Subprime Crisis in US: Introspection & Lessons

Omdeep Gupta, Nibedita Biswas**, & K.C.Balodi****

INTRODUCTION

Subprime lending, is a general term that refers to the practice of making loans to borrowers who do notqualify prime rates because of their deficient credit history. Subprime lending is risky for both lenders and borrowers due to the combination of high interest rates, poor credit history, and uncertain financial situations often associated with subprime applicants. Subprime lending encompasses a variety of credit instruments, including: Subprime mortgages, Subprime car loans, and Subprime credit cards, Subprime personal loan (including laptops, bikes, etc.) The term "Subprime" refers to the credit status of the borrower (being less than ideal), not the interest rate on the loan itself. A Subprime lender is one who lends to borrowers who do not qualify for loans from mainstream lenders. Some are independent, but increasingly they are affiliates of mainstream lenders operating under different names. Subprime lenders seldom if ever identify themselves as such. The only clear giveaway is their prices, which are uniformly higher than those quoted by mainstream lenders. There are lenders who offer both prime and subprime loans. A subprime borrower is one who cannot qualify for prime financing terms but can qualify for subprime financing terms. The failure to qualify for prime financing is due primarily to low credit scores. A very low score will disqualify. A middling score might or might not, depend mainly on the down payment, the ratio of total expense (including debt payments) to income, and ability to document income and assets.

OBJECTIVE

In the light of recent subprime crises which gripped economies across the world there is a lot of hue and cry about the crises itself, its antecedents and consequences. Thus this paper is an attempt to investigate the subprime market, terminology used, its functioning and various issues such as the history and crises of U.S. subprime market, proliferation of prices across world economies and impact on U.S. and major Asian markets.

CHARACTERISTICS AND FUNCTIONING OF SUBPRIME MARKET

Subprime Loans go to higher risk borrowers, who pay higher rates, subprime mortgages are issued to higher risk borrowers. They typically have inconsistent credit histories, lower levels of income and assets, or other characteristics that increase the credit risk to lenders. This is reflected in lower average FICO (A FICO score is a credit score- the likelihood that credit users will pay their bills, developed by Fair Isaac & Co.) credit scores, and greater average loan-to-value Ratios. These borrowers pay substantially higher interest rates and fees than other borrowers, and are more likely to be subject to prepayment penalties, which make it costly to refinance loans in the early years of their life. As evident from Fig 1, subprime Loans typically have Higher Delinquency and Default Rates because of the higher risk characteristics of subprime borrowers.

Subprime lenders base their rates and fees on the same factors as prime lenders. For example, rates are higher for lower credit score and for smaller down-payment. However, the entire structure of rates and fees is higher at subprime lenders to cover the greater risk and higher costs of subprime lending. A higher percentage of subprime than of prime loans go into default. Subprime lending also costs higher because more applications are rejected and marketing costs are higher. Among subprime loans that don't default, a higher percentage of early prepay penalty clauses are often mandatory on them. There is a reason that most lenders have such stringent requirements for giving out prime loans, and that is

, ** Both Lecturers & * Senior Lecturer, Department of Management, Institute of Management Studies, Dehradun.*

