

Causes of world Financial crisis 2007-2009 evidence from United States

AZIZ– Bilal*†

University of Punjab, Lahore 54890, Pakistán

Received April 05, 2010; Accepted April 26, 2010

This paper seeks to explain the causes of the U.S. subprime mortgage crisis, and how this crisis has led to a generalized credit crunch in other financial sectors that ultimately affects the real economy. The currently observed turmoil in financial markets, which is believed to have been ignited by the collapse of the subprime mortgage market, has recently brought to prominence the ideas of Hyman Minsky (1919–1996), a prominent member of the post-Keynesian school of economics. Many commentators are of the view that Minsky's framework of thinking accurately anticipated the current financial crisis Wray (2007), McCauley (2008). Some of them called this situation a “Minsky moment” (Whalen 2007, Magnus 2007). While some economists have the view that Government Actions and Fed’s role created and deepened this crisis Taylor (2009). In this paper we would discuss how this crisis started and proceeded? What role U.S housing market played? And how lack of transparency and accountability deepened the crisis?

Financial Innovations, Subprime Mortgage Crisis, Mortgage Back Securities (MBS), Housing Bubble, Collateralized Debt Obligations.

Citation: Aziz. B. Causes of world Financial crisis 2007-2009 evidence from United States. ECORFAN Journal-Mexico 2010, 1-2:125-139

*Correspondence to Author (email: bilalazizposwal@hotmail.com)

† Researcher contributing first author.

Introduction

Financial Crises are the result of the normal functioning of the economic and financial systems over the course of the business cycle. Endogenous processes take place near the peak of the expansion phase of the business cycle, in particular, the deterioration of the financial condition of the business sector, which set the stage for a financial crisis (Wolfson, 1994). There is no precise definition of “financial crisis,” but a common view is that disruptions in financial markets rise to the level of a crisis when the flow of credit to households and businesses is constrained and the real economy of goods and services is adversely affected. One thing is common in all crises that “All Crises are Crises of Success” (Portes & Vines, 1997). The term ‘financial crisis’ is used too loosely, often to denote either a banking crisis, or a debt crisis, or a foreign exchange market crisis. It is perhaps preferable to invoke it only for the ‘big one’: a generalized, international financial crisis. This is a nexus of foreign exchange market disturbances, debt defaults (sovereign or private), and banking system failures: a triple crisis, in which the interactions are the key to causality, depth, and persistence (Eichengreen and Portes, 1987).

Financial Crises could involve either bank or currency crises or indeed, both of them could take place at the same time (Daianu & Lungu, 2008). (Delargy and Goodhart, 1999) argue that both the late 19th century crises and those in the late 20th were more likely when loose credit conditions in the lending countries were in place. Subsequently, when credit conditions suddenly adversely changed it generated a boom and bust economic cycle.

“The classic explanation of financial crises, going back hundreds of years, is that they are caused by excesses—frequently monetary excesses—which lead to a boom and an inevitable bust. In the recent crisis we had a housing boom and bust which in turn led to financial turmoil in the United States and other countries” (Taylor, 2008).

The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. In the 19th and early 20th centuries, many financial crises were associated with Banking Panics and many recessions coincided with these panics.

Financial Crisis 2007-2009

How it is Started & Proceeded

The origin of the current financial crisis which is called the “Financial Tsunami” by some leading economists (Lim, 2008), clearly the worst financial Crisis since the Great Depression 1930, is much divided. Some economists believe that the causes of the current crisis go back to the Great Depression of 1930 (Eichengreen, 2008). While others believe that a housing market bubble began in the late 1990s and accelerated in the early-mid 2000s became the root cause of this crisis (Crotty, 2008). While others have different idea “The classic explanation of financial crises, going back hundreds of years, is that they are caused by excesses—frequently monetary excesses—which lead to a boom and an inevitable bust. In the recent crisis we had a housing boom and bust which in turn led to financial turmoil in the United States and other countries” (Taylor, 2008).

Due to the housing bubble banks and mortgage brokers pushed mortgage sales because they earned fees in proportion to the volume of mortgages they wrote. Wall Street took in \$27 billion in revenue from selling and trading asset-backed securities (Farzad, 2007). Banks earned large fees securitizing mortgages, selling them to capital markets in the form of mortgage backed securities (MBSs) and collateralized debt obligations (CDOs), and servicing them after they were sold. The volume of Mortgage backed securities (MBS) originated and traded reached \$3 Trillion in 2005 in a United States housing mortgage industry of \$10 Trillion (Farzad, Goldstein et al., 2007b). Since, it was generally believed that banks distributed most of these mortgages to capital markets as asset-backed securities; it was expected that little if any bank risk was involved in the process. Many large housing developers aggressively pushed mortgages to borrowers in order to boost sales. For Example, Pulte Home (the country's largest developer by market capitalization) provided mortgages for 90% of the houses they built (Lim, 2008). Institutional investors such as hedge funds and insurance companies demanded these complex, risky products because they were given high – often AAA – ratings by credit ratings agencies, yet they had higher returns than equivalently rated corporate bonds whose yield was constrained by the low interest rates of the era.

