Global Confidence Crisis

28 January 2008

Dawnay Day AV Analytics

Agenda

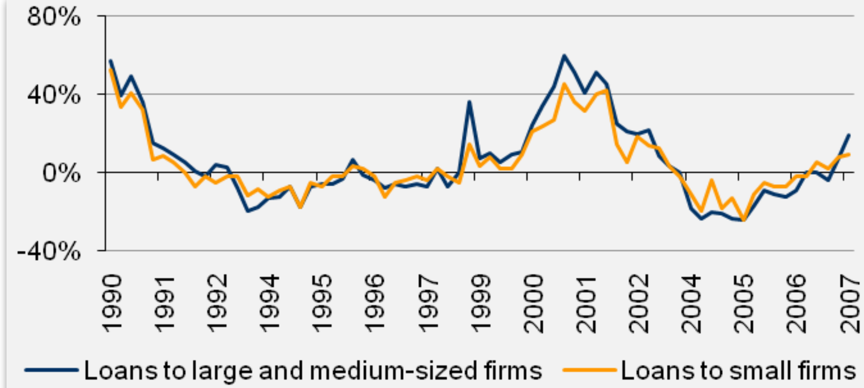
- Current market situation
- The backdrop
- Impact of the crisis
- Will this lead to a recession?
- What happens next?
- Global economic outlook
- Investment outlook

Current market situation

The current market situation can be summarized as follows:

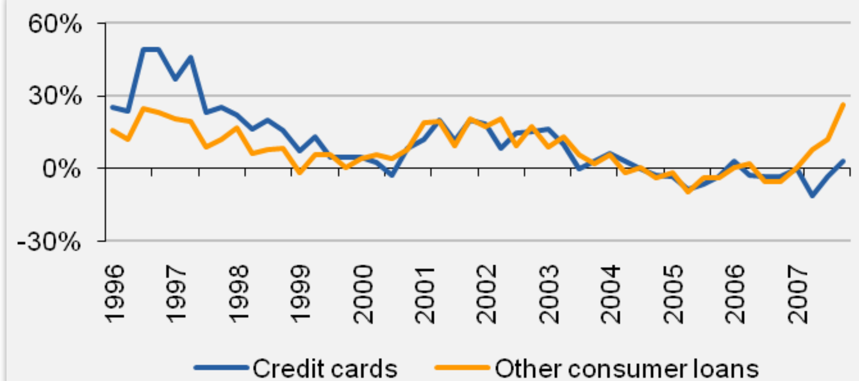
- Rising foreclosures and delinquencies in the U.S. housing market.
- Re-pricing of risks leading to a sharp decline in the asset backed securities market.
- Confidence crisis among financial institutions as large financial institutions take huge hits.
- Some bond insurance companies get downgraded.
- Temporary shutting down of markets for non-agency mortgages due to funding difficulties and collapse of asset-backed paper market.
- Tightening of lending standards across categories by banks.
- Fear of a slowdown in U.S. consumption spending on account of housing market collapse.

C&I Loans
Net % of Banks Tightening Standards



Source: Federal Reserve Board

Consumer Credit
Net % of Banks Tightening Standards

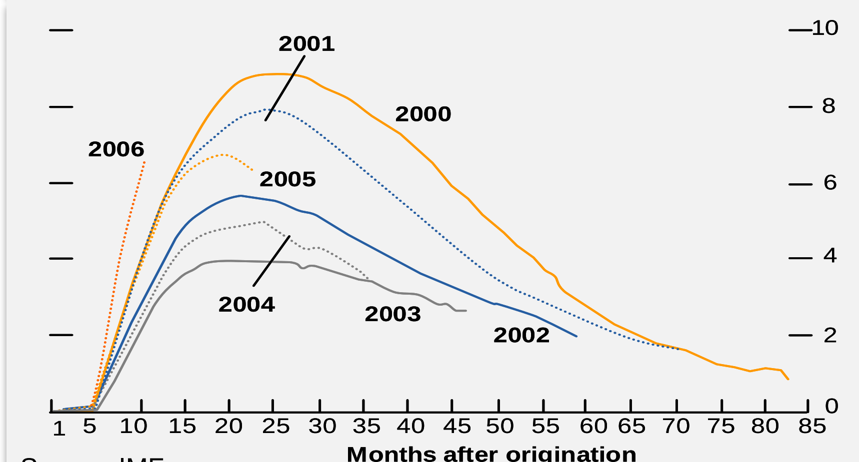


Source: Federal Reserve Board

The Backdrop

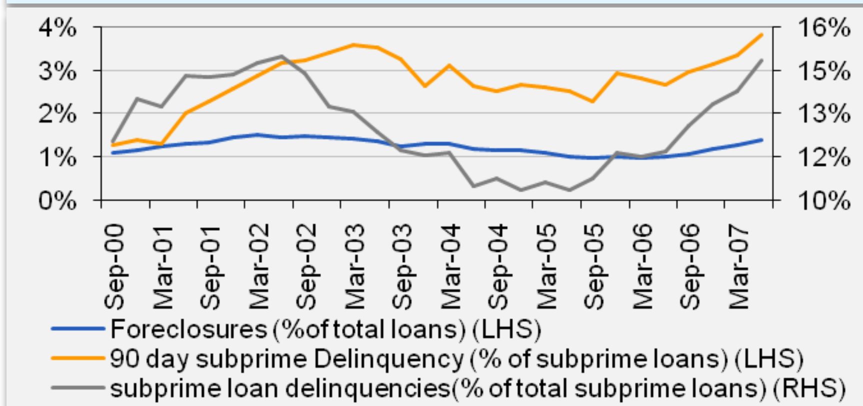
- The roots of the present crisis can be traced back to the excesses in the credit markets and slack regulatory oversight practiced in the aftermath of the dot-com bust and the September 2001 terror attacks which pushed American economy into recession.
- Credit was made easy and lending practices were relaxed on the false premise of continuous growth in housing prices. This created a bubble in housing and other asset markets.
- As interest costs rose borrowers faced payment shocks due to a rise in interest rate during late 2006, which resulted in delinquencies and foreclosures.
- Losses were transferred to lenders directly or through derivatives based on subprime loans.
- Banks and other financial institutions started reporting losses. All these led to fear psychosis and loss of confidence among market participants due to lack of transparency regarding exposure of each participant to the subprime mortgage market.

