COVALENCE ANALYST PAPERS

Financial Institutions' Responsibility in the Subprime Mortgage Crisis

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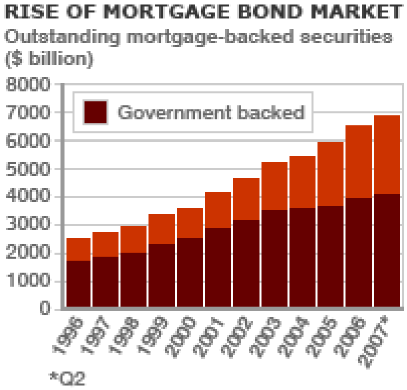
I. Introduction

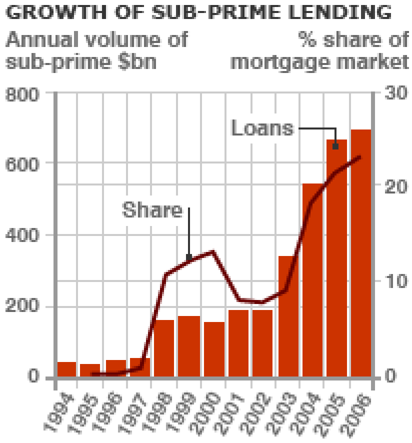
In the past five years, the private sector has largely expanded its role in the mortgage bond market, which had previously been dominated by government-sponsored agencies like Freddie Mac.



They specialised in new types of mortgages, such as sub-prime lending to borrowers with poor credit histories and weak documentation of income, who were shunned by the "prime" lenders like Freddie Mac.

Sub-prime lending had spread from inner-city areas right across America by 2005.

By then, one in five mortgages were sub-prime, and they were particularly popular among recent immigrants trying to buy a home for the first time in the "hot" housing markets of Southern California, Arizona, Nevada, and the suburbs of Washington, DC and New York City.



Graphs from BBC News[1]

II. Subprime, what does it mean?

The term subprime refers to a sort of lending, based on the borrower's low credit qualification, due to a deficient credit history or its lack. Subprime loans will be granted at a higher interest rate than equivalent prime loans. Thus, the difference on the offered interest is based on the financial relation: risk versus revenue. The riskier a financial asset is, the higher the income should be.

Subprime lending is risky for both lenders and borrowers. Lenders offer expensive credits as higher income is expected due to the more likely failure in repayments.

[1] "The US sub-prime crisis in graphics" In BBC.co.uk. http://news.bbc.co.uk/2/hi/business/7073131.stm

Borrowers with a poor credit history and adverse financial situations will be charged with unaffordable monthly repayments, very above their possibilities, as those amounts are fixed related to the value of the properties rather than to the financial performance. This situation could even aggravate in case the borrower takes out adjustable-rate mortgages interest, giving them a low initial interest which increases steadily.

a. *Prime versus subprime lending*

For instance, to avoid the initial hit of higher mortgage payments, most subprime borrowers take out adjustable-rate mortgages that give them a very low initial interest rate of around 4%. But with annual adjustments of 2% or more per year, these loans typically end up charging around 10%. So a $500,000 loan at a 4% interest rate for 30 years equates to a payment of about $2,400 a month. But the same loan at 10% for 27 years (after the adjustable period ends) equates to a payment of $4,470. A 6-percentage-point increase in the rate caused an almost 100% increase in the payment[2].

b. *Profile of subprime borrowers*

The regular profile of a subprime borrower is determined by several credit risk characteristics which can include:

- Two or more loan payments paid past 30 days due in the last 12 months, or one or more loan payments paid past 90 days due the last 36 months.
- Judgment, foreclosure, repossession, or non-payment of a loan in the prior 48 months;
- Bankruptcy in the last 7 years.
- Relatively high default probability as evidenced by, for example, the already-pointed FICO credit score of less than 620.

However, subprime mortgages are usually defined by the type of consumer to which they are made available. According to the U.S. Department of Treasury guidelines

[2] Sham Gad. "The Skinny on Subprime" In The Motley Fool, July 10, 2007. http://www.fool.com/investing/value/2007/07/10/the-skinny-on-subprime.aspx

issued in 2001, "*Subprime borrowers typically have weakened credit histories that include payment delinquencies and possibly more severe problems such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories*.[3]"

c. *Subprime lending characteristics*

So far, the Subprime lending characteristics could be summed up as follows:

- *Higher risk*: lenders experience higher loan defaults and losses by subprime borrowers than by prime borrowers.

- *Lower loan amounts*: on average, loans in the subprime mortgage market are smaller than loans in the prime market. Estimates for average subprime loan size ranging between $58,000 and $85,000, as compared to an average of $133,000 for all mortgages.

- *Higher costs to originate*: subprime loans may be more costly to originate than prime loans, as they often require additional review of credit history, a higher rate of rejected or withdrawn applications, and fixed costs, such as appraisals, that represent a higher percentage of a smaller loan.

- *Faster prepayments*: subprime mortgages tend to be prepaid at a much faster rate than prime mortgages.

- At least in part as a result of the above characteristics, subprime loans tend to have significantly higher fees and rates than for prime loans (even if the fees were the same for prime and subprime loans, since subprime loans generally are smaller than prime loans, the fees would be higher as a percentage of the loan amount).

[3] Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance, Corporation, Office of Thrift Supervision. “Interagency Expanded Guidance for Subprime Lending Programs”, March 1, 1999.

d. *Credit scores characteristics*

In figures, the credit qualification of a potential borrower is determined by a score. The credit score is based on the information provided by several reporting agencies, which maintain records of the use of credit and other information from financial services clients. There are three major credit reporting agencies in the United States: Equifax, Experian and TransUnion. These records are called credit reports, and as well as the credit score, they will be checked by lenders anytime a credit application is submitted.

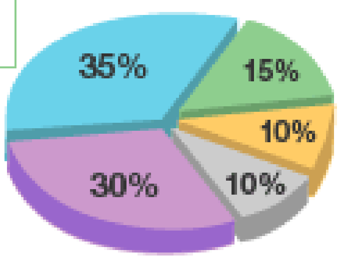
One of the most common credit score used by both lenders and borrowers, FICO, range between 300 and 850, the higher the better since it means lower interest rate (higher repayment capacity).The calculation is based on the rating in five general categories[4]:

Payment history, 35%: late payments, bankruptcies, and other negative items can hurt the credit score. But a solid record of on-time payments helps score raise.

Amounts owed, 30%: on all accounts, the number of accounts with balances, and how much of the available credit is being used. The more owed compared to the credit limit, the lower the score will be.

Length of credit history, 15%: A longer credit history will increase the score. However, a short but responsible credit history could mean a high score.

New credit, 10%: the credit score weighs the application for or opening of new credit accounts. The score distinguish between a search for a single loan and a search for many new credit lines, in part by the length of time over which inquires occur.