Demand for high yield products based on mortgages was so great and bank fees so large that banks and brokers began to sell mortgages to those who could not afford them under terms that were bound to trigger large defaults when the housing price bubble evaporated and/or interest rates rose. The whole process was driven by accelerating leverage.

Subprime mortgages simply mean lending to house borrowers with weak credit. Lenders did so by providing teasers like minimal or zero down payment, and low introductory adjustable rate mortgages, as well as lax documentation and credit checks. Between 2004 and 2006, \$1.5 Trillion (15% of total United States housing loans) of subprime mortgages were booked (Brooks and Mitchell, 2007).

Total subprime loans form 25% of the housing mortgage market (Capell, 2007). These subprime loans were fine as long as the housing market continued to boom and interest rates did not rise. When these conditions disappeared the countdown started (Lim, 2008). Home sales peaked in late 2005 and home construction spending and housing prices topped out in early 2006.

When the subprime mortgage crisis erupted in mid 2007, the entire building began to collapse. The crisis began in the US, but since mortgage-based financial products had been dispersed around the world, we soon had a global financial crisis.

Some economists believe that the Subprime Mortgage defaults did not cause the financial crisis, it only acted as a trigger (Lim, 2008). This crisis is fundamentally a consequence of three imbalances: Wealth and income imbalance, Current Account imbalance and Financial Sector imbalance (Lim, 2008). While others are of the view that Government actions and interventions caused, prolonged and worsened this financial Crisis (Taylor, 2008).

While subprime defaults were the root causes, the most identifiable event that led to the systematic failure was most likely the collapse on June 20, 2007, of two highly levered Bear Stearns (The fifth-largest investment bank)-managed hedge funds that invested in subprime assets –backed securities (ABSs) and the bankruptcy of the Lehman Brothers (Acharya, Philippon, Matthew et al., 2008). Lehman Brothers (The Forth-largest investment bank) filed for bankruptcy on September 12, 2008. Lehman contained considerable systemic risk and led to the near collapse of the financial system. Lehman Brothers episode revealed “too big to fail” label for the financial institutions.

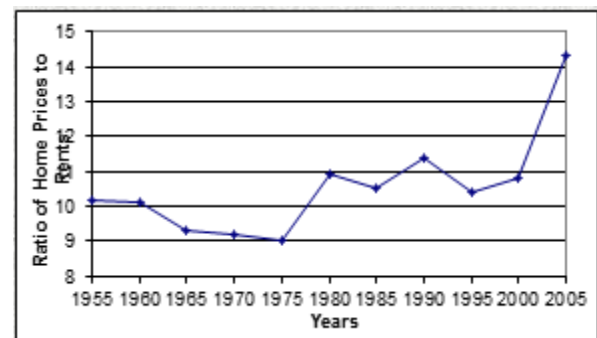
Nearly two years after the outbreak of the credit crisis (which may be dated to early 2007 when major losses were announced by the U.S. subprime-based investors), key issues remain to be resolved. At the most basic level the big question: What caused the crisis? This financial crisis is not the result of only single factor rather it is the combination of many factors. I am discussing the role of U.S housing market and transparency issues.

Housing Boom, Bubble & Bust.

A housing bubble is a type of economic bubble that occurs periodically in local or global markets. It is characterized by rapid increases in valuation of real property such as housing until they reach unsustainable levels relative to income and other economic elements. The driving force behind the mortgage and financial market excesses that led to the current credit crisis was the sustained rise in house prices and the perception that they could go no where but up (Baily, Litan et al. 2008).

Graphic 1 plots data on the ratio of the total value of residential real estate to a measure of the rental value at an annual rate. Equivalent to a price-earnings ratio for equity, data beginning in 1955 make clear how extraordinary the first five years of the 21st century were. Normally, home prices are between 9 and 11 times the annual level of rent paid. That makes sense, as it implies an average user cost of housing of around 10 percent. But since 2000, prices have skyrocketed, leaving rents in the dust. The price-to-rent ratio peaked at the end of 2006, reaching the rather extraordinary level of 14.5, clearly suggesting the existence of a “bubble” in residential housing. Home prices were at levels far higher than justified by fundamental values (or replacement costs).

Ratio of Home Prices to Rents

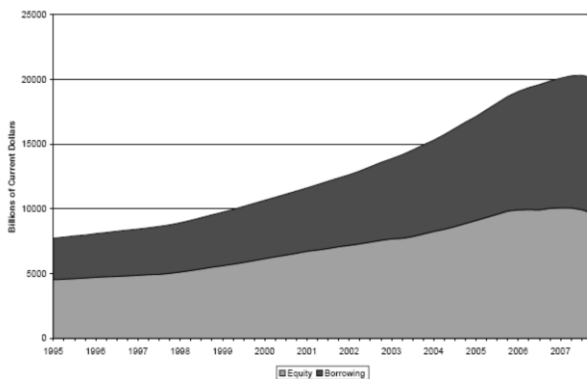


Graphic 1

The residential real estate price rise that began in 2000 had a number of important side effects. First, when the value of housing rises, it creates wealth and wealthier people consume more. This consumption-wealth effect is substantial.

The simplest way to convert housing wealth into consumption is to borrow. And this is where, in hindsight, we can find the second sign of trouble. Graphic 2 separates the value of residential housing into owners' equity and borrowing (combining mortgages and home equity loans). What we see is that as the value of residential real estate rose, mortgage borrowing increased even faster. Since 1995 home equity has fallen from 58, already far below the 69 percent level a decade earlier, to 52 percent of home value.