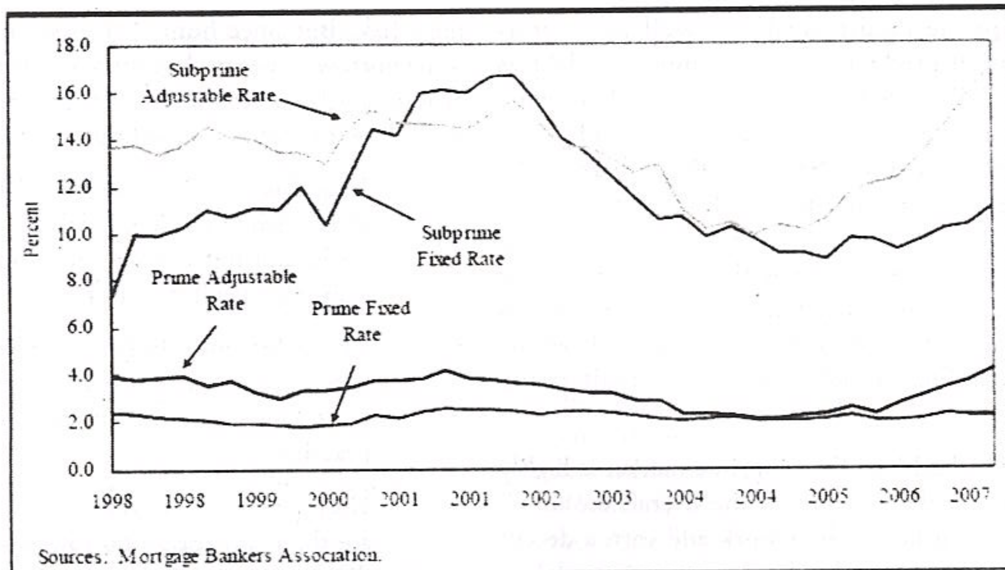
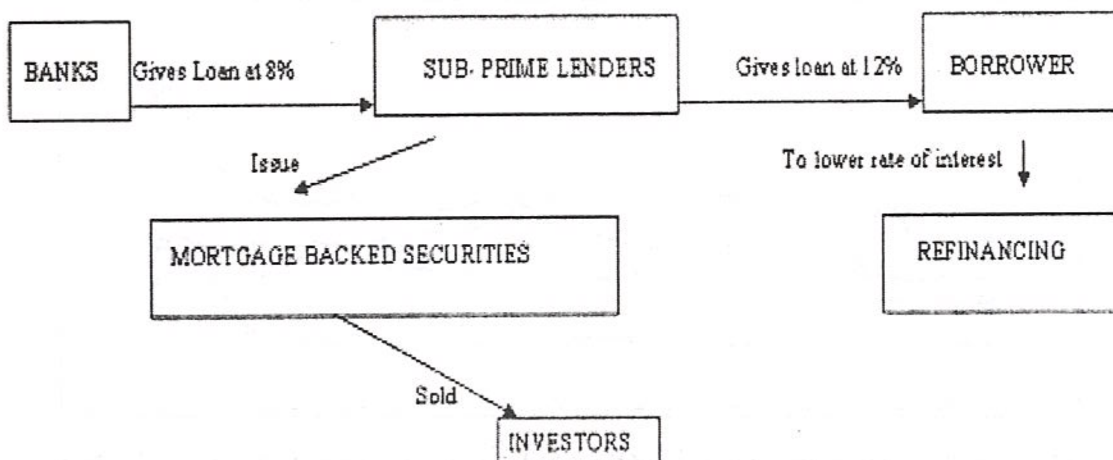


Figure1: Comparison of Prime versus Subprime Delinquency Rates, Total US 1998-2007

because a person who can meet such high qualifications is much more likely to repay. But banks also knew that they could not simply ignore the majority of potential buyers who could not meet the high demands of the prime loan market, so the subprime or alternative loan market was born. A subprime loan is a good option for you if you have a lower credit score, and perhaps have not been making a large income for a long enough time that it is considered 'verified.' Though there are some lenders that do not offer subprime mortgages or home loans, many do, and they will be willing to work with you to custom-tailor the loan to fit your own specific financial needs. However, due to the non-conformity and customization of most subprime home loans, this might mean that you will pay a higher interest rate. But a subprime mortgage with an interest rate that is maybe 2-3 points higher is much better than no home loan at all.

The market for lenders and borrowers of subprime credit, a credit that is lent to people of questionable or limited credit histories includes the business of subprime mortgages, subprime auto loans

WEB OF SUB-PRIME



and subprime credit cards, as well as various securitization products that use subprime debt as collateral. Subprime borrowing comes with a higher interest rate than for borrowers with good credit ratings, as the risk of default is much higher, the subprime market can be a profitable one for lenders as they can demand higher interest rates, and as long as borrowers are able to repay their loans. Subprime lending is also less susceptible to interest rate swings because subprime borrowers usually don't have the option to refinance debt until their credit rating improves.