Types of credit used, 10%: such as credit cards, installment loans (mortgage or auto loan) and personal lines of credit.

[4] "About FICO scores" In myFICO. http://www.myfico.com/

Thus, credit scores above 700 are very good and a sign of good financial health. FICO scores below 600 indicate high risk to lenders and could lead lenders to charge borrowers much higher rates or turn down the credit application. Generally, clients with a score below 620 are considered as subprime borrowers, being the US average credit score 723

As example, a couple who is looking to buy their first house with a credit scores of 720. They apply for a thirty-year mortgage loan, qualifying for a mortgage with a low 5.5 percent interest rate. But if their scores are 580, they probably would pay 8.5 percent (both on 2005 basis) or more. That means at least 3 full percentage points more in interest. On a $100,000 mortgage loan, that 3 point difference will cost them $2,400 dollars a year, adding up to $72,000 dollars more over the loan's 30-year lifetime[5].

By law, credit scores may not consider any issue related to race, colour, religion, national origin, sex and marital status, and whether public assistance is received or exercise any consumer right under the federal Equal Credit Opportunity Act or the Fair Credit Reporting Act.

III. Predatory or Abusive Lending Practices

Subprime lending is highly controversial. Despite of defenders who maintain that subprime lending extends credit to people who could otherwise not have access to the credit market, opponents allege the easiness of lenders to engage in predatory lending.

Although home mortgage lending is widely regulated, there is no legal definition of predatory lending. The "*Curbing Predatory Home Mortgage Lending*" report[6], elaborated by the US Department of Housing and Urban Development (HUD) - Treasury Task Force on Predatory Lending of the US in June 2000, defines predatory lending as the an action which…

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[5] Consumer Federation of America and Fair Isaac Corporation Scores. "Your Credit Scores". http://www.pueblo.gsa.gov/cic_text/money/creditscores/your.htm.

[6] HUD Treasury, Task Force on Predatory Lending. "Curbing Predatory Home Mortgage Lending", June 2000. http://www.huduser.org/Publications/pdf/treasrpt.pdf

"…*involves engaging in deception or fraud, manipulating the borrower through aggressive sales tactics, or taking unfair advantage of a borrower's lack of understanding about loan terms. These practices are often combined with loan terms that, alone or in combination, are abusive or make the borrower more vulnerable to abusive practices.*"

a. Categories of abuses

Even though there is no legal definition of predatory lending, typical abuses have been identified in the subprime lending market. The HUD and the Federal Reserve[7] have observed that these abuses tended to fall into four main categories:

- *Lending without regard to the borrower's ability to repay:* making unaffordable loans based on the assets of the borrower rather than on the borrower's ability to repay an obligation. Indeed, a troubling practice which involves lending based on borrowers' equity in their homes, where the borrowers clearly did not have the capacity to repay the loans. In particularly egregious cases, elderly people living on fixed incomes had monthly payments that equalled or exceeded their monthly incomes. Such loans quickly led borrowers into default and foreclosure.

- *Loan Flipping:* inducing a borrower to refinance a loan repeatedly in a short period of time. With each successive refinancing, these originators charge high points and fees, including sometimes prepayment penalties that stripped borrowers' equity in their homes.

- *Outright fraud and abuse*: engaging in fraud or deception to conceal the true nature of the loan obligation, or ancillary products, from an unsuspecting or unsophisticated borrower. In many instances, abusive practices amount to nothing less than outright fraud. Unscrupulous actors in these markets often prey on certain groups – the elderly, minorities, and individuals with lower incomes and less education – with deceptive or high-pressure sales tactics.

[7] Office of the Comptroller of the Currency Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation Office of Thrift Supervision. "Expanded Guidance for Subprime Lending Programs", 2001.

- *Excessive fees and "packing"*: while subprime lending involves higher costs to the lender than prime lending, in many instances there have been evidences of fees that far exceeded what would be expected or justified based on economic grounds, and fees that were "packed" into the loan amount without the borrower's understanding.

b. *Common subprime practices*

Several practices, very common in the subprime market, have not been classified as predatory lending actions. They increase dramatically the possibilities of falling into foreclosure because either they are based on optimistic expectations of the market evolution or based on a lack of information, even on a wrongly forecast. The most common among subprime mortgages are:

- *Prepayment penalties*: a clause in a mortgage contract that says if the mortgage is prepaid within a certain time period, a penalty will be assessed. The penalty is usually based on percentage of the remaining mortgage balance or a certain number of months worth of interest.

A prepayment penalty that applies to both, the sale of a home and a refinancing transaction is called a "hard" prepayment penalty. A prepayment penalty that applies to refinancing only is called a "soft" prepayment penalty. A borrower should be aware of the risks associated with a prepayment penalty. A prepayment penalty can substantially increase the cost of refinancing a mortgage when it would otherwise be economical.

- *Adjustable-rate mortgage*: a type of mortgage in which the interest rate paid on the outstanding balance varies according to a specific benchmark. The initial interest rate is normally fixed for a period of time after which it is reset periodically, often every month. The interest rate paid by the borrower will be based on a benchmark plus an additional spread, called an ARM margin.

An adjustable rate mortgage is also known as a "variable-rate mortgage" or a "floating-rate mortgage". Both 2/28 and 3/27 mortgages are examples of ARMs. A

2/28 mortgage's initial interest rate is fixed for a period of two years and then resets to a floating rate for the remaining 28 years of the mortgage. A 3/27 mortgage is typically the same as a 2/28 mortgage, except that the interest rate is fixed for three years and then floats for the remaining 27 years of the mortgage.

- *Balloon payment*: kind of loan, normally five-year balloon mortgages, which have a reset option at the end of the five-year term that allows for a resetting of the interest rate (based on current interest rates) and a recalculation of the amortization schedule based on a remaining term. If a balloon loan does not have a reset option, or frequently even when it does, it is expected that the borrower will sell the property or refinance the loan before the end of the original loan term. However, the borrower must be aware of refinancing risk and/or the risk that the loan will reset at a higher interest rate.

By these sorts of actions, the borrowers get a more affordable loan at the beginning of the mortgage's term, but after the referred period, the repayments become more beyond the financial possibilities of the households. Most borrowers have trustfully taken out any of the sorts of financing regarding the value of their properties and uncertain optimistic expectations. But the equation failed since the real state market did, realizing a true overvalue on properties which had been previously justified by speculative practices on the market.

IV. The Subprime crisis

The controversy surrounding subprime lending has expanded as the result of an ongoing lending and credit crisis both in the subprime industry and in the greater financial markets which began in the United States. This phenomenon has been described as a financial contagion which has led to a restriction on the availability of credit in world financial markets. Hundreds of thousands of borrowers have been forced to default and several major American subprime lenders have filed for bankruptcy.