Evolution of Equity and Borrowing in Residential Real Estate



Source: (Cecchetti, 2008)

Graphic 2

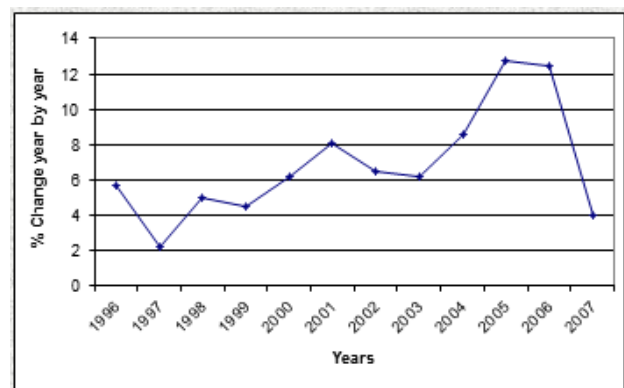
To recap, by the beginning of 2007 we can say:

- A. Home prices were at unprecedented levels.
- B. Home owners had more leverage than ever before.
- C. Mortgage quality had declined substantially.

This sets the stage for the crisis (Cecchetti, 2008). House prices in some regions grew rapidly after interest rates declined in 2001.

Adjusting for inflation, real U.S. house prices rose 34% during 2000-2005 (they rose 51% if not adjusted), which is more than double any five-year rate in the past 30 years. Specific regions experienced even faster appreciation; in 2004 alone, housing in Miami, Los Angeles, and West Palm Beach appreciated more than 20% and Las Vegas appreciated 35%. Graphic 3 shows that the rate of house price appreciation, year over year, reached 13% in 2006, and then plunged to 3% by mid-2007.

Appreciation of House Prices, 1996-2007
(Percentage change year by year)



A survey held by (Case and Shiller, 2003) report that the overwhelming majority of persons surveyed in 2003 agreed with or strongly agreed with the statement that real estate is the best investment for long-term holders.

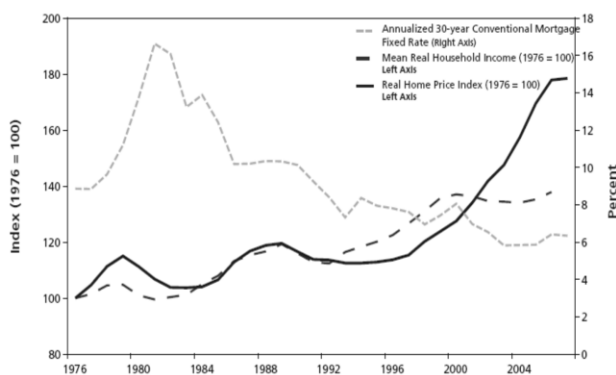
Respondents expected prices to increase in the future at 6 to 15 percent a year, depending on location.

Graphic 4 below shows that, between 1975 and 1995 real home prices went through two cyclical waves: rising after 1975, falling in the early 1980s and then rising again before falling in the early 1990s.

From 1975 until 1995 housing did increase faster than inflation, but not that much

faster. After the mid 1990s, however, real house prices went on a sustained surge through 2005 making real estate a great investment opportunity. In 1995-2000 household income per capita rose substantially, contributing to the increase demand.

Real home Prices and Real household income (1976=100); 30-year conventional Mortgage Rate

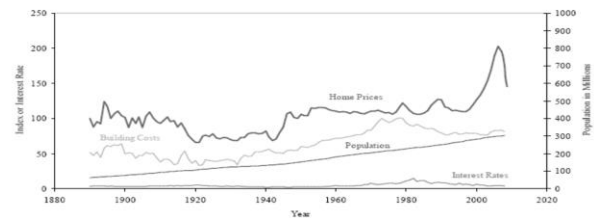


Graphic 4

But what happened after is a constant surge in the housing prices from 1995 to the onwards. The increasing trend regardless of the constant decreasing household per capita income clearly shows a bubble in the housing market. In general experience of the other countries supports the view that the decline in mortgage interest rates was a key factor in triggering the run up of housing prices (Green and Wachter, 2007).

Graphic 5 below shows four parameters: Home prices, building costs, population and interest rates. Apart from the Home prices the other factors remained steady. Since 2000 an unprecedented appreciation has been seen in the housing factor which is very abnormal. Rapid housing appreciation clearly depicts a bubble in the housing sector.

US Home Prices 1890 to 2008 Q3 With Annual Building Costs, Population, Ten-Year Treasury Yield



Graphic 5

Source: Taken from Wikipedia. Robert Shiller's plot of U.S. home prices, population, building costs, and bond yields, from Irrational Exuberance

Was the Boom a Bubble?

In the aftermath of the housing boom, the question that economists are heatedly debating is how much of the increase in housing prices was due to economic fundamentals, and how much was due to a bubble—a rise in price due to “irrational exuberance” about future price appreciation (Alan Greenspan).

