal or larger share of GDP as compared to India but similar resilience was not observed by them. The above mentioned economies are largely dominated by foreign trade related services like storage, trade, transportation and other trade related financial services. For example, in Singapore trade related services account for more than 75% of total value added in service sector where merchandise trade is as high as 386% of GDP. On the contrary, the dependence of service sector on foreign trade in India is lower at 62%. An analysis of service sector growth shows that this lower dependence on merchandise trade has been critical in maintaining growth.

China too faced upper pressure on its currency and raised concerns regarding the world depending on one foreign currency reserve. It called for replacing dollar by a world reserve currency run by the IMF. Industrial production in Japan fell by 10% and with increasing unemployment, optimism and lack of confidence the recovery was dampened.

Table 2: Composition of GDP Growth (%)

	People's Republic of China (PRC)		India	
	1995–2000	2000–2007	1996–2001	2001–2007
Final consumption expenditure	66.1	38.3	76.9	53.2
Gross capital formation	27.1	48.3	20.4	57.3
Net exports	6.8	13.4	2.7	-10.5
Total	100.0	100.0	100.0	100.0

Source: Authors' compilation from CSO (2009) and NBS (2008).

Table 3: Composition of GDP and Outward Orientation

	Composition of GDP (2006)			Trade % of GDP	Merchandise Trade % of GDP	Services Trade % of GDP
	Agri	Industry	Services			
PRC	11.71	48.37	39.91	72.39	66.56	5.83
India	17.53	27.89	54.58	48.78	32.36	16.41
Japan	1.50	29.90	68.60	---	---	---
Indonesia	12.90	47.05	40.06	56.90	50.40	6.50
Republic of Korea	3.25	39.60	57.15	85.35	71.49	13.86
Malaysia	8.71	49.94	41.35	216.98	193.68	23.30
Philippines	14.18	31.63	54.19	94.01	83.84	10.18
Singapore	0.09	34.74	65.17	473.51	386.22	87.29
Thailand	10.70	44.62	44.68	143.53	125.73	17.80

Source: World Development Indicators 2008 (file://localhost/Softarchives/WDI-2008/Tables/wdi2008home.html [accessed 5 February 2010]).

Impact on stock market, investors and corporations

Like S&P500, virtually every market in the world faced severe drops especially Brazil and Korea being hit-hard. Daily drops of large magnitude became very common, KOSPI dropped about 7% in one day. The largest daily drop in S&P500 in U.S was in February, 2008 due to the subprime crisis. The year to date returns from BSE Sensex and Nifty was 13.55% and 15.47% respectively during the same period. Dow Jones industrial average and NASDAQ decreased 8.79% and 11.77% during the crisis. Germany's DAX, France's CAC and U.K.'s FTSE tumbled same as the Indian stock exchange which was shaken by the selling of the foreign institutional investors. Hong Kong's Hang Seng also fell down by 14.5%.

Not a good scorecard

	(%)
NSE Nifty	-15.47
Hang Seng	-14.19
DAX - Germany*	-14.3
CAC - France*	-14.13
BSE Sensex	-13.55
FTSE - London*	-13.0
Kospi - South Korea	-12.45
Brazil	-12.17
Nasdaq - US**	-11.77
Dow - US**	-8.79
Nikkei - Japan	-8.0
Shenzhen - China	0.59

* till 1700 hrs IST
** 18/1/2008

The global investors panicked as they were concerned that the U.S will fall into recession. Emerging markets like Russia, Brazil, South Korea and Mexico faced downfall in the range 10-13% in 2008. Sri Lanka and Pakistan performed better than other countries. A decline of 2.02% only was observed in Karachi's index. Stock indices in Amman, Kuwait and Abu Dhabi created positive returns in 2008 due to the strong crude prices. Metal and mining companies were the one of the worst hit industries. Mortgage lenders and home builders fared terribly.

Impact on the financial institutions

Due to mortgage payment default and mortgage devaluation, real estate investment trusts (REIT), banks, mortgage lenders and hedge funds had to suffer huge losses. The financial institutions recognized the subprime related losses and by 19th February, 2008 they had written down U.S. $150 billion. Scores of mortgage lenders filed for bankruptcy and banks around the world such as IKB, Deutsche Indusriebank, etc suffered huge losses. Even the top management of various institutions were forced to resign eg. Citigroup and Merril Lynch.

The following table shows the business loss by various financial institutions.

Company	Business Type	Loss (Billion $)
Citi Group	Investment Bank	$24.1 bln
Merrill Lynch	Investment Bank	$22.5 bln
UBS AG	Investment Bank	$18.7 bln
Morgan Stanley	Investment Bank	$10.3 bln
Credit Agricole	Bank	$4.8 bln
HSBC	Bank	$3.4 bln
Bank of America	Bank	$5.28 bln
Deutsche Bank	Investment Bank	$3.1 bln
Barclays Capital	Investment Bank	$3.1 bln
Bear Stearns	Investment Bank	$2.6 bln
Swiss Re	Reinvestment	$1.07 bln
Lehman Brothers	Investment Bank	$2.1 bln
JP Morgan Chase	Investment Bank	$ 2.9 bln
Goldman Sachs	Investment Bank	$1.5 bln
Credit Swisse	Bank	$ 3.7 bln
SocieteGenerale	Investment Bank	$ 3.0 bln
BNP Paribas	Bank	$0.870 bln

The table shows the institutions that filed for bankruptcy

Business	Type	Date
New Century Financial	Subprime lender	April 2,2007
American Home Mortgage	Mortgage lender	August 6, 2007
Sentinel Management Group	Investment fund	August 17, 2007
Ameriquest	Subprime lender	August 31, 2007
NetBank	On-line bank	September 30, 2007
Terra Securities	Securities	November 28, 2007
Amerian Freedom Mortgage Inc	Subprime lender	January 30, 2007

Impact on municipal bonds insurers

The municipal bonds achieve higher debt rating by ensuring them. The insurers used the premium received to purchase CDO investment and suffered huge losses. The rating agencies downgraded the bonds insured as the insurers did not have additional capital. The financial institutions holding these bonds had to lower their valuations or sell them. The impact of such devaluation on corporations and financial institutions holding such bonds is estimated U.S. $200 billion. To avoid or reduce such an impact, the regulators are encouraging banks to lend the municipal bond owners the required capital.