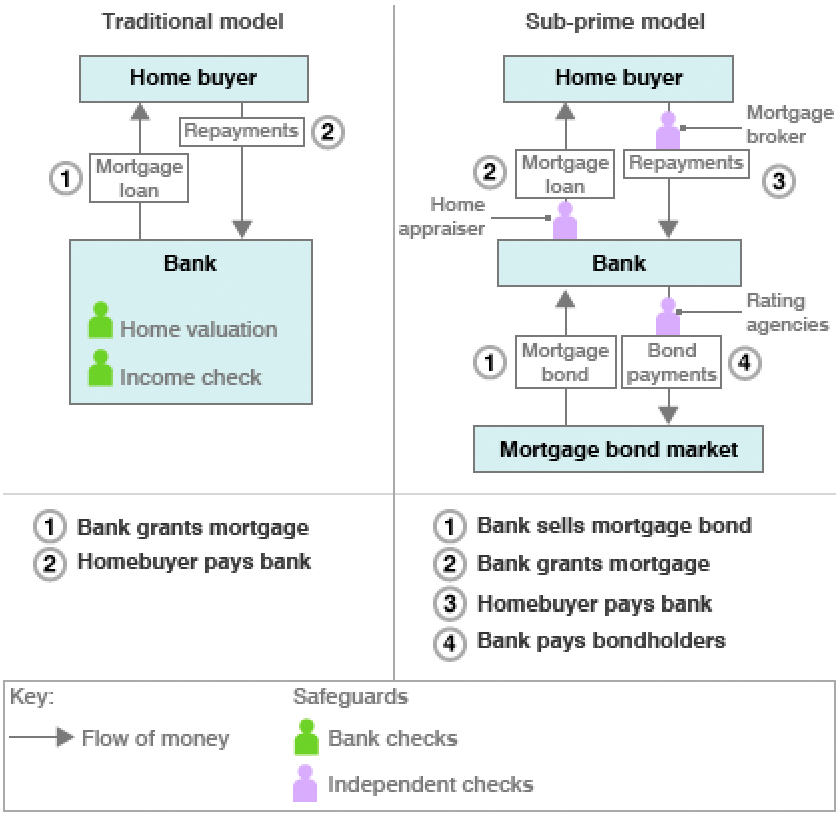
Several factors contributed to the rapid growth of the subprime mortgage market:

- A rise in consumer credit problems, including the rising level of credit card debt and high consumer bankruptcy rates.
- The Tax Reform Act of 1986, which eliminated the deductibility of most consumer interest payments except for mortgage interest.
- Increased capital flows to the subprime credit market, driven by the entrance of capital market investors through securitization of subprime loans.
- The increased popularity of subprime first mortgages (prior to the 1990s, subprime mortgage lending generally meant second mortgages).

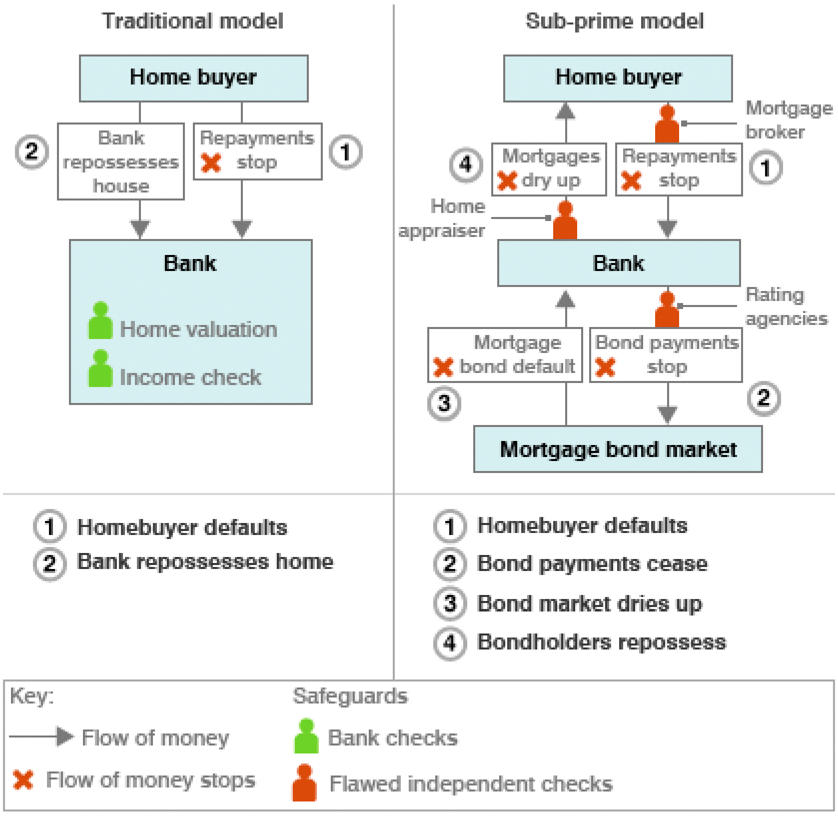
To understand the broad spread of the crisis, the subprime mortgage market may be thought of as a pipeline that connects the ultimate source of funds (i.e., the investors) with the individual borrower. At one end of the pipeline is the borrower being granted credit. There are a wide range of intermediaries involved in delivering the mortgage loan to the borrower. These intermediaries include participants in the subprime market that are likely to deal directly with the consumer such as home improvement contractors, mortgage brokers, finance companies, mortgage bankers, and insured depository institutions. It also includes companies that fund subprime lenders' warehouse lines of credit and securitize subprime loans such as commercial and investment banks. Credit life insurance companies participate in the subprime market by providing credit property, life, and disability insurance. Recently, mortgage insurance companies and government sponsored enterprises, have entered in the subprime mortgage market.

At the other end of the pipeline are the ultimate providers of funds. These providers are as varied as the components of the pipeline itself. Insured deposits and other depository liabilities are one source of funds. Capital market borrowing by depositories and finance companies is another source. And capital market investors may buy the subprime mortgages themselves, typically by purchasing asset-backed securities that constitute an ownership interest in an underlying pool of subprime mortgages. Thus, the ultimate source of funds includes depositors, pension funds, mutual funds, and other investors (both institutions and individuals).

The pipeline and the connections among the actors can be draw as follows. In the left side, we can see the traditional relation, lender-borrower, with no intermediaries between them. In the right side, the same relation as is known currently, with several intermediaries who raise the price of the service and the financial operations hold by banks to sell on the mortgages to the bond markets.