There were also reasons for housing prices to rise based on market fundamentals, however, such as rising incomes and falling mortgages rates (Getter, Jickling et al. 2007). They put mainly two questions: First why did borrowers increasingly use ARMs rather than locking in a relatively low fixed rate, which would have had no risk of future interest rate increases? And second, why did mortgage lenders and investors not factor in rising rates when estimating the future probability of ARM delinquencies? Outcome of the results suggests that many borrowers might have been motivated by the prospect for short-term financial gains and investors turned to riskier types of MBS and these investments create a housing bubble which ultimately becomes the main reason of Subprime Default.

Lack of Transparency & Accountability

“Throughout the housing finance value chain, many participants contributed to the creation of bad mortgages and the selling of bad securities, apparently feeling secure that they would not be held accountable for their actions. A lender could sell exotic mortgages to home-owners, apparently without fear of repercussions if those mortgages failed. Similarly, a trader could sell toxic securities to investors, apparently without fear of personal responsibility if those contracts failed. And so it was for brokers, realtors, individuals in rating agencies, and other market participants, each maximizing his or her own gain and passing problems on down the line until the system itself collapsed. Because of the lack of participant accountability, the originate-to distribute model of mortgage finance, with its once great promise of managing risk, became itself a massive generator of risk.” Former Fed Chairman Paul Volcker has observed that problems of financial crisis began with a lack of accountability in mortgage lending and the trading of mortgage-backed securities. Financial executives spawned a proliferation of mortgage backed securities without integrity and traded them in non-transparent markets. According to (Larson, 2009) CEOs and Boards of Directors failed to be accountable to shareholders and to the public. They took on growing risk, ran reputable companies into the ground and paid themselves fat bonuses.

This attitude of individuals and even companies raises question of lack of transparency and accountability during the financial crisis.

One of the essences of a well functioning free market is that the market itself holds players to account simply through who gets to sell their wares & who does not.

It appears that this market function has not helped because Financial Crisis tells us the different story. According to (Larson, 2009) the German multinational firm Siemens recently agreed to fines of over \$1.6 billion to German and American authorities to resolve charges that it had systematically bribed public officials around the world in order to gain billions in government contracts. About one hundred U.S. firms were prosecuted by the Justice Department in 2008 for similar offences. Recently, Halliburton and Kellogg Brown & Root agreed to pay \$579 million in fines related to bribes paid in Nigeria (Larson, 2009).

Federal Bureau of Investigation (FBI) has opened investigations into more than 500 cases of alleged corporate fraud, including 38 that involve important firms and are "directly related" to the national economic crisis. Deputy Director of FBI John Pistole told Congress that 38 companies are significantly large companies, everyone knows about them but he cannot comment publicly. In addition to major corporate fraud, Pistole testified that the number of mortgage fraud cases investigated by the FBI has risen from 881 in fiscal year 2006 to 1,600 in fiscal year 2008 (Jason, 2009). According to (Tatom, 2008) The origins of the problem go back to 2004-2006 when a large share of new mortgage loans were made to subprime borrowers, borrowers who had relatively low credit scores and could not qualify for conventional mortgage loans at normal market interest rates (Tatom, John 2008). Many of these loans began to default much earlier than the normal experience from the past (Demyanyk and Hemert, 2008). In fact, some of them went into default without ever making a payment.

Table-1 below provides some statistics of mortgage origination. Annual originations grew from \$2.2 trillion in 2001 to nearly \$4 trillion in 2003 before settling around a figure of about \$3 trillion in the years 2004-06. Of that, subprime originations grew from just \$190 billion in 2001 to \$625 billion in 2005; as a percent of the dollar value of total originations, subprimes grew from 8.6% to 20% of the market. Over the same period, the percent of subprimes securitized increased from 50.4% to 80% which shows a growing trend of securitization.

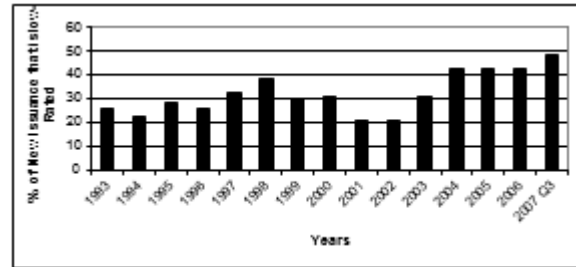
Mortgage Origination Statistics

	Mortgage Originations (\$Billions)	Sub Prime Originations (\$ Billions)	Subprime share in Total Originations % of \$ Value	Subprime mortgage Backed Securities (\$ Billions)	% Subprimes Securitized (% of dollar Value)
2001	2215	190	8.6	95	50.4
2002	2885	231	8	121	52.7
2003	3945	335	8.5	202	60.5
2004	2920	540	18.5	401	74.3
2005	3120	625	20	507	81.2
2006	2980	600	20.1	483	80.5

Table 1

Moreover, poor underwriting practices such as no down payments, no verification of income, assets, and jobs exacerbate the issue much. Over the past several years, the quantity and quality of loans across a variety of markets has weakened in two important ways. In terms of quantity, there was a large increase in lower-rated issuance from 2004 to 2007.