The health of the subprime market is highly dependent on the strength of the overall economy; if people can generally find work and earn a decent wage, they are more likely to repay their debts. Subprime lending can dry up very fast in a weakening economy, as lenders collectively will avoid taking excess credit risks. Seeking new clients at a time when home values were soaring in many markets, emboldened lenders raced to offer easy credit with exotic loans, such as "piggyback" loans requiring no down payment and "no-doc" loans that let borrowers state their incomes without supporting documentation.

Subprime lenders charge higher interest rates — sometimes four percentage points more than on loans to more credit-worthy borrowers. Investors, eager for bigger returns, have fueled demand by purchasing securities that are backed by these mortgages. That has enabled many mortgage originators to turn around and sell their loans after making them, enabling more loans and reducing their risk. But once home prices started dropping, some borrowers began defaulting on their mortgages. Scanning various secondary data sources brings forth the following doubts regarding subprime markets:-

1. Adopting new laws and regulations to stop abusive lending practices will end up restricting credit and hurting the very people subprime loans are intended to help.
2. The subprime market is correcting itself, weeding out the bad players, and penalizing those who engage in unfair, deceptive practices.
3. Unemployment and other economic problems are the main reason borrowers are becoming delinquent and facing foreclosure in record numbers, not abusive loan terms.
4. Clear disclosures on loan documents would solve the problems in the subprime market.
5. Predatory lending legislation with stronger lending rules will make it harder for home owners in trouble to refinance, which will lead to additional foreclosures.

US SUBPRIME MARKET

The US real estate industry had a boom between 2001 and 2005 as property prices reached historic highs on account of low interest rates, price-to-rent ratios and other factors. Figure 2 traces demographic variables, viz., Home Price, Building Costs, Population and interest rates from 1938 through 2007. When property prices began to fall due to

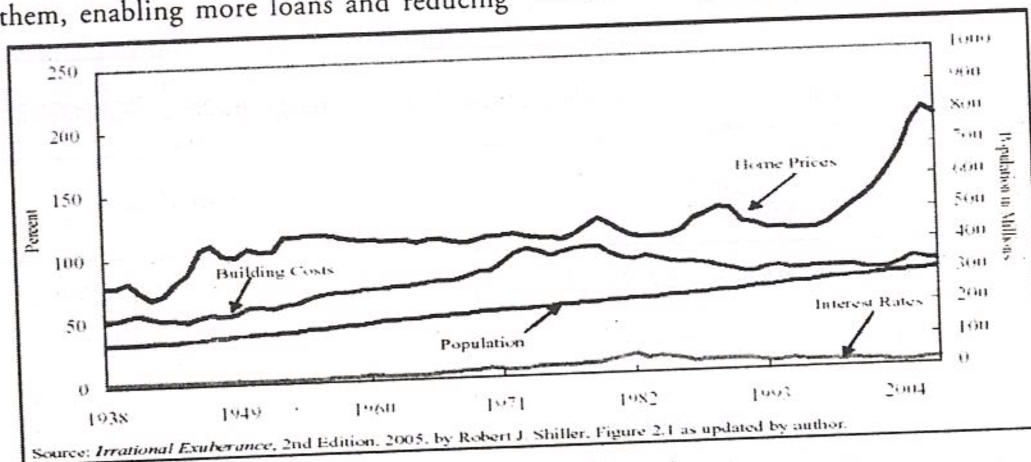


Figure 2: U.S. Housing Market in Historical Perspective Source: Shiller U.S. Real Housing Price Index and other Economic indicators. 1938-2007

saturation or lack of demand, the owners had to face mortgage loan which was higher compared to property value. The collapse of the US market had a direct impact on housing values, mortgage industry, real estate companies, hedge funds (A hedge fund is an investment fund charging a performance fee and typically open to only a limited range of investors; unlike mutual funds and pension funds, hedge funds are not usually regulated by Securities Exchange Commission.) etc. In late 2006, several US subprime mortgage companies had to close down due to losses. For example New Century Financial Corporation had to file for bankruptcy. Some companies were accused for actively encouraging fraudulent income inflation on loan applications. This led to collapse of stock prices for many companies in subprime mortgage industry, notably for some large lenders like Countrywide Financial and Washington Mutual etc.