So far, within the traditional model, mortgages were financed through the deposits the banks received from their customers. Under such model, the amount of mortgage lending they could do was limited. During last years, the underwriting of mortgage-backed securities has allowed banks to offer additional borrowing. The stability of the model is based on the confidence of the markets in the steadily growth on the value of the properties, but as soon as borrowers were not able to face the skyrocketing repayments, a surplus in the real state market happened. The contagion and the worldwide spread of the crisis came after the loss of value in the bonds' underlying asset, causing a general lack of credit.



Both graphs extracted from BBC News[8]

V. Financial Institutions' Ethical implications

As the title on top suggests, by the means of this article I intend to find out whether the irresponsibility of the financial institutions or the recklessness of their clients are the cause of the subprime crisis and the subsequent global recession. However, both parties have been strongly hit. Banks have suffered huge losses, and asset shortages which have led into massive downsizing and a general lack of credit in the markets. On the other side customers and employees, affected by the dramatic drop in the value of their properties and the layoffs in the financial industry as well as in the real state sector.

At his point, there is no lack of controversy. Subprime lending may be argued as the only way which allows to low qualified households to afford a property. Probably, it otherwise might not be affordable. Detractors see behind the term subprime

[8] "The US sub-prime crisis in graphics" In BBC.co.uk. http://news.bbc.co.uk/2/hi/business/7073131.stm

abusively and predatory lending practices carried out by financial institutions which seizes upon naïve and joyful customers, luring them toward the idea of an ownership.

After the carefully analysis of several articles about the Subprime crisis, I consider as relevant criteria:

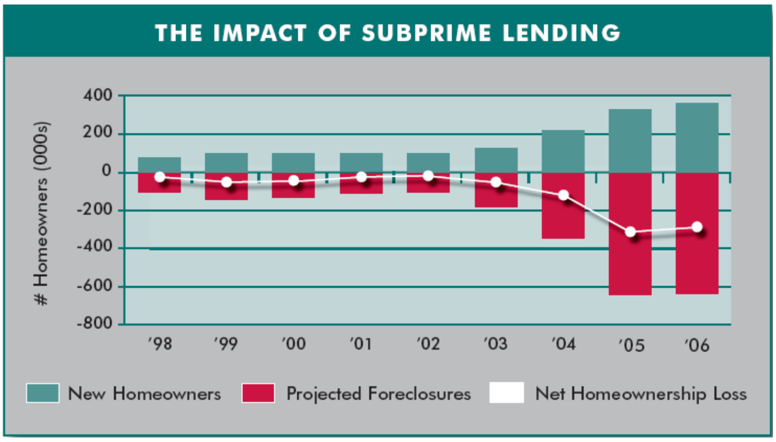
Sales *(criterion number 7)*: this criterion might be interpreted either positively or negatively related to the influence of the financial institutions in the crisis. Subprime offers an opportunity for borrowers with a less than ideal credit record to gain access to credit. Borrowers may use this credit to purchase homes, or in the case of a cash out refinance, finance other forms of spending such as purchasing a car, paying for living expenses, remodelling a home, or even paying down on a high interest credit card. However, due to the risk profile of the subprime borrower, this access to credit comes at the price of higher interest rates. On a more positive note, subprime lending (and mortgages in particular), provide a method of "credit repair"; if borrowers maintain a good payment record, they should be able to refinance back onto mainstream rates after a period of time. For instance, the analysis of the follow information may lead to a positive interpretation, as it states that "*between 1998 and 2006, only about 1.4 million first-time home buyers purchased their homes using subprime loans*" and "*even in 2006, subprime refinance loans accounted for a majority (56%) of all subprime loans originated*[9]".

Thus, the article "*The Good That Subprime Loans Do*[10]" by Jack Guttentag, compares the number of subprime loans to first time buyers against total foreclosures. It concludes that from total 1.4 million homeownership subprime loans, the number of 625,000 foreclosures is not that negative compared with the number of existing homeowners who were able to upgrade, plus the 354,000 subprime mortgages originated by first-time buyers.

In contrast with this idea, the report –A Net Drain on Homeownership- intends to demonstrate that subprime market decreases homeownership. As already pointed

[9] Center of Responsible Lending. "Subprime Lending: A Net Drain on Homeownership", 2 March 2007. http://www.responsiblelending.org/pdfs/Net-Drain-in-Home-Ownership.pdf
[10] Jack Guttentag. "The Good That Subprime Loans Do" In The Washington Post, September 8, 2007. http://www.washingtonpost.com/wp-dyn/content/article/2007/09/07/AR2007090700015.html

out, the previous numbers show that foreclosures have been greater than subprime mortgages originated by first-time buyers. In addition, the influence of the subprime should also be pointed out regarding the number of refinancing operations, which accounts for a totally 56%.



Through the previous analysis, it is likely to conclude that the increase on the number of subprime mortgages goes against the number of foreclosures and bankruptcies, and so far, causes a raise in the number of home losses, having a negative social impact.

<u>Economic impact *(criterion number 12)*</u>: this criterion is linked with many others, as social impact, downsizing or social stability. Though the instability in the labour market and the social welfare loss are caused and broadened by the financial crisis. As already discussed, financial institutions have fallen into reckless practices, as offering unaffordable loans to non-qualified borrowers or backing overrated securities. Right here lays the cause of the crisis rapidly spread.

"*Traditionally, banks have financed their mortgage lending through the deposits they receive from their customers. This has limited the amount of mortgage lending they could do. In recent years, banks have moved to a new model where they sell on the mortgages to the bond markets. This has made it much easier to fund additional borrowing. But it has also led to abuses as banks no longer have the incentive to check carefully the mortgages they issue*[11]".

[11] "The US sub-prime crisis in graphics" In BBC.co.uk. http://news.bbc.co.uk/2/hi/business/7073131.stm

The lack of financial resources has affected business and households, propagating the crisis abroad. Many borrowers have recently found many difficulties to get credit, and banks have opted to attract new investors who ease the crisis. For example, Citigroup sold on November 27th, 2007 a $7.5 billion stake to a Middle Eastern sovereign fund (the Abu Dhabi Investment Authority) to shore up its balance sheet[12].

An additional consequence of massive bankruptcies and foreclosures is the drastic drop on the properties price. Borrowers owing the 100% value of their purchase, have seen how properties depreciate at same time that their debt increases steadily thanks to the raise on the interest rate, the fees charged in the total of the mortgage because of the costly refinancing operations and only-interest instalments which delay the loan full repayment.