Quality of New Debt Issuance, 1993–2007



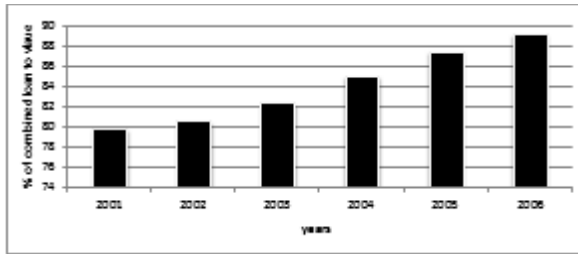
Graphic 6

Graphic 6 above shows the quality of new debts issued from 1993 to 2007. Most of debts are low rated (B). From 2004 sudden increase in the issuance of low rated loans has been observed from as compared to the past years.

Quality wise we have seen increase in high combined loan-to-value*. Graphic 7 below shows the issuance of loans with limited documentation.

* Combined Loan to Value (ratio) (CLTV) is the proportion of loans (secured by a property) in relation to its value. The term "Combined Loan to Value" adds additional specificity to the basic Loan to Value which simply indicates the ratio between one primary loan and the property value. When "Combined" is added, it indicates that additional loans on the property have been considered in the calculation of the percentage ratio. The aggregate principal balance(s) of all mortgages on a property divided by its appraised value or Purchase Price, whichever is less. Distinguishing CLTV from LTV serves to identify loan scenarios that involve more than one mortgage. For example, a property valued at \$100,000 with a single mortgage of \$50,000 has an LTV of 50%. A similar property with a value of \$100,000 with a first mortgage of \$50,000 and a second mortgage of \$25,000 has an aggregate mortgage balance of \$75,000. The CLTV is 75%.

Combined loan to value



Graphic 7

Table 2 below shows the evolution of underwriting standards for subprime loans. The %age of such loans with adjustable rates rose from 74% to 93% in the years 2001 to 2005. Interest-only loans rose from zero to nearly 38% and the low or no doc share rose from 29% to more than 50%. In other words, the riskiest types of subprimes ARMS and hybrid ARMS were favorites with securitizes. Debt payment to income ratio has been increased from almost 40% to 43% while average loan to value ratio has been decreased.

Underwriting Standards in Subprime Home-Purchase Loan

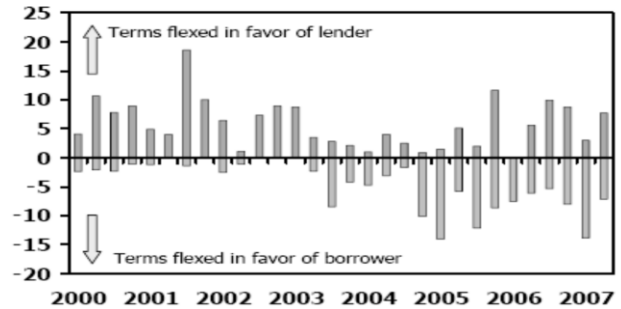
Year	ARM Share	Interest-Only Arm Share	Low-No-Doc Share	Debt Payment-to-Income Ratio	Average Loan-to-Value Ratio
2001	73.80%	0.00%	28.50%	39.7	84.04
2002	80.00%	2.30%	38.60%	40.1	84.42
2003	80.10%	8.60%	42.80%	40.5	86.09
2004	89.40%	27.20%	45.20%	41.2	84.86
2005	93.30%	37.80%	50.70%	41.8	83.24
2006	91.30%	22.80%	50.80%	42.4	83.35

Table 2

Regardless of increase in low quality credit issuance and decrease in quantity there has been a parallel weakening of credit discipline in corporate credit markets, seen in the “flexing” of deals in favor of borrowers. Figure-8 below shows how credit risks have been increased by flex and reverses flex deals.

From 2000 to 2002 we have seen terms flexed in favor of lenders while from 2003 to 2007 observed opposite.

Flex and Reverse Flex Deals (in percentage of deals)



Graphic 8

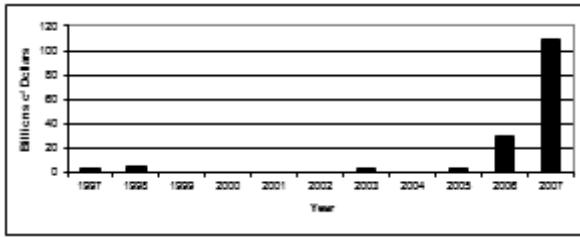
Source:IMFhttp://www.imf.org/external/pubs/ft/fmu/eng/2007/charts.pdf

In 2006 and 2007 a sharp increase has been seen in the volume of Cov-lite* or covenant lite loans. Cov-lite lending is seen as more risky because it removes the early warning signs lenders would otherwise receive through traditional covenants. Graphic 9 below shows a tremendous increase in the use of Cov-Lite loans in the years 2006 and 2007. Especially in the year 2007 it cross the \$100 billion marks. Low credit quality and easy access to the credit made this possible. Firms looking for customers and eager to increase their share give loans even by compromising basic principles.

Loans were granted on the minimum documentation possible and standard of documentation decreased.