CRISIS

i. On June 20, 2007, Merrill Lynch seized $800 million in assets from two Bear Stearns hedge funds that were involved in securities backed by subprime loans. The two funds are now reported to be essentially worthless

ii. American Home Mortgage Investment Corporation filed Chapter 11 bankruptcy on August 6, 2007, after a layoff of its employees the week before

iii. On August 8, 2007, Mortgage Guaranty Insurance Corporation announced it would discontinue its purchase of Radian Group after suffering a $ 1 billion loss of its investment in Credit-Based Asset Servicing and Securitization. C-BASS is seeking to restructure its financing. The MGIC-Radian transaction would have been a $4.9 billion deal.

iv. on August 9, French bank BNP Paribas stopped valuing three of its funds and suspended all withdrawals by investors after United States subprime mortgage woes had caused "a complete evaporation of liquidity"

v. Accredited Home Lenders reported on August 10 that the company expected to see up to a $60 million loss for the first quarter 2007

vi. Goldman Sachs' $8 billion Global Alpha hedge fund, its largest, reportedly lost 26% in 2007

vii. Citigroup has reported taking $700 million in losses in its credit business in July and August 2007

The expansion of subprime mortgages during the years 2001 through 2006 came, for the most part, through a well defined channel of financial intermediaries. The intermediaries in this Channel – brokers, mortgage companies, and the firms that securitize these mortgages and sell them on to the capital markets – had strong incentives to increase the supply of these loans. One outcome was a significant increase in the rate of homeownership. From 1994 to 2005, the overall homeownership rate rose from 64 to 69 percent. However, since brokers and mortgage companies are only weakly regulated, another outcome was a marked increase in abusive and predatory lending. Most subprime Loans are originated through Mortgage Brokers. The mortgages underwritten by subprime lenders come from many sources, but the overwhelming majority is originated through mortgage brokers. For 2006, Inside Mortgage Finance estimates that 63.3 percent of all subprime originations came through brokers, with 19.4 percent coming through retail channels, and the remaining 17.4 percent through correspondent lenders. Independent Mortgage Companies and Other Mortgage Specialists account for most subprime lending. Most subprime loans are made by companies that specialize in mortgage lending because they are not deposit-taking institutions, the independent mortgage companies and bank subsidiaries are not subject to the safety and soundness regulations that govern federal or state banks. These entities are less closely monitored under the Home Owners' Equity Protection Act (HOEPA) and the Community Reinvestment Act. Most subprime Loans are securitized via Non-Agency Conduits to the Capital Markets. Lenders hold only a fraction of the subprime loans they make in their own portfolios. Most are sold to the secondary market, where they are pooled and become the underlying assets for residential mortgage backed securities.

	Total Mortgage Originations (Billions)	Subprime Originations (Billions)	Subprime Share in Total Originations (percent of dollar value)	Subprime Mortgage Backed Securities (Billions)	Percent Subprimes Securitized (percent of dollar value)
2001	$2.215	$190	8.6	$95	50.4
2002	$2.885	$231	8.0	$121	52.7
2003	$3.945	$335	8.5	$202	60.5
2004	$2.920	$540	18.5	$401	74.3
2005	$3.120	$625	20.0	$507	81.2
2006	$2.980	$600	20.1	$483	80.5

Source: Inside Mortgage Finance. The 2007 Mortgage Market Statistical Annual. Top Subprime Mortgage Market Players & Key Data (2006).

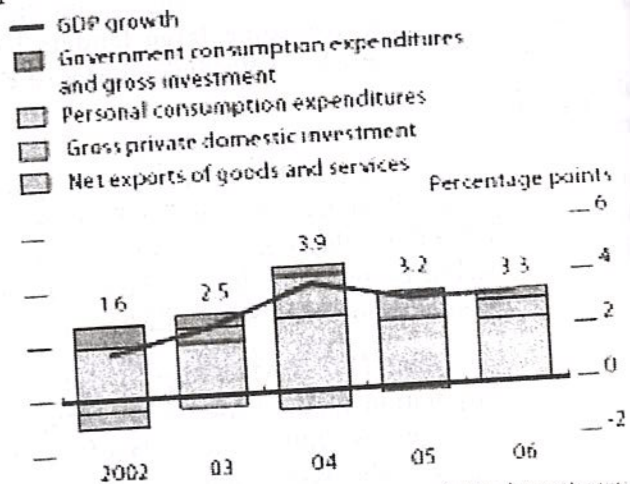
Figure 3: Mortgage Origination Statistics