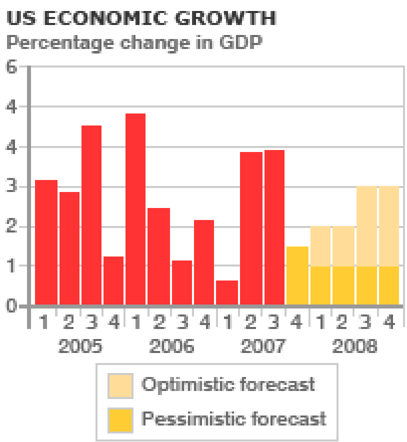
Company	Business Type	Loss (Billion $)
Citigroup	investment bank	$24.1
Merrill Lynch	investment bank	$22.5
UBS AG	investment bank	$18.7
Morgan Stanley	investment bank	$10.3
Crédit Agricole	bank	$4.8
HSBC	bank	$3.4
Bank of America	bank	$5.28
CIBC	bank	$3.2
Deutsche Bank	investment bank	$3.1
Barclays Capital	investment bank	$2.7

Extracted from: Investment Bank Scorecard [13] *Jan 31 2008*

So far, the economic consequences of the crisis have negatively affected companies and states. Thus, the clearest case is the one of Northern Rock in UK, financial institution which has been recently nationalised. Last year "*10,000 Northern*

[12] Eric Dash and Andrew Ross Sorkin. "Citigroup Sells Abu Dhabi Fund $7.5 Billion Stake" In The New York Times, November 27, 2007.
http://www.nytimes.com/2007/11/27/business/27citi.html?_r=1&hp&oref=slogin
[13] David Koeppel. "Investment Bank Scorecard" In Portfolio, January 31, 2008.
http://www.portfolio.com/careers/features/2008/01/31/Investment-Bank-Scorecard

Rock customers are a month or more in arrears on their mortgages, on loans worth nearly £1.2bn. At the end of 2003, there were only 2,500 in the same difficulties, with mortgages worth £168.8m.[14]"



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Economists expect the US economy to slow in the last three months of 2007 to an annual rate of 1% to 1.5%, compared with growth of 3.9% now.

But no one is sure how long the slowdown will last. Many US consumers have spent beyond their current income by borrowing on credit, and the fall in the value of their homes may make them reluctant to continue this pattern in the future.

"The US sub-prime crisis in graphics", from BBC

So far, the effects of the subprime crisis have hit economies world-wide and so companies and individuals. The graph above shows such impact in the US economy, the slowdown on the economic growth and indeed the length of the recession is correlated to the instability of real state markets and how banks have seized to the chance of doing great money at the expenses of naïve borrowers and optimistic market expectations. Consequently, the actuation of financial institutions have negatively contributed to the broadly spread and aggravation of the crisis.

Social impact *(criterion number 13)*: there is no doubt that the subprime crisis has broadly affected generally the society, either through layoffs or foreclosures. The fact is reflected on the high number of charges and lawsuits faced by banks and on the several measures carried out by the central US government. Among them we can find a cut in US interest rates up to 75 basis point in January 22nd, certain regulations oriented to avoid predatory lending practices and, the most recent one, a plan called "*Project Lifeline*" backed by the US Treasury Department and Housing Department.

[14] Ian Griffiths. "Revealed: massive hole in Northern Rock's assets" In The Guardian, November 23, 2007. http://www.guardian.co.uk/business/2007/nov/23/northernrock.bankofenglandgovernor
[15] "The US sub-prime crisis in graphics" In BBC.co.uk. http://news.bbc.co.uk/2/hi/business/7073131.stm

Numerous financial institutions have taken part in the program, concretely Bank of America, Citigroup, Countrywide Financial, JP Morgan Chase, Washington Mutual and Wells Fargo. These six banks held almost 50% of the mortgages in the US[16]. The project would assist from prime to subprime borrowers as well as auto and credit card loan holders, being available to customers whose mortgage payments are delayed on 90 days or more.

Additionally, social action has been organized in order to ease the impacts of the crisis. We find, as instance of initiative backed by a financial institution, the program launched jointly by Countrywide Financial and Association of Community Organizations for Reform Now[17]. It is focused on helping borrowers with some types of subprime adjustable-rate mortgages who have strong payment records but are struggling with payments as higher interest rates kick in.

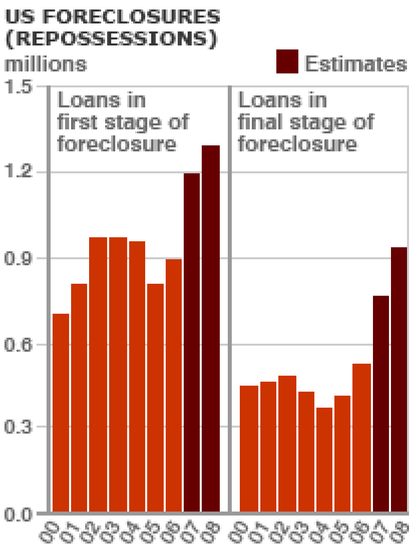
Such initiatives intend to offer better lending conditions to costumers by refinancing their mortgages or to make easier for them to catch up on overdue repayments.

However, an appropriate measure of the issue comes through the analysis of the number on foreclosures and its evolution. Having as reference again the report "*Subprime Lending: A Net Drain on Homeownership*" issued by the Center of Responsible Lending[18], the following table shows the steadily increase on the number of foreclosures in the area of the study and how likely might be to fall into foreclosure, since about 20% of the Subprime Loans originated have done during 2007.

[16] "US banks join mortgage help plan" In BBC News, February 12, 2008. http://news.bbc.co.uk/2/hi/business/7240277.stm
[17]"Countrywide expands plans to help subprime borrowers" In Triangle Business Journal, February 11, 2008. http://www.bizjournals.com/triangle/stories/2008/02/11/daily8.html
[18] Center of Responsible Lending. "Subprime Lending: A Net Drain on Homeownership", 2 March 2007. http://www.responsiblelending.org/pdfs/Net-Drain-in-Home-Ownership.pdf

TABLE 2: Net Impact on Homeownership from Subprime Lending

Year	Total Subprime Loans Originated[6]	Homeownership Gain: Subprime Loans to First-Time Homebuyers (A)	Homeownership Loss: Projected Subprime Foreclosures[6]		Net Homeownership Gain or (Loss) (A) - (B)
			No. of Foreclosures (B)	Cumulative Foreclosure Rate	
1998	962,273	73,253	94,750	9.8%	(21,497)
1999	1,132,280	89,309	144,567	12.8%	(55,258)
2000	911,369	87,651	133,126	14.6%	(45,475)
2001	918,557	80,856	105,464	11.5%	(24,608)
2002	1,046,072	85,883	102,252	9.8%	(16,369)
2003	1,505,854	120,807	181,464	12.1%	(60,657)
2004	2,219,547	219,180	348,345	15.7%	(129,165)
2005	3,259,908	324,361	632,302	19.4%	(307,941)
2006	3,219,749	354,172	624,631	19.4%	(270,459)
TOTAL '98-'06	**15,175,609**	**1,435,472**	**2,366,901[10]**	**15.6%**	**(931,429)**



[19]

Subprime mortgages have a much higher rate of repossession than conventional mortgages because they were adjustable rate mortgages (ARMs).