Subprime 60-Day Delinquencies by Mortgage Vintage Year (In % of payments due)



Source: IMF

Delinquencies and Foreclosure Trends



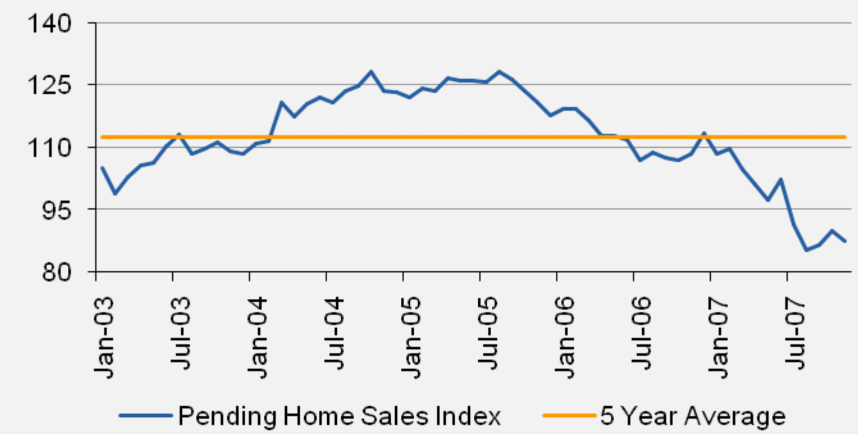
Source: Bloomberg

* Please refer to Annexure 1 for a Primer on U.S. mortgage markets

The Housing Market Started this crisis …

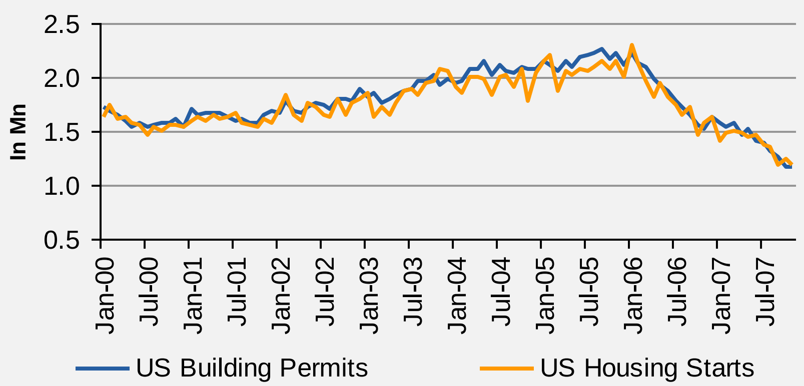
- As interest costs rose borrowers faced payment shocks due to a rise in interest rate during late 2006, which resulted in delinquencies and foreclosures.
- Leads to steady fall in U.S. existing homes sales; pending home sales index gives indication of a further slowdown in U.S. housing market.
- Sharp decline in building permits and housing starts.
- Property values, even in cases where mortgage payment was made on time, had a sharp fall because of foreclosures in neighborhoods.
- Introduction of stricter lending standards; reduced liquidity supply for borrowers.
- Drop in the number of “qualified” buyers and rise in the cost of funds.
- Consequently, rising inventory in the housing market.
- Ratings were downgraded in RMBS and Mortgage Credit derivative market.

US Pending Home Sales Index



Source: Reuters

US Building Permits + US Housing Starts



Source: Reuters

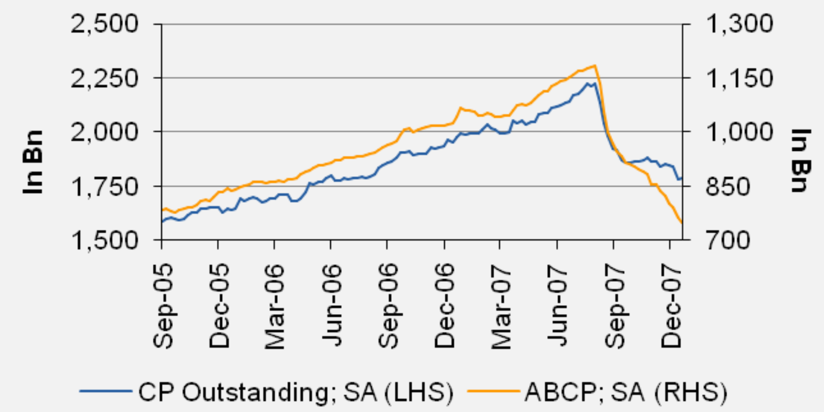
…Affecting financial institutions exposed to US Mortgage Markets

- Two Bear Sterns sponsored hedge funds were forced to liquidate assets after subprime losses.
- IKB subprime positions were taken over by a state-owned German bank in the first instance of a bailout.
- French bank BNP Paribas halted redemptions in two asset-backed funds.
- Aegis Mortgage, an American mortgage lender, filed for bankruptcy.
- German regional bank SachsenLB was sold to the country's largest regional bank, Landesbank Baden-Wuerttemberg, as it was on the verge of collapsing due to its exposure to subprime debt.
- Bank of China ($9.7 billion) and ICBC ($1.23 billion) reported exposure to securities backed by subprime mortgages.
- British mortgage lender Northern Rock applied to the Bank of England for emergency financial support, prompting hasty withdrawal of savings by worried customers.

* Please refer to annexure 2 for the list of mortgage lenders affected by the crisis

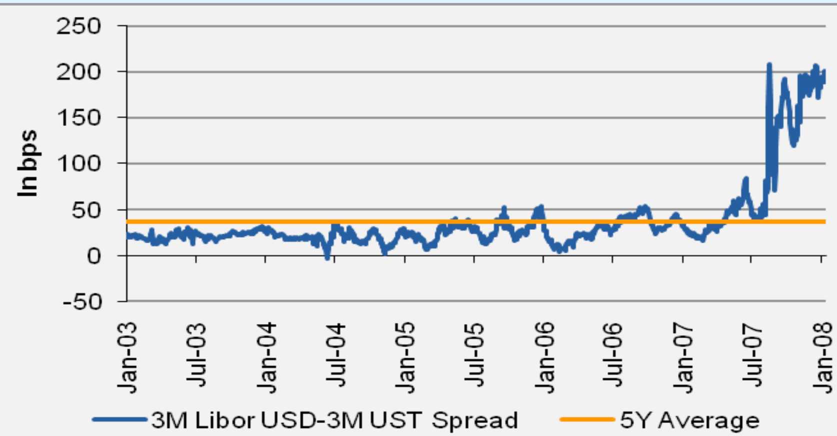
- Spreads in the money market widened due to loss of confidence among market participants. Lack of transparency regarding the actual exposure of financial entities to the subprime market led to a confidence crisis among participants.
- The situation became worse at the end of the third-quarter leading to widespread inability to raise short-term funds, including highly rated short-term commercial paper. This crisis of confidence was evident from the large drop in Outstanding Commercial Paper Market.
- Spreads in money markets continue to remain high.
- Central banks are keeping a close vigil on the overnight rates and stand ready to intervene whenever required.
- Commercial paper segment of the money market is still closed for highly leveraged borrowers.