Volume of Covenant-Lite Loans

* Covenant lite is financial jargon for loan agreements which do not contain the usual protective covenants for the benefit of the lending party. It has been observed that cov-lite loans simply reflected changes in bargaining power between borrowers and lenders, and followed from the increased sophistication in the loans market where risk is quickly dispersed through syndication or credit derivatives

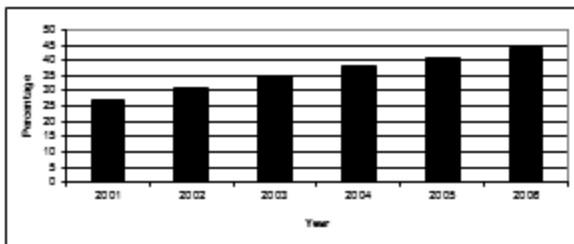


Graphic 9

The Fed and other regulators generally supported new financial innovations. There may be some truth to both views. On the one hand, credit was widely available across all markets—mortgage, consumer, and corporate loans—with characteristics that suggested poorer and poorer loan quality.

Graphic 10 below shows the loans which were issued during the period 2001 to 2007 with limited documentation. Percentage of limited documentation has increased from 27% in 2001 to 44% in 2006.

Limited Documentation %

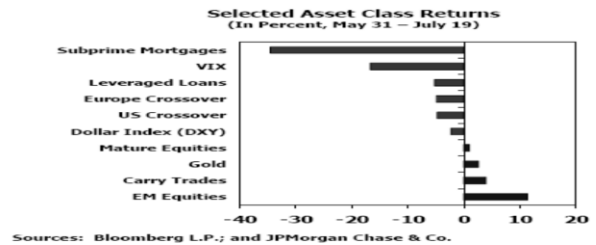


Graphic 10

One explanation for deteriorating loan quality is the huge growth in securitized credit.

This is because the originate-to-distribute model of securitization reduces the incentives for the originator of the claims to monitor the creditworthiness of the borrower, because the originator has little or no skin in the game.

According (Jaffee, 2008) securitization process has created a “moral hazard,” allowing subprime lending risks to be passed in a sequence starting with mortgage brokers, then to lenders, then to securitizes, and ending as risks in investor portfolios. Although it is understandable that each of these transactors might participate in the chain as long as they were confident they could transfer the risk to the next stage. Large quantity of risky loans with low quality creates troubles in credit markets. Loans were even given to those persons who don’t afford it. It results in a mess in the credit market. Returns on these loans started to shrink and creates problems for the lenders.

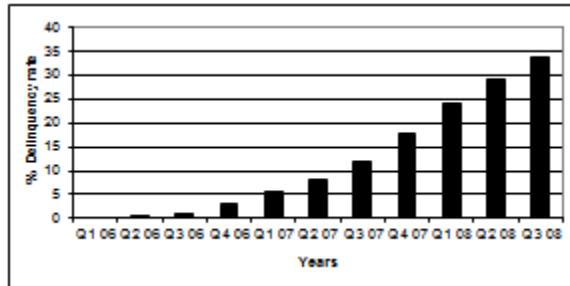


Graphic 11

Source:IMF<http://www.imf.org/external/pubs/ft/fmu/eng/2007/charts.pdf>

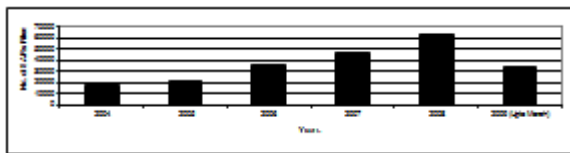
Graphic 12 below shows the subprime 60 days delinquency rate which is constantly rising from 2006 to 2008. Subprime delinquency has been increase from 0% in 2006 to alarming rate of almost 34%.

Subprime 60 days Delinquency Rate



Graphic 12

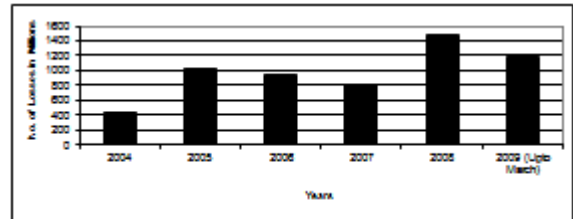
Lack of transparency and accountability in financial institutions motivated borrowers to borrow more and more even if they are not eligible. Apart from the low standard of credit and minimum documentation there have been cases of massive frauds in mortgage loans. Federal Bureau of Investigation (FBI) issued a report on mortgage frauds in financial institutions. According to this report, Suspicious Activity Reports (SARs) from financial institutions indicate an increase in mortgage fraud reporting. There were 63,713 mortgage fraud related SARs filed in Financial Year 2008, a 36-percent increase from Financial Year 2007. Graphic 13 below shows increasing trend of SARs filed from the period 2004 to 2008.



Graphic 13

In the same period, Graphic 14 below shows SARs reported losses which are in \$Billions. SARs in FY2008 revealed losses of more than \$1.4 billion, an increase of 83.4 percent from FY2007.