Most payments were fixed for two years, and then became both higher and dependent on the level of Fed interest rates, which also rose substantially.

Consequently, a wave of repossessions swept America as many of these mortgages reset to higher rates in the next two years.

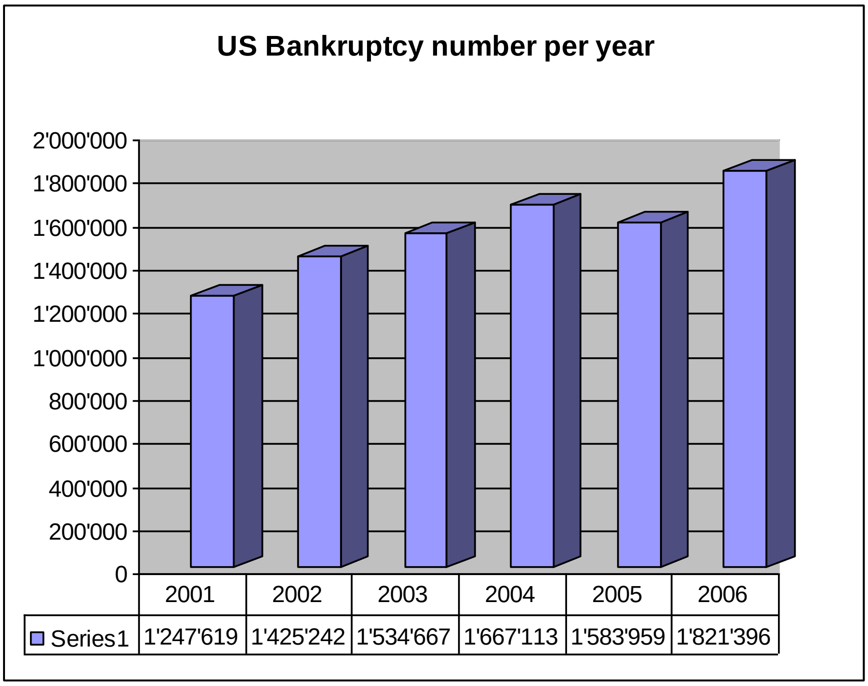
And it is likely that as many as two million families will be evicted from their homes as their cases make their way through the courts.

"The US sub-prime crisis in graphics", from BBC

Therefore, as the number of foreclosures rises, do so the number of bankruptcies, most of which happens among individuals, not companies.

So far, the social impact of the crisis among customers has been negative, as the chart obtained from the website of the US Courts of Justice[20] shows.

[19] "The US sub-prime crisis in graphics" In BBC.co.uk. http://news.bbc.co.uk/2/hi/business/7073131.stm
[20] US Courts, US Central Government. "Bankruptcy Statistics". http://www.uscourts.gov/bnkrpctystats/bankruptcystats.htm



Downsizing ***(criterion number 18)*****:** thousands of layoffs have been carried out during the last couple of years, affecting concretely on those departments in charge on loans and mortgages management. The banking industry has intended to ease the consequences of the crisis by cutting jobs and consequently minimizing costs. Downsizing may be carried out by direct layoffs, attrition on consolidated positions or the selling of certain parts of the company. This is the case of Citigroup which is likely to announce a total layoff of 24.000 former employees during the current year, as reported by CNBC.com[21], through a combination of the three downsizing forms mentioned. As a fact, Citigroup has already cut about 320,000 jobs, which could mean 5% to 10% of its workforce. Bank of America already announced 3,650 layoffs since October and plans more job cuts in its corporate and investment banking divisions. Morgan Stanley and Merrill Lynch are planning cuts in their banking divisions as well[22].

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[21] Charlie Gasparino. "Citigroup's Layoffs Could Reach 24,000 This Year" In CNBC, January 14, 2008. http://www.cnbc.com/id/22639976

[22] Liz Moyer. "Banks' Subprime New Year" In Forbes, February 1, 2008. http://www.forbes.com/business/2008/01/02/national-city-bank-biz-wallst-cx_lm_0102nationalcity.html AND David Koeppel. "High Anxiety" In Portfolio, January 31, 2008. http://www.portfolio.com/careers/features/2008/01/31/Wall-Street-Layoffs

Most of layoffs happen in American banks but also European ones have been affected, especially those with business in the American mortgage sector, reaching the number of 32.000 layoffs as early as August 2007[23].

The evaluation of the companies' behave under this criterion should be negative, as long as it conducted to massive cuts of jobs and the worsening of the affected employees. Furthermore, the plans have not been jointly presented by the employers along with any social benefits scheme.

Product social utility *(criterion number 28)*: through the analysis of the current situation under this criterion, I will explain how badly or positively have the financial institutions responded to the inquiries of the customers, related to their needs and situations.

Somehow, subprime lending might be seen as the only way for bad credit history clients to get a mortgage loan, either in order to purchase a house or any other valued good. It is true that not qualified borrowers have had access to credits which would not be so if not thanks to subprime lenders. The table below shows how the percentage of subprime loans used for home purchase has increased related to the total number of Subprime Loans originated. Though, the number of subprime loans has not risen in the same proportion, which means that most of subprime loans have been used to second home purchasing (as the chart[24] shows). The increase on the second house purchase number could be explain through the overvalued price of the real state properties which allowed households owners to ask for new mortgage loans backed on their initial properties, and the attractiveness of the real estate market as a return-ensured market.

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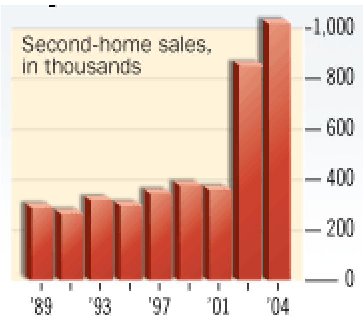
[23] "Credit Suisse annonce d'autres licenciements" In Le Temps, October 4, 2007.
http://letemps.ch/template/recherche.asp?page=rechercher&contenuPage=identification&types=search&type=0&artID=216228&rubrique=1%2C2%2C3%2C4%2C5%2C6%2C7%2C8%2C9%2C10%2C11%2C12%2C13%2C15%2C16%2C17%2C18%2C19%2C20%2C21%2C22%2C23%2C24%2C25&liste=precedent

[24] "By the numbers" In Time US issue, June 13, 2005.
http://www.time.com/time/magazine/0,9263,7601050613,00.html

TABLE 1: Estimated New Homeownership from Subprime Lending

Year	Total Subprime Loans Originated[6]	Subprime Loans Used for Home Purchases		Estimated Subprime Loans to First-Time Homebuyers[7] (Homeownership Gain)	
		Number	% of all SP Loans	Number	% of all SP Loans
1998	962,273	293,012	30%	73,253	8%
1999	1,132,280	357,234	31%	89,309	8%
2000	911,369	350,604	38%	87,651	10%
2001	918,557	323,424	35%	80,856	9%
2002	1,046,072	343,530	33%	85,883	8%
2003	1,505,854	483,229	32%	120,807	8%
2004	2,219,547	876,721	40%	219,180	10%
2005	3,259,908	1,297,443	40%	324,361	10%
2006	3,219,749	1,416,690	44%	354,172	11%
TOTAL '98-'06	**15,175,609**	**5,741,887**	**38%**	**1,435,472**	**9%**

As the table extracted from "Subprime Lending: A Net Drain on Homeownership" shows, on average, 31 % of Subprime loans have been assigned to second-home purchases.