Weekly Outstandings



Source: Federal Reserve

TED Spread

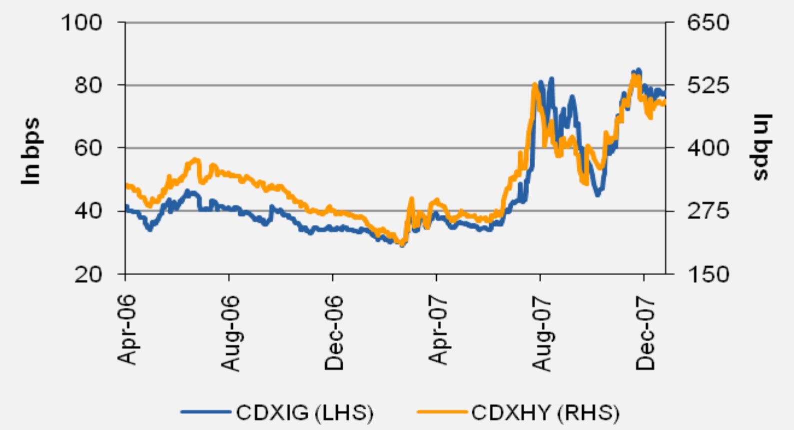


Source: Reuters

…And troubled the credit markets

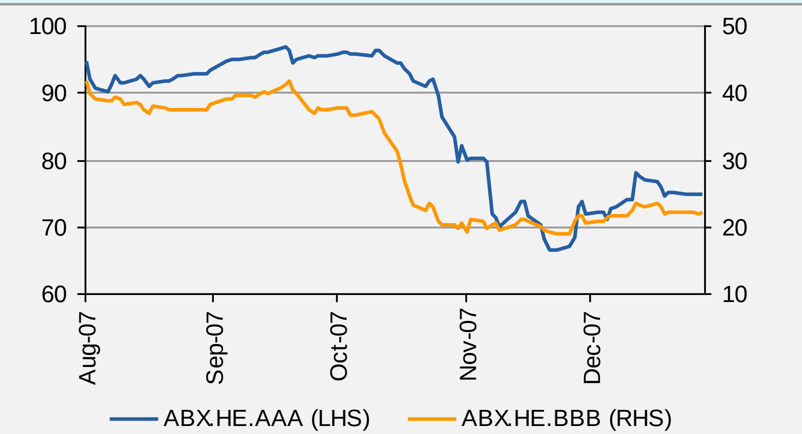
- Spreads widened on structured credit securities, primarily on securities that were backed by subprime mortgages. Spread on investment grade CDX of 5 years reached 77.88 which is far greater than its two-year average of 45.06. Default spread between CDXHY 5Y and CDXIG 5Y is also floating above its two-year average though it declined slightly in the second week of December.
- Increased use of leveraged loans as a primary form of debt financing has made them unattractive due to the adverse market conditions. This would increase the cost of LBO financing and may make them unappealing.
- Turmoil in the credit markets is leading to a flight in treasury prices as investors are looking for safer avenues to park funds.
- Market participants are expecting more write-offs by financial institutions which is putting pressure on the prices of debt instruments of financial companies.

CDXIG 5Y + CDXHY 5Y



Source: Reuters

ABX.HE.AAA + ABX.HE.BBB Price Index



Source: Reuters

…Leading to heavy losses for leading global banks

- Banks in the U.S. and the U.K. incurred heavy losses due to their direct and indirect (SIVs) exposure to subprime MBS and related derivatives. Total banking sector losses have crossed $75 billion.
- This has put a significant strain on the risk capital of the banks who had to seek funds from sovereign wealth funds based in Korea, Singapore and the Middle East. Citigroup is raising $14.5 billion from the Middle East while UBS is securing $11.9 billion from Singapore government's investment arm and Middle East investors. Funds were also made available by rich individuals of these countries, e.g. Saudi Arabia's Prince Alwaleed bin Talal, who invested in Citibank.
- Banks are also initiating cost cutting measures to sustain jumbo losses. Citigroup has announced a job cut for 4,200 employees.
- Also, the banks are facing high borrowing costs due to the confidence crisis.
- All these have led to the poor performance of the banking stocks in the bourses.

Banking Sector Write-Offs

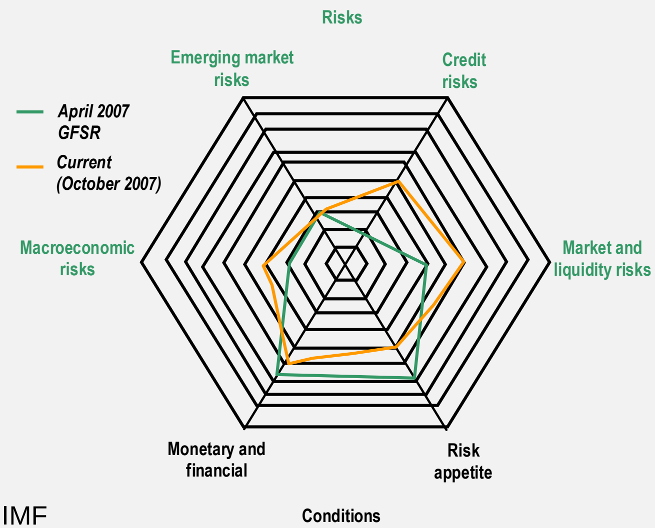
Institution Name	Business Type	Losses (In Billion $)
Citigroup	IB	24.10
Merrill Lynch	IB	22.50
UBS AG	IB	13.70
Morgan Stanley	IB	10.30
Crédit Agricole	Bank	4.80
HSBC	Bank	3.40
Bank of America	Bank	3.30
CIBC	Bank	3.20
Deutsche Bank	IB	3.10
Barclays Capital	IB	2.70
Bear Stearns	IB	2.60
RBS	Bank	2.60
Lehman Brothers	IB	2.10
LBBW	Bank	1.10
JP Morgan Chase	IB	2.90
Goldman Sachs	IB	1.50
Credit Suisse	Bank	1.90
Wells Fargo	Bank	1.40
Wachovia	Bank	2.40
RBC	Bank	0.36
Commerzbank	Bank	0.43