As can be seen from the data in Figure 3, the percentage of subprime mortgage securitized rose rapidly after 2001, reaching a peak value of more than 81 percent in 2005. Deposit-taking institutions such as banks and thrifts, which deal mostly in lower-priced mortgages, sell their mortgages primarily to government sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac. Independent mortgage companies, however, make their secondary market sales primarily to other financial market outlets. Hence whatever influence the GSEs have on lender underwriting standards is missing from much of the Subprime market since securitization is done by other market participants.

IMPACT ON MAJOR ECONOMIES

U.S.

The United States (US) economy grew by a solid 3.3% in 2006, reflecting an upturn in business investment and robust private consumption (Figure 4). However, quarterly GDP figures demonstrated a visible slowdown in the second half and the year ended on a less positive note. The weak spot was mainly associated with housing sector retrenchment. Residential investment contracted for five consecutive quarters from the last quarter of 2005, and both new and existing home sales fell significantly in the latter half of 2006. Although home sales are showing signs of stabilizing, housing starts and permits continue to slide (Figure5), reflecting an excess supply of unsold homes. With falling house prices, these indicators suggest that expectations of an early resolution to the housing-induced slowdown are premature.

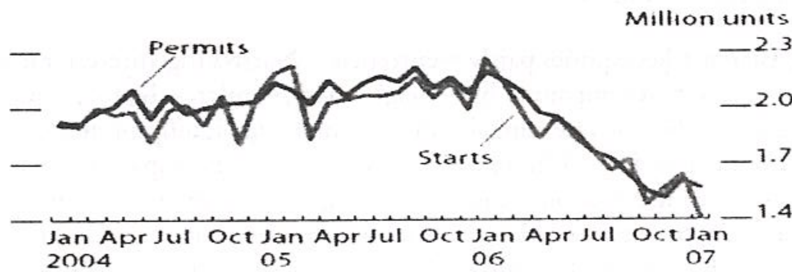


Source: Bureau of Economic Analysis, available: http://www.bea.gov, downloaded 1 March 2007.

Figure 4

Several factors stopped the economy from going into a steep slide. Personal consumption expenditure remained buoyant and grew by 3.2% in 2006, underpinned by relatively healthy job gains and rising incomes. Household discretionary income was boosted by falling oil prices and easing inflation. Solid business investment in several quarters, on the back of strong corporate profits, was another factor.

But there are signs that the housing market trouble is spilling over into both the real economy and the financial market. Industrial production figures are slipping, with manufacturing activity slowing sharply in the last quarter. Falling orders for cars, household appliances, and construction



Source: US Census Bureau, available: http://www.census.gov, downloaded 15 March 2007.