☞ Center of Responsible Lending. "Subprime Lending: A Net Drain on Homeownership", 2 March 2007. http://www.responsiblelending.org/pdfs/Net-Drain-in-Home-Ownership.pdf

Consequently, even if the number of households has increased lately, the major effect of Subprime lending has been on the second-home market. At this point we should have into account the circumstances under which the credits have been granted, related to mortgages conditions and target groups. Such points will be addressed under criterion number 35, Pricing/Needs. Indeed, a positive evaluation under this criterion could be made, even though it is not convenient to insolate it, and so we should have into account further issues.

<u>Information to Customers *(criterion number 34)*:</u> under this criterion the information given by the financial institutions to their customers will be analysed. I will approach it carefully, since many factors as the drop on housing prices have contributed to such situation. Even if the trustful behaviour according to the stability of the housing market of many borrowers may be observed as recklessness, banks have played a decisive role on financial advising. On the other side, the consequences of the crisis have been unpredictable and both parts have been broadly affected: customers who have tried unsuccessfully to refinance their mortgages and subsequently sell their properties, and lenders who have issued overvalued mortgage backed-securities as commodities.

Lately, we find many real cases in the papers related to the issue. As instance, Brenda Harris' case, (on International Herald Tribune[25]), who purchased a $392,000 house in Las Vegas in 2006. She signed an option adjustable-rate mortgage, making the minimum monthly payments due on her loan, about $2,400. But shortly, she would have to face an instalment payment up to $3,400 needed to cover the interest and principal, which she will be required to pay once her loan balance reaches 115 percent of her starting balance. And under the terms of her loan, which was made by Countrywide Financial, she would have to pay a prepayment penalty of about $40,000 if she chose to refinance or sell her home before May 2009.

Briefly, she said that she wishes she had taken a traditional fixed-rate loan when she bought the home. At the time, she asked for a loan that could be refinanced after one year without penalty. She said her broker had told her a week before the closing that the penalty would extend until May 2009 and that she reluctantly agreed because she had already started moving.

Another similar story appeared in the New York Times[26]. In 2004, Miss Booker bought a house for $130,000, her initial payments were $841 a month. He had an adjustable rate, with the possibility of refinancing after six months, but she regrets she did not ask "*why I didn't get a fixed rate from the beginning*". After two years, her mortgage payments shot up to $1,769.

In the same way, Ms. McIntyre bought her house for $125,000 in April 2006 using two subprime loans (adjustable loans that started at 8.35 percent and 13.25 percent) the lender insisted that she uses her savings to pay down a car loan. After she lost her job, she had no reserve to pay her mortgage.

Many households have borrowed money much further their financial possibilities, most of them under the certainty of the value of their properties and the expectation

[25] Vikas Bajaj and Louise Story. "U.S. mortgage crisis spreads past subprime loans" In The international Herald Tribune, February 12, 2008.
http://www.iht.com/articles/2008/02/12/business/12credit.php

[26] John Leland. "Baltimore Finds Subprime Crisis Snags Women" In The New York Times, January 15, 2008. http://www.nytimes.com/2008/01/15/us/15mortgage.html?adxnnl=1&adxnnlx=1203344981-3aV148ryOGsISXcB6KXKJA

of refinancing or selling in case they would not be able to make the monthly repayments. Both cases would increase the owed amount, independently of the drop in the drop in the prices.

Thus, as long as a more responsible action could have been demanded from lenders, especially in terms of information to customers about fee charges and future amounts of loan repayments; I consider as negative the action of financial institutions in terms of information providing.

Pricing/Needs *(criterion number 35)*: according to this criterion, disparities in the interest rates offered among subprime borrowers have been found regarding to social condition or race. Several studies show how the effects of subprime lending have been considerably broader in African-American and Latino neighbourhoods, than in white zones. More important, the studies have compared zones with similar income levels.

An analysis made by N.Y.U.'s Furman Center for Real Estate and Urban Policy and commented on the New York Times[27], shows the gap between zones in New York. The 10 neighbourhoods with the highest rates of mortgages from subprime lenders had black and Hispanic majorities, and the 10 areas with the lowest rates were mainly non-Hispanic white. The analysis shows that even when median income levels were comparable, home buyers in minority neighbourhoods were more likely to get a loan from a subprime lender.

The study, titled "*State of New York City's Housing and Neighbourhoods 2006*[28]" shows how in Jamaica, Queens, where the majority is black and the median household income was $45,000 in 2005, 46 percent of the mortgages were issued by lenders who specialize in subprime loans, the second highest rate in the city. In Bay Ridge, Brooklyn, which had a median income of $50,000 and is mostly white, the rate

[27] Manny Fernandez. "Study Finds Disparities in Mortgages by Race" In The New York Times, October 15, 2007.
http://www.nytimes.com/2007/10/15/nyregion/15subprime.html?scp=2&sq=disparities+in+mortgages&st=nyt

[28] The Furman center for real estate & Urban Policy, New York University. "State of New York City's Housing & Neighborhoods 2006". http://furmancenter.nyu.edu/documents/SOC2006FINAL_000.pdf

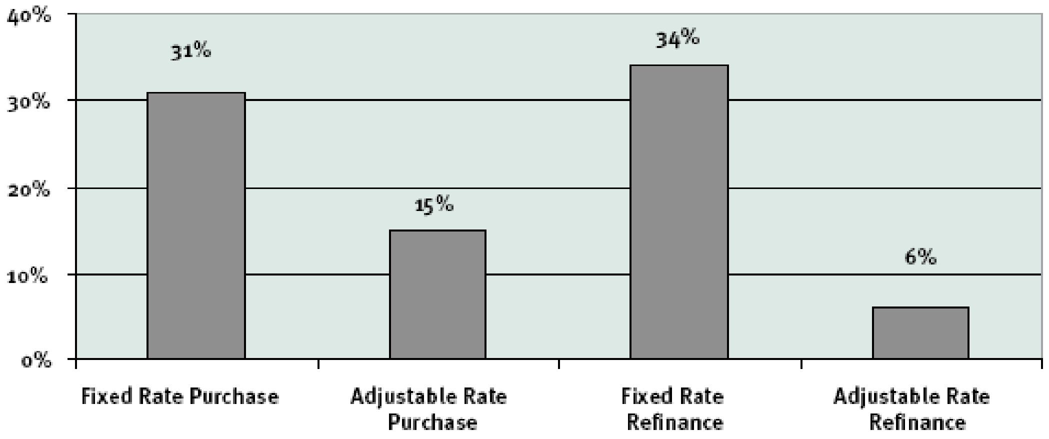
was among the lowest in the city, with 3.6 percent of home loans coming from subprime lenders.