Source: Wikipedia * IB= Investment Bank

…Also, posing a risk to the stability of the financial system

- According to IMF, macroeconomic risks have increased substantially in the last three months but have not reached a level that can pose a serious threat to the global financial system. Moreover, world economic outlook still remains positive.
- U.S. macroeconomic risks have diminished in some areas that are mentioned below:
  - The growth differential between regions is lessening due to a rise in domestic demand in Europe and emerging markets.
  - U.S. growth dependence on domestic consumption is declining. It is slowly and steadily being replaced by consumption in developing economies which implies that U.S. export will continue to increase in coming months. This is further supported by the weakening of the dollar.
  - The much required sense of balance has returned among investors due to the present crisis resulting in re-pricing of risk.

Global Financial Stability Map (September 2007)

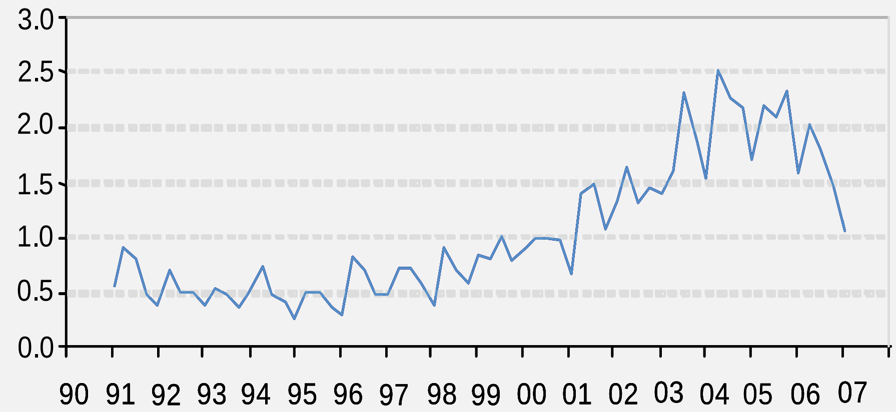


Source: IMF

…and creating worries about US consumption spending

- Personal consumption expenditure forms 71% of U.S. GDP.
- Most recessionary arguments are based on the premise of slowdown in personal consumption due to the depreciation in home equity.
- However, mortgage equity withdrawal does not form a major chunk of personal consumption expenditure – It was 1% of PCE in the first quarter of 2007.
- Moreover, recent data suggests that –
  - U.S. core personal consumption was up 3.0% in Q3 of 2007.
  - Though U.S. savings are dismal, the country remains the major destination of investment for foreign savings, which will continue to feed domestic consumption.

Equity Extraction – Contribution to PCE
(Portion used for personal consumption, % of PCE)

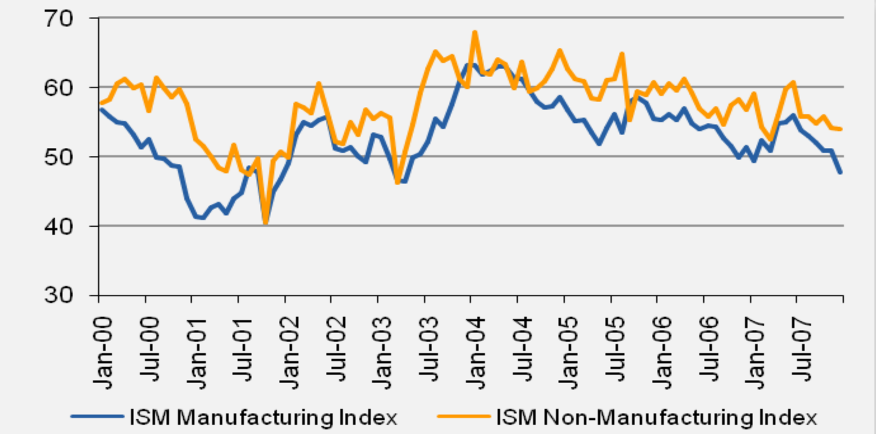


Source: BEA

- However retail sales are slowing down – declining 0.4% in December on month-on-month basis.
- The major risk to the U.S. consumers is the tight lending standards adopted by the banks. This can affect consumption, as it would be difficult for them to sustain current levels of consumption spending with the low savings.

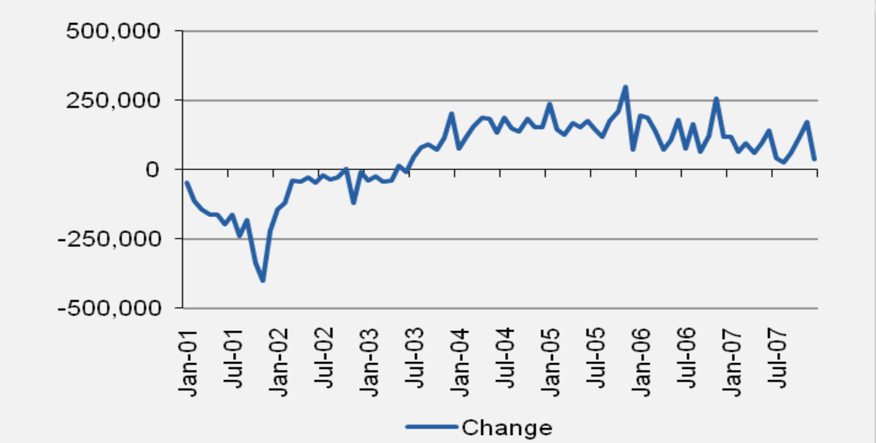
- U.S. economy shows signs of a slowdown with the banking sector adopting tight lending standards.
- Retail sales declined by 0.4% in December on month-on-month basis and industrial production declined by 0.3 % in November.
- Employment data is also far from exciting. Non-farm private employment increased by just 40,000 in December and unemployment rate reached 5%.
- U.S. consumer confidence is below the five-year average.
- Dollar continues to decline against all major currencies except for Canadian dollar and GBP – positive for U.S. exports.