Impact on home-owners

The housing prices had fallen approximately 8% by November 2007 from their peak in 2006, according to S&P/Case Shiller. The sales volume of homes (units) dropped by 26.4% in 2007 as compared to the previous year. The MBS and CDO continued to make losses with the decrease in housing prices as the value of MBS and CDO is related to the value of the underlying housing collateral. A number of homes have been foreclosed and sit vacant with the rise in re-financing standards and the rise in home prices after their decline. These houses are poorly maintained and tend to attract criminal activity. Home prices have fallen more than rents thereby turning former neighbourhood homes from owner occupied to renter occupied.

V. ACTIONS TAKEN TO MANAGE THE CRISIS

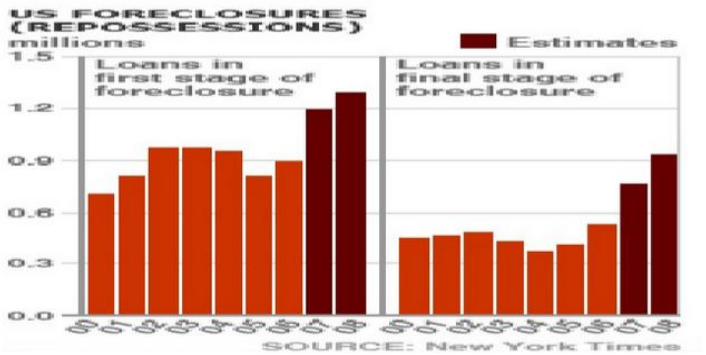
- An economic stimulus package of $168 billion was signed into law on 13th February, 2008 by President George W. Bush. This stimulus was in the form of income tax rebates to stimulate economic growth.
- Plan of temporary and voluntary freezing the mortgage of a limited number of mortgage debtors holding ARM was announced by the President.
- A refinancing facility FHA-Secure was established. The facility was part of an ongoing collaboration effort between the U.S. government and the private industry in order to help the subprime borrowers known as the Hope Now Alliance. The alliance released a report in February 2008, which showed that it helped 5, 45,000 borrowers with weak credit or 7.7% of 7.1 million of subprime loans outstanding in September 2007.

- "Project Lifeline" was announced in February 2008. An agreement was made by six largest U.S. lenders in partnership with the Hope Now Alliance to defer foreclosure action by 30 days for the homeowners and 90 days or more delinquent on payments.
- Rather than working loans on case by case basis, the U.S. Treasury Department started working through major banks to develop a systematic means of modifying loans for a significant number of borrowers.
- Interest rate cuts were announced Federal Reserve Chairman, Ben Bernanke. On 22nd February 2008, reduced key interest rates by 75 basis points to 3.5% which was the biggest cut since 1984. Another cut of 50 basis points was made in January 2008.
- Open market operations were made by the Central Bank to ensure access of funds to the member banks.
- Discount rates were also cut by the Central Banks.

VI. SUGGESTIONS TO MANAGE THE CRISIS

- Though foreclosure is a lengthy and costly process, it can be avoided benefiting both the lenders and the homeowners. Action has been taken by some lenders to contact the homeowners to provide favourable mortgage terms for example, refinancing or loan modification. Homeowners have also reached out to their lenders to discuss alternatives. The statistics regarding the number and type of homeowners assisted through the loan modification programs have begun to be cited by the trade groups, consumer advocates and the corporations. As per the claim of the consumer groups, of the total 3 million subprime loans, the modifications affected less than 1%.
- The rating process followed by the credit rating agencies should be re-examined and improved to encourage greater transparency of the risk involved with the complex mortgage backed securities and the financial entities providing them. Actions regarding the lending practices, tax policies, bankruptcy protection, qualification of applicants, credit counselling, etc. should be taken by the lenders and regulators.
- Public can be educated by the media. Subject experts could be engaged and to share reason and debate about the pros and cons and cause of the various solutions.
- According to a study released in February 2008, 278 law suits filed during 2007 in Federal Courts related to the subprime crisis. 43% of the cases were filed by the borrowers who claimed they were victims of discriminatory lending practices. The litigation process should be made faster.

IMPACT OF SUB PRIME MORTGAGE CRISIS
ON GLOBAL ECONOMY



VII. CONCLUSION

The current credit crisis will come to an end when the overhang of inventories of newly built homes is largely liquidated, and home price deflation comes to an end. That will stabilize the now-uncertain value of the home equity that acts as a buffer for all home mortgages, but most importantly for those held as collateral for residential mortgage-backed securities. Very large losses will, no doubt, be taken as a consequence of the crisis. But after a period of protracted adjustment, the U.S. economy, and the world economy more generally, will be able to get back to business.The effects of the meltdown spread beyond housing and disrupted global financial markets (see financial contagion and systemic risk) as investors, largely deregulated foreign and domestic hedge funds, were forced to re-evaluate the risks they were taking and consumers lost the ability to finance further consumer spending, causing increased volatility in the fixed income, equity, and derivative markets. The impact on the economy of this American problem was also felt in Europe, where the European Central Bank tried to control the crisis by injecting over 205 billion U.S. Dollars in the European financial markets.

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