Analysing the different income ranges in the study, we observe that the rate of subprime lending is far higher for minorities than for whites even at higher income levels:

- $125,000 to $150,000 income range: 24 percent of non-Hispanic white borrowers took out a subprime mortgage in 2006, compared with 52 percent of Hispanics and 63 percent of non-Hispanic blacks.
- $150,000 to $250,000 income range: the rate of subprime loans was 20 percent for whites, 50 percent for Hispanics and 62 percent for blacks.

Furthermore, the Center for Responsible Lending has issued a study about "*The Effect of race and ethnicity on the price of Subprime Mortgages*[29]", examining 50,000 subprime loans nationwide. It found that:

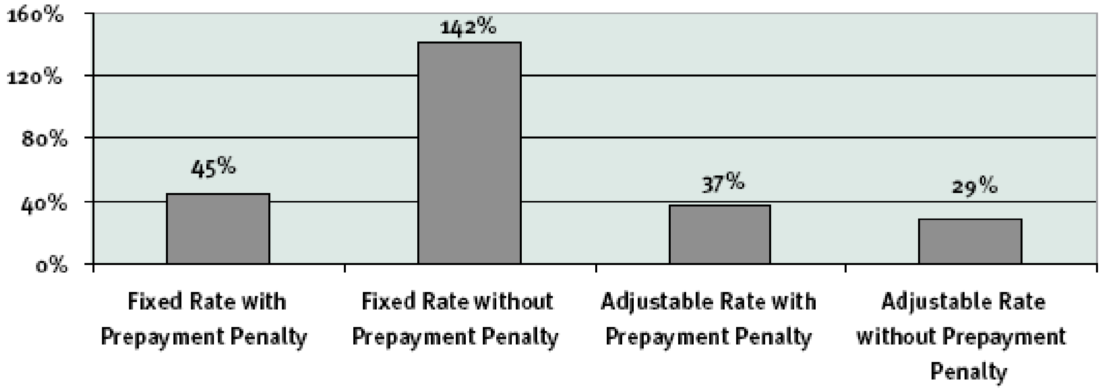
- African-Americans were more likely to receive higher-rate home purchase and refinance loans than similarly-situated white borrowers, particularly for loans with prepayment penalties.



[29] Debbie Gruenstein Bocian, Keith S. Ernst and Wei Li for Center for Responsible Lending. "Unfair Lending", May 31, 2006. http://www.responsiblelending.org/pdfs/rr011-Unfair_Lending-0506.pdf

☞ *Increased Likelihood that African-American Borrowers Received a Higher-Rate Subprime Loan with a Prepayment Penalty versus Similarly-Situated White Borrowers* (During 2004, approximately two-thirds of all home loans in the subprime market had prepayment penalties)

- Latino borrowers were more likely to receive higher-rate loans than similarly-situated non-Latino white borrowers for mortgages used to purchase homes:



☞ *Increased Likelihood that Latino Borrowers Received a Higher-Rate Subprime Purchase Loan versus Similarly-Situated White Borrowers*

To conclude, none of the predominantly white neighbourhoods in the Furman Center analysis had a lending rate from subprime companies higher than the overall city rate of 19.8 percent, while numerous black and Hispanic areas did.

Briefly, some of the above disparities could be explained by the non-presence of many financial institutions in low-income neighbourhoods, but the data shows that in case of similar income ranges, higher interest rates are offered depending on the race of the borrower. So far, having into account that the credit score standards (and consequently the loan's rate) should be assessed under objective criteria, the financial institutions have not been able to respond to their customer's needs and, further, the prices have been fixed under discriminatory criteria.

Social Stability *(criterion number 43)*: the effect of the crisis into the regional communities is unquestionable. Apart from the fact of foreclosures and layoffs, the community has felt the consequences in terms of tax collection, public security expenses, financial aids and properties maintenance. Some cities, as instance Cleveland or Baltimore[30], have sued banks and other financial institutions. They seek to compensate the damages of the crisis, such as loss of taxes from devalued properties, money spent demolishing and boarding up thousands of abandoned houses or the increase of police expenses because of the increasing insecurity in the most affected neighbourhoods.

[30] Thomas J. Sheeran. “Cleveland sues 21 banks for home loans gone bad” In USA Today, January 12, 2008. http://www.usatoday.com/money/economy/housing/2008-01-11-cleveland-sues-subprime_N.htm

Conclusion

Through the previous analysis according to different Covalence ethical criteria, it is possible to conclude that the financial institutions could have acted more correctly in terms of ethical criteria in the crisis. The most influential criteria have been Sales, Economic Impact, Social Impact and Downsizing, mainly because of the direct impact in the crisis.

Regarding “Product social utility” of the subprime mortgages, the impact and how the financial institutions have responded to the housing social need should be analysed according to different criteria, and it could even be interpreted positively regarding the fact of the access for low income households to a wholly owned property.

Nevertheless, the clearest issues are Information to customers and Pricing/Needs. The abuses related to both have been broadly reported and contrasted, showing that financial institutions have acted under discriminatory criteria and have lacked rigorousness in terms of product information and financial advising. Banks have varied the terms in mortgage contracts related to differences on raze or ethnic, offering worse deals to black and Latino borrowers. Further, financial institutions have granted mortgages related to the value of the purchased properties, regardless of the client’s real financial capacity to face the repayments. Other several practices, as instance Adjustable Rate Mortgages, have contributed to the worsening of the borrowers’ financial situation.

In any case, financial institutions are not the only ones to blame. Responsibility for the crisis could be spread out, being attributed to clients, intermediaries, the Real State Industry, the Federal Reserve and the Central Government. Clients, blamed for a continuous reckless attitude and a trustful confidence in the Real State market stability. Intermediaries and Real State industry that have overvalued the properties and have acted led by greedy practices. At last, the Federal Reserve and the US Central Government who have passively seen the financial meltdown and the pop on the housing bubble go on and have reacted lately, once the crisis have already blown up and spread over.

In my opinion, the crisis has not yet ceased, nevertheless, It holds signs of becoming a rough recession, especially in the US and Europe. Bank's general lack of liquidity is the last consequence, affecting to the whole economic system. And emergency reactions by Public Institutions do not seem to calm enough, rather than to be a patch.