ISM Manufacturing Survey



Source: Reuters

ADP Non farm Private Employment Change, SA



Source: Reuters

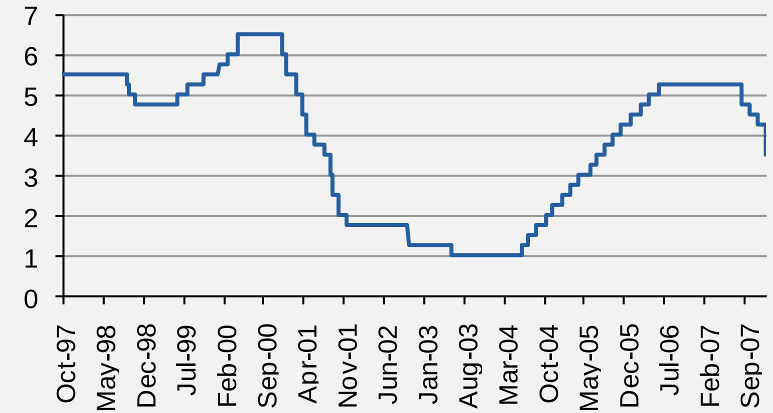
…Resulting in surprise Fed rate cut

Weak economic data and worsening economic outlook of U.S. economy prompted Federal Reserve to take an emergency step, i.e. a reduction in the interest rate by 75 basis points to 3.5%. The rate cut this time was unique in many ways:

- Fed did not wait for the next FOMC meeting (on January 29) to decide on rate cut.
- The rate cut was more than expected and the largest in the last 23 years.

This indicates that Fed is not only concerned about U.S. recession but also about the systemic risk to the financial system.

Fed Funds Rate



Source: Reuters

After Fed's aggressive move other central banks are also under pressure to follow suit:

- ECB, however, is not expected to follow suit immediately as inflation is still a major concern in Europe, hovering at around 3.1% against the targeted level of 2%.
- Bank of Japan is expected to cut the interest rate by the end of the first quarter, though it has left it unchanged for the time being.
- Bank of England Governor Marvyn King hinted that at 5.5% the bank rate is "bearing down on demand". He however cautioned that inflationary pressure is rising due to a rise in food and energy prices, and suggested that inflation targeting is the way out.

…And a fiscal stimulus package

- Leaders of House of Representatives and Bush administration reached an agreement on a $150 bn fiscal stimulus package to overcome the recessionary concerns.
- Under the deal single taxpayer are likely to get a rebate of up to $600 and two wage household is expected to get a maximum rebate of $1200. It also includes an additional amount of $300 per child. Higher income taxpayers or individual earning $75,000 or more and couples earning $150,000 or more have been kept out of the package.
- The package also has a tax incentive for business to make new investments, possibly a provision to expense a part of the investment in the same year.
- The package aims to temporarily raise the limit of conforming loans for Fannie Mae and Freddie Mac from the current $417,000 to $625,500.
- Total size of the package is nearly 1% of the national income.
- The fiscal package along with the interest rate cut is likely to support the housing market and boost consumption and investment expenditure which otherwise would have been highly impacted by recessionary expectations.
- Jumbo loans are likely to get refinanced in the broadened conforming segment. This would provide support to a high value property market and probably have a trickle down impact on the non-conforming segment.

…Which provided support to tumbling investor confidence

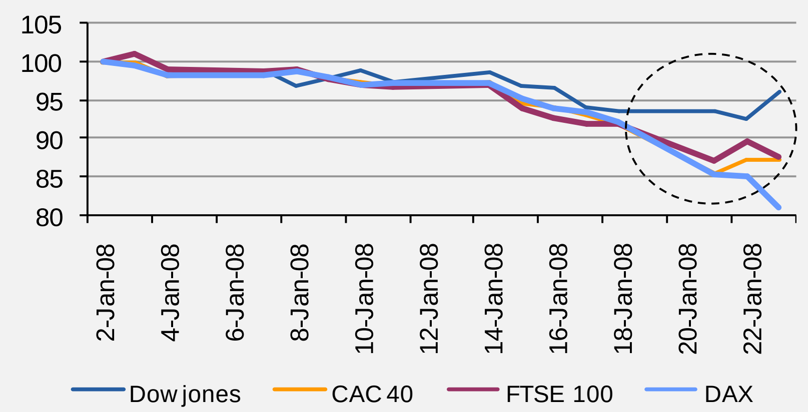
Equity Markets before the Fed rate cut:

- Global equity markets showed a sign of strong ties and reacted negatively to any economic news coming from the U.S.
- All the major equity indices declined by more than 10% in early 2008.
- Chinese and Indian markets, which are expected to be the engine of world economic growth, fell by 11.9% and 12% respectively in the last two trading days before the fed rate cut.
- A day before the Fed rate cut, fear took over and global equity markets plunged.

After the Fed rate cut:

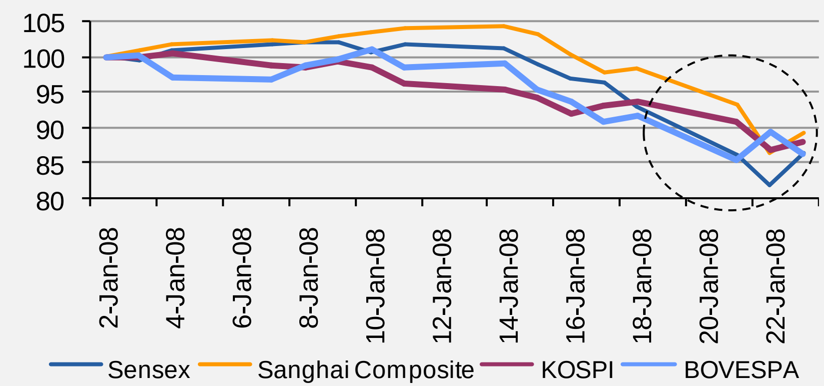
- There was a mixed reaction over the Fed rate cut by the global equity markets. Dow closed lower while the emerging markets recovered.
- Jean-Claude Trichet's emphasis on controlling inflation ran against the market expectation of a coordinated action by the central banks.

Developed Markets



Source: Reuters

Emerging Markets

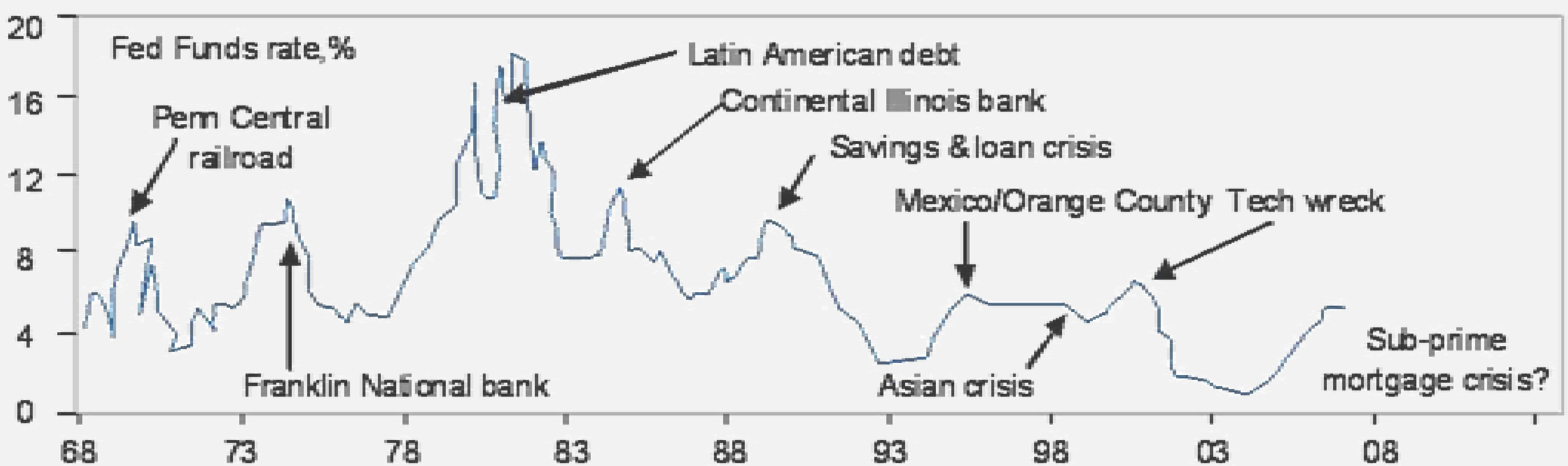


Source: Reuters

…However inflation is limiting central banks' options

- High spreads in the credit markets and fear of a slowdown is compelling Fed and ECB to cut their benchmark rates or at least keep them stable for now. Growth concerns seem to have taken a toll on central banks for the moment.
- However, in the process of supporting growth, central banks are not paying due attention to inflation.
- Already, high oil and food prices are increasing the inflation rate in the emerging markets.
- Flow of foreign funds are also adding to the inflation pressure.

Financial crises occur when real Fed Funds rates are high



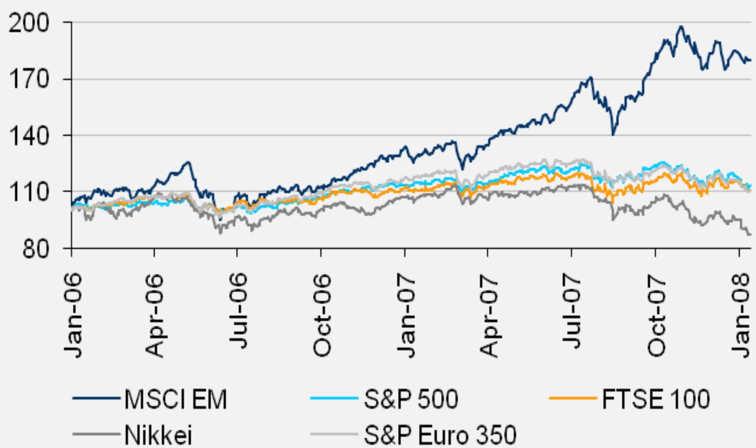
Source: Thomson-Financial

…While emerging markets provide strong support to economic growth

Global economic growth is expected to slow down in 2008 to 4.6% from 5.2% (IMF estimate) in previous year.

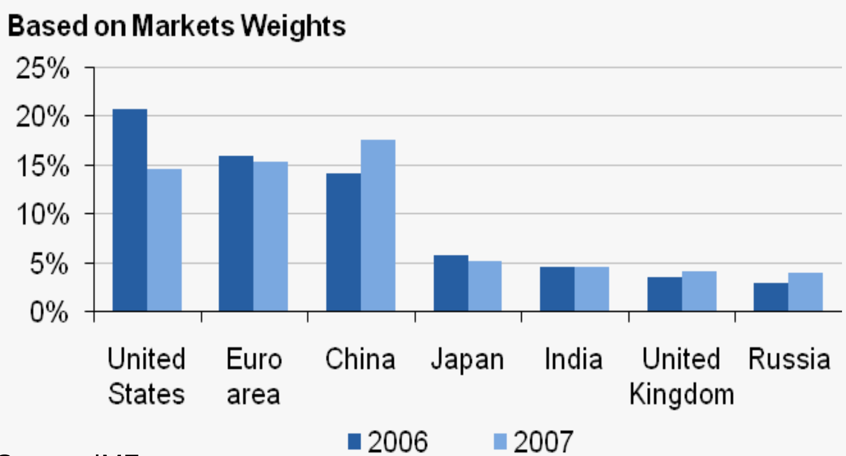
- U.S. growth is expected to slow down due to housing sector crisis and disruption in credit flow.
- Europe is also expected to witness a slower growth on account of distress in the financial system and a strong Euro.
- The Middle East and other oil producing countries that have amassed billions of dollars in oil trade are investing heavily in their own as well as other countries. These countries will keep growing at a fast pace.
- Emerging markets are the new engine of growth for the world economy. They will continue to grow strongly and provide the basis for strong global growth. China and India have the maximum contribution to the world economy in terms of purchasing power parity.