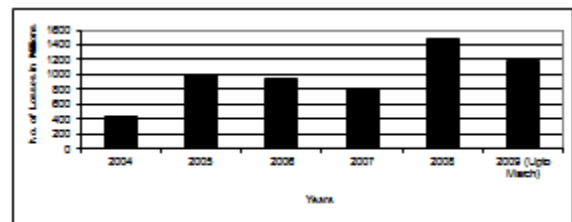
Mortgage Fraud SAR losses (\$ Millions) From 2004 TO MARCH 2009



Graphic 14

FBI mortgage fraud investigations totaled 1,644 in FY2008, a 37% increase from FY-2007 and a 100% increase from FY-2006. Sixty-three percent (1,035) of all pending FBI mortgage fraud investigations as of FY-2008 involved dollar losses of more than \$1 million. Graphic 15 below shows the story

Increase in FBI Mortgage Fraud Pending Investigations from 2004 TO MARCH 2009



Graphic 15

According to (Crotty, 2008) main source of investment bank income has recently shifted from traditional activities such as advising on M&As and bringing IPOs to market to fee income from securitization and trading on their own account. Much of the trading is in mortgage-backed securities, which they create and both sell to others and hold in their own trading accounts.

Citigroup was one of the biggest players in the mortgage securitization frenzy having global M&As worth \$3.8 trillion at their peak in 2006, 11% higher than in the super year of 2000 (Crotty, 2008). Goldman Sachs, the number one bank in the M&A business that year, achieved record profits from this sector in 2006. Economist (23rd Dec. 2006) reported that 70% of Goldman's total net income came from gambling with the firm's own capital. These profits with high risk strategies enabled the firms to reward its executives. Top traders and executives receive sky high bonuses in years in which risk-taking behavior generates high profits.

In 2006, Goldman Sachs' bonus pool totaled \$16 billion. Top executives of Wall Street received bonuses up to \$50 million that year (Crotty, 2008). According to Financial Times 18th January 2008, the five largest investment banks – Merrill, Goldman Sach, Morgan Stanley, Lehman Brothers and Bear Stearns paid out about \$66 billion in compensation in 2007, including an estimated \$40 billion in bonuses. Despite the decline in profit the bonus figure was higher than the \$36 billion last year. These severe lack of transparency and accountability practices generate the mess in which we are now. Strange part of the story is that still no proper accountability has been fixed on any one. For transparency and accountability in future US Govt. has taken two steps. First, Financial Stability Plan has been constituted with the purpose "to protect taxpayers and ensure that every dollar is directed toward lending and economic revitalization, the Financial Stability Plan will institute a new era of accountability, transparency and conditions on the financial institutions receiving funds" Second congress has passed Commission on Financial Crisis Accountability Act 2009.

The purpose of which "To establish a commission* on the tax and fiscal implications of the regulation of financial products and arrangements and to study the current financial crisis, its causes and impact on the Federal deficit and tax revenues." Commission would have following duties:

- In General- The Commission shall conduct a study of the financial system in the United States. In conducting such study, the Commission shall examine the current financial crisis, its causes and its impact on the Federal deficit and tax revenues, including- regulation and transparency, fraud and abuse, the fairness and equity of the tax treatments of financial products and arrangements, and the role of any and all participants in the financial services industry that the Commission deems necessary, including-- government agencies, including the Department of Housing and Urban Development, Department of Treasury, the Securities and Exchange Commission, and any other agency the Commission considers necessary, government-sponsored entities, including the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation, the Board of Governors of the Federal Reserve System, and its banks and leadership, the executive, legislative and judicial branches of government, credit rating agencies, and the Federal Deposit Insurance Corporation and the Commodities Futures Trading Corporation. Report- The Commission shall prepare a report to the Congress on its findings pursuant to the study conducted under subsection (a). Such report shall include a detailed statement of the findings, conclusions, and recommendations of the Commission and shall address the following:

The causes of the current financial crisis and how this kind of crisis can be avoided in the future. The stage the current financial crisis is in and what can be expected in subsequent stages. The impact of the current financial crisis on Federal revenues. The extent to which the financial regulatory structure should be restructured. The tax treatment of financial products and arrangements and how to make them more fair and equitable. Shareholder Bill of Rights- The Commission shall also make recommendations for investor's bill of rights, which shall include necessary protections, as determined by the Commission, to prevent shareholders from being deprived of their rights and their savings.

References

- Baily Martin Neil, Robert E. Litan, and Matthew S. Johnson(2007) "The Origins of the Financial Crisis"
- Balkan, E. M. (1992), "Political instability, country risk and probability of default"
- Benjamin Keys, Tanmoy Mukherjee, Amit Seru and Vikrant Vig "Did Securitization leads to lax screening? Evidence from sub prime loans"
- Berg, A. and J. Sachs (1988), "The debt crisis structural explanations of country performance"
- Brooks, Rick, and Ford Constance Mitchell (2007) "Data Show Bad Loans Permeate Nations, and Pain May Last Years; California's Foreclosure Capital."
- Cameron L. (November 2003) "Securitization: The Financial Instrument of the future, hearing on protecting homeowners: Preventing abusive lending while preserving access to credit"
- Capell, Kerry (2007) "Britain's Coming Credit Crisis."
- Case, Karl E. and Robert J. Shiller (2003) "Is There A Bubble in the Housing Market?" Brookings Papers on Economic Activity 2:2003: 299-342.
- Cecchetti Stephen G. "Monetary Policy and the Financial Crisis of 2007-2008"
- Chang and Velasco (2000), 'Financial fragility and the exchange rate regime'. Journal of Economic Theory 92, pp. 1-34.
- Courchane, M. J., Surette, B. J., and Zorn, P. M. (2004) "Subprime Borrowers: Mortgage Transitions and Outcomes" Journal of Real Estate Finance and Economics, 29 (4), 365-392.
- Crotty James (2008) "structural causes of the global financial crisis"
- Crouhy Michel, Robert A. Jarrow and Stuart M. Turnbull (September 2007) "The Subprime Credit Crisis Of 2007"
- Daianu Daniel & Laurian Lungu, "Why is this Financial Crisis occurring? How to respond to it?"
- Davies Paul, Anousha Sakoui and Gillian Tett (Oct 2008) "Sigma collapse ends shadow bank project" Financial Times Delargy, J.R and Charles Goodhart (1999). "Financial Crises: Plus ca Change, plus c'est la meme chose". LSE Financial Market Group Special Paper No.108.
- Dymyanyk Yuliya, Otto Van Hemert "Understanding the Subprime Mortgage Crisis"