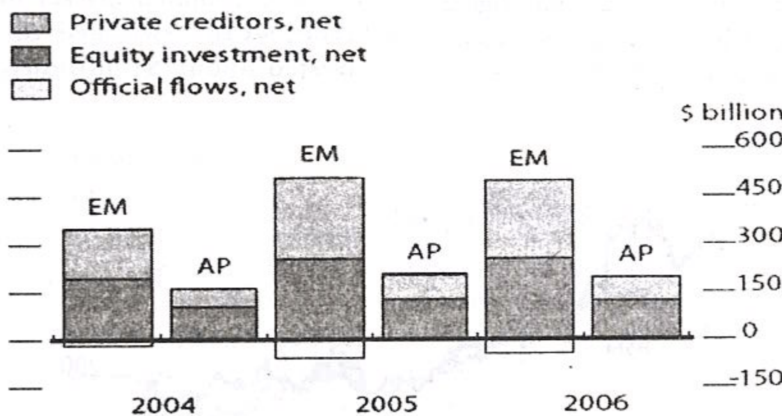
Figure 5

materials could generate ripple effects. All of these added up to a contraction in business investment in the fourth quarter. The emergence of marked increases in payments delays on subprime mortgage loans since late February revealed further elements of weakness. A pause in monetary tightening since last June has turned into a hiatus. Consumer price inflation has been ebbing, partly in reflection of the tightening, but also thanks to sharp declines in gasoline prices since the fall of 2006. Given the lessened pressure from inflation, combined with slowing economic activity, futures markets expect that the Federal Reserve may start to cut interest rates in the second half of this year. On the fiscal side, strong revenue increases reduced the 2006 US budget deficit for the second year in a row. The Congressional Budget Office projects the deficit to decline over the next 2 years. The ongoing slowdown in US growth is expected to be moderate. Sustained income growth and low inflation will continue to underpin private consumption growth. A relatively benign business outlook is predicted, based on good corporate earnings and firm demand. While exports are seen maintaining recent gains, robust consumer spending will likely rekindle growth in imports this year. The current account is expected to deteriorate further, though the pace of growth in the trade deficit has stabilized.

ASIAN CAPITAL FLOWS AND FINANCIAL MARKETS

The global investment climate for developing Asia remains favorable. Despite the most recent correction in February–March, emerging market asset prices have kept their earlier large gains. In 2006,

emerging market equity prices again staged a strong rally after a brief midyear sell-off. The strong



EM = emerging markets; AP = Asia-Pacific.

Note: Emerging markets and Asia-Pacific follow the definition of the Institute of International Finance Inc.

Source: Institute of International Finance Inc., *Capital Flows to Emerging Market Economies*, various issues, available: http://www.iif.com.

Figure 6

performance of emerging Asian market equities partly reflected external demand and was accompanied by robust capital inflows (Figure 6). Net private capital flows to emerging Asia amounted to $197.3 billion, only slightly down by 3.9% from the previous year, due to slightly smaller foreign direct investment flows. However, with its strong growth outlook, the region continues to be the primary recipient of private equity investment, attracting again more than 60% of net portfolio equity investment flows to emerging market economies in 2006.

Relatively low interest rates and benign liquidity conditions in capital markets have kept private credit flows generally buoyant, benefiting emerging Asian borrowers. Credit spreads remained near record lows for emerging market issuers through most of 2006 (Figure 7). While the region's strong fiscal position limited the need for new issuance of sovereign debt, corporate issuers took advantage of low funding costs. Foreign investors' Asian bond purchases (which account for a majority of private creditor non bank flows) were boosted by expectation of currency appreciation. Although Asian corporate borrowers will have ready access to bank credit, borrowing from banks abroad remained slow in 2007, mainly due to government measures to curtail investment in the PRC.

Asian currencies strengthened further against the US dollar in 2006. Gains ranged from 1.9% for the Indian rupee to 13.8% for the Thai baht (Figure 8). Robust performance of both current and capital accounts underpinned the strength of most Asian currencies. Narrowing interest rates continued to weigh on the dollar, which fell by 11.7% against the euro in 2006. Significant interest rate differentials between the US and Japan limited the dollar's fall against the yen to only 0.8%. Expectations for strong growth will continue to underpin the strength of Asian currencies in 2007, as will narrow interest rate differentials, due to monetary tightening in some countries.

INDIA

How much will Indian market get thrown off from its axis by the American subprime mortgage storm? The creeping big-time volatility has so far thrown more questions than answers. In the Indian market, the bear in the first four months of 2007 trumped the bull. But, the beaten bull pulled back from behind and outperformed the antagonist and took the BSE Sensex to a newer heights in later months of 2007. The rout of the bear ensured a stable, rising market spell during which it kept scaling higher levels, shored up by the unprecedented inflow of about $10 billion foreign money. But, August2007 brought with it the anti-climax and reversed the hard-gained smooth-sail and left the market in windless choppy water. The BSE Sensex gave up around 1700 points in august – September 2007, on cues from jitters in the global markets caused by the US subprime fiasco. FIIs that pumped the money in the rapidly rising intermediate months of the Indian market in 2007, seeing a gathering storm, switched to exit mode and disinvested about $1 billion in later half of

Source: Bloomberg, downloaded 15 March 2007.