World Equity Market Trends (Base 2nd Jan 2006=100)



Source: Reuters

Contributions to Real GDP Growth (% of World Growth)



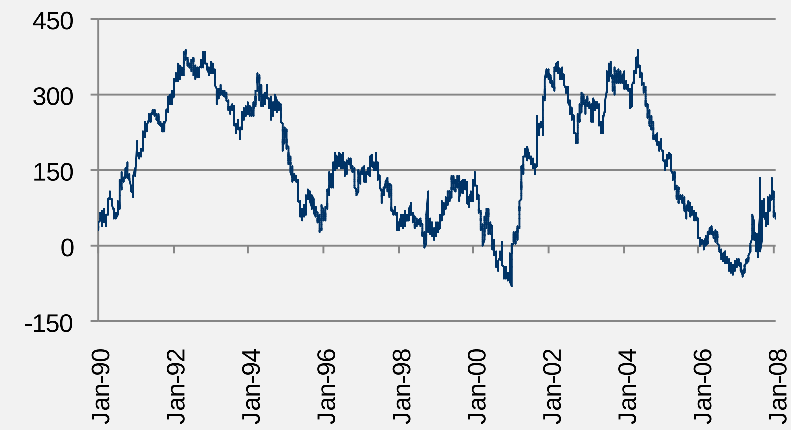
Source: IMF

This raises the question - Will this crisis lead to a recession?

We have attempted to answer this question through two different methods:

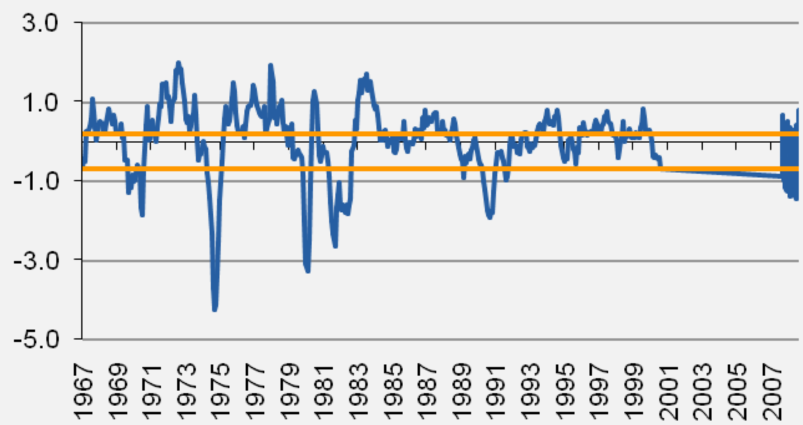
- By using Estrella and Mishkin's Recession Probability Model, which is a good indicator for forecasting the next two or more quarters. According to this model, probability of a recession in the first and second quarters of 2008 is 40% and 25%, respectively, which is a very strong signal of recession.
- By using the Chicago Fed National Activity Index, which is a good indicator for next quarter forecast. A CFNAI-MA3 value below -0.7 indicates the beginning of a recession. The November value of -0.53 is greater than -0.7 and shows an improvement over the last month. It indicates that though the economic activity is below historical trend, it is still far from being a recession.
- After analyzing the model and indicators mentioned above, it is likely that the US could enter into a recession, as defined by the NBER, in the first or second quarter of 2008. However, any such recession is likely to be short and shallow as the Fed has promised to act in a timely manner to address recession risks. Negative growth during this period is highly unlikely.

10 Y UST – 3M UST Spread



Source: Reuters

CFNAI-MA3



Source: Federal Reserve Bank of Chicago

Outlook

- Slowing growth and an Inflation rate that is still above trend are the two challenges for central bankers in 2008.
- Global monetary easing would accelerate in the foreseeable future, as Central Bankers try and counter the slowing growth in US, Euro Zone and Japan.
- The worst delinquencies and defaults are yet to come – though moderated significantly by aggressive monetary easing by Fed.
- We expect risk re-pricing to continue and spreads to widen. Credit standards will get tightened, along with some regulatory changes.
- US economy would slow down significantly – however may avoid a recession. Our base case for 2008 is a 1% GDP growth in US while the worst case growth outlook for US is a short and shallow recession.
- Short and medium term outlook for the Euro Zone is not very robust - we expect a GDP growth of about 1.5% - 2.0% in 2008 and expect ECB to ease interest rates by 50 bps in 2008.
- Most emerging economies are experiencing robust economic growth – China is still growing in excess of 11% while India is growing a healthy 8.5% - 9.0%. We expect some slow down in 2008 – though graded by their exposure to the US Markets.
- India is the likely standout due to a large domestic market and low dependence on US.
- Inflation is a bigger concern in some emerging markets, especially China. We expect some central banks in these countries to continue with tight monetary policy and a stronger currency to counter this.
- Overall we expect global economic growth to slow down from close to 4.7% in 2007 to 4% in 2008.

Annexure

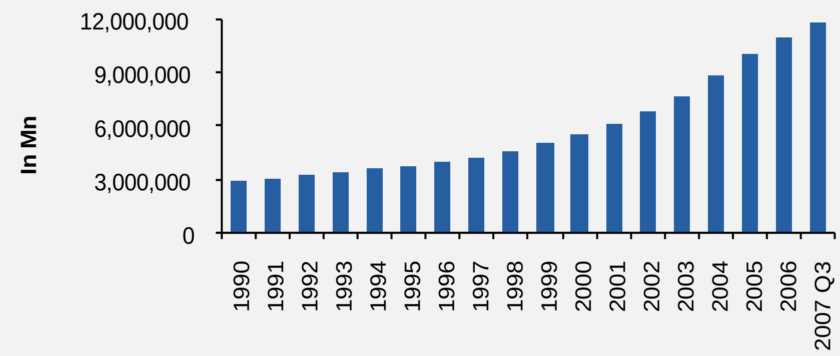
Mortgage Primer

Mortgages are the single largest liability in the balance sheet of U.S. households. At the end of Q3 2007, mortgage debt outstanding was $11.8 trillion, which is 85% of the U.S. GDP on current dollar basis. The rise of mortgage debt is driven by increased home ownership in the U.S.

Players in the mortgage business are:

- Mortgage Originators (Originate and service mortgage loans)
- Warehouse Lenders (Lend to mortgage originators)
- Third Parties (Act as source of liquidity for originators)

Residential Mortgage Debt Outstanding (In Mn)



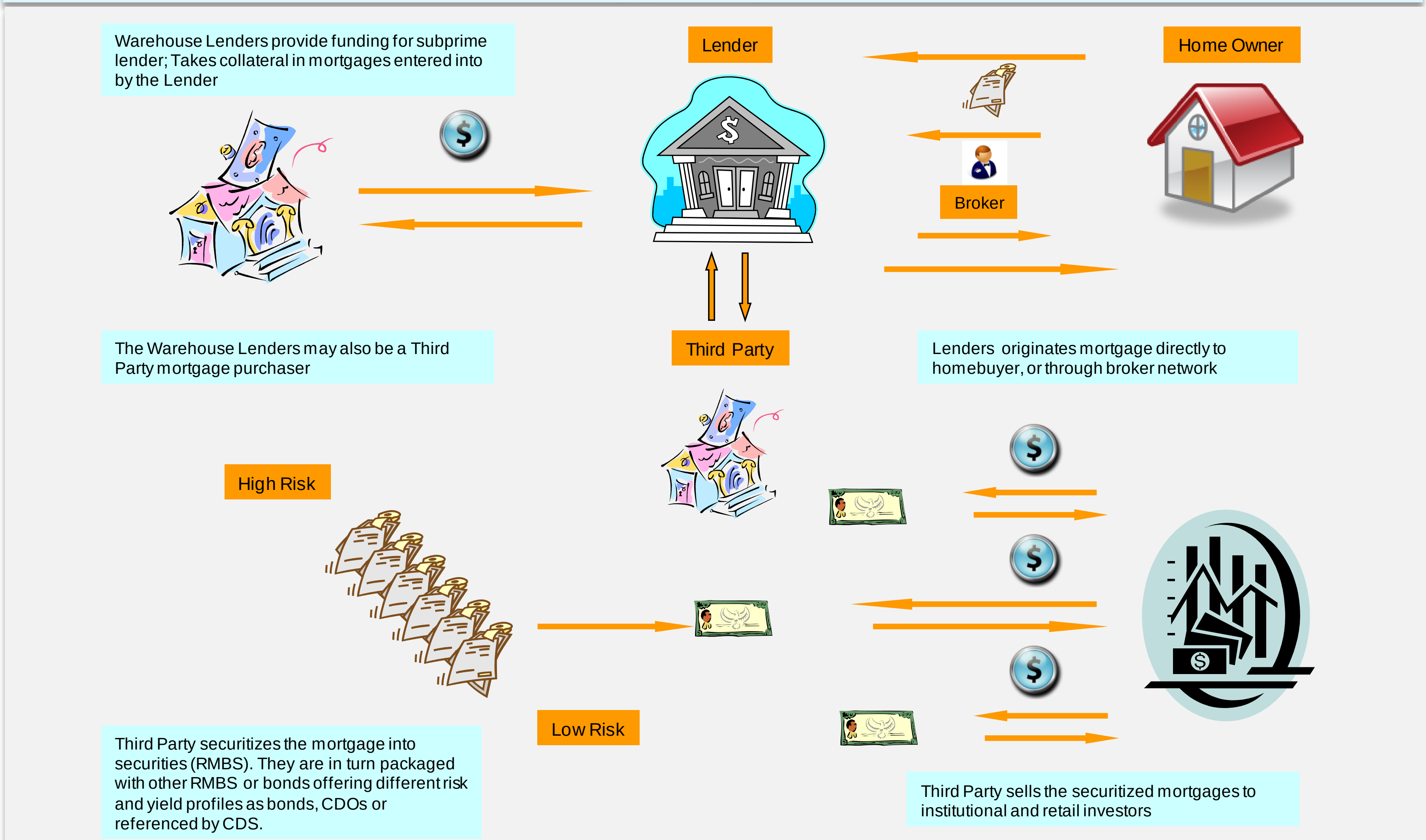
Source: Office of Federal Housing Enterprise Oversight

What are Subprime Mortgages?

Subprime Mortgages are residential loans that do not conform to the criteria laid down for the approval of prime mortgages, and therefore indicate a lower probability of full repayment or a higher probability of default. Criteria for Subprime Mortgages are: Low Credit score (FICO Score < 620), High DTI ratio (>55%) and High LTV ratio (>85%)

Mortgage Primer (Contd.)

Mortgage Lending Process



Affected mortgage lenders

Bankrupt Lenders

Company	Headquarter	Status	Date
Bankrupt lenders:			
South Star Funding	Atlanta, GA	Bankrupt (Chapter 7)	April 11,2007
New Century Financial	Irvine, CA	Bankrupt (Chapter 11)	April 2,2007
People's Choice	Irvine, CA	Bankrupt (Chapter 11)	March 20,2007
ResMae Mortgage Corp.	Brea. CA	Bankrupt (Chapter 11)	February 12,2007
Mortgage Lenders Network USA	Middle town, CT	Bankrupt (Chapter 11)	February 5,2007
Ownit Mortgage Solutions	Agoura Hills, CA	Bankrupt (Chapter 11)	December , 2006

Lenders actively seeking to sell

Company	Headquarter	Status	Date
Lenders that have closed or been acquired:			
Option One Mortgage	Irvine, CA	Sold to affiliate of Cerberus Capital Management	April 20, 2007
EquiFirst Corp.	Charlotte, NC	Sold to Barclays	April 2, 2007
Fieldstone Mortgage	Columbia, MD	To be acquired by C-BASS	April 2007
Rose Mortgage	Parsippany, NJ	Closed	April 2007
Investaid Corp.	Southfield, MI	Closed	March 2007
Popular Financial Holding	Marlton, NJ	Closed	March 2007
ECC Capital Corp.	Irvine, CA	Acquired by Bear Stearns	February 12, 2007
Lenders Direct Capital	Lake Forest, CA	Closed wholesale operation	February 2007
Secured Funding	Costa Mesa, CA	Closed wholesale operation	January 2007
Bay Capital	Owings Mills, MD	Closed	January 2007
Champion Mortgage	Parsippany, NJ	Sold to Nationstar Mortgage	January 2007
Harbourton Mortgage	Santa Rosa, CA	Closed	December 20, 2006
Sebring Capital Partners	Carrollton, TX	Closed	December 2006
First Financial Equities	Teaneck, NJ	Closed	December 2006
Centex Home Equity	Dallas, TX	Sold to Fortress	July 2006

Source: “The Subprime Meltdown: A primer” Part 1 of A NERA Insights Series.

About Dawnay Day AV Analytics

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