Eichengreen, B., and R. Portes, 1987, "The Anatomy of Financial Crises", in Threats to International Financial Stability"

Eichengreen, B., A.K. Rose, and C. Wyplosz (1995), "Exchange rate mayhem: the antecedents and aftermath of speculative attacks"

Estevez Pablo Garcia "Collateralized Debt Obligation (CDO)"

Fabozzi, J. Frank (2007). Bond Markets, Analysis, and Strategies. 6th Edition, NJ: Pearson Prentice Hall

Farzad, Roben (2007) "Let the Blame Begin."

Farzad, Roben, M. Goldstein, D. Henry, and C. Palmeri (2007) "Not So Smart."

Firla-Cuchra, M., and Jenkinson, T. (2006) "Why are Securitization Issues Tranched? [Online]. Available from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=676730

Fisher David, (2009) "Collateralized Debt Obligations (CDOs) - A Complicated Way to Spread Risk crisis"

Gary Gorton (2008) "The Subprim Panic"

Getter Darryl E., Mark Jickling, Marc Labonte & Edward V. Murphy, "Financial Crisis? The Liquidity Crunch of August 2007. Girton, L. and D. Roper (1977), "A monetary model of exchange market pressure"

Green, Richard K. and Susan M. Wachter (2007) "The Housing Finance Revolution." Paper presented at the Federal Reserve Bank of Kansas City Symposium

Jaffee Dwight M. (2008) "The U.S. Subprime Mortgage Crisis: Issues Raised and Lessons Learned"

Josef Emanuel (2009) "What is CDO"

Kennon, Joshua (March 2009) "Understanding Collateralized Debt Obligations or CDOs, How the CDO brought down Wall Street and the World"

Kregel Jan, "Using Minsky's cushions of Safety to Analyze the Crisis in the U.S Subprime Mortgage Market"

Kregel, Jan. (2007a.) "Financial Innovation and Crises"

Krugman, Paul, (1979), "A Model of Balance of Payments Crises," Journal of Money Credit and Banking, 11: 311-325.

Kunt Dermirguc, A. and E. Detragiache (1997), "The determinants of banking crises in developing and developed countries", IMF Working Paper 106

Kuttner, Robert (2007) "The Alarming Parallels between 1929 and 2007," The American Prospect. October 2. Testimony of Robert Kuttner Before the Committee on Financial Services, Rep. Barney Frank, Chairman, U.S. House of Representatives, WashingtonD.C.http://www.truthout.org/docs_2006/100307H.shtml.(<http://www.sec.gov/news/press/2008/2008-110.htm>)

Laderman, Elizabeth (2001) "Subprime Mortgage Lending and the Capital Markets" [Online]. San Francisco: FRBSF. Available from:<http://www.frbsf.org/publications/economics/letter/2001/el2001-38.pdf> [Accessed 23 July 2007]

Larson, Alan (2009) "Restoring Trust through Accountability, Transparency and Integrity: The Key Ingredient for Recovery Lindgren, C.J. and G. Garcia and M.I. Saal (1996) "Bank Soundness and Macroeconomic Management"

Liu Yuan(2008) "The U.S Subprime Crisis and the CDO Troubles"

Marchesi, S. (2003), "Adoption of an IMF programme and debt rescheduling"

McKenzie Heather (2009) "Clear as mud" Otto Eckstein and Allen Sinai, (1986) "The Mechanisms of the Business Cycle in the Post-war Era"

Portes, R., and D. Vines, 1997, "Coping with Capital Inflows"

Prince, J.T. (2005) "Common structures of Asset-backed securities and their Risks"

Ryan, Jason (2009) "Fraud 'Directly Related' to Financial Crisis Probed FBI Agents could be reassigned from National Security due to booming caseload"

Sabry Faten, Anmol Sinha, and Sungi Lee (June 2009) "An update on the credit crisis litigation: A turn towards structured products and asset management Firms"

Securities industry and Financial Markets Association (sifma.org)

Tatom, John (2008) "two pronged assault on us economy" Tett Gillian, (2009) "Lost through destructive creation"

Trevor Evans "Marxian and post-Keynesian theories of finance and the business cycle"

Wojnilower, Albert (1980) "The Central Role of Credit Crunches in Recent Financial History"

Wray L. Randall (2008) "Lessons from the subprime meltdown". Wright Dean (2009)"Watching our language: Writing about the financial crisis"