Figure 7

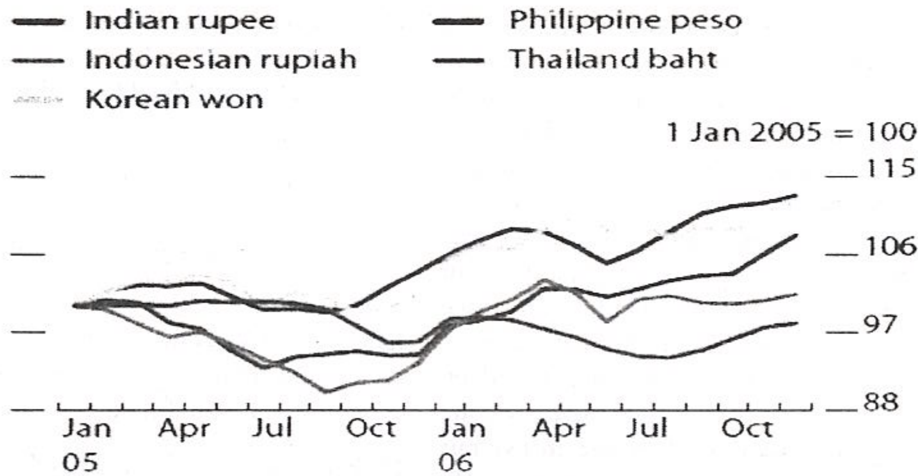


Figure 8

September 2007. Where are the national and global market headed and how deep can be the damage of what looks the fiercest-ever bull verses bear fight in the globalized marketplace?

US economy slipping into recession, may not impact the world economy significantly. This is because the economic fundamentals of emerging markets like India , China, Brazil, Russia etc, are still strong and are expected to grow at a faster pace in the long run. India's GDP continuous to grow at above 8%. This is the reason why International monetary fund in its report on World Economic Outlook April 2007, said that the whole world output is expected to grow at 4.9% in 2007 and 2008.

It is also being said that emerging markets like India are becoming less dependent on short term disruption in US financial market. As far as Indian economy and market fundamentals are concerned, these are strong and there is no reason to believe that there is anything which is going wrong. Market experts are of view that the correlation between the Indian market and US may weaken over long run. India may continue to see higher FII participation over a period of time, despite some temporary pull backs, in line with global trend. Hence the unanimous view is that the Indian economy would continue to grow in the long run due to strong performance from India Inc.

CONCLUSION

Bad lending practices, not good underwriting practices, restrict credit. The credit crunch is a consequence of the lack of adequate regulation and the reckless lending that followed. If subprime lenders had been subject to reasonable rules—the kind of rules that responsible mortgage lenders have always followed—we wouldn't have the problems we're seeing today. Sound laws bolster market health by restoring public confidence and promoting sustainable home ownership. The subprime mortgage market as currently structured doesn't have adequate incentives to change its practices. As long as the subprime market continues running without adequate rules, brokers and lenders will continue to make any type of loan that people will buy. Data shows that the severity of the current foreclosure problem is due to abusive loan terms, not simply economic forces. The data released by the Mortgage Bankers Association (MBA), shows that foreclosures on all types of loans have increased, but, as expected, that the increase in foreclosures in the subprime market is most severe. New foreclosures

on subprime adjustable-rate loans in the second quarter 2007 was 90% higher than the same time last year, compared with a 23% increase on prime fixed-rate loans. While local economic conditions do matter, subprime loans typically include features, such as prepayment penalties, that are well known to increase the rate of foreclosure. It is a fallacy that borrowers consciously choose and accept the loan terms they get. Most terms on a standard mortgage contract are buried in pre-printed loan documents and are dictated by the lender, not negotiated by consumers. What's more, by the time buyers see the disclosures they likely have nowhere else to live but the new home more disclosures as part of an already confusing and paper-heavy mortgage settlement process will not correct the problem.

The current epidemic of subprime foreclosures is severe and widespread and the primary victims are hard-working families who, instead of gaining the benefits of homeownership, are struggling to keep their home. Thus the government and players of the industry should take adequate steps to ensure a comprehensive reinvestigation of functioning and ensure that it should be the long term vision and greater social good that should be the guide towards the